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**Holistic Support Model in Opinions and  
Experiences of Specific Learning Disability  
(SLD) Students**

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Mahatma Gandhi once said: "*Live as if you will die tomorrow but learn as if you will live forever*".

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## **Abstract**

Studies indicate a very high probability that a child with a learning disability will grow up to be an adult with a learning disability and will encounter difficulties in his or her academic or professional studies and in the employment world. Today, there is a marked increase in the number of students with learning disabilities enrolled in academic institutions, with Israel estimating the extent of learning disabilities among students at its institutions of higher learning at a rate between 1.5% and 5% among both diagnosed and undiagnosed students.

A proactive approach, the operation of assistance and intervention centers which provide individual and group support, the use of assistive technologies and the implementation of programs that focus on empowering the student are all employed to cope with the issue within academic institutions and to support individual students with learning disabilities.

These measures have been developed alongside the understanding that academic institutions also have a responsibility to prepare students with learning disabilities for the labor market, which comprises difficulties for this population.

The aim of the present study is to examine the perception of the contribution of a Holistic Support Model that is based on an intervention program, which was provided to students with learning disabilities, as well as the extent of the model's impact on the student's academic self-efficacy.

The study examines the attitudes of students with learning disabilities before and after they participated in an intervention program, by means of two structured interviews. During the first interview students recounted their life story as framed by their learning disabilities, including their perspective on assistive factors they encountered over the years, while the second interview, conducted after participation in the intervention program, focused on the emotional and social aspects of living with a learning disability.

The study findings also reveal various aspects in the development of self-perception of students with specific learning disability (SLD) during their life. The findings prove that some perceptions of those students about learning disabilities were positive and some were negative. The research also sheds light on the way students with those disabilities perceive themselves and how they cope in the various life cycles not only with the intervention program but also without it. Only when the full insights are obtained will it be possible to determine the main result regarding the need to change the

existing support model. It seems that academic support is not enough to ensure the success of students with learning disabilities, but achieving such success requires comprehensive support and significant social support from a peer group. Indeed, this is the "gospel" and innovative findings which is presented in the dissertation.

## **Streszczenie**

Badania wskazują na bardzo wysokie prawdopodobieństwo, że dziecko z trudnościami w uczeniu się wyrośnie na dorosłego z tymi trudnościami i napotka trudności w nauce, pracy zawodowej i na rynku pracy. Obecnie obserwuje się wyraźny wzrost liczby studentów z trudnościami w uczeniu się, którzy uczęszczają do instytucji akademickich. Izrael szacuje, że odsetek studentów z trudnościami w uczeniu się na swoich uczelniach wyższych wynosi od 1,5% do 5% zarówno wśród studentów zdiagnozowanych, jak i niezdiagnozowanych.

Podjęcie proaktywne, działanie ośrodków pomocy i interwencji, które zapewniają wsparcie indywidualne i grupowe, stosowanie technologii wspomagających oraz wdrażanie programów, które koncentrują się na wzmacnianiu pozycji studenta, są stosowane w celu radzenia sobie z tym problemem w instytucjach akademickich oraz wspierania indywidualnych studentów z trudnościami w uczeniu się.

Środki te zostały opracowane przy założeniu, że instytucje akademickie są także odpowiedzialne za przygotowanie studentów z trudnościami w uczeniu się do wejścia na rynek pracy, co wiąże się z trudnościami dla tej populacji.

Celem niniejszego opracowania jest zbadanie postrzegania wkładu Holistycznego Modelu Wsparcia, opartego na programie interwencyjnym, w który zostali wyposażeni studenci z trudnościami w uczeniu się, a także zakresu wpływu tego modelu na poczucie własnej skuteczności w nauce.

W studium badano postawy uczniów z trudnościami w uczeniu się przed i po udziale w programie interwencyjnym za pomocą dwóch ustrukturyzowanych wywiadów. Podczas pierwszego wywiadu uczniowie opowiadali historię swojego życia związaną z trudnościami w uczeniu się, w tym perspektywy czynników wspomagających, z którymi zetknęli się na przestrzeni lat, natomiast drugi wywiad, przeprowadzony po udziale w programie interwencyjnym, dotyczył emocjonalnych i społecznych aspektów życia z trudnościami w uczeniu się.

Wyniki badania ujawniają także różne aspekty rozwoju postrzegania siebie przez uczniów ze specyficznymi trudnościami w uczeniu się (SLD) w ciągu ich życia. Wyniki badań dowodzą, że niektóre wyobrażenia tych uczniów na temat trudności w uczeniu się były pozytywne, a niektóre negatywne. Badania rzucają także światło na sposób, w jaki uczniowie z tymi trudnościami postrzegają samych siebie i jak radzą sobie w różnych cyklach życia nie tylko z programem interwencyjnym, ale także bez niego. Dopiero po uzyskaniu pełnego obrazu sytuacji będzie można określić główny wynik dotyczący potrzeby zmiany istniejącego modelu wsparcia. Wydaje się, że wsparcie akademickie nie wystarczy, by zapewnić sukces uczniom z trudnościami w nauce, ale osiągnięcie takiego sukcesu wymaga wszechstronnego wsparcia i znaczącego wsparcia społecznego ze strony grupy rówieśniczej. W istocie jest to "ewangelia" i innowacyjne wnioski, które zostały przedstawione w tej rozprawie.

## **Introduction**

"Learning disabilities" is a general term that refers to a heterogeneous group of disorders, manifested in significant difficulties in acquiring and using attention, speaking, writing, logic, or math skills. These disorders are internal to an individual and can appear throughout all life cycles, and researchers assume that they are the result of dysfunction of the central nervous system. Problems with self-control, social perception, and social interaction may coexist with learning disabilities, but they do not constitute learning disabilities in themselves. Although learning disabilities may exist alongside other limitations (such as sensory impairment, mental retardation, severe emotional disturbance) or in tandem with external influences (such as cultural differences, inadequate or inappropriate teaching approaches), they are not a result of these limitations or effects (NJCLD, 1994).

Learning disabilities significantly interfere with academic achievement and daily life activities that require reading, math, or writing skills (DSM-IV, 1994). Contrary to popular belief, learning disabilities do not disappear in adulthood, but the same behavioral and cognitive symptoms accompany those with learning disabilities throughout their lives, so that even if their character should change at different stages of development, the influence of the disabilities remains noticeable.

In recent years, there has been an increase in the number of students enrolled in institutions of higher learning across the world who have been diagnosed with disabilities in general, and of those found to have learning disabilities. In Israel, too, the Committee for the Examination of the Ability of Students with Learning Disabilities noted a significant increase in the number of students with learning disabilities in institutions of higher education, and various estimates indicate that 1.5% to 5% of students at such institutions may be contending with learning disabilities.

Until not long ago, few students with learning disabilities were admitted to academia around the world, and even fewer completed their degree studies. With the rise of awareness of the issue, there has also been a change in the approach to students with learning disabilities in academia. This change is reflected in the shift from the limited care provided as part of the Student Decant services to the extensive and focused support provided by support centers established for this purpose in academies around the world (Laser, 2011).

The common premise of the therapeutic models provided in academic support centers internationally is the belief that society has a responsibility to develop accessible learning environments so that students with learning disabilities will be able to integrate into academia.

Therefore, the staff at such centers believes that its main role is to identify students within the academy who need assistance, and to provide them with the necessary support throughout their years of study to optimally realize their academic potential.

Academic support centers for students with learning disabilities have also been established in Israel, and following the success of their activities, there has been a significant increase in the number of students with learning disabilities applying to higher education (Margalit, Breznitz, & Aharoni, 1998). These institutions also help to increase awareness among academic and administrative staff about the subject of students with disabilities, while providing guidance to streamline such work in the academic field (Meltzer, 2006). The services provided at the support centers include counseling and support, adjustments in teaching and examination methods, counseling and individual or group support for academic, social, emotional, technological, and occupational issues.

Research conducted to date in the field of helping students with learning disabilities to adapt to academic studies show that when these topics are addressed the students who receive assistance exhibit great improvement in their learning (Dahan 2003; Kozimansky, 2004; Meltzer & Lidor, 2010). Most students with learning disabilities understand that it is such support which enables them to pursue academic studies, and so most choose to study at the institutions which provide it. Some even choose an academic institution according to the quality and scope of assistance and support provided at its support centers (Meltzer, Zadok, & Dahan, 2011).

However, the support center established at institutions of higher education provide extensive assistance to students with learning disabilities, my experience at support center established at the Peres Academic Center in Rehovot has led to the conclusion that there is still a lack of systemic thinking to provide an optimal multidisciplinary response.

The research knowledge focused on cognitive difficulties and ways of dealing with learning, rather than examining the meaning of emotional and social processing, or the way in which emotional processes affect learning tasks (Margalit & Tur-Kaspa, 1998). Despite researcher's attempts to trace the causes of the development of emotional problems among students with learning disabilities, there is still insufficient knowledge

or adequate understanding of the emotional processes experienced by students with learning disabilities. The paucity of information is especially noticeable when it comes to an important period in their lives, when dealing with complex academic learning and the lack of student voices is noticeable. Their point of view and perception of their processes (Kos, 1991; Reid & Button, 1995; Reiff & Gerber, 1992).

The support that has been provided to date proves that treating one difficulty factor (either cognitive or emotional), or even two areas of difficulty (academic and emotional), is not sufficient to maximize academic abilities among students with learning disabilities (Margalit & Tur-Kaspa, 1998).

However, there are multiple research data in the field of student support with - specific learning disability (SLD) but there is still a knowledge gap regarding older students in academia with this specific disorder. Moreover, existing approaches (based on experiences with younger groups) that offer multidisciplinary therapy are not fully satisfactory and applicable. From personal experience, during my work at the Peres Academic Center in Rehovot, the holistic support model was presented in the form of an intervention program offered to students at the academy. According to the personal experiences and experiences of the program participants in the program it is fruitful, but it requires research that will confirm its effectiveness.

The aim of this study is to analyze the experiences of students enrolled into Holistic Support Model which includes strengthening the cognitive, emotional, and social abilities that are affected by the difficulties experienced by a student with a learning disability. This view is based on a theory of self-efficacy (Bandura, 1997) which deals with a person's perception of his or her ability to perform behavior that will lead to a particular result. The study conducted in dissertation aims to measure learning success as perceived by the students, in addition to the achievements measured by test scores. According to Albert Bandura, a person with high self-esteem values his ability to handle a certain task as high, and this increases the tendency to invest effort in performing a task. Low self-esteem weakens the motivation to try to accomplish a task and leads to thoughts of failure. In addition, according to Bandura, the social environment is also a significant factor influencing human behavior. A person judges his behavior in terms of observations of his behavior and the behavior of the environment, as well as in response to the verbal persuasion of another person encouraging the person and expressing the opinion that he has a high ability to succeed. Verbal persuasion is effective only when the persuasive person is close and meaningful to the person concerned, or when he or she is perceived



as proficient in the field of the task. If so, the behavior is a product of both external processes (the environment) and internal processes (man). Judgment results direct the person: they evoke feelings of satisfaction or disappointment, and these motivate either repetition or avoidance of a particular behavior. Another factor which affects an individual's success is the emotional component – high emotional arousal, such as a feeling of mental stress or anxiety, leads to physiological changes such as feelings of discomfort, which lower the perception of self-efficacy. In contrast, a sense of calm contributes to creating a high sense of self-efficacy.

To describe the experiences of students participating in Intervention Program based on Holistic Support Model the research in a qualitative-narrative approach was designed. Within the study, the emotional and cognitive processes experienced by students with learning disabilities during the first semester of the academic year 2019/2020 were identified and described. For this purpose, interviews with 30 students have been conducted and analyzed before and after their participation in the intervention program. A distinction has also been made between cognitive processes and directed learning strategies to deal with the study material, and emotional processes to enable adaptations of interventions to the needs of the students. The results of the study have been used as aids by support centers, lecturers and researchers working in the field and building programs for the well-being of these students, with the goal of improving the focus and effectiveness of intervention programs. In this way, it was possible to help the success of students with learning disabilities in exams and, as a result, to integrate them into the adult world and the contemporary work circle that is required from professional training and academic education for every person.

The theoretical review in this work deals with three topics: The first chapter reviews the research literature on the subject of "young maturity" - definitions, characteristics, and cultural and social challenges. The second chapter brings the review of studies on specific learning disabilities, definitions, characteristics, and treatment modalities. The third chapter deals with the ways in which students with learning disabilities are treated in Israel from school age until their integration into the higher education system. Chapter Four presents the research method, research problems, and intervention plan. Chapter Five reflects the findings of the study as they emerged from the interviews that took place, and in the sixth chapter there is an in-depth discussion of the findings and recommendations to support students with learning disabilities based on recent research.

# **Chapter 1: Young Adulthood – Theoretical Analysis in light of Psychological, Sociological, and Pedagogical Literature**

Researchers throughout the world distinguish between different definitions of the youth population and include unique characteristics to describe young adults. In order to understand students with learning disabilities, it is imperative to comprehend how young people live their lives today.

This first chapter describes research findings concerning developmental stages, challenges, and coping mechanisms which characterize today's young people.

## **1.1 Definition of Young Adulthood**

“Young adulthood” is a new field that characterizes recent decades (Lavel, 2011) and addresses the extension of the transition from the stage of adolescence to the stage of adulthood. There are many discourses about youth and terms like “youth”, “young”, “adolescence” etc. are defined in a variety of ways and there is no consensus about the way it should be defined. However, there is general consensus that this is a field which needs to be redefined due to current socio-cultural changes.

The period of life between the end of the teens and the end of the twenties, also referred to as "young adulthood," is a sensitive stage of life that is very important for young people in industrialized Western countries, since it is during this period when important decisions are made in central areas of life (for instance, choice of romantic partner, education, and employment) which shape the young peoples' life patterns and thus give shape to society (Arnett, 2004). The experiences of young people in different realms of life and the meanings they ascribe to these experiences constitute important components of the research into the main mechanism within the process of the construction of their identity (Flum & Kaplan, 2006).

The definitions of the term “young people” address a very wide age range. In Israel that range is generally defined as up to age 35. However, the age component is only one part of the definition.

Traditionally, the transition from the period of adolescence to the stage of adulthood was anchored at the age of eighteen, at which point the individual was thought to become an emotionally and financially independent adult, capable of establishing an independent family unit. Demographic and socioeconomic changes that occurred from

the end of the 20<sup>th</sup> century gradually led to the blurring of the border between adolescence and adulthood, to the point where today it is not possible to pinpoint a certain point in time at which an individual becomes an adult, but rather [the two are viewed as] a continuous period of life (Arnett, 2000). Thus, this stage may be referred to as “young adulthood” and also “emerging adulthood” (Arnett, 2006).

In young adulthood, a young person has dual characteristics. On the one hand, she has the characteristics of adulthood and of bearing responsibility: she has the political and social rights of an adult, and she is generally involved in a couple relationship, and can make meaningful decisions in the context of her life. On the other hand, for the most part she is not financially independent, does not have her own formal family unit, and is often in the process of pursuing a higher education or acquiring a profession, and does not have regular employment. In psychological terms, this period of transition is characterized by confusion, self-inquiry, and search for self; by a search for meaning and by a feeling of instability and uncertainty.

To fit-in normally as an adult in society, a young person must be able to integrate into frameworks which provide a higher education and/or lead to the acquisition of a profession; to develop a career, to integrate into employment that will ensure appropriate and adequate income; to find suitable housing; and to integrate into social frameworks that will provide a sense of meaning and belonging, and facilitate the shaping of an identity and social involvement (Katan, 2009). The ability of a young person to fulfill these tasks is influenced by the existence of economic and emotional support, a structure or structures which provide such support, and appropriate academic or professional training.

Another characteristic of the period of young adulthood is the need to make decisions about issues related to three separate circles: intimate relationships, career (employment/education), and belonging to society (Cinamon & Rich, 2002). It is frequently necessary to make important decisions during our adult lives, but in the period of young adulthood not only must a young person make several critical decisions (with long-term implications) at central junctures, but also for the first time in his or her life these decisions must be made beyond the formal frameworks of support.

The definition of "young adulthood" does not have clear boundaries, and in contrast to other stages of life (such as childhood, adolescence, or old age), chronological age is not the only characteristic that determines who is designated as being at this stage. There are great differences among the ways in which young people experience the period

of young adulthood, about their relationship to the environment (Côté, 2006). Psychologists in the field of social psychology, such as Erickson and Levinson, have attempted to analyze the characteristics of the developmental stage of "young adulthood."

Erikson (1968) describes human development as comprised of eight stages, from birth to old age. At every stage there is a conflict that a person must resolve so as to acquire the abilities required to cope with the conflict within the next developmental stage. A failure to resolve the conflict will expose a person to difficulties with respect to the continuation of his life. Erikson maintains that the period of adolescence, until the age of eighteen, is a period in which the developmental task is the development of a personal identity. The personal identity or the ego identity, according to Erikson, is the person's ability to perceive in a stable manner who he is and what his future will be and to perceive himself that includes the range of his beliefs, the constellation of his roles, and his social and political outlooks. A person has a formed identity when he can evaluate his strengths and weaknesses and find ways of coping with them. According to Erikson's theory, the stage of the formation of identity is followed by a period of "early adulthood," which comprises the age range of 18 to 35. During this period, a person must resolve the conflict between his desire for uniqueness and the social requirement to establish an intimate dyadic relationship. This is the stage in which a person is required to make decisions about choice of profession and integration into the work world, choice of a life partner, and establishment of a family. The developmental task during this period is described as "being in an intimate relationship with another person but not losing the self."

Arnett (2000) maintains that Erikson's thinking is no longer suited to our time, since today young people become independent only in their late twenties. In the past, young people in their late teens entered the job market, earned their own livelihood, and paid their own rent. However, in past decades, for biological and social reasons, adolescence begins earlier and ends later. Many young people continue to live at their parents' homes during their twenties, attempting different types of jobs, changing workplaces, and furthering their education, even switching to different fields of study more than they did in the past. Arnett defines the period between 18 and 25 as a new developmental period which he dubs "emerging adulthood." On the other hand, Arnett's approach applies less to young people in developing countries and more to those in modern Western countries.

According to Arnett (2006), the characteristics of this period are expressed both in the way that the young people function and in the way in which they perceive the expectations of others. On the level of functioning, in recent years many young people continue to live with their parents even during their twenties. While some leave the parental home and attempt to live with partners or on their own, if they encounter economic or other difficulties, they may return to live with their parents (Arnett, 2005).

During this period young people also tend to change jobs, when they have their parents' financial support at the times when they are unemployed (Stein, 2006). Some young people may begin academic studies during this period, and a tendency to change paths of studies more frequently than in the past has been noted. In accordance with this trend, in many countries the age of marriage and the birth of a first child are now postponed to the late twenties (Douglass, 2007). With respect to self-perception, during this period young people perceive themselves as neither adolescents nor adults in an absolute manner, but rather as "betwixt and between" (Facio, Resett, Micocci, & Mistrorigo, 2007). This period gives them the opportunity to examine and choose their values, beliefs, and norms of behavior and to have different experiences and thus to make long-term decisions in a more relaxed manner about significant subjects such as the choice of education and employment. Research findings indicate that in the past young people tended to define themselves as adults in the context of objective events, such as marriage, while today they define being an adult in the context of subjective aspects, such as the ability to make decisions (Berman, Schwartz, Kurtines, & Berman, 2001). Arnett believes that the formation of personal identity, which in the past was perceived as a developmental task associated with adolescence, concludes only during the period of "emerging adulthood." At present, it is more often believed that the process of forming a personal identity is ongoing, as it is more acceptable to make decisions and then discard them and choose a new path.

### **1.1.1 Socio-Cultural Transformation as a Challenge for Young Adults**

Changes in the demographic and socioeconomic reality in the middle of the last century, such as shifts in the health and education systems and economic and social changes, have blurred the transition between adolescence and adulthood, leading to a situation where it is no longer possible to speak about an age threshold at which an individual becomes an adult, but rather about a period of life (Settersten, Furstenberg, & Rumbaut, 2005).

Social and economic changes enable certain young people in industrial countries to continue their studies and acquire a higher education, to postpone marriage and the establishment of a family, and to experience several jobs and even a number of romantic relationships before they make a commitment and "settle down." The statistical data about Israeli society support these trends and indicate a rise in the age of marriage and the age of parenthood between the years 1999 and 2008, and a significant rise in the number of students who are studying at institutions of higher learning, with similar trends reported in other Western countries (Côté & Bynner, 2008). These changes led some researchers to posit the existence of a distinct developmental stage with unique characteristics – the stage of emerging adulthood (Arnett, 2000). They claim that this stage is characterized by a lack of stability and many nonbinding experiences, primarily in the fields of love, education, and work; by a sense of transience and lack of permanence; by focus on the self and research of identity; and by a sense of optimism about the variety of possibilities. A lengthy period of instability and deliberations regarding the desired and appropriate lifestyle may be a challenging period to the extent that it may be perceived as difficult and stressful and inspire a need for social, counseling-based, educational interventions to ameliorate the process and help young people to make decisions and build their future in the way that is most appropriate for them (Tanner, 2006).

Alongside agreement as to the unique characteristics of this stage, there is an understanding that there is also a wide range of possible reactions due to differences in the values and norms which characterize individual upbringings (Schwartz, 1994). However, there is a lack of comprehensive research into these differences, with most of the extant research focusing on young, middle-class Americans (Arnett, 2004). American young people perceive individualistic values – such as the ability to make decisions independently or economic independence – as signifying adulthood, and do not consider external events (such as completion of studies, marriage, or integration into a job) to be indicators of entrance into the adult world. In fact, most define themselves as not yet having reached this stage (Nelson, Badger, & Wu, 2004). In contrast, a unique study that focused on Chinese students in their early twenties, revealed that their indicators of adulthood are related to characteristics of Chinese culture, so that most define themselves as having reached the stage of adulthood, and are less focused on themselves and more oriented to family and social commitments. One study that focused on young Mormon Americans shows that their period of young adulthood is shorter and more structured than

that of their non-Mormon American peers, and their indicators of adulthood are different (Arnett, 2004) In other words, different cultures present young people with different norms and different expectations regarding appropriate behaviors and achievements at this stage. Therefore, every intervention with young people must consider the culture in which they were raised, as well as their unique perceptions and needs.

The main perception of current theoretical literature is that the developmental period known as "young adulthood" is related to processes of globalization. Adolescents and young adults today are rarely exposed to only one culture. Rather, the reverse is true; they tend to have direct interactions with people from different cultures and are exposed to various media such as television and the Internet, which indirectly connect them to distant cultures. In today's world, development during adolescence and young adulthood is more complicated than it was in the past (Jensen & Arnett, 2012). This complexity is expressed in different dimensions, such as the construction of cultural identity, the formation of a belief system, the creation of a positive self-image, the development of social and civic responsibility, and the reinforcement of a sense of maturity and of optimism (Mahatmya & Lohman, 2012).

## **1.2 Development in the Young Adulthood Stage (Areas of Change in Young Adulthood)**

### **1.2.1 Models of Development**

The professional literature focuses on young adulthood as a developmental stage and differentiates it from other developmental stages with three sets of explanations that (Elizur, Tiano, Monitz, & Neumann, 2006) categorized as biological explanations, psychological explanations, and sociological explanations.

Biological explanations focus on the influence of physiological and biochemical factors of the body systems. The first to address the period of young adulthood as a developmental stage was Stanley Hall (1884-1924). Hall based his theory on Darwin's theory of evolution and determined that the individual undergoes four stages of personal development which correspond to the stages of the historical development of the human species – infancy (age 0-4), childhood (age 4-8), adolescence (age 13-25), and adulthood (age 25+).

Hall's theory shows that as early as the end of the 19<sup>th</sup> century, young people up to age 25 were considered adolescents. New research studies focus on the development

of the human brain and categorize the developmental stages of the brain according to age (Ahn & Gotay, 2014).

Psychological explanations focus on the influence of personal factors generally derived from educational processes, emotional experiences, and reciprocal relationships with significant others. Erikson was the first psychoanalyst to address the young adult. His psychosocial theory refers to the period of young adulthood that occurs between the ages of 18 to 35 as the sixth of eight stages in a person's development, during which one is required to cope with tasks unique to one's age. He maintains that during this stage it is necessary to confront "*intimacy versus isolation*". A person establishes herself and her status through productive work and through disconnecting from dependent relationships with previous systems such as parents and educational institutions, seeking to arrive at important decisions with respect to choose of profession or vocation and choice of a life partner. Erikson holds that the failure to achieve the preceding during this stage leads to isolation and the lack of ability to create or to persevere within a relationship (Muuss, 1969).

Erikson (Friedman, 2000) believes that from childhood to old age, man develops, and his environment has an important connection to it. A person who grew up and was educated in a certain culture will develop in a different way than a person who was raised and educated in a different culture. The experiences that a person has gone through during his life and how he has succeeded, or failed or the way he has chosen, to deal with shape his personality and all of these constitute his development: The experiences that a person has gone through during his life, and how he has succeeded or failed, or the way he has chosen to deal, shape his personality and all of these constitute his development.

#### Ages 0-1 - Trust vs. Suspicion

At this stage of life, the baby is completely dependent on his parents and the most important organ in his body is the mouth, through which he sucks. The parents are the most important figures in the baby's life, they provide for him in terms of food and also in terms of social, warmth and love. When parents are attentive to the baby and provide for his needs, the baby can establish trust. When parents are not attentive, it may establish a basic suspicion in the baby.

The baby does not always get exactly what he wants, even if the parents are attentive, they cannot be perfect, and the baby faces conflicting feelings ranging from trust to suspicion.



### Ages 1-3 - Anatomy vs. Shame

The organs in focus are the sphincters. At this point the child develops various motor abilities, including control of the braces, and begins the learning process of the need for cleanliness. At this point the child begins to break free from dependence on the parents. The process of learning to hold or release is not only expressed in parentheses but in general in the concept of control. When the child is unable to control himself, he may develop feelings of shame. At this stage an aggressive approach is needed, according to Erickson, but nevertheless to preserve the trust he developed in the previous developmental stage by granting freedom of action. When the child passes the early childhood stage, to Erickson's approach, he will develop willpower and knowledge to control and release control in different situations. A good example of this is toys - the child will be able to take care of and maintain his toys but also know how to share with others. If the child does not pass this stage there is a fear that he will develop a restrained personality and that his conscience will be too strong, not allowing flexibility.

### Ages 3-6 - Initiative vs. Guilt

The organs that are in focus at this stage are the genitals of the child. At this developmental stage of life, the child begins to show curiosity as well as initiative. Children at this stage begin to explore the environment in which they find themselves and explore boundaries. Children at this stage can try to initiate sexual moves with others out of curiosity, and it can be expressed directly or indirectly. At this point the important people for the child are his parents and the educational figures (teacher, caregiver, etc.).

Do you know the girl who wants to marry her father or the boy who wants to marry his mother? This usually happens at this stage, the Oedipus complex, or the Electra complex. At this point it is important that the characters in the child's life do not laugh or embarrass the child about it. In this situation mixed feelings develop, and this can lead to feelings of guilt and fears of punishment for sexual arousal.

When the child passes this stage, he will learn impulses from them and how he can deal with them without succumbing to them, he will be able to set goals for himself and stick to them without feeling guilty or afraid.

### Ages 6-12 - Productivity and Diligence versus Feelings of Inferiority

The center of this stage is cognitive development. This is the stage where learning begins, and it is not just about learning the textbooks. At this point, the child learns the social field that is not his family cell.

Here he begins to learn and understand the environmental requirements of his surroundings, requirements for productivity and diligence, as well as the results if he does not satisfy these requirements.

The important factors in a child's life are the parents, school friends, teachers and environment. At this point, the child will learn to develop different skills and he will develop his self-worth.

If the child passes this stage, he will develop high self-worth and high self-abilities. If the child fails in this stage, he may develop feelings of inferiority and he will not find his place in society.

#### Ages 18-35 - Intimacy versus Loneliness

At this point the person has severed the dependent bond with his family and is engaged in productive work to establish his status. There are fateful decisions at this stage of life - choosing a career, choosing a spouse and more.

The conflict between intimacy and loneliness is created because on the one hand the person has the need to be special and independent and on the other hand longs for intimacy. At this stage, many people experience the desire to seek a close and intimate relationship, and on the other hand an escape from serious and long relationship.

A person who has passed this stage will be able to feel love and make meaningful connections.

A person who fails in this stage may develop loneliness, closure and will not be able to commit to a long-term relationship.

#### Ages 35-50 - Fertility vs. Stagnation

This stage is characterized by renewal and treading in place. Simultaneously, a sense of ego is released, and the person's sense of self grows. The focus is on passing on the genes and caring for the family to the next generation.

A person who succeeds in this stage will care and will take responsibility for his environment. People who have failed at this stage may compromise their intimate life and experience moments of disgust.

#### Ages over 50 - Perfection vs. Despair

This phase is the last phase in Erickson's theory, the aging phase. The different feelings, good or bad, that people encounter at this point are related to experiences and earlier stages in their lives.

When a person looks back and can positively summarize the other stages in his life, he will be able to feel a sense of satisfaction and even accept death more easily, from a place of contentment for the full and good life he is living.

If a person fears death and is afraid, it can indicate incompleteness and dissatisfaction with the life he is living.

A study of a group of young adults confirms Erikson's theory that a preference for inner values (such as the aspiration for personal growth, the construction of intimate systems of relationships, and contribution to the community) predicts the arrival at the stages of identity and intimacy appropriate for the developmental stage in terms of age and leads to significant improvement in the personal wellbeing of young adults (Hope, Milyavaskaya, Holding, & Koestner, 2013). Another study found that the achievement of intimacy in one's system of relationships at the end of young adulthood predicts a relationship between early development of the ego and late development of the ability to achieve intimacy (Shulman & Connolly, 2013).

Sociological explanations focus on the influence of social factors which derive from the cultural environment of a young adult and the circumstances of his life, which affect his ability to integrate into adult life. These approaches hold that the stage of young adulthood is a new phenomenon that derives from changes that have occurred in society.

Arnett (2004) developed a theory according to which early adulthood is characterized by an "intermediate sense." In other words, young people do not yet consider themselves adults, but at the same time they do not feel like adolescents. This is expressed in a search for identity, primarily in the fields of work, love, and ideas; a focus on the self that is characterized by a sense of commitment to others; a lack of stability, apparent in the changes in place of residence, systems of relationships, work, and studies; and a sense that one has a multiplicity of possibilities, or in other words, optimism regarding the ability to navigate life within every sphere desired.

According to Arnett (2004), the concept of development addresses change, progress, and growth, or the pattern of the changes that a person experiences from the moment of separation until death. There are four significant dimensions in all the stages of development in an adult's life\_

1. Career – all that pertains to the field of work in a person's life
2. Family – the origin family, or the nuclear family, or the future family with a partner and his/her children or future children
3. Intimacy – couple relationship

#### 4. Self-development – internal, spiritual, and personal

Development theories such as those of Arnett and Erickson attempt to explain the consistent and accumulative changes, which occur in a specific order, as each stage embodies what precedes it and adds something new. According to Arnett (2004), the developmental tracks are influenced by a number of factors:

1. The location in time and the physical place in which the individual is found at every stage
2. The component that addresses the relationship between the cultures to which one belongs, which dictate the norms for the individual's unique culture; in some cultures, an individual is restricted by limitations, while in others she is free to do as she chooses.
3. Every person has three "scheduling clocks" – the physiological/biological clock (the physical components that dictate behavior); the social clock (the correct order of things according to the social norms of one's society); and the personal clock (the individual pace of development according to which one matures into his different roles)
4. Heredity – one's inherited genes; and environment – all external factors which influence potential

At the start of the 20<sup>th</sup> century, scientists began to research the **lifecycle in the context of the development of the personality**, to gain insight into normal stages of development and to be able to anticipate complications. At first, they studied primarily the influences of childhood, later adding other influences, such as those resulting from social status. The recent awareness of biological influence on behavior has led to an increase in the importance of research in this field. The important role in this field was delivered by the authors from the psychoanalytic approach (Freud, Jung, etc.), and was broadly discussed and transformed. While the theories are not empirical and do not provide an objective truth, they provide a definition and language with which to discuss the stages of development that were more like abstract constructs until the advent of these theories.

In 1905, Sigmund Freud wrote “Three Essays on the Theory of Sexuality,” in which he focused on the influences of childhood on a person’s libido. According to Freud, childhood is divided into four stages, defined by sexual energy and places in the body related to erotica (the mouth, the anus, and the sexual organs): the oral stage ranges from

birth to one year, the anal stage from age one to age three, the phallic stage from age three to age five, and the latency stage from age five or six until puberty.

Freud contends that psychological development ends at the age of eighteen, while biological development continues. Freud did not believe that adults continue to develop, and therefore believed that psychological treatment was irrelevant for them, assuming that their personality structure is inflexible and cannot change.

Adler (1931/1980) believed that a person is mainly driven by the aspiration to be whole. He wrote that a person is born with a sense of inferiority (he describes this as true for the entire human species) and seeks to overcome this feeling to experience success, supremacy, wholeness, etc. Since this may be accomplished by means of interpersonal relationships, a person is a social creature by nature. Adler claimed that each person creates for himself the reality in which he lives, and his observations are subjective. According to this approach, the focus is on the future rather than the past, since a person needs to feel that he has a destiny and a goal in life, for if not he will suffer feelings of inferiority. Treatment, for Adler, focuses on changing one's perception, reaching the understanding that everything is subjective, and therefore it is possible to build things anew. Adler's theory is not defined by stages, but its structure embodies the idea that the personality can develop throughout life.

Jung (2009) lists four stages for the development of personality: (1) childhood and adolescence (until the age of 20); (2) young adulthood (20-40), during which the personality examines and studies itself; (3) later adulthood (40-50); and (4) old age (60 and up).

According to Jung, the self seeks to achieve recognition which leads to balance. For him, personal development is associated with influences from the past, while heredity is responsible for the instincts of self-preservation and the inheritance of archetypes. The achievement of balance is individuation, when the different parts of the personality connect and become unique.

According to Jung's approach, during the early year's energy is devoted to the basic and existential processes as the infant is influenced by primal drives and the collective unconscious, and the ego develops with concepts of I, the self, and mine.

Young adulthood embodies the pain of the surrender of childhood fantasies. Young adults understand that some things they believed are not possible and this is when differentiation from parents occurs. Jung says that the young adult undergoes extroversion to achieve separation from the parental identity. At the intermediate age

(thirty plus to old age), the search for meaning begins, leading to increased introversion. A person's values undergo sublimation, through society and religion, he or she finds the connection between what is important personally and what is accepted, and all these processes combine to build the self.

Gottman (2008) uses Jung's theory and focuses on a person's gender identity. His argument is that at the beginning of life a person lives according to the gender archetype unconsciously adopted by his parents. In other words, development derives from parental dictates. However, as children grow up and leave home, the parental dictates wane, and they can examine and experience other things and examine opposite gender roles. Throughout life, a person moves in the direction of androgyny, or the combination of masculine and feminine parts.

Sullivan (1962) believed that early childhood experiences play an important role in the development of personality. However, he also believed that personality continues to develop after childhood. He identified seven periods of development, where a different interpersonal theme is prominent at each stage.

1. Infancy: from birth until the acquisition of language, the mouth as the means of communication and physical and emotional absorption; the mother is the main figure
2. Childhood: eighteen months to five years; the beginning of play in the company of other children
3. Elementary school, ages six to eight: playmates are members of the same sex; main coping is the creation of relationships with other children and adjustment to new figures.
4. Pre-adolescence, ages nine to twelve: this period continues until the appearance of the tendency and interest in members of the opposite sex
5. Early adolescence, ages thirteen to eighteen: this period continues until the clear focus of interest in members of the opposite sex; sexual arousal, emotion, and desire.
6. Late adolescence, from age eighteen: this period continues until the development of adult interpersonal relationships; establishment of a professional identity; in a negative situation a person chooses isolation and distance.
7. Adulthood: the conclusion of the formation of the personality; achievement of the ability to love, or of a situation in which the beloved is almost as important and meaningful as the person himself

According to Sullivan (1962), although a person may go through a developmental stage in a certain way due to biological factors, the main influence is the type of experiences that a person undergoes at that specific age. In other words, there is a significant difference between Sullivan's and Freud's outlook regarding development.

Levinson (1978) emphasizes the positive psychology. His approach maintains that growth and development occur throughout life, and people receive different meanings. In his research, Levinson examined the development of the male personality in early and middle adulthood (40 men aged 35-45 years old) and reached a new structure of stages of adulthood in the lifecycle. According to Levinson, the lifecycle is composed of four stages of about 25 years: (1) childhood and adolescence (from birth to age 22); early adulthood (ages 17-45); (3) middle adulthood (ages 40-65); and later adulthood (above age 65). Levinson (1978) defined that four-five years old is a transition period between the stages, when the person must "end" one stage before beginning the next one.

The theories of Freud, Jung, and Erikson are based on philosophical hypotheses that were proved by research studies that examined behavior. However, not one of them conducted an empirical and controlled study, and it is very likely that their results derived from previously held opinions. Consequently, longitudinal studies were subsequently conducted which follow subjects in the transitions between the lifecycle stages and examine the influence of various events on their psychological and mental states.

## **1.2.2 Physical and Psycho-Social Changes**

### **Psychological Aspects**

The professional literature addresses young adults at an intersection between the world of childhood and adult society. They have achieved biological adulthood and completed the process of socialization but have not yet acquired the abilities and skills necessary to function fully as adults (IARD, 2001). According to this approach, one can identify various stages which an individual is expected to undergo during the period of his or her youth as she proceeds to the objective – the appropriate integration into adulthood, or the adult world. These stages are as follows:

- Completion of studies
- Integration into employment
- Finding a life partner
- Establishing a family and having children

Of course, this is not the only continuum that leads to the status of an adult person. However, the normative assumptions about the continuum of steps toward adulthood have contributed to this continuum, which is considered the most common in most modern societies.

In the past, young people would progress through this continuum relatively rapidly. At one time, the period of studies ended in the middle teen years (ages fourteen to sixteen), and difficult living conditions compelled young people to integrate as quickly as possible into the employment world. Marriage age was also relatively young, with people in their twenties establishing families.

In contemporary societies, in contrast, there is a steadily increasing trend of the extension of the duration of the period of youth, the main reason being the extension of the period of study. If in the past young people were satisfied with a high school diploma, today many continue to study for advanced degrees during their twenties, primarily due to the development of a knowledge-rich society, which necessitates a broad education so that a person can advance on the social ladder. This change has created an extension of the continuum, so that an individual's occupational integration, as well as the choice of a life partner and the establishment of a family, is postponed.

The extension of the period of adolescence derives also from changes and developments in the accepted model of socialization. This model allows young people a longer period than was acceptable in the past to engage in a process of "trial and error" – the examination of different identities, social roles, and tendencies. Social and personal identities are not defined once and for all, as was the case in the past, but may be changed and examined anew, and it is generally agreed that an individual requires a considerable amount of time to forge a stable identity.

Young people thus reap many advantages which were not previously available to them. The freedom to repeatedly examine one's identity, without the need for quick commitment; the opportunity to experience a range of experiences; the chance to enjoy a period dedicated to reflection and the formulation of a personal outlook – all these contribute greatly to the individual's cognitive and emotional richness, prevent stagnation, and develop independent and creative thinking.

However, this process also has implications for the social fabric and wellbeing of others, with a central concern pertaining to the future of the "intergenerational compact." This term describes the process in which the older generation supports the younger generation, with the expectation that it will be supported in turn, when the older



generation becomes elderly and is dependent on family and society. These reciprocal relationships have enabled human survival throughout history and helped to maximize the chances of economic and personal wellbeing for all members of society.

According to researchers in the field, the extension of the period of youth in contemporary society may detrimentally influence the normal continuation of this process. The later entry into the adult world reduces the number of years during which the young generation is active in the job market and contributes to social resources. Moreover, the postponement of marriage to a later age leads to a lower birthrate and a demographic phenomenon in which the population of young people is steadily shrinking, while the population of older people is steadily increasing (also influenced by extended life span). This leads to a heavier burden on the young generation, or a lower standard of living among the older generation (IARD, 2001).

Furthermore, since the transition to adulthood is often accompanied by uncertainty, emotional distress, and risk-taking, the extension of this stage over a too-long period of time increases the risk of harm to an individual’s mental and physical wellbeing.

According to the findings of the 2001 IRAD study referred to above, for these reasons most of the current theories on the topic focus primarily on the negative implications of a prolonged period of youth. These theories may be divided into three main categories:

<b>Young People as an Underclass</b>	<b>Individualization of the Course of Life</b>	<b>New Stage in Life: Post-Adolescence</b>
A lack of integration of young people into the employment world positions them as an underclass – a social group with low accessibility to social resources.	In industrialized societies there no longer exist typical continua of the transition to adulthood (studies>employment>couple hood>parenthood). The course of life in contemporary societies is individual and very pragmatic at any given moment.	The prolongation of the stage of transition to adulthood has created a new stage in life, known as post-adolescence.

### 1. Young People as an Underclass

One of the prominent elements of entry into the adult world is the integration into stable and permanent employment. The prolongation of the period of youth, as previously mentioned, postpones this integration to a later age. According to certain researchers, the lack of integration of young people into the employment world positions them as an underclass, or a social group with low accessibility to social resources. This view states

that, like other underclass groups (disadvantaged neighborhoods, immigrants, etc.), the young people are exposed to various risks, such as poverty, the likelihood of dropping out of university, lack of success in studies, homelessness, and psychological distress, often expressed through alcohol or drug abuse or mental problems (Furlong & Cartmel, 1997; Murray, 1990, in IARD). However, according to the significant opposition to this view, while many young people experience anxiety and lack of social belonging during this period, most do not suffer from poverty, hunger, or threats to their physiological survival. These dangers are related more to the socioeconomic context in which they live and not to their belonging to a specific age group. Moreover, surveys show that for most young people who experience poverty or unemployment, these constitute but a passing phase.

## 2. Individualization of the Course of Life

Another group of theoreticians holds that in industrialized societies there no longer exist typical continua for the transition to adulthood (studies→employment→couplehood→parenthood). The course of life in contemporary societies has become individual and very pragmatic. At any given moment, the individual can end her career and return to her studies, and the reverse is also true. Systems of couple relationships are far less stable than in the past and are not perceived as essential for the purpose of bringing children into the world. This contrasts with past years, in which young people passed through a structured continuum with minimal deviations.

According to the researchers, this change has altered the sociological significance of the group classified as "young people." Since there is no longer a uniform pattern that characterizes this group, young people have shifted from a declared social category (in the sociological sense) to a purely statistical datum, eliciting more than a few disadvantages. When a group constitutes a social category, for the most part there is also an intentional social policy to promote and cultivate it. In addition, the considerable freedom which characterizes this group often creates a profound sense of loneliness and lack of social affiliation along with extreme uncertainty, which cause young people to make decisions that are not based on long-term plans. According to certain researchers, today's young people find it difficult to imagine their future, tend to live in the present, and have difficulty defining priorities that are derived from the objectives they wish to achieve.

However, this approach has met with considerable objection, since surveys have shown that despite all the points listed above, most young people still advance along the accepted continuum. Most acquire an education and subsequently integrate into the employment world, and most have their first child only after they have established a couple relationship. In addition, many maintain that the difficulty in making long-term plans is derived primarily from the prolongation of the period of studies, high unemployment, and the significant reduction in welfare policy – and not from over-individualization (IARD, 2001).

### 3. New Stage in Life: Post-Adolescence

Adherents to this approach believe that the prolongation of the stage of transition to adulthood has created a new life stage known as post-adolescence. This stage is created as a result of the prolongation of the period of studies. The lengthy period of academic training fosters high expectations about an individual's future occupational development. These expectations, however, are not commensurate with the social and economic reality, following the “inflation” of people with advanced academic education and the high rates of unemployment. Therefore, a long waiting period is created, during which young people acquire all the areas of responsibility related to the concept of adulthood (Franz & White, 1985).

#### **1.2.3 Erikson's Process of Identity Development**

According to Erikson (Kidwell, Dunham, Bacho, Pastorino, & Portes, 1995) "identity versus confusion" is the fifth stage of development and is characterized by a conflict between the sense of personal identity and a sense of identity confusion. During adolescence, the main task is to build a personal identity. Erikson dedicated most of his efforts to the understanding of this process of the creation of personal identity and attempted to clarify the implications of a positive or negative solution on the main conflict during this stage.

According to the article, "Individuation and Attachment in Personality Development: Extending Erikson's Theory," (Ochse & Plug, 1986) an adolescent who coped successfully with the conflicts of the previous stages should arrive at the stage where he is a person who believes in others; has a sense of autonomy and self-confidence; initiates; and believes in his ability to meet challenges and attain appropriate achievements. Now he must cope with a new task – the creation of a personal identity.

Until this stage, during the process of identification with significant figures, children internalize the values, opinions, and behavior of these figures. At the start of adolescence, the components of a personality that have been acquired thus far are a collection or puzzle constituting the parts of the personality upon which every meaningful figure has left its impression. In addition, many changes – physical, sexual, intellectual, and social – cause the adolescent to reflect on questions pertaining to identity. Among these are questions such as: “Who am I?” “Where did I come from?” “What do I want?” and “What will I be?” Now an adolescent must examine his previous identifications, clarify what suits him, what he is and what he isn't, and craft from these a new structure – his personal identity.

According to Erikson, the emerging personality will be different from all previous identifications. It will be unique and exclusive to the individual, for no two people can have the same personal identity.

The concept of "personal identity" addresses one's ability to assess personal traits, strengths, and weaknesses, to accept them, and to decide how to deal with them. In addition, this concept includes one's opinions and outlooks on different topics as well as the physical development and sexual changes that require one to be able to accept and construct a sexual identity, considering the new drives awakened during adolescence.

The search for identity is an active process which is not an outcome of growth or biological maturation and is not acquired by itself. An adolescent distance herself from her parents and searches for the answer to the question, “Who am I?” in the company of her peers. Friends constitute the model for behavior and feedback for her behavior and it is through their opinions about her that she learns about herself. For instance, a compliment about her appearance is interpreted as meaning that she is pleasant-looking, and a request for her help to solve a mathematic equation will be understood to mean that she is smart. Adolescents are greatly influenced by their friends and tend to attribute considerable importance to the way they believe that their friends perceive them. The process of the formation of identity is accompanied by dependence on the group opinion, which has significant influence on an adolescent. Every expression of intolerance toward differences from the group emphasizes adolescents' aspirations to build an identity different from that of their parents. An adolescent conforms to the behavior of others in order to learn how he is different and unique. At a later stage in the continuum, an adolescent is freed of her dependence on the group opinion to become herself and form an adult and unique identity.

During this stage, adolescents' negative and destructive behaviors are apparent in their intolerance toward those who are different. Due to a need for protection during the loss of identity stage, adolescents tend to be forceful, intolerant, and even brutal toward anyone who is different – who is of a different color or cultural background, or who holds different opinions, has different abilities or dresses in a different way. Anyone who is identified as “not one of us,” can expect to be the target of a mocking, sharp, and inconsiderate attitude, which results from the need to feel protected during the loss of identity stage, and this continues until identity is re-formed and reconstructed in a unique personal identity. Hence, for adolescents from minority groups, the crisis of identity is more acute than it is for adolescents from the majority group.

During the process of the formation of identity, adolescents' experiment with the different roles assigned to them by society. This "moratorium" is an extension which is bestowed, a “release of debts,” or a period facilitating a search for the purpose of forming a personal identity. Society enables the adolescent to assume roles and fulfil adult-like duties, but without the obligations and responsibilities expected of an adult. It grants adolescents an extended period of time in which to amass experiences, engage in self-examination, and enjoy the freedom to take chances and make mistakes, until a personal identity is formed.

During this period adolescents fall in love, engage in academia and various professions, search for special experiences, and experiment with different lifestyles, styles of dress, and fields of occupation. Thus, falling in love is not necessarily an intimate need but the examination of the self on the way to the formation of a personal identity. The same is true of the choice of a course of study, workplace, etc.

Adolescents tend to have an ideal and unrealistic perception of the occupations and professions that they believe they should aspire to in the future (model, rock star, race car driver, etc.). Frequently their aspirations are far beyond their abilities and talents. In other words, they tend to adulate an object of their aspirations, imitate and idolize it, and identify with it in an exaggerated manner. This over-identification with youth idols provides the confused adolescent, who lacks a cohesive identity, with a sense of a borrowed identity. This may be a negative identity that contradicts the parents' position, but the central need of the adolescent is to attach him or herself to an identity (Fan, Cheung, Leong, & Cheung, 2014).

Adolescence is also characterized by a tendency toward extreme behaviors; the search for exceptional experiences which often involves drugs or alcohol; the joining of

cults; and other risky behaviors. All these stems from a need to examine the self and form a unique personal identity. In Israel, a common part of this developmental process is to embark on a “big trip” following compulsory military service. This trip to distant lands and cultures, which has come to characterize the maturation process of many Jewish Israeli adolescents, is viewed as a "freeing" experience following the rigors of military service but is also fueled by the need to "journey into the self" and form an adult identity.

This stage also expresses a search for autonomy, like Erikson's second stage, in which infants search for increased independence from their parents. However, now the search for independence and autonomy is different and meaningful not only with respect to the physical-practical aspect, but to the mental aspect. This separation from parents can be expressed as a “war” in which parents often resist appropriate separation and fear the loss of a relationship with their children. In essence, adolescents also fear the separation, despite their desire to be independent, and thus experience a conflict between dependence and independence, which often triggers anxiety.

It is important to note that the experience of independence enables adolescents to learn about themselves. Their successes and failures teach them about their traits, abilities, and coping mechanisms. They examine what they know about themselves and revise their opinion of themselves in accordance with the feedback they receive and the way they perceive themselves in comparison to others (Munley, 1975).

### **Cognitive Aspects**

In his book "*Youth and Crisis*" (1968), Erikson wrote that until the middle of the 20<sup>th</sup> century, the belief prevalent among researchers and psychologists who addressed the field of cognitive development over the span of a lifetime was that a person's thinking abilities develop until adolescence, after which people acquire only new information, but not new ways of thinking. In addition, the assumption was that basic mental abilities, such as abstract thinking, mathematical thinking, and verbal flow, come to a head during young adulthood and begin to decline gradually but sharply from the period of midlife. These assumptions were based in part on the theory of Jean Piaget, who described stages in the development of the thinking constructs among children and youths; and also, on some cross-sectional studies that indicated significant gaps in cognitive abilities between young people and older people and the elderly, in favor of younger people. However, during the second half of the 20<sup>th</sup> century, this perception changed as a result of the groundbreaking work of the researchers Arnett and Mitra (2020). By means of very long

and complicated research models, Shaya showed that on average, people continue to develop and improve in cognitive terms until the age of forty or fifty while a significant cognitive decline begins only at a relatively older age – from the sixties – and some abilities decline even later.

There is a prevalent perception that people are at the height of their mental abilities in their twenties, but the apex of cognitive ability is a problematic concept since it depends on the way it is measured and on the field of research. Various studies have chosen to examine different areas in which to determine when people display the apex of their abilities. Recently, researchers have re-analyzed and summarized past studies and undertaken new studies on a large population recruited through the Internet, in an effort to determine the age at which different abilities reach their peak. One such study included the re-analysis of the IQ test, which evaluates various abilities that comprise the intelligence score (Wechsler Test).

Most of the abilities evaluated in this test indeed reach a peak (according to the median) between the ages of twenty and thirty, but there are several interesting exceptions. It emerged that vocabulary, general knowledge, reading comprehension, and performance of arithmetic calculations all reach an apex at the age of fifty. It is interesting and perhaps to be expected that the performance of memory-related tasks will reach an apex at an early age, under the age of thirty. For example, short-term memory, which includes the recall of lists of words, faces, sequences of numbers, visual memory, and so on, reaches its apex before the age of twenty, while the high point of long-term memory comes at the end of the twenties.

An important question in the context of cognitive abilities is what happens after the high point? Does a certain ability that reaches an apex at a certain age begin to decline immediately afterward, or is there a certain period during which it is found at its peak? Research shows that most cognitive abilities, primarily short-term memory, do not begin to decline until, on average, after age forty. Working memory, in contrast, begins to decline after age fifty, while vocabulary improves and increases almost throughout an entire lifetime (or at least until age seventy). It is interesting that general knowledge, which we would expect to increase throughout life, weakens after the age of fifty, perhaps because beyond this aged people are less interested in events beyond their personal sphere and focus on fewer topics.

It is noteworthy that the high point in age for vocabulary differs, depending on a respondent's age group, in what is called the cohort effect. In the modern world, as the

age of a group increases, the cognitive apex also arrives later. In other words, today, people aged fifty enjoy higher cognitive ability than their parents did when they were fifty. Over the past generation, an increase has been observed in the general richness of vocabulary, and while this is true both for children and adults, the rise among adults is higher. One hypothesis for this finding is that current studies focus on older subjects than previous studies did. Further, even after they conclude their formal studies, people now tend to continually learn new things, to contend with the challenges of modern society, such as new technologies that influence their daily work life. Today's job market is far more sophisticated and requires abilities which did not exist in the past, while people also change jobs far more than they did in the past, which also necessitates new adjustments and learning. The entry of the Internet into our lives over the past twenty years, with its infinite possibilities, increases the cognitive load in comparison to fifty years ago, and exposes us to things that other generations could only dream of. People also use computers and smartphones from a young age, and the knowledge they are expected to acquire at school and at work is more extensive and sophisticated than in the past.

This phenomenon is apparently related to what is called the Flynn effect, which is the consistent rise in intelligence test scores over the past hundred years. According to standard tests, we are far smarter than our parents were, and they in turn are far smarter than their parents. Of course, this finding is based on today's test standards, which does not mean that people were less intelligent in the past. (If one compared the results of tests administered fifty and a hundred years ago to today's norms, the test subjects of the past would be classified as mentally retarded!). This apparent increase in intelligence is related to a rise in the complexity of the cognitive requirements of modern society.

Studies have revealed intriguing findings about the gaps between the generations and the different emphases. For instance, people born in 1945 have a large and exceptional vocabulary in comparison to the generations that followed. People born in 1980 have an exceptional working memory, while people born in 1990 process information more rapidly than any other generation. These results represent significant cultural and social changes pertaining to the foci of the studies and to life in general in each period, with technology naturally also having a tremendous impact. They also show that the entire topic of the assessment of cognitive abilities is more flexible than what most people, including many researchers, believed in the past. Although the apex of cognitive ability may occur at a young age in most respects, this does not mean that it is impossible to maintain this high point over time, or at least to slow its decline. It is always



important to challenge the brain, and this can be accomplished by broadening horizons, adopting new areas of interest, or specializing more extensively in a field that one is already well-acquainted with. These are only several ways in which it is possible to maintain sharp and fresh brainpower.

Research about cognitive high points is important in both theoretical and practical terms as it can shed light, for example, on different aspects of the development of the human brain, answering questions such as: are these abilities connected to one another? Are they distinct? What can be expected from the investment in a certain ability at a certain age (in professional terms, for instance)? When does a certain ability begin to deteriorate and is it worthwhile investing additional effort, to slow the aging process?

The practical implications are clear. Knowledge about the highest point can help with various assessments and determine whether a specific individual suffers from a cognitive problem. Information may be garnered about the extent of the flexibility that pertains at the cognitive high point, and whether this apex might change, depending on the year of one's birth. It may help to assess whether a cognitive decline indicates a problem or is simply a natural decline in ability, in accordance with an individual's experiences and private history. This research further illustrates the brain's flexibility about different abilities. It may be possible to strengthen a weakness in a certain ability with suitable training and effort. Of course, abilities alone are not the most important factors in life. Experience has great value and can often compensate for low cognitive ability, and of course people have the wonderful facility to compensate for a lack in one trait through the improvement of another, so that the sum of their abilities may not change. In addition, there is a limit to the extent to which one can improve in a certain field and biological factors play a role.

### **The Process of Identity Formation in the Stage of Young Adulthood**

In research about personality, identity is defined as a person's essential and continuous self, as the inner subjective perception of the self as an individual, or as the entirety of the components through which a person defines herself.

The process of the development of self-identity is the organizing principle that allows an individual to maintain himself as a cohesive personality in sameness and continuity of the experience of the self in the context of social reality. This process enables an individual to answer the questions, "Who am I?" and "What am I?" and "Who and what am I not?" Thus, the individual can evaluate his strengths and weaknesses,

address the constellation of his values and outlook, and decide how he would like to organize them. He must answer to himself about where he comes from and what he wants to be.

The psychologist Erikson (1987) who formulated the psychosocial theory of stages, defined the concept of identity as the most meaningful component in an individual's functioning and as such, as a motivating force of all human behavior (Cole & Cole, 2001). The process of the construction of identity occurs as early as childhood; however, it doesn't become a concept of a stable self until adolescence. The process of identity formation during these years requires an individual to continuously define the constellation of personality characteristics that will accompany him from now on, such as: formation of self-image, identification of abilities and competencies, decisions about outlook, setting life goals, decisions about occupation, the positioning of the self in the social environment, etc. In essence, the stage of identity formation constitutes a summative stage: during this period the young person must process and formulate all the information accumulated during the earlier stages, to create his or her desired personality.

Society, which recognizes the necessity for the construction of identity and the energy that this process requires, affords a young person a "time out," during which he is permitted to experiment with different social roles, from which he will form his personality. At the end of the struggle, success is the formation of a final identity, while acquired along the way is the quality of loyalty – the ability to maintain consistency in self-identity and in the future social frameworks that a person will establish. Conversely, failure would be a state of identity confusion and avoidance of commitments.

Erikson (1968) who lived in the middle of the 20<sup>th</sup> century maintained that the stage of identity formation ends at age eighteen. However, following the extension of the period of adolescence in contemporary society, as described previously, the stage of identity formation has also been extended. Most adolescents in Western society do not establish a stable and cohesive self-identity by age eighteen, and many young people in their twenties still deliberate questions about their tendencies, preferences, and aspirations. Therefore, the task of identity formation continues to be relevant for young people aged eighteen to thirty.

Erikson describes the process as often difficult not only for the young people who are experiencing it, but also for their relatives and friends. Physiological growth, like improved cognitive ability, awakens doubts about one's changing identity, expected future, profession, and the way in which an individual is perceived by society. A young

person often finds it difficult to define who he is, while the feeling of continuity that characterizes childhood is eroded.

This confusion and sense of loss may lead to anti-social and sometimes destructive behavior. While the most prevalent causes of death among adults are cancer and heart disease, among adolescents they are traffic accidents, suicide, physical injuries, and others.

Erikson further writes that if an individual fails to form an identity at the culmination of the process, the effects of this failure will severely hamper his or her ongoing development. The Marcia model (Marcia, 1966) defines four common forms of concluding the stage of identity formation, two of which are considered maladaptive. These forms are based on the combination of two main components of the stage of identity formation.

1. Crisis/exploration: re-thinking and deliberation about the variety of social roles and plans for the future, primarily in the professional and ideological fields.
2. Professional and ideological obligation: expressed in the ability to choose a profession and outlook and willingness to invest in this choice.

As mentioned, these two components create a typology of four types:

- Identity achievers: young people who experienced the crisis of making decisions and present independent attitudes; following examination of the possibilities, they reached commitment about the employment and outlook they chose.
- Foreclosure: adolescents with commitment to employment and ideology, but not commitment achieved after a process of research and examination, rather from conformity to the expectations of parents and society
- Moratorium: young people who are still at the stage of investigation; they do not use the time to arrive at commitment but rather for the process of deliberation and identity crisis
- Diffuse identity: young people who did not experience a crisis and did not reach commitment (Cole & Cole, 2001).

According to the theoreticians, those who did not resolve the identity crisis, and primarily those who belong to the four types of diffusion described above, will find it difficult to function during the next stage of life, when one is required to pave a professional path and establish a family. In the absence of the commitment component, these two tasks cannot be performed, so that these young people may become “eternal

children” – adults who exhibit inconsistency and behave childishly. Another possible complication is the intentional choice of a negative identity, ranging from delinquency to low self-image, lack of trust in one's competencies, and so on.

Empirical evidence was presented for these arguments, as Marcia and other researchers found that young people with a crystallized identity have a more positive sense of self, are capable of more complex thinking, are less impulsive, and exhibit a greater ability to achieve intimacy in interpersonal relationships than young people with a diffuse identity. Moreover, the theories of the self, starting with Kohut's theory (Stein, 2006), maintain that self-cohesion is a basic condition for mental health. According to these theories, lack of integration in the concept of the self, causes anxiety that is greater than anxiety about death. This is one of the explanations for the sad fact that the 15 to 24 age group is characterized by the highest suicide rate. Farewell letters written by adolescents who committed suicide frequently refer to questions of identity, self-image, and autonomy, and tend toward confusion and emotional turmoil.

Katzir's (2005) study revealed that soldiers who made serious suicide attempts had significantly more diffuse personalities than other soldiers. This diffuseness was expressed in the lack of future goals; the lack of a sense of continuity, meaning, and belonging; a confused physical identity; and low self-control. In addition, the lack of formation of identity factors was found to be related to high anxiety, depression, and an unstable emotional situation. Additional studies revealed a relationship between identity status and drug use, where those with a diffuse identity used more hard drugs than those of all other identities.

In conclusion, the findings indicate the importance of the achievement of a crystallized self-identity, for the purpose of future development and mental wellbeing. Moreover, difficulties with self-definition may lead to choices that do not correspond to an individual's true characteristics.

Considering these conclusions, it is clearly necessary to provide help and support for young people at this critical age, to facilitate the formation of identity in an adaptive manner. In industrialized societies, the most significant components of identity are those characteristics necessary to reach professional and academic decisions: traits, abilities, talents, and hobbies. Therefore, during the stage of identity formation it seems that the most important support should be in the occupational-academic sphere, to help young people to map their characteristics and tendencies, set future goals, and delineate a path to follow.

It should (Schiff, 1987) be noted that the process of setting life goals must consider the occupational reality in a country, and not only an individual's abilities and inclinations. Some young people feel a connection to a certain field and are interested in participating in in-service training but may not be sufficiently aware of the implications of their choice. Institutions of higher learning teach a variety of professions that inspire great interest but for which there may be little or no demand in the job market. The choice of these paths may significantly reduce the occupational channels open to a young person, who may be compelled to abandon a chosen profession after investing many expensive years of study.

Moreover, Gilbo (2015) sometimes one can define his aspirations but may lack the capabilities to realize them. For instance, many young people aspire to study prestigious subjects, such as medicine, computer science, and so on, but their personal data may not indicate that they would succeed in such fields. The contradiction between the dream and the reality leaves some disillusioned while others spend costly years on futile attempts to achieve their dream. In some cases, by desperately clinging to a dream, an individual may be blinded to other possibilities or professions that might also provide satisfaction.

A wise counselor, therefore, would do well to explain the reality and examine together with the young person the degree to which that reality corresponds with his or her aspirations. When the two are at odds, a counselor should provide direction to a similar and more accessible path (for example, if medicine is out of reach for any reason, perhaps the paramedical professions, or nursing, could be substituted as a career goal), or assist the young person in recognizing prominent abilities and competencies, which he or she might not have considered.

Another course (Katznelson, 2009) of action focuses on young people with a deficient self-perception. Deficiencies in self-perception may interfere with the process of identity formation or lead to its unsuccessful conclusion. Past failures, failures in the family system, excessive criticism from his or her environment, and additional factors may harm an individual's self-perception and self-esteem and have a destructive influence on the constellation of an individual's patterns of behavior and thought, and primarily on the sense of control over one's fate. People with a negative self-image often lack trust in themselves, doubt their ability to succeed, and live with a constant feeling of powerlessness. They may find it difficult to recognize their strengths or talents and avoid setting meaningful goals, since they have no faith in their ability to realize them. They

tend to avoid attempting to cope with difficulties, for fear of experiencing repeated failure. This pattern of behavior denies them experiences of success and creates a negative cycle, which is difficult to break without the assistance of an outside figure.

The recommended course of action in this case is first and foremost to find a qualified therapeutic-counseling figure, to identify the sources of harm to the self-image. This professional's role is to cultivate and rehabilitate self-esteem and help such young people to identify the areas in which they can experience success. Empowerment and cultivation of a sense of control; an increase in the level of aspirations; belief in one's capabilities; development of leadership abilities; and provision of a supportive social system in times of failure and success – all these processes may promote positive development in the coming stages of life.

However, even young people with a cohesive identity, who can define and set goals and who believe in their ability to achieve them, may find it difficult to pave the way to the adult world, for technical, financial, or social reasons. One of the main obstacles lies in the problem of access to higher education.

Education is one of the most important rights to which a citizen is entitled (Lomranz, 1989). In contemporary societies it is of even more importance because it facilitates entry into many of the most lucrative and prestigious professions. For this reason and because of the importance of human capital to a state's economy, during the second half of the past century all industrialized societies initiated significant educational reforms and considerably increased the percentage of young people who acquire an education.

### **Emotional Aspects – Future Orientation, Self-Image, Self-Efficacy, and Approach to Life**

#### Future Orientation or Perception of the Future

The perception of the future includes a person's plans, expectations, and concerns regarding possible events in different areas of life in the near or distant future. Regarding the perception of the future, the focus is not on what an individual hopes will happen to her, but on what she estimates will happen to her.

While people of all ages think about the future, such thinking is more prevalent among adolescents as they shape their perceptions about themselves and their environment (Shif & Benbenishti, 2004). Furthermore, perception of the future is important for people of all ages, but more so for people who are in a process of transition

and in times of crisis. A significant period for the formation of a perception of the future is during adolescence, when young people make significant decisions that may influence their future, such as decisions regarding a field of study.

Several studies have examined how vulnerable young people perceive their future and their ability to deal with independent life. A study performed among adolescents at-risk found that one quarter have fears about the future, while one quarter estimates that they will not attain a higher education. These young people felt that they were less prepared to manage independently with respect to employment, handling of residential arrangements, and education. Other studies conducted among young people on the threshold of departure from the educational framework or after leaving it indicated that a large group fears that they are not willing to embark on an independent life. A study conducted among young people aged 14 to 28 from disadvantaged regions in Turkey found that the more years of education young people had, the more faith they had in their ability to realize future (Hobfoll & Walfish, 1984).

Research (Greenberger, Lessard, Chen, & Farruggia, 2008) shows that higher education is associated with a more positive perception of the future. In addition, it was found that young people who both studied and/or worked were more optimistic about their ability to realize their future than young people who did not work and did not study. From these findings the researcher concluded that education constitutes a significant factor for advancement among young people from distressed populations. It further emerged that young people aged 14 to 18 were more optimistic in comparison to young people aged 19 to 24 and they in turn were more optimistic than young people aged 25 to 28. This may be because during young adulthood young people are compelled to face reality as they are exposed to the financial, bureaucratic, and social barriers that may delay the realization of their future.

Some studies revealed that positive expectations about the future among adolescents are related to the setting of long-term goals; belief in the value of higher education; positive thoughts about employment; better emotional and social adjustment at school; and sense of ability. Nurmi (2005) notes that the way in which young people view their future is related to future behaviors, such as delinquency, use of drugs, and lack of occupational stability. This is because the perception of the future includes expectations about social belonging. Therefore, the perception of the future is perceived as an important development variable among young people.

## Self-Image

Self-image is a person's perception of himself: his evaluation and opinions of himself, his body, his aspirations, and his ability to deal with problems (Baumeister, 1999). It includes one's opinions and emotions about oneself both as observer and actively, as a person with the ability to make changes (Levi & Burrows, 2008). According to Rosenberg (1965), this is an emotional trait that includes a person's thoughts and emotions about different aspects of his life. Self-image is characterized by continuous feelings that are relatively stable over time. However, it tends to be based on a variety of experiences comprising success and failure. It is influenced by both life circumstances and social interactions, as it is also composed of comparisons one makes with those around him with the aim of creating an evaluation of the self (Erol & Orth, 2011). The importance of self-image is its influence on one's functioning, and feelings related to anxiety, pessimism, and even to physical health.

A longitudinal study performed among young people aged 14 to 30 found that while self-image is indeed created during adolescence it continues to be added to, albeit to a lesser extent (Gelles, 2005). This study showed that introverted young people who are emotionally unstable have a lower self-image. The importance of self-image among vulnerable young people appears in several studies. Among adolescents at-risk (up to age 18), a relationship was found between suicide and poor self-image (Littleton & Ollendick, 2003) In addition, a relationship was identified between low self-image and eating disorders. One of the explanations is that young people with a low self-image develop a negative body image, which in turn may lead to an eating disorder (Glass, Flory, Martin, & Hankin, 2011). A relationship was also found between poor self-image and substance abuse among learning disabled young people (Pearlin & Schooler, 1978). The statements indicate that low self-image has negative and dangerous implications for vulnerable young people.

Another personality characteristic examined is the sense of control. A sense of control in life and over one's fate is defined as a person's belief in her ability to influence her future, her sense of self-efficacy in evaluating the relationship between behaviors and situations and their outcomes, and the sense of possessing the ability to muster the forces necessary to deal with different life events (Levi & Burrows, 2008). A sense of control also refers to the following elements: the possibility and ability to make choices; the feeling of strength that may derive from certain abilities; and control of resources. The



literature links additional terms to this concept, such as learned powerlessness and self-efficacy. Other related references are to the differences between the internal locus of control – which describes the extent to which a person feels he wields influence, is responsible, and is in control – and the external locus of control, in which a person feels himself to be controlled by external forces and at their mercy, and therefore not responsible for or in control of his situation (Caputo, 2003).

A sense of control develops both as an inherent component and as a product of the family and social framework. Throughout her lifetime, an individual's circumstances contribute to the shaping and development of her sense of control. One of the characteristics of young people at-risk is their feeling that they do not have control over their fate and that they are subject to the influence of forces which are stronger than they are. This is often the result of constant exposure to difficult life events that could not be averted. A strong sense of control among young people was found to be associated with positive elements. For example, a series of studies among adolescents found relationships between a sense of control and mental and physical health, high self-image, satisfaction with life, and a positive life perception (Armstrong & Boothroyd, 2008). Moreover, several studies of adolescents demonstrate that their external locus of control is an affiliating factor with at-risk groups (Cahn-Strabczynski, 2005). The preceding shows that the development of a sense of control should be a significant component of programs for the advancement of young people

#### Self-Efficacy and Approach to Life

The theory of self-efficacy is concerned with individuals' beliefs about their ability to oversee and manage events which influence their surrounding environments and their lives in such a way that they can successfully satisfy their needs and utilize their abilities, and summon the motivation, cognitive resources, and required actions (skills), in order to succeed at the tasks, they have chosen to undertake. According to Bandura (1997), self-efficacy can be developed through the successful accomplishment of tasks, the observation of behavioral models, verbal persuasion, and a positive level of psychological and physiological arousal. Bandura maintained that the empowerment of the individual is achieved through the identification of his strengths and abilities, an increase in the awareness of his strengths and abilities, the development of his ability to change the negative attitudes of the educational staff toward him, and the creation of personal and group opportunities for the expression of his abilities.

The role of the system that grants education is to facilitate among its students the discovery of strengths and self-fulfillment until excellence is achieved. The perception of self-efficacy influences behavior and emotions. People who are insecure about their abilities tend to invest little effort and to quickly give up if they encounter difficulties. They often feel anxiety and negative emotional arousal in situations that they believe they do not have the ability to cope with. Moreover, self-efficacy pertains to a person's belief in his ability and not only to his objective abilities.

Motivation is a vital and necessary component of the learning processes, without which learning will not occur and academic achievements will not be attained. When a student feels she is in control of her behavior, she is receptive to learning and to challenges and is more likely to take initiative and be motivated

The role of the system that grants education is to enable the discovery of strengths and the self-fulfillment until excellence. The perception of self-efficacy has behavioral and emotional influences. People who cast doubt on their ability will tend to invest little effort and to quickly give up if they encounter difficulties and will feel anxiety and negative emotional arousal in situations that in their opinion, they do not have the ability to cope with. Moreover, self-efficacy pertains to the person's belief in his ability and not only to his objective abilities.

Through the increase of efficacy, the process of empowerment will occur, which is the transition from a situation of powerlessness to a situation of better control of life and the environment, and the improvement of the academic achievements.

The social cognitive revolution in psychology, which occurred in the 1950s and 1960s, also addressed the field of motivation and directed the attention from basic and unconscious needs and from reinforcements and punishments to cognitive processes. One of the most important developments in the field was the understanding that the process of motivation includes the individual's expectations of the outcomes of his behavior. Different definitions of these expectations became central concepts in the explanation of human behavior. Kaplan and Asor (2004) explained that the most important concept is self-efficacy.

Bandura (1986) conceived the idea and laid the theoretical basis for the concept of "self-efficacy" and defined it as a process that links knowledge and action as an assessment of the ability to perform behavior that results in a certain outcome. The extension of the definition to the belief in the ability to muster motivation, cognitive

resources, and processes of action necessary for the mastery of the task requirements emphasizes the cognitive process.

Self-efficacy, like other mediating factors, is built through the gradual acquisition of abilities through cognitive, social, verbal, and physical experiences. To realize the internal resources effectively and primarily to perform complex tasks, skills, good abilities, and high self-efficacy are necessary, although there is not necessarily a correlation between the level of skills and the individual's capability to perceive his ability to use them in different situations.

Self-efficacy is a process of assessment, judgment, and control that creates a measure that determines how a person thinks, feels, and acts contributing significantly to motivation and achievements. Bandura (1977) notes five processes based on accumulative experience through which the generalness in the perception of the self-efficacy is formed:

1. Similar skills required in a variety of activities.
2. Simultaneous development of abilities in different fields.
3. Control of the mechanisms of self-direction.
4. Skills of coping that can be generalized and that enabled the individual to control situations of pressure.
5. Structuring of frequent behaviors of success cognitively in different activities.

The social cognitive theory maintains that people tend to perform tasks that they believe they can perform, and it influences their choice. According to Bandura (1989), the creation of the sense of efficacy is created from the processing of four sources of information.

1. Reconstructed personal experiences or past performances. The experiences of success tend to raise the assessment of the self-efficacy, while repeated failures weaken it. The real influence that the personal experiences have on the self-efficacy depends on the conditions under which the task was performed and on the results. For instance, the perceptions of high self-efficacy are created following experiences of success of the task performed, repeated for a task performed under conditions of challenge, and received reinforcement. In addition, the personal experience in the performance of specific tasks influences the individual's sense of efficacy. In the continuation, the personal experiences may contribute to the general perception of efficacy from a perspective of all the successes or failures that the person experiences.

2. Observation of the performance of other people. Alternative experience based on the performances of significant others constitutes a model to which the individual can compare himself and draw conclusions about his personal abilities. This source of information is effective primarily if the person has little prediction of the evaluation of his personal ability in a certain field. This source too has considerable weight in the formation of the beliefs of specific and general efficacy.
3. Verbal persuasion. Realistic verbal persuasion of other people, expressed in the experience of others, causes the person to believe he is capable or incapable of performing a given task. The persuasion is a factor of influence, primarily if the people doing the persuasion are meaningful figures, such as parents or teachers. This source of information may influence differently the degree of generalness of the perception of self-efficacy. If the reference of the other is to the individual's successes or failures in similar situations, the attempt at persuasion will strengthen or weaken the feeling of efficacy. If the other's statements are directed to the individual's successes or failures in tasks and in different situations, the attempt at persuasion will contribute primarily to the general aspect of the self-efficacy.
4. Physiological and emotional situation. According to this situation, the individual judges his abilities in light of situations of functioning or lack of functioning. Physiological and emotional responses under conditions of calm and relaxation or tiredness and anxiety illustrate to the individual his ability or inability to undertake the task successfully. The influence of the physiological arousal is primarily on the individual's specific sense of efficacy since it is expressed to him in situations and in specific fields.

At an adult age the self-efficacy is expressed in different areas of life. Research studies showed that there is a relationship between self-efficacy and clinical problems among adults, such as phobias, addictions, depression, assertiveness, social skills, control of pain, athletic performances, and self-direction (Pajares & Valiante, 1997). Bandura (1997) maintained that among adults, cognitive activity is the main source of self-efficacy. They can act themselves to raise their own self-efficacy, through thinking and practice. As the self-efficacy is higher among adults, the goals they set for themselves and their willingness to achieve them are higher. Adults with a low sense of self-efficacy easily become victims of pressure and depression (Katz & Sokal, 2016).

Self-efficacy is embodied in the person in different areas. In the field of education, the feeling of self-efficacy is researched primarily as predicting academic achievements (Betz & Hackett, 1983). To achieve good performance, it is not enough to have ability or talent, it is necessary to have a high level of motivation and perseverance. The variable of self-efficacy is one of the components of motivation, and it is the only one with direct impact on the performance of action. According to Bandura (1997), the influence of the factors of motivation on the academic performance comes for the most part from the high sense of self-efficacy, with which the learner accesses the performance of academic tasks. The research today focuses on the individual's beliefs, self-efficacy as a vital component that predicts what he will do with his knowledge and skills and following this determines success or failure in the studies (Pajares & Valiante, 1997). When the self-efficacy is high, the learner's attention is directed to the task requirements, and when it is low, the learner is focused on himself and his failures. However, research shows that the success in the studies increases the feeling of self-efficacy. It was found that students with effective and active learning style who succeed in the studies report a higher feeling of self-efficacy than do passive students who fail. Consequently, they solve problems more effectively, work better on their tasks, evaluate their academic work as effective, and their ability of perseverance is higher than that of students with a low sense of self-efficacy. In essence, self-efficacy is the motivation that drives the learning and in addition is a direct outcome that develops following learning (Schunk, 1981).

A sense of self-efficacy allows for a process of empowerment to occur, which is the transition from a situation of powerlessness to one of feeling more in control of one's life and environment, which lead to an improvement in academic achievement.

The social cognitive revolution in psychology, which occurred in the 1950s and 1960s, also addressed the field of motivation and directed attention from basic and unconscious needs and from reinforcements and punishments to cognitive processes. One of the most important developments in the field was the understanding that the processes of motivation include the individual's expectations of the outcomes of his behavior. Different definitions of these expectations became central concepts in the explanation of human behavior. Kaplan and Asor (2004) explained that the most important concept is self-efficacy.

### **1.3 Developmental Tasks / Progress and Crises in the Challenges of Young Adult Life**

The Developmental Theory is represented in the works of scholars such as Piaget (1980) and Erikson (1968). Erikson assumes that human development is driven by an inner need to progress towards personal wholeness that includes self-awareness and the realization of interaction with those around him, and that the surrounding society tends to encourage and support this interaction (Hjelle, 1981).

George Vaillant and his group (1984) conducted a 35-year study about first-year students at Harvard University and found a high correlation between a happy childhood and positive traits in the middle of life (expressed in the ability to play and maintain good systems of relationships). Vaillant noted that the hierarchy of defense mechanisms was formed as the age of the subjects increased and was composed of two aspects – adulthood versus lack of adulthood, and psychopathology as opposed to mental health. He saw that in adulthood the defenses depend on psychology and on objective adjustment to changes in the environment. Vaillant concluded that the defense mechanisms matured over the years when adulthood depends more on internal development than environmental development. In addition, in his research Vaillant concluded that negative events influence mental health more than physical health and that pressure experienced in military combat causes post-traumatic pressure without other phenomena of psychopathology.

Today, longitudinal studies do not provide a consistent model of human development. However, they demonstrate the influences of genetics and the environment on development and prove that while childhood has a great impact on development change is also possible throughout adult life.

#### **Developmental tasks**

Although many theorists are responsible for contributing to the Developmental Tasks Theory, it was Robert Havighurst (1948) who elaborated on this development theory in the most systematic and extensive manner (the concept is sometimes considered to be outdated due to socio-cultural changes of the XX/XXI century, but it's still useful for understanding of the developmental mechanisms).

The main assertion of the Havighurst developmental tasks theory is that development is continuous throughout a person's entire lifespan, occurring in stages. A person moves from one stage to the next by means of successful resolution of problems

or performance of certain developmental tasks. These tasks are typically encountered by most people in the culture where that person belongs. According to the Havighurst developmental tasks theory, when people successfully accomplish the developmental tasks at a stage, they feel pride and satisfaction. They also earn the approval of their community or society. This success provides a sound foundation that allows these people to accomplish the tasks that they will encounter at later Havighurst developmental stages.

Conversely, when people fail to accomplish the developmental tasks at a stage, they're often unhappy and are not accorded the desired approval by society. This results in the subsequent experience of difficulty when faced with succeeding developmental tasks at later Havighurst developmental stages.

Robert Havighurst (1972) proposed a bio-psychosocial model of development. According to Havighurst's Developmental Tasks Theory, the developmental tasks at each stage are influenced by a person's biology (physiological maturation and genetic makeup), his/her psychology (personal values and goals), as well as his/her sociology (specific culture to which the individual belongs).

Havighurst identified six major stages in human life covering birth to old age:

- 1.) **Infancy and early childhood**, which lasts from birth to age 5. These are babies who are just learning to walk and talk and figuring out the world around them.
- 2.) **Middle childhood** lasts from age 6 to age 12. During this time, children become more self-sufficient as they go to school and make friends.
- 3.) **Adolescence**, which lasts from age 13 to age 17, comes with hormonal changes and learning about who you are as an individual.
- 4.) **Early adulthood** lasts from age 18 to age 35 and involves finding an occupation and often finding a life partner as well.
- 5.) **Middle Age** lasts from age 30 to age 60 and is the time when most people start a family and settle into their adult lives.
- 6.) **Later Maturity** is the time of life after age 60. During this time, people adjust to life after work and begin to prepare themselves for death.

Tasks that have their source in the pressures of society: Learning to read, learning to be a responsible citizen. Following the Havighurst Developmental Tasks Theory, Physical maturation has a great influence on psychological and emotional growth (for

instance, the ability to move freely from the age of a year or to speak from age two enable interactions that were not possible beforehand) (Siegel, 2013). The child influences the environment, which influences his development concurrently. People are born with the maximum number of brain cells they will have, and development is in the neurons, which grow and transmit information, and cause the brain weight to increase by a factor of three (Dweck, 2000) Brain growth is plastic and is greatly influenced by environmental stimuli (the brain adjusts itself to the environment where it finds itself; for example, an infant is born with the ability to identify all sounds, but at age two loses the ability to identify sounds not in his language), or in other words by an environment that provides normal stimuli facilitating the development of a normal brain.

In the past, mental health was defined as the opposite of mental illness, or in other words, addressed all behavior that is not significantly psychopathological as normal. Over time, many psychiatrists realized that this definition is inadequate and proposed different definitions, including the definition suggested by Daniel Offer and Melvin Sabshin (1974), who divided normal behavior into four useful complementary perspectives. In the traditional medical-psychiatric approach, normality is health, and this is an almost internationally accepted phenomenon. The boundaries of "normal" are very broad and almost all people (all those who do not suffer from significant psychopathology) are defined as normal. This definition is like the traditional definition, according to which normality is a reasonable form of functioning and not necessarily an optimal one, in which symptoms of illness are not visible.

According to this approach, normality is a harmonious and optimal combination of all the different mental components, when the apex is optimal functioning. This is an ideal person, the aspirational goal in successful therapy (like the approach of Freud that normality is an imaginary idea).

This approach is based on the mathematical idea of the bell curve, where the main range of the bell comprises the "normal" with the "deviants" situated along the edges. According to this approach, a person is evaluated in the context of his or her society, and difference is accepted only when it exists within the group. Furthermore, in the context of this approach normality is the outcome of a process in which different temporary changes are required (the theory of Erikson about the eight stages in the life cycle is an example of this approach).



Several cross-sectional studies were conducted to gain greater understanding of normality, such as the research of Offer and Sabshin (1974), which monitored a group of adolescents over their high school years. This study defined three types of development – continuous, during analysis. Peoples who developed in each one is very different from one another but are defined within some range of normality. However, this research is not absolute since it was performed on one type of population – middle class adolescents who do not have significant psychopathologies, who can experience different emotions and resolve conflicts, who have relatively positive systems of relationships with parents and siblings, and who feel a sense of belonging to their culture and environment and are aware of the prevailing norms and values.

### **1.3.1 Lifelong Learning Challenge**

In a world of endless changes, the acquisition of knowledge is significant to improve personal abilities and to find employment and attain self-fulfillment. Today, acquiring an education is a long-term process, and may be referred to as “life-long learning.” Learning and training are no longer performed only in the framework of school and university but are acquired over many years, in informal environments as well and during all stages of life.

Young people with a well-formulated identity, who are adept at defining goals and believe in their ability to achieve, may still find it difficult to enter the adult world, for technical, economic, and social reasons. One of the main obstacles lies in the problem of access to higher education.

Education is one of the most important rights to which a citizen is entitled (Ben-Zur, 2003). In contemporary societies even more importance is attributed to education, for it is an admission ticket to the most prestigious and remunerative professions. For this reason and because of the importance of human capital to the economy of the state, all industrialized societies during the last half of the century initiated significant reforms in education and considerably increased the percentage of young people who acquire an education. In the State of Israel, the Compulsory Education Law was legislated, amended, and extended, until age sixteen was determined as the age up to and including which education is compulsory. In addition, the Israel Ministry of Education invests considerable resources to ensure that as many adolescents as possible will complete twelve years of learning and will acquire a high school matriculation certificate.

Despite these efforts (Ben Olon, 2004), not one country has succeeded in ensuring true equality of opportunities in education among its citizens. While most citizens in developed countries acquire a high school education, the possibility of the acquisition of further education changes significantly from one country to the next.

The problem of access to higher education among young people derives from four main foci. First, the acquisition of higher education entails many costs, and despite government subsidies many students cannot rely on the help of their parents to make up the difference between those subsidies and the cost of tuition and are forced to finance their studies by themselves. Even in cases in which studies are funded by another factor, attendance at an institution of higher learning entails many concomitant expenses, such as travel costs, textbooks, office equipment, administration services (printing, photographs, computerization, etc.), living expenses, housing costs, and so on.

### **1.3.2 Entering New Roles – Professional, Familial**

It is during adolescence that young people prepare for their adult roles in the spheres of employment, family, and other parts of society. Success in these roles depends on the development of personal abilities, such as self-confidence and interpersonal and social skills, employment, and education, as well as the acquisition of abilities related to employment that grant adolescents tools which reinforce their abilities in this field and thus reduce the possibility that they will be dependent on the welfare system. The ability to support themselves is also related to positive experiences that adolescents have undergone during childhood and adolescence, so that the development of their work abilities occurs in the context of a broader model of development that includes references to different spheres of life: studies, health, sense of security, mental and social wellbeing, and the ability to support themselves (Muuss, 1990).

The ability to be gainfully employed enables adults to avoid a cycle of poverty. Moreover, it was found that quality employment leads to better health, longer lifespan, a sense of control over life, and mental wellbeing. Nevertheless, young people experience many difficulties in their entry into the job market, both due to considerable competition and because of the steadily increasing demand for literate and educated workers. In other words, the level of abilities required by the job market has risen significantly, so that people with less ability and lower levels of education will experience erosion in their salary and fewer work opportunities.

Research into the relationship between dropping out of school and finding employment shows that "dropping out" constitutes a problem both for the youths who drop out and for society at large. At the level of the individual, young people who have not completed high school studies experience great difficulties when they attempt to enter the job market (OECD & CPRN, 2005). Moreover, these young people are likely to raise their children in poverty, as their parents did before them, in a situation where frustration, low self-esteem, and feelings of alienation may lead to more serious problems, such as the use of addictive substances, delinquent activity, having children out of wedlock, violence, and lack of family stability (Miller, Bos, Porter, Tseng, Doolittle, Tanguy, & Vencill, 2003).

In the early 1990s, the Department of Labor in the United States appointed the Secretary Commission of Achieving Necessary Skills (SCANS), to define the abilities required in the work world. The fundamental assumption behind the appointment of the committee was that since technologies and markets frequently change and make it difficult to predict which specific abilities will be required of workers, there is a need to provide generic abilities to serve as a basis for the acquisition of knowledge and skills (BIAC - Business and Industry Advisory Committee to the OECD, 1999). The commission defined three types of abilities:

1. Basic abilities: reading, writing, arithmetic, listening, and verbal ability.
2. Thinking abilities: creative thinking, decision making, problem solving, visual ability to process pictures, graphs, and so on, and ability to draw conclusions.
3. Personal qualities: sense of responsibility, self-confidence, social abilities, management, self-control, and trustworthiness (U.S. Department of Labor, 1991)

Another role which many young people assume is the role of parent. Developmental psychology and clinical psychology address parenting primarily as a role that establishes the institution of the family and has supreme significance for the socialization of children. Parenting is highlighted as one of the stages of a person's development. However, parenting, as a rich chain of significant experiences that change and shape the adult's world, was addressed by artists long before it was of interest to psychological researchers. In recent years, there has been a change in this trend which influences theoretical, research, and clinical works that address parenting as a rich inner occurrence as well as a significant interpersonal one. It becomes clear that this occurrence inspires strong and complicated emotions, gives rise to new thinking processes, and the implementation of important integrative and developmental processes.

Parenting as a role has exceptional characteristics that make it unique among all other roles that a person assumes as an adult and make it “more than a role.” One of its prominent characteristics is that it is based on an interpersonal relationship of a special nature due to its intensity. This relationship is characterized by commitment, responsibility, and emotional and practical nurturing, which require multiple investments that are not limited in time and place. The strong moral internalization of the importance of the role and the accompanying social expectations do not grant parents the rights of respite, erosion, or waiver of this responsibility. The parent’s value is determined largely by others, although also by himself or herself, in accordance with dedication and degree of success, as reflected through children’s achievements and how well-adjusted they are. This is the case even though there are many additional influences on a child’s development aside from parenting (including personal characteristics and other innate data pertaining to the child, as well as the influences of the social environment in which a child grows up).

The parental role is frequently undertaken without appropriate preparation, and the expectations of the role are colored by cultural and media messages. These often convey harmonious and spontaneous relationships between parents and children and oversimplify an extremely complex role. The accelerated social-cultural changes of the modern era make the task of navigating parenthood especially confusing, both practically and on the level of values. There is no doubt that the popularization of psychological approaches to child raising (influenced by psychoanalytical theory) have contributed to the transition from the traditional focus on the needs of adults, to a focus on the needs of the child, her sensitivities, and her rights. This change was influenced also by linear models that dominated in the field of the research of children’s development, which focused largely on parents’ influences on their children while only a few were concerned with the children’s influences on the parents. The attempts at correction or reversal frequently occur in an atmosphere of concern about parental damages (often the phrase “do not” is employed) more than the agreed-upon intentions (conveyed by the word “do”). Frequently, parents adopt an exaggerated focus on their children, over-protect them, or experience a sense of powerlessness with regard to their parenting, accompanied by a lack of effectiveness, and a loss of all reciprocity in the relationship with their offspring. This situation embodies harmful developmental and adaptive influences for the child (Cowen, 1994).

However, the competitive and demanding nature of the modern world may lead to a kind of paradoxical pressure on parents: on the one hand they are meant to meet their children's needs with sensitivity, facilitate their self-expression and self-realization, and at the same time they are expected to educate them to be competent, considerate, and successful friends and human beings in contemporary society. Another parental challenge is related to maintaining both involvement with and separation from their children, aspects which many parents experience as contradictory. The difficulty in the transition from the mother-child unit in pregnancy; the response to the needs of a wholly dependent infant; and anxiety about the risks of the outside world – all these make it difficult for parents to cultivate among their children's feelings of healthy separation, autonomy, and the expectation for age-adjusted reciprocity, while preserving their responsibility, involvement, and caring in their relationship.

In the context of the modern family parents are expected to be capable of maintaining a career while functioning as a parent, while work tasks outside the home are executed and monitored via advanced media devices. However, there is a severe lack of social support systems for the nuclear family, and it is not surprising that the gap between the scope of the responsibility and the complexity of the task, and the sources of support, direction, and feedback often give rise to anxieties, guilt, lack of confidence, and many conflicts in the relationships between parents and children.

Parents' needs for professional assistance to cope with the problems of their children may, in this context, become a double-edged sword: the need itself is frequently experienced as embarrassing, the difficulty gives rise to guilt feelings, the "mistakes" are interpreted as failure, and the parental activity is experienced as risky and anxiety-inducing. If a therapist chooses to focus on treating a child directly, the parents may respond to this approach as further evidence of their inability to build a positive relationship with their son or daughter. This situation not only complicates the system of relationships between the parent and the child instead of rehabilitating it, but also complicates the therapeutic relationship between the therapist and the child. There must be a "good reason" for a therapist to work directly with a child, which contributes to building a system of relationships between parent and child (Berger, 2011).

### **1.3.3 Developmental Tasks in Young Adulthood**

The period that follows adolescence is described, on the axis of person-environment relationships, as a period of great distance from the familiar environment of

growing up, characterized by wandering, finding a (metaphorical) place, landing, and nesting. On the axis of interpersonal relationships there occurs a struggle for separation from parents and other supportive figures, and the attempt to establish support relationships from within the peer group; integration into a new community; and the creation of a family nest. In technical terms, this is an intensive period of performance, and therefore it is most challenging and filled with tensions between the outside reality and the internal world.

The period following adolescence, which in Western societies is described as ranging from age 18 to age 28, is the period of "launching from home," or the post-adolescent period. This is a period of significant and pragmatic choices which determine the way an individual's life will unfold. A number of conditions must prevail for an individual to know how to choose his or her next steps. The first condition, basic and existential, is the legitimization of the choice, or the action in terms of subjective consideration. The second condition is the existence of options or alternatives, while the third is expressed in the development of meaningful deliberation between at least two options when the preference of one over the other is not clear. The fourth and final condition is the ability to act based on the choice (Meisels, 1992).

To differentiate from the "in adolescence" choices, these are not "subjective" choices. They do not necessarily pertain to the building of the individual's nuclear identity but are true objective choices. This decade is the person's decade of reality. It is now time to plant the seedlings that sprouted and were cultivated in the greenhouses of families and communities in new fertile soil. During adolescence a person chooses himself; in the post-adolescence period he chooses his place in the world.

The developmental tasks model that Havighurst developed was age dependent and all served pragmatic functions depending on their age. The developmental tasks can be divided due to the fields of development:

- Tasks that arise from physical maturation: Learning to walk, talk, control of bowel and urine, behaving in an acceptable manner to opposite sex, adjusting to menopause.
- Tasks that arise from personal values: Choosing an occupation, figuring out one's philosophical outlook.

From a practical perspective, in the period following adolescence and until the establishment of the family nest, the individual is supposed to achieve the following objectives (Krona, 2013):

1. To leave his or her parents' home and being to live outside the home of the origin family.
2. To engage in the stabilization of the various basic anxieties which tend to arise when first living outside the childhood home: abandonment anxiety, separation anxiety; annihilation anxiety, and anxieties about damages that he may cause to himself.
3. To engage in the examination of different life environments and different distances from the environment of his growth and residence to date, and to clarify and evaluate a comfortable region for final placement or "settling down".
4. To choose at least one professional path
5. To direct the self to the achievement of a socioeconomic status, which the individual has generally chosen either knowingly or unknowingly during adolescence and perhaps beforehand.
6. To attempt to realize the specific sexual identity chosen during adolescence.
7. To cope with mental suffering, disappointments, and frustrations regarding identity and to attempt to accept them and continue to develop.
8. To attempt to achieve intimacy, a task that is genetically built-in to resolve the anxiety-inducing separation from the origin family, while also coping with the dilemma of separation-unification

As a rule (Moss, 1990), maladaptive young people in the post-adolescent period experience themselves as unprepared for an autonomous role in conditions of loneliness and "wandering." For such individuals, the separation from home and its substitutes induces anxiety and depression. They experience reality as threatening, complex, and unstructured; as too dangerous. They are often very confused about their identity and to the objectives of their "wandering" and ongoing development and are unable to create the personal code required for interpersonal communication with other "wanderers," communication that is vital for the purpose of establishing a support group that will facilitate coping. They are very stimulated by what they see but feel too weak to achieve it. They are often engaged to some extent in painful and stifling jealousy in their youth, and their peers seem to them to be more organized and successful than they are. They are

engaged in an aggressive accounting with their past, their family, and the framework in which they grew up and may suffer anxiety in advance of every encounter that demands coping and adjustment: emotional relationships, work interviews, registration for studies, or encounters with social institutions.

A difficulty to adjust to reality and to fulfill post-adolescent tasks is often signified by a stifling fear of reality. This fear is without a doubt derived from what is referred to in the framework of developmental psychology as “stranger anxiety” and “fear of abandonment,” which are dynamic and derived from annihilation anxiety, but in contrast to the appropriate input in early childhood that can reduce these anxieties, young people in the post-adolescent period do not consider reliance on a support or attachment framework as solutions for these anxieties. They want to cope on their own (Robson, 2008).

## **1.4. Contemporary Fears among Young Adults**

### **Factors Determining Neurotic Behaviors**

Neurotic behavior is the most common for SLD students, this is a continuous or recurring mental disorder that is not psychotic and is characterized primarily by anxiety. This effect is felt directly, or the anxiety changes in its expressions following defense mechanisms and then is expressed through different symptoms. There are different neurotic syndromes, some are temporary and transient, and some are continuous and regular. Because the concept is broad and vague, it does not appear in the DSM-4 (Diagnostic and Statistical Manual of Mental Disorders, fourth edition, an accepted guide for the classification of learning disorders in the behavioral sciences), but its classification in the ICD-10 still appears.

Common symptoms of neurotic behavior are increased anxiety, fatigue, stress, disturbances in concentration and creativity, a range of anxiety and phobias, panic, OCD, depression, and dissociative conditions. Frequently the patients complain about many physical sensations but without findings of a physical illness.

In neurotic disorder the individual maintains his insight, his sense of reality, and proper judgment. Generally, he does not confuse between the ill mental experiences and normal reality. The personality is not deficient and does not reach a situation of lack of internal organization.



The differentiation between neurosis and psychosis is based on the severity and different quality of the psychopathology. In contrast to psychosis:

- In neurosis there is no regression to primitive thinking and behavior.
- The judgment and critique of reality are normal.
- There is no distortion of the perception and thinking.

### **Causes of Neurosis**

The causes of neurotic personality are divided into three:

1. Innate genetic factors. It can be assumed that there is an innate core. According to psychoanalytical theory, the “ego” does not cope with the tasks it faces and therefore neurosis develops. There is evidence that anxiety disorders are found at a high frequency in families, but the responsible gene has not been found. The hypothesis accepted today is that people inherit character traits from their parents – shyness, agitation, anxiety, and so on.
2. Environmental and traumatic factors during childhood. Mental disorders of parents, physical illnesses, loss of the parents, tensions at home, and so on can delay the child’s normal mental development, prevent the development of the “ego” and “super ego”, and then in mental conflicts in the continuation of the life the defense mechanisms are inadequate, and a neurosis develops.
3. Situations of severe stress throughout life. Severe mental pressures during adolescence (threat to the sense of self-worth or self-confidence, forbidden drives, significant failure, fear of danger, danger of the loss of the social or economic status, illness, handicap, death of the parents, etc.), increase the internal tension, the mental pressure, and factors for the development and outbreak of the neurosis.
  - When these three factors (innate weakness, deficiency in development in the period of childhood, and mental stress from an internal or external source) connect then the main conditions for the outbreak of the neurosis are filled. The defense mechanisms of the ego stop filling their role and the neurotic symptoms appear.
  - Psychodynamic explanation. Conflicts are created between the id, ego, and superego. The ego attempts to protect itself against the anxiety that the conflict awakens through defense mechanisms that do not work well and therefore there is the risk that the drive will break through the id. The neurotic symptoms are a compromise – the forbidden drives find alternative release, or the neurosis. The primary benefit is that despite the mental

difficulty in the neurosis there is the easing of the stress that created the conflict. The secondary benefit is that the patient receives a forgiving attitude, sympathy, and considerable attention.

### **Conditions for the Creation of Neurotic Symptoms**

1. Rise in the intensity of the forbidden drive. For the most part, this occurs during adolescence, in situations in which there is increased exposure to the temptation of the drive.
2. Decline in the intensity of the powers that repress the forbidden drive and restrain it. Such a decline is expressed in exhaustion, physical illness, and anxiety.

The behavior theories of learning maintain that anxiety, which is found at the basis of all neuroses, is a response conditional upon environmental stimuli that are generalized. The child has mistaken ways of thinking, distorted, which exaggerate the degree of risk and harm that can be caused in different situations. In addition, there is the reduction in the evaluation of the self to cope with problems or dangers. In this way, an anxious and pessimistic approach to life is created.

Neurobiological research studies investigate the main symptoms of the neurosis, anxiety, and panic. The research studies examine the brain activity of neurotic people and regular people to find the basis for anxiety. Now, it is not known whether unusual activity in the brain is the primary or the secondary cause of the neurosis. Research studies note that there are structural deficiencies in the amygdala and hippocampus. Some research works assume that there are deficiencies in the GABA receptors.

The transition toward adulthood is characterized, above all, by the cultivation of an independent lifestyle ranging from cognitive and emotional aspects, through the financial aspect, to independent residence and the establishment of a family. Along the path to achieving all of these, young people must contend with a range of crises, deliberations, and obstacles.

In the framework of the review of the literature (Shif & Benbenishti, 2004), four main areas were found, which embody the most significant challenges that young people are required to cope with on the path to adulthood: the formation of a self-identity, education, employment, and housing. Considering this conclusion, there is a need to aid and support for young people at this critical stage, so as to facilitate the formation of identity in an adaptive manner. In industrialized societies, the most important components of identity are those characteristics which are necessary to make professional and

academic decisions: traits, abilities, skills, and hobbies. Therefore, it appears that what young people seem to need the most to help them to formulate an identity is employment-academic direction. This type of direction will help them to map their characteristics and tendencies, set goals for the future, and delineate a path for progress.

Moreover, although a young person may be able to define her aspirations, she may not necessarily possess the capability to realize them. For instance, many young people aspire to study in prestigious fields, such as medicine, computers, and so on, but in fact their abilities and grades are such that they would be unable to do so. The contradiction between the dream and the reality may leave them greatly disillusioned or they may spend costly years on futile attempts to achieve their dream. Sometimes the desperate clinging on to a dream may blind an individual and prevent him from discerning other abilities in himself that may provide satisfaction in a completely different profession.

In some cases, young people have a deficient or low self-perception. Deficiencies in self-perception may interfere with the process of identity formation or lead to its unsuccessful conclusion. The failures of the past, failures in the family system, excessive criticism from the environment, and other factors may adversely affect an individual's self-perception and self-esteem, leading to destructive influence on the constellation of his or her patterns of behavior and thought, and primarily on the sense of control over one's destiny. People with a negative self-image may lack trust in themselves, doubt their ability to succeed, and live with a constant feeling of powerlessness. They find it difficult to recognize their talents and avoid determining meaningful aspirations, since they do not believe in their ability to realize them. They tend to avoid difficulties, due to fear of experiencing repeated failure. This pattern of behavior denies them experiences of success and creates a negative cycle, which is difficult to break without the assistance of an outside figure.

These young people need, first and foremost, a therapeutic-counseling figure to identify the sources of harm to their self-image, cultivate and rehabilitate self-esteem, and help them to identify the areas in which they can experience success. Empowerment and cultivation of a feeling of control, an increase in the level of aspirations, belief in one's capability, the development of leadership qualities, and a supportive social system in times of failure and success – all these may promote positive development in the next stages in life (Shif & Benbenishti, 2004).

## **1.5 Young Adulthood in Israeli Society – A Contemporary Perspective**

In institutional terms, at the age of 18 an Israeli adolescent becomes an adult with obligations in society. However, in social terms, frequently the individual is still not perceived as an adult by himself or by others. There are two main reasons why the duration of adolescence is relatively long in the State of Israel. First, in contrast to other countries, in which young people find themselves free of any binding and encompassing framework at age 18 (with some even beginning to integrate into the job market at age 15), in Israel at the age of 18 most young people are drafted into the military or into a national service<sup>1</sup> framework and are under the supervision of a holistic system for the next one to three years. When released from the military or national service, they frequently experience a challenging transition to civilian life and embark upon a period of “social moratorium” and a search for self. Consequently, the period of the search that characterizes ongoing adolescence is further extended. Another reason why adolescence in Israel is relatively long is related to the historical development of the services for young people. Until 2007, most services for young people extended to the age of 30. Over time services were developed, in collaboration with societal factors motivated by different interests, which address various target populations. Thus, the 18 to 30 age range was extended to the age of 35. The population of young people in Israel is divided into subgroups, each of which has unique needs and a different degree of vulnerability or potential for success. A contemporary study performed by Professors Cinamon and Rich (2002) found that young people in Israel are mainly interested in work, family (couple relationship and parenthood), and the combination between the different roles (family and career), so that economic and learning-occupational issues are entwined. Another area of great interest to young people is the field of leisure activity.

### **1.5.1 Military Service in Israel**

Military service is a universal path for most young people in Israel from adolescence to adulthood (Maysel, 1993) While the military framework is enforced by law and not a matter of free choice, it is nevertheless perceived as a “mentoring stage”

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<sup>1</sup> In Israel, National Service is a framework for those who do not perform the mandatory military service to nevertheless perform service for society, whether in a school or a hospital or another setting. Religious girls participate in national service, as do people who cannot serve in the military for health-related reasons.

for the status of the adult with equal rights in Jewish Israeli society. Within this framework, young people can evaluate themselves and their capabilities and experiment with new and non-routine experiences. Military service is also a move to a semi-autonomous framework, in which a young person on the one hand is independent of his parents, while at the same time returns home periodically and relies on his parents in economic, instrumental, and emotional terms. Another characteristic of Israeli society that influences the attitudes and values of young people is the ethic of communality from which are derived the importance of social relationships in general (Katriel, 1991), and the family relationship (Peres & Katz, 1981). These characteristics of Israeli society may bias the value of society, which is perceived as in need of protection, and may encourage closeness to family and avoidance of rebellion against the parents' generation and the values it represents. These characteristics of Israeli society may catalyze processes of adolescence in the personal sense (in terms of postponement of gratification, responsibility), but delay processes of adolescence regarding relationships with parents, the formation of personal identity, and economic independence.

### **1.5.2 The Impact of Military Service on the Life of Young Adults**

After high school in most countries, and in Israel following mandatory military service, young people are released into the adult world, where each paves his or her own way.

The nature of individualistic life dissolves the common denominator that once united young people. Modern life, which enables every young person to choose a desired way of life for her or himself has created, along with the positive feeling of freedom, a difficulty to find a common discourse with other young people. Every young person, according to his or her character, makes dozens of different choices in different areas (education, employment, housing, etc.). The unique puzzle that each one completes makes it difficult to create a cohesive group of young people (IARD, 2001).

The absence of a broad and meaningful movement of young people, denies young people the power of the group. In these cases, the relevant sentence is that the whole is greater than the sum of its parts: the power of the cohesive group to achieve goals and effect revolutions far greater than the power of the individuals within it. This phenomenon has far-reaching implications, both for young people and for society.

In democratic societies, it is very difficult to promote a policy which pertains to a certain sector, without a nationwide and crystallized social movement which acts

continuously to promote it. It is possible that this is one of the reasons why government policy concerning young people is not as developed in Israel as it is in the rest of the world. The social organization of the sector of "young people" may lead to the creation of a group possessing political awareness which may drive positive processes that help the entire country.

With respect to the family, most young people in the process of transition to adulthood have the support of their parents and the surrounding environment, both emotionally and financially, to help them deal with the difficulties that characterize the period (Kaakinen & Hyönä, 2010).

Regarding the period of transition from the educational framework to independent life, about one-half of respondents to the question about the difficulty of making this transition defined it as "difficult" or "very difficult," while about one-fifth reported that they did not have anyone to talk to after they left the framework. However, research studies from around the world indicate that some of these young people succeed in identifying distant relatives and identifying their ability to be helped by each one of them and that the relationship with relatives is strengthened as time passes from the date of the departure from the formal framework (Dixon et al, 2006; Marsh & Peel, 1999; Wade, 2008 in Stein, 2012). Some studies indicate that these young people are assisted by the relationships with friends which help them cope with the difficulties that the transition to independent life involves (Hiles, Moss, Wright, & Dallos, 2008). The abilities to recruit support to cope with difficulties are sometimes defined in the professional literature as the ability to create "social capital," (Hook & Courtney, 2011), or in other words, relationships or resources that are available to a person for the purpose of promoting personal issues and solving problems (Kim, Subramanian, Gortmaker, & Kawachi, 2006).

A review of the literature indicates that support from surrounding people contributes to the improvement of a person's concrete and emotional situation and found that the support of friends is related to better functioning in the workplace. Similarly, the existence of a social network after leaving an educational framework is related to a summative measure of positive outcomes. Research about placement among high school graduates who integrated into higher education, indicate the importance of support factors to help young people function in an adaptive manner and to prevent dangerous behaviors (Zimmerman, 1989). In addition, emotional and concrete academic support is vital among

young people with learning disabilities at the start of their academic career to prevent the phenomenon of dropping out.

The contribution of a positive relationship with their parents to young peoples' achievements and mental wellbeing in the general population is unequivocal. Findings for the population of young people at risk also indicate the significant contribution of parents' support to their functioning in a variety of areas.

Studies have revealed several effects of military service on the transition from adolescence to adulthood in Israel, where military service is perceived by most young people as a positive period leading to positive outcomes. A prominent positive outcome is its contribution to the development of emotional and personal maturity that includes the ability to withstand pressure and the motivations of the ego, to delay gratification, and so on. In terms of the specific experiences undergone during military service, which are incredibly broad and varied, it appears that combat service contributes to the development of such maturity, as does service as an officer, although to a lesser extent. The higher emotional development of officers, in comparison to the enlisted soldiers, primarily reflects their different abilities from before they were conscripted. The contribution of military service to the strengthening of emotional maturity is related to the experience of successful coping with the challenges of military service.

With respect to the formation of identity in a professional field, mixed influences are apparent. It emerges that military service causes some delay in the process of identity formation, and that success or failure during military service has a significant influence on this process, beyond the influence of other relevant variables. When comparing various types of military service, we learn that combat service may lead to a halt in the process of exploration regarding formation of a professional identity. Although the officers tend to have higher scores in the research than the enlisted men, this primarily reflects their personal characteristics before the draft. In any event, the length of the process of professional identity formation is not inconsiderable and continues for at least a few years following release from the military.

With respect to the formation of a value-based position, especially in the political sphere, it appears that certain experiences during military service, and primarily the exposure to terrorist events, encourage a process of self-observation and value-based investigation related to the political field. Combat service was not found to be related to embarking on a process of investigation or questioning. In the political sphere too, as in the professional field, the fact that officers seem to be more likely to question and

investigate appears to derive from their personal attributes and is not related to their military experiences.

When it comes to interpersonal relationships, a complex and interesting picture emerges. It appears that regarding relationships with parents, military service may lead to an increase in closeness and may improve the relationship between parents and child, especially between mother and child, and may result in a more mature relationship. However, this occurs in only some of the cases, and there is a significant minority whose relationships with their parents become more tense and dependent. In most cases no noticeable or comprehensive change occurs, and for the most part the existing relationship between the adolescents and their parents is simply extended. Of course, regardless of participation in military service, during those two to three years adolescents tend to become more mature, so that it is possible that it is the change in age and not necessarily the military service that is making the difference. The findings of Mayseless (1993) indicate that, as they do in other areas, relationships with parents have significant impact on soldiers' functioning and success during their service. Regarding relationships with the peer group (friends and romantic interests), a consistent and interesting finding arises, according to which service as an officer, and especially a non-combat officer, contributes to the investigation of, and investment in, relationships with friends and even to the development of intimacy in romantic relationships that is above and beyond the expected contribution of the pre-service personality variables. This contribution is significant, since the increased ability to form intimate relationships found among officers (especially non-combat officers) also rises when comparing between officers and reservists, who have similar personality and background characteristics. It is possible that this derives from the fact that service as an officer, a role which embodies responsibility for others (especially in the Israeli military where the officer is frequently perceived as a substitute parent to the soldiers serving under him), encourages the development of traits such as caring, empathy, and sensitivity to others. These traits come into play in all an officer's relationships, and not only in his relationships with subordinates.

The findings indicate that in certain situations military service indeed contributes to the development of emotional and personality maturity and to the development of the ability to be involved in intimate relationships with friends and in romantic relationships. And yet, Israeli adolescents apparently do not tend to complete the developmental task of separating emotionally and economically from their parents (Hoffman, 1984) during or following military service. Rather, the reverse is true: a continuation of the status quo



is apparent in the systems of relationships with parents, as following military service many young Israelis are not motivated to change them and become more independent, but often become even closer to their parents. The findings also indicate a “freeze” in the process of identity formation in the professional and value-oriented spheres, as well as a delay in this process following discharge from the military. The delay in the formation of a professional identity occurs in parallel to the delay in the departure from the parents’ home and the attainment of economic independence, and it appears that from this perspective young people in Israel are like those in other Western countries. Possible reasons, of course, include the economic challenges involved in being independent, or an attempt to extend the period of security and shelter in the parents’ home and to postpone entry into adult society. In Israel this phenomenon may also be related to Jewish-Israeli family values of preserving family relationships beyond adolescence, so that many parents do not encourage their older children to leave home.

Yet another explanation is that the current generation is a more "pampered" one that prefers to continue to rely financially and emotionally on its parents, which perhaps was not true of previous generations. It is very interesting that despite the great difference in values, culture, and path of transition to adulthood (which in Israel includes a long period of military service) the extension of the period of semi-autonomy (Goldscheider & Goldscheider, 1999) among Israeli young people is incredibly like the situation that obtains in other Western countries. It is possible that in Israel military service makes a significant contribution to the extension of this period, but similar findings in other Western countries gives rise to other interpretations, for instance, that the extension of the duration of the period of professional training and thus the stage of semi-autonomy is related to a longer life span and to the relatively comfortable financial level of the broad middle class in industrialized countries. It should be noted that the studies referred to above do not describe when this period concludes or at what stage young people enter “full adulthood.”

It is important to note that in Israeli society there are also sectors of young people who are not conscripted into the military (Arabs and Ultra-Orthodox Jews). Furthermore, the findings of the studies cited above refer only to men.

These findings reveal many difficulties, which are sometimes particularly pronounced among different subgroups. The following are some examples from 2019:

Twenty-eight percent of young people aged 25 to 29 completed high school without earning a matriculation certificate or did not finish high school. This percentage

is higher among men than women (34% compared to 19%), and among Arab youth (40%) compared to Jewish youth (23%).

Although the level of education among women aged 25 to 29 is higher, they earn less on average, and their financial situation is worse.

Twenty-two percent of young people aged 18 to 24 live in families below the poverty line. This percentage is higher among Arab youth (43%) compared to Jewish youth (15%). In addition, a higher percentage of young Arabs aged 20 to 24 who work, are dissatisfied with their job, and feel a lack of job security.

Fourteen percent of young people aged 20 to 24 reported at least two emotional difficulties "always" or "often," over the past year. These include depression, stress, and difficulty coping with problems. This percentage rises to 18% among 25- to 29-year-olds.

Some experts attribute the rise in prevalence to the indirect influence of social-cultural changes. The increase in existential tensions and pressures on the family overshadow concern about a child's learning success and lessen the educational and emotional support that families provide for their members. The increase in the number of children below the poverty line exposes the broader population to health risks and damage to the functioning of the nervous system. While there is no direct causal relationship between poverty and learning disabilities, often the children in families of limited means do not receive economic, educational, and social support, and thus their chances of coping with academic difficulties are very slim. According to a report from Israel's National Insurance Institute from the beginning of 2008, the number of children who live below the poverty line has exceeded 800,000. As of today, one in every three children in Israel lives below the poverty line. Although in the past it was believed that learning disabilities gradually diminished over the years, new research undermines this assumption and shows that for now, such disabilities are incurable. The new population of learning-disabled adults, who in their childhoods were classified as lazy students with low-level intelligence, and many of whom were expelled from school, will live as adults lacking in education, with poor reading, writing, and arithmetic skills.

## **Conclusions**

Young adulthood is a developmental stage that is essentially a series of significant choices: reaching independence, choosing a profession, managing an independent life for the first time and a significant first relationship.

Conduct at this age is accompanied by great emotional intensity, which is often expressed in frustration, anxiety, and disappointment.

This is, among other things, due to the size of the gap between the desires of the individual and the difficult encounter with the limitations of reality. Sometimes this conflict escalates into a crisis.

“Awakening Maturity” according to Arnett (1995), paints the combination of “aspirations” and “challenges and struggles”, under the physical maturity characteristics of successes and failures, which combines feelings of satisfaction and disappointment, respectively. Arnett sums up this process according to the rule: "The size of the aspiration is the size of the challenge."

According to him, the experience of "travel" - which includes frameworks of employment and studies, career aspirations, relationships, and personal processes - during the period of "young adulthood", is important and significant. According to this concept, this matriculation phase is a "fertile ground" for: the construction of the "self", the fulfillment of personal goals, along with the acquisition of tools for coping further down the path of young graduates.

Given Arnett's perception, this does not mean that young adults who "strive for high peaks" are necessarily exposed to significant disappointment or feelings of frustration, as part of the "challenge" involved in "Peaking to the Peak." This argument can be explained by the perceptual separation between the term's “aspiration” and “expectation”.

This type of separation enables adaptive and "healthy" coping with failures or "failures" - which become an "experience in itself" for older graduates. Moreover, often the aspirations of young men and women along the way may change.

However, many times the fact faces young men and women - that they are unable to reach the "long-awaited summit", or alternatively they discover that the summit to which they are marching is no longer as important and satisfying a destination as they thought. Despite this, and similar to a "real trip" - it is important to remember that most of the "trip photos" are not the photos from the "summit", but rather the photos taken "along the way". The same difficult, beautiful, challenging and experience-filled way, the same path that led us to our destination.

From the description of this literature review, it appears that young adults encounter many difficulties in the journey to adulthood. It also appears that insufficient attention has been given to young adults who suffer from learning disabilities in addition to the difficulties of adults of their age, their characteristics will be presented in the next chapter.

## Chapter 2: Learning Disabilities

The prevalence of learning disabilities has increased significantly over the past twenty years. In 1976, it was reported that about two percent of students in the United States had a learning disorder; in 1990 the figure had grown to five percent; and in recent years the prevalence reported in the professional literature internationally and by educational institutions is 10% to 15% of the population (Brown, Aylward, & Keogh, 1996). Since the enactment of the American Law for the Disabled (ADA) in 1990, the number of people identified with learning disabilities increases every year (Ballard, 2002), with institutions of higher learning reporting that about three percent of their student body has a learning disability (Ministry of Education, 1997).

It is noteworthy that there is still a gap between the suspected prevalence of the disorder in the general population and the number of people who are diagnosed, as for various reasons many people with learning disabilities do not seek a diagnosis. It is expected that the rate of those seeking diagnosis will continue to rise, and some estimate that up to a quarter of the population will be discovered to be contending with a learning disability. One of the problems inherent in measuring the prevalence of the disorder is of course related to how the disorder is defined and determined. At present, there is no consensus among practitioners in the field of learning disabilities regarding these fundamental issues, although the gaps seem to be narrowing in recent years.

There is documentation identifying and addressing the common symptoms of learning disabilities from as early as the beginning of the 19th century. The term "learning disability" came to replace other terms that were common until the 1960s, such as Minimal Brain Damage (MBD), brain damage, neurological irregularity, perceptual limitation, dyslexia, and aphasia. Since these terms referred only to subgroups within what appeared to be a more comprehensive group, a term was needed that would broaden and encompass the full spectrum of symptoms characteristic of this heterogeneous group. The disorder was first referred to as "learning disability" by Kirk (1962) but has undergone a number of incarnations over the years, as will be described in the following pages. Today, 40 years after the new name of the disorder was coined, we still experience a degree of embarrassment due to the ambiguity surrounding its definition and its boundaries, which creates discomfort and lack of clarity among diagnosticians, therapists, researchers, and other practitioners in the field. The issue of accommodations provided for those contending with learning disabilities in the education system is directly

related to the diagnosis of a learning disability. At times it appears that the current situation, in which diagnosis is not sufficiently valid, leads to adjustments and a kind of flexibility which results in lower standards for admission to various professions and to institutes of higher education. (Ballard, 2002) This chapter will provide definitions for specific learning disabilities, Concepts and Classifications, Learning disabilities among children and adults and models for treatment.

## **2.1 Definitions of Specific Learning Disabilities**

Learning disability is a neurodevelopmental disorder that harms the basic learning functions (APA- American Psychiatric Association, 2013) of reading, writing, and calculation, and interferes with a person's ability to acquire and express knowledge and skills at a level anticipated of people of his or her age, level of education, and intelligence quotient. Some professionals consider learning disability to be one of the following: dyslexia, dysgraphia, and dyscalculia; while others include skills such as listening, speaking, and conceptualization as fields of learning that are compromised when there is a learning disability. Therefore, the definition of learning disabilities may also include attention deficit hyperactivity disorder, language disorder, and nonverbal learning disability.

Based on the research in the field, it is accepted today that learning disability derives from neurodevelopmental factors and therefore generally accompanies a person throughout his or her life and may impair functioning in adulthood. Appropriate treatment may help a person with a learning disability to express knowledge and skills and fulfill his or her personal potential in the context of the specific learning disability.

Learning disabilities are characterized by heterogeneity (different people may have diverse profiles of the disability), and they influence a wide range of learning skills. A person may have more than one learning disability, and thus a situation of dual morbidity or comorbidity obtains. Professional diagnosis of a learning disability addresses the range of characteristics of the disability and the factors and additional problems that may appear alongside it.

A learning disability is the type of disability most frequently found in the education system, with the percentage of students in regular education systems who are diagnosed and identified as learning disabled continuing to be on the rise all over the world. The hypothesis is that about 10% to 20% of all students have a learning disability,

which obligates educational systems to adapt to support these students at every age, so that they may fulfill educational expectations.

Difficulties in the identification of learning disabilities are related to the situation of over-diagnosis, too great difference or too great specificity, depending on the criteria defined for assessors by law (in the countries where there are laws related to this issue). Considerable effort is invested in the issue when the criteria that have been repeatedly defined are tested against other alternatives (Schrag, 2000)

Many definitions of "learning disorder" have been published over the years, but the initial definition was proposed by Kirk (1962), who first coined the current name of the disorder.

Learning disability is a disorder or developmental delay in one or more of the processes of speech, language, reading, writing, arithmetic, or other learning skill, which derives from a psychological limitation that was caused by the brain dysfunction and/or emotional or behavioral disorder. The disorder is not an outcome of mental retardation, sensory lack, or cultural and educational factors.

Another definition was published by Bateman (1965) and emphasizes the gap between ability and achievement.

Children with learning disabilities express a significant gap between their assessed intellectual potential and their level of performances, related to the basic disorder in the process of learning and that can be accompanied or not accompanied by the deficiency of the central nervous system and is not secondary to mental retardation, educational or cultural lack, severe emotional disorder, or sensory loss.

In these definitions the researchers do not rule out the possibility of brain injury as a background to learning disabilities, but it is also not considered a necessary factor in the process of the development of learning disabilities. While in their definitions the researchers do not reject the possibilities of mental retardation or severe damage to one of the senses, there is no agreement among them that an emotional disorder can create a learning disorder.

Additional important definitions have been published from time to time by various public offices, organizations, and institutions. Among the most significant is the definition supplied by the U.S. Department of Education, which determined a specific criterion for the identification of a learning disability – the gap between abilities and achievement, as proposed by Bateman.

Another key definition was published by the National Joint Committee on Learning Disabilities (NJLCD, 1998), which met in Canada in 1981 and published a definition in the name of several important organizations. This definition was updated in 1988 and again in 1994. It emphasizes the relationship between a learning disability and a lack of brain functioning and stresses the likelihood of the disorder remaining throughout the life cycle and not only among children. According to the contemporary definition published by this committee in 1994:

Learning disability is a general term that addresses a heterogeneous group of disorders expressed in significant difficulties in the acquisition and use of attention, speech, reading, writing, conceptualization, and/or mathematical abilities. These disorders are internal to the individual and it is assumed that they derive from a central neurological dysfunction and can appear throughout the lifecycle. Although a learning disability can occur simultaneously with additional limiting conditions (sensory harm, mental retardation, emotional and social disorder) or external conditions (cultural differences, inadequate or inappropriate teaching) learning disabilities do not constitute a direct outcome of these conditions (NJCLD, 1994)

Another definition published in 1994 in the DSM-4 holds that:

Learning disabilities are diagnosed when the individual's achievements in standard tests held individually in reading, mathematics, or written expression are significantly lower than expected for the age, studies, and intelligence quotient. Learning disabilities significantly interfere with the academic achievements or everyday life actions that obligate abilities of reading, mathematics, or writing. (APA, 1994, p.175)

In Israel, contemporary definitions of "learning disability" are occasionally published in the General Administration Circular of the Ministry of Education. The General Circular of 2003 notes that the two definitions mentioned previously are accepted by the Ministry of Education, and furthermore it was determined that to assess a student as learning disabled, two conditions must pertain:

1. There must be a significant gap between the student's academic achievements and the achievements expected of him according to his age and class level
2. There must be a significant gap between the student's academic achievements and his intellectual abilities as determined by the objective intelligence quotient tests.

Johnson and Blalock (1987) address the topic of the different definitions published over the years and summarize that it is possible to differentiate three components shared among the definitions:

1. Reference to disorders not defined as causing learning disabilities (exclusion clause): there is agreement that sensory disorders, mental retardation, physical handicaps, and emotional disorders will not be defined as possible causes of learning disability; difficulties in the academic domain caused as a result are not considered learning disability although sometimes the cognitive and behavioral symptoms may be similar.
2. Reference to the gaps between actual functioning and intellectual potential: there is agreement that among the learning disabled there are gaps between mental ability and specific skills. These gaps are reflected in the “focused profile of achievements” in a variety of areas, when in specific areas low achievements are apparent, in “sudden drops.” In this way, a learning-disabled student is different from a “weak” student who has poor achievements in all areas.
3. Reference to the factor of intrinsic disability in the person: there is agreement that the cause of the learning disability is related to internal variables (on the structural-neurological level and the cognitive level) and hence the removal of external factors, such as poor economic situation or lack of opportunities for education, to beyond the field of learning disability. Of course, these outside factors may also cause low academic achievements, but this is not learning disability.

Hammill (1990) reviews at length ten main definitions that were published since the first definition by Kirk (1962). He notes several aspects that create differentiation between the definitions and emphasize the points of dispute, including:

1. The causes of the development of learning disability: some of the definitions note explicitly the neurological-physiological factor (harm to the central nervous system) while others do not address this factor at all.
2. Learning disability, learning throughout the life cycle: some of the definitions address the description of the disorder without mention of a specific age, while others address childhood alone and others note that the disorder lasts throughout the lifecycle, from childhood to adulthood.



Shany's research (Shani, Lachman, Shalem, Bhatt, & Ziger, 2004) indicates that without doubt learning disabilities accompany a person throughout his entire life; sometimes the difficulties become more moderate and at times they worsen, and sometimes difficulties appear in spheres that were not expressed in childhood. Many identify difficulties at an older age against a background of social adjustment, beyond academic difficulties. Frequently these difficulties are accompanied by low self-image, low peer assessment, and coping strategies and attempts to compensate that are not sufficiently effective.

An important question arises in the context of learning-disabled adults: Is there a need for separate definitions for this population? The issue has come to the fore because more and more learning-disabled adults are availing themselves of services and assistance, both from institutions of higher education and at the workplace. The problem is that many of the adults requesting help were not assessed during childhood and are seeking help many years after they attended school. Many the existing definitions refer to young people, and therefore the criteria noted are not suitable.

The response to this vital issue is the suggestion of a definition for the disorder that is sufficiently broad to address disability beyond the aspect of age. The disorder is not fundamentally different in an adult; however, the expressions and scope differ during different periods in a person's life, so that there is no need for separate definitions but rather for age-appropriate diagnostic norms.

Another issue is related to the mention of the cognitive abilities and skills that may be impaired in the context of a learning disability. The different definitions reviewed sometimes use different ways to address the damaged areas – speech, language, reading, writing, arithmetic; (Kirk & Chalfant, 1984) attention, speech, reading, writing, conceptualization, and or arithmetic abilities (NJCLD, 1994); reading, mathematics, or written expression (APA, 1994); reading, writing, arithmetic, language and thinking functions, perception, orientation in space and time, memory, attention and concentration, motor functioning, perception-movement coordination, organization (Israel Ministry of Education, 1996).

It appears that here too there is room to organize and delineate the list of affected areas so as to reach a standard assessment that is sufficiently comprehensive. To this end, in the framework of the research (Kirk & Chalfant, 1984) a taxonomy of the difficulties of the disorder was constructed. This taxonomy of learning disabilities indicates that the difficulties included in the assessment can be combined in a broad group:

1. Difficulties related to the stage of the **input**: when it is possible to differentiate between difficulties related to visual input and difficulties related to auditory input
2. Difficulties related to the type of **language** (symbol): learning disabled people may find it difficult to master one or more of the types of language: verbal language, form language, and arithmetic language
3. Difficulties related to a certain type of **activity or cognitive operation**: several main areas of cognitive activities that may be damaged among the learning disabled were identified: differentiation and attention to details, analysis and synthesis, recall and high cognitive functioning (logical thinking, logic)
4. Difficulties related to the output stage, when an external reaction is required, such as vocal reading, speech, writing, drawing, etc. I use this definition in my research.

### **Concepts and Classifications**

Learning disabilities are expressed in considerable difficulties with two main aspects of learning: (1) the acquisition of basic learning skills, such as reading, writing, arithmetic, and foreign languages and (2) mastering learning skills in accordance with the expectations of specific ages, such as the reading of lengthy texts (Flechter, Francis, Morris, & Lyon, 2005). Sometimes students who acquire the basic skills find it difficult to utilize them efficiently, in an age-appropriate manner. For instance, when students reach the secondary education framework, in which they are expected to be able to cope with long and complicated texts, they may again encounter difficulties with reading skills, and find that they are slow readers, have difficulties deciphering long and complicated words, and difficulties with reading comprehension. The difficulties in the acquisition and usage of learning skills may appear in all areas of language – attention, speech, reading, and writing, and in mathematics and in foreign languages – and they are expressed primarily in the three areas of acquired skills, as follow:

*Reading Disabilities:* dyslexia, or reading disability, is expressed in difficulty with age-appropriate acquisition of reading, slowness in reading, distortions of and difficulty with extrapolating meaning from what is read; and at other stages in the future, difficulty in coping with lengthy texts and with comprehension. Some reading disabilities are related to language difficulties, such as difficulties with phonological awareness (awareness of the basic sound units comprising a language), difficulties with naming, and difficulties regarding sentence structure. Significant delays and deficiencies in language

development may sometimes predict dyslexia. Other reading difficulties are caused by a problem with processing visual information, such as identification of differences in directions and differentiation between forms, and so on (Fletcher, Stuebing, Morris, & Lyon, 2013).

*Writing Disabilities:* dysgraphia, writing disability, may be expressed in too great pressure or too little pressure exerted on the writing instrument, by slowness of writing, by many spelling mistakes, by mistaken phrasing of sentences, by avoidance of writing, or by use of short responses to avoid lengthy writing. The level of the content that a student expresses in writing is frequently lower than the level of the content he expresses orally, because of the investment of efforts in the technical side of the writing and the distraction from the content. To a certain degree, these difficulties come against a background of problems with fine motor control (difficulty holding the pencil), language difficulties (such as problems differentiating between the sounds of language, and difficulty connecting between sounds and letters), difficulties in visual perception, such as with differentiating between letters, and difficulties with hand-eye coordination.

*Arithmetic Difficulties:* Also known as dyscalculia, this disability is expressed in the age-appropriate acquisition of arithmetic skills and is generally discovered at a young age. The problems are apparent in the understanding of central concepts in arithmetic and in difficulties performing arithmetic actions. Among some students, there is an apparent problem with quantitative differentiation, such as comparing between quantities, the ability to estimate (and the understanding of a continuum), such as a continuum of numbers and a continuum of arithmetic actions, and a language disorder, such as an inability to learn mathematical terms or to translate a verbal problem into an exercise.

Deficiencies in other processes may impair different types of learning. These include attention deficit hyperactivity disorder, language development disorders, and dysphasia (defining deficiencies in the acquisition of language and speech among children with developmental speech delay). There are problems with types of memory, difficulties with fine and coarse motor activity, and difficulties with social skills. Common phenomena among the learning disabled are seen in a number of areas of functioning.

Still, it is important to remember that not every academic gap is the result of a learning disability. Sometimes an academic gap is the result of a didactic failure, inappropriate inculcation, inadequate exposure to material, inadequate coaching, or lack of mastery of the necessary knowledge on the part of an instructor or teacher and/or the

instructor's teaching skill. In some cases, such a gap may derive from the existence of serious emotional issues. These may include difficult family circumstances: being an orphan, being the child of divorced parents, having socioeconomic difficulties, experiencing violence, and so on. Therefore, it is necessary to differentiate among the causes through appropriate assessments – didactic, psychological, or paramedical – to determine not only the extent of the gap and its characteristics but also its root causes.

There are four diagnostic criteria for the assessment of learning disabilities:

1) Difficulties in learning and use of academic skills that persist for at least six months, despite focused intervention to deal with them, and that are expressed in at least one of the following areas: reading and reading comprehension, writing and written expression, and arithmetic.

2) The academic skills that are harmed are significantly lower than expected for the individual's chronological age and cause significant disorder in the academic or professional functioning or in activities in the everyday life.

3) The difficulties of learning begin during the years of learning in the school but may be expressed until the student is required to implement academic skills that he finds it difficult to perform.

4) The learning difficulties cannot be explained by another factor such as low intellectual ability, vision, or hearing problems, mental or other neurological disorders, psychological distress, lack of knowledge in the language or academic guidelines, or inappropriate teaching (DSM-5, 2013)

## **2.2 Specific Learning Disabilities – Clinical Characteristics and Symptoms**

Differentiation between the different types of learning disabilities is very important, and researchers have proposed several insights and divisions. Without a doubt, a learning disability is very heterogeneous and comprises symptoms of different types that appear at different intensities. It is near-impossible to identify two learning disabilities possessing the same combination of symptoms to the same extent and at the identical level.

Considerable research effort has been invested to characterize different types of learning disabilities, to facilitate better understanding of the different problems and effective ways to treat them. The identification among the constellation of learning

disabilities of homogenous types is a most complex undertaking since there is no distinct field in which all the learning disabilities are different. A disability is not apparent in one single field but is expressed in many ways. Therefore, a division into types of disability is based on a variety of dimensions which describe the basic nature of each type (Kavale & Forness, 1998).

According to Wong (1996), the classification of learning disabilities serves to create more homogeneous groups and thus to achieve the following three goals: (1) better understanding of the characteristics; (2) more effective focus on the difficulties and their causes for the purpose of improvement of treatment effectiveness; and (3) methodical examination of the results of the treatment intervention.

Kavale reviews the outcomes of the considerable research that was invested in the attempt to isolate several homogenous types of learning disabilities. The plethora of research studies mentioned in the literature is itself an indication of the importance attributed to the topic, and the effort to promote the knowledge collected to achieve consensus. The review presents divisions into neuropsychological types (Rourke, 1989), behavioral types (Speece, McKinney, & Appelbaum, 1985), and types of information processing.

The division of learning disabilities according to types is very similar to the division of the characteristics of learning disability disorder according to central paradigms. This is understood since the researcher who supports a certain etiological paradigm will also want to propose a division of learning disabilities that derives from this paradigm. The researchers who engaged in the identification of homogeneous types of learning disabilities used a wide range of tests. The number of types proposed in the different studies ranges from two to seven. For the most part, the number of types of learning disabilities was found to be related to the nature of the evaluative measures utilized by the researcher.

Several methodological problems arise from studies that attempt to classify learning disabilities. Sometimes there is a problem related to the reliability of the tests, or to the battery of tests themselves, and the procedures used in the assessment. In addition, occasionally explanations were not found for the great differences in the types of learning disabilities (Speece, McKinney, & Appelbaum, 1985).

Johnson and Myklebust (1967) were among the first to differentiate between the verbal type and the nonverbal type of learning disability. This important basic

differentiation was later extended and appears in the research of Siegel and Heaven (1986) and Rourke (1995).

Among the proposed divisions it is possible to differentiate between classifications of children and classifications of adults, as will be described in the following pages.

### **2.2.1 Classification of Learning Disabilities among Children**

The following examples illustrate different methods for the classification of learning disabilities among children:

1. Division based on characteristic behavior.
2. Division on a cognitive basis
3. Division based on school functioning.
4. Division on a neuropsychological basis.

*Division based on characteristic behavior* (Speece, McKinney, & Appelbaum, 1985) differentiates six types of learning disabilities, where each type has a behavioral common denominator, based on the teacher's ranking of several dimensions: independent/dependent, task oriented/tending to distraction, extroverted/introverted, and considerate/hostile. The types identified were:

- Children with attention deficit, who are characterized by dependence in the context of normal social behavior.
- Children with behavioral problems, who are characterized by hostility and few attention problems.
- Children exhibiting withdrawn behavior, who are characterized by dependence and introversion.
- Children who demonstrate normal behavior with little hostility
- Children with low positive behavior
- Children with general behavior problems

*Division on a cognitive basis:* In a study which included an extensive system of cognitive tests, Speece et al. (1985) noticed that in a representative sample of learning-disabled children, 76% had problems with reading speed, 51% had problems with short term memory, 29% had problems with semantic coding, 24% had problems maintaining attention, 15% had problems with the organization of memory, and 9% of the sample had problems with phonetic coding.

*Division into types based on school functioning:* Siegel and Heaven (1986) characterized types of learning disabilities based on school functioning and presented a schema for classification of learning-disabled children as follows:

- Reading Disability (RD): children who find it difficult to acquire reading skills at school and to master subjects which require considerable reading material. These children are characterized by a difficulty to identify words and tend to read words without comprehending them. They find it difficult to link sounds and letters, to process visual and auditory language, and to express themselves both orally and in writing.
- Arithmetic and Spatial Disability (AD): children with AD encounter difficulties at school with arithmetic and subjects that require spatial perception and coordination. These children struggle with problems related to arithmetic and spatial fields, tend to achieve low scores on arithmetic tests, have trouble with short term memory and hand-eye coordination, and find it difficult to adhere to a schedule.
- Attention Deficit Disorder (ADD): children who have difficulty functioning at school because of ADD are characterized by impulsiveness, frequently find it hard to get along with other children and tend to be socially immature.

Based on this division into types of difficulties within the context of school, many recent studies have focused on a comparison between the different types of learning disabilities (with emphasis on the verbal and nonverbal types) and validated this classification.

Another distinct type of learning disability is related to the different types of writing disorder or dysgraphia. Research concerning written output has lagged considerably in comparison with studies focused on spoken output (such as reading), despite findings of a high prevalence of these disabilities (Hooper, Swartz, Wakely, de Kruijff, & Montgomery, 2002). A longitudinal study performed recently in the United States determines that only 23% of fourth grade students master writing at a good or higher level (The National Center for Educational Statistics, The National Assessment of Education Progress, 1999), while the remaining children express different types of difficulty at diverse levels of severity. The main writing disabilities identified are related to the speed of slow writing, spelling mistakes, deficient shaping of letters, and spatial organization of writing on a page. These difficulties may emerge against a background of language, of dyspraxia (difficulty planning movement), or on a visual-motor

background (difficulty with the visual organization of text, such as spaces, margins, etc.) (Deuel, 1992) Several studies assess the use of a word processor as an aid for children with writing disabilities (Hetzroni & Shrieber, 2004).

*Division into types on a neuropsychological basis:* the group of researchers which supports this approach is largely represented by Rourke (1995). With their neuropsychological approach, they propose a classification of learning disabilities that is largely commensurate with the classifications based on scholastic achievements mentioned above. The division they propose includes three types of disorders: disorder in language functioning, disorder in nonverbal functioning, and disorder regarding outputs in all modalities, as follows:

- Learning Disability (LD) characterized primarily by disorder of linguistic functioning: this type of disability is also called reading-spelling disorder (RS) and is characterized by linguistic difficulties and difficulties with auditory perception, alongside normal functioning regarding nonverbal skills, tactile perception, and in spatial skills and psychomotor vision skills. The impaired skills are related to the functioning of the left hemisphere.
- LD characterized primarily by disorder of nonverbal functioning: this may also be referred to as arithmetic disorder (A) and is characterized by problems with sensory-visual reception as well as attention and recall of sensory-visual material, problems with psychomotor tasks, and a resistance to new experiences which detrimentally influences explorative behavior. In addition, this type of learning disability is characterized by problems with visual-spatial orientation, right-left orientation, psychomotor coordination, dysgraphia, and tactile differentiation. The impaired skills are related to the functioning of the right hemisphere.
- LD characterized primarily by output disorders of all modalities: this disorder is called reading-spelling-arithmetic disorder (RSA) and is characterized by severe problems related to reading, writing, and arithmetic, as well as prominent social difficulties.

Interest in nonverbal learning disability (NVLD) and the differentiation between NVLD and verbal learning disability is steadily increasing. Research shows that NVLD characterized by difficulties in spatial-visual organization, tactile and psychomotor perception, and nonverbal problem solving is not necessarily found in



disabilities which comprise difficulties in the mathematical field or social difficulties.

### **2.2.2 Classification of Learning-Disabled Adolescents and Adults**

In addition to the different types of learning disabilities among children identified by various researchers, several classifications were also proposed for learning disabled adolescents and adults, based on intellectual functioning and achievements. Shafrir and Siegel (1994) focused on the differentiation between types of learning disabilities among adolescents and adults (the range of ages in this study was vast, from 16 to 72) and showed that at adult ages the basic classification of linguistic disability and nonverbal disability is still valid, as with learning disabled children. The researchers used the basic categories of three homogeneous types in terms of intellectual functioning and achievement on various intelligence tests: reading difficulty (RD), arithmetic and spatial perception difficulty (AD), and a mixed group of both types (RAD).

Stanovich (1988a) focused on reading disability and divided it into two groups: reading disability with a gap between achievements and ability and reading disability without such a gap. In processes associated with identification of words there was no difference between the groups, but in all that pertains to the processes of reading comprehension there was a clear difference between the groups, where the group with the gap performed better. Wong (1996) compares between the different categories proposed by the researchers and demonstrates the great similarity between the findings.

Smith and Nagle (1995) express reservations about the proposed divisions into categories when there is still no agreement on the definition of the disorder referred to as learning disability. They maintain that it is only possible to determine which types of learning disability exist from a long-term developmental perspective. In other words, only by means of prolonged observation at different stages, different ages, and in different situations, is it possible to begin to understand the range of types of learning disabilities.

Much research addresses the personality traits associated with the different types of learning disabilities. Thus, for example, a difference was found in the level of self-image, in the style of attribution, and in the perception of self-efficacy between two groups of subjects with learning disabilities who do or do not have difficulties in the sphere of attention (LD/ADHD) (Tabassam & Grainger, 2002).

The abundance of categories proposed, some supported by research and some less so, sheds light on the dilemma and the different possibilities. The prevalent division

regarding learning disabilities, based on empirical research that employs cluster analysis (Shani, 1999), includes five types (the analysis was performed both according to achievements in a battery of tests, and according to self-reported symptoms in a questionnaire about the evaluation of ability completed by a group of soldiers diagnosed with learning disabilities):

1. Group experiencing difficulties with reading and writing
2. Group experiencing difficulties with arithmetic and spatial perception
3. Group experiencing difficulties in many diverse areas, including in verbal fields, with arithmetic, and with spatial perception
4. Group experiencing difficulties with attention, concentration, and long-term planning
5. Group experiencing moderate difficulties and reasonable achievements, but with a gap between the two, as opposed to high general ability

It appears that such a division of types of difficulties enabled more precise segmentation of the learning disabilities regarding the assessment and treatment of a disorder.

The fundamental assumption is that although a division into subgroups is proposed here, many of the learning disabled suffer in more than one area. This is not a “clean” division, and every learning disability is characterized by its unique, personal combination of difficulties from different areas. A personal combination or profile of difficulties can be identified more easily using the diagnostic model.

### **2.2.3 Forms of Expression of Specific Learning Disabilities in the Lifecycle**

A learning disability accompanies a person throughout his or her life and does not change with age (Zadok-Leviatan & Bronz, 2004). However, the way in which the disability is expressed may change during different periods over the years, in accordance with a society's developmental and environmental requirements. Society finds it difficult to recognize the chronic nature of difficulties caused by a learning disability, since it perceives learning difficulties that appear at a young age as expressions of a temporary development stage, which creates an erroneous expectation that the disorder in all its aspects will pass with age.

Recently there has been an increase in awareness of the expressions of learning difficulties in adults and their many implications. One reason for the increase in awareness is the phenomenon in which many adults discover that they are learning

disabled when they bring their children for an assessment and then recognize the characteristics of the disability in themselves as well. Since learning disabilities are hereditary, there is considerable likelihood that the parents of learning-disabled children will also be learning disabled. Many of these parents didn't realize that they had a learning disability, because often there was little if any awareness of the topic when they were children. Frequently, an adult who discovers that he or she is learning disabled undergoes a period of grief due to a sense of missed opportunities and understanding that certain difficulties could have been prevented. Such an adult may experience anger at the environment that accused her unjustly and did not help her to cope with her difficulties. A person must be permitted to process this difficult insight before he can be expected to deal with his own disability and that of his child. However, there is still no organized support system for cases like these and most such adults face this crisis on their own.

Another factor contributing to the expression of learning difficulties is the increased importance of academic education in modern society and the integration of the learning disabled in higher education (Zadok-Leviatan & Bronz, 2004). Many students encounter new difficulties, different from those they had to cope with during high school. The academic requirements are greater and lecturers' willingness and abilities to be flexible are limited relative to those of high school teachers. There are cases in which students who were able to compensate on their own during high school discover that they are learning disabled only when they reach university. This happens for the most part in cases in which the disability is relatively slight or when a person is particularly intelligent. This discovery can be difficult both for the person and for his social and educational environment since the learning disability is so often perceived as a phenomenon associated with childhood. The possibility that it is only expressed after high school may be considered unacceptable and cause suspicion, in some cases leading to a refusal to recognize the existence of the disability or to an accusation against the person with the disability that he or she is being deceitful and seeking preferential treatment with respect to academic requirements or attempting to evade difficult obligations.

However, as awareness of the issue increases, academic institutions have begun to establish various kinds of support centers for learning disabled students which specialize in meeting the unique requirements of this population. The goal is to enable these students to realize their academic potential despite their disability, and to open the door for them to professional training at a high level. Therefore, it is important to be

certain that all assistance and accommodation will not adversely affect the knowledge and skills required of all students in a particular field.

Recently a conversation has begun about the integration of people with learning disabilities into the job market upon completion of their studies. The new approach stresses that the choice of a career should result from freedom and not lack of choice (Tzadok, Ben-Sira Rotman, & Eisner, 2011). A learning-disabled person should aspire to integrate into a profession that is commensurate with his abilities and takes his difficulties into account, as any other person. However, it must be recognized that the unique nature of a disability and any resulting gaps in functioning will make this process more complex for a learning-disabled person. This is a separate aspect to consider, since in many cases the requirements of work in a certain profession are different from the requirements during the period of study for the same field. These differences may be easier or harder for a learning-disabled person to cope with, depending on his or her situation. In many cases a tremendous need for reading and writing is limited in the work world in comparison to academia and this may be a most welcomed situation for many learning-disabled people. However, the need to adhere to a schedule is even more significant. Many people with learning disabilities require more time to complete a task than do their non-learning-disabled peers, which puts them at a significant disadvantage.

The transition from academia to the work world poses unique difficulties for the learning disabled (Hallahan, 1989). A learning-disabled worker must develop ways of coping with situations he has not encountered in the past. This will not necessarily impair his functioning, but the period of adjustment to new roles may be longer and more exhausting than for a person facing fewer challenges. Moreover, he or she usually has no choice but to contend with this situation alone. Unlike remedial instruction, which has already developed many ways to help the learning disabled integrate into school, the work world has a low awareness of the need for intervention and treatment.

Similar to the school framework, in the work world the challenges facing a learning-disabled person reflect not only difficulties which are a direct result of the disability, but those which also have emotional and behavioral implications. For instance, a work interview is not perceived only as a situation in which there is an opportunity to achieve a certain position but as a situation that reflects society's overall appreciation of a person. When the question of acceptance by an employer is perceived as identical to the question of acceptance by society, every work interview becomes imbued with extremely strong emotional significance. In addition, the very situation in which an

interviewee is evaluated may awaken painful memories in which conditions that are inappropriate and possibly even debilitating for a person with a learning disability repeatedly prevent a person from expressing or demonstrating his or her abilities. In extreme cases, this can lead to emotional paralysis and avoidance.

## **2.3 Models Explaining Specific Learning Disabilities**

The discussion about learning disabilities has engaged the world of education and educational psychology for several decades, while at the same time, the frequency with which assessments of learning disability are conducted has increased immeasurably. Moreover, new evidence emerged which demonstrates that the model of learning disability as defined in the past is no longer valid. New models of the definition of learning disability were formulated and have become less general and more specific, as the concept of Specific Learning Disorder (SLD) is apparent in the literature of the past decade. Many disputes revolve around these definitions, which are often tainted by interdisciplinary struggles between the fields of special education and educational psychology. In the models presented in the following paragraphs I attempt to summarize the existing literature and present the implications which derive from it.

### **2.3.1 The Classic Model**

The dominant model used in Israel to assess learning disability is the **gap model** which identifies a gap between ability and achievement. This model resulted from Orton's 1995 discovery of the phenomenon of strephosymbolia (disorder in the perception of words and letters, which are perceived reversed, in mirror image) in children with normal intelligence (based on the Stanford-Binet test). Strephosymbolia was initially thought to be related to the phenomenon of "word blindness," a term first coined at the start of the 20<sup>th</sup> century by Hinshelwood and Morgan, who identified it among children with normal intelligence. These researchers made the distinction between a difficulty with reading that derives from low intelligence and a difficulty with reading that does not derive from low intelligence (Mercer, 1997). They explained how the determination of the level of intelligence facilitates the assessment of a learning disability: the disability can exist only among those who are not expected to encounter a problem with the acquisition of reading and writing skills, based on their level of intelligence.

The model based on a gap between ability and achievements has appeared in various forms in the criteria for and definitions of learning disorders around the world.

Two additional rules were conceived to help to define learning disability: the rule of internal factor and the rule of exclusion. According to the rule of internal factor, a learning disability may exist when an individual has a disorder in one or more of the psychological/cognitive/neurological processes. The rule of exclusion addresses situations in which the learning disability is not defined – such as when there is sensory harm, mental retardation, an emotional disorder, or a lack of opportunity for education (Scruggs & Mastropieri, 2002). It is important to note in this context that according to the first definition of learning disability, as put forward by Kirk (1962), the rule of exclusion of emotional or behavioral disorder did not apply (Kavale & Forness, 1987).

The gap model has attracted considerable criticism, which has focused both on the manner in which the diagnosis is determined and on its definition. Critics describe the main problem with this definition as its circular nature: according to the definition, the reason why a child has a learning disability is that there is a gap between his ability and his achievements. However, concurrently, the existence of the gap between his ability and his achievements is the result of his being learning disabled. The criticism of the manner in which the diagnosis is arrived at, according to the model, focused on an attack on the necessity of utilizing an intelligence test: research studies have found that the best predictors of reading disability are difficulties in phonological processing, as well as difficulties in the speed of naming and of flow. It appears, therefore, that the intelligence test is not directly related to the prediction of a learning disability but solely to the definition of the disability.

Additional arguments leveled against the model were based on the finding according to which the performance of learning-disabled students on an intelligence test was like that of students with low ability (O'Malley, Francis, Foorman, Fletcher, & Swank, 2002). Therefore, it was argued that the intelligence test cannot constitute evidence of the existence of a disorder, since it does not differentiate between those with low ability and those with learning disabilities. In addition, it was asserted that the tools of cognitive assessment are culturally biased against many groups, and therefore members of cultural minorities may receive an erroneous assessment of learning disability (Donovan & Cross, 2002). The epidemiology of learning disabilities, which varies from country to country, was also presented as undermining the validity of the structure of the assessment. Furthermore, it was found that the academic performance of students who did not receive appropriate instruction is like that of children who have a learning disability (Donovan & Cross, 2002). Hence, the main distinguishing factor

between a learning-disabled student and a non-learning-disabled student is not the level of intelligence but the degree of suitability of the teaching style for reading. A student who has difficulty with reading and did not receive proper instruction is not learning disabled, while a student who despite the efforts of teaching still has difficulties with the acquisition of reading skills will be defined as learning disabled.

### **2.3.2 The RTI Model**

The most prominent model proposed as a substitute for the model based on the gap between ability and achievement was the Response to Intervention or RTI model, which is based on a child's response to educational intervention. A child whose achievements are below the level of the rest of the class is referred to remedial instruction based on research, and if, following this intervention, his achievements do not improve at a suitable pace, he or she is likely to be defined as learning disabled. The RTI model for the definition of learning disability is therefore a model of a "double gap:" (Scruggs & Mastropieri, 2002) the first gap is between the child's achievements and his classmates' achievements, and the second gap is between the investment in remedial teaching and the result – the child finds it difficult to close the gap separating him from his classmates.

The prominent advantages of the RTI model lie primarily in the field of instruction. First, according to this model the intervention occurs earlier, since the established norm of the required class level enables the immediate identification of the students for which intervention is required, without a long diagnostic process. Second, the danger that a child will be diagnosed as learning disabled because of a deficient or inappropriate level of instruction is significantly low, since the intervention that is obligated by the model is adjusted to the child's presented difficulties. Third, the early intervention creates a possibility of future saving of public expenditure for special education, which is an advantage of great importance (According to Lynn, the most significant contributions of the RTI model to the discourse surrounding learning disability therefore include:

1. Reduction of unnecessary referrals to special education
2. Encouragement of group thinking when a child's progress is slow
3. Responsibility for the progress of each child
4. Assurance (at least in part) that the difficulty does not derive from the method or quality of instruction

5. Raising of awareness of effective educational interventions
6. Attribution of importance of the pre-referral process for assessment (Brown-Chidsey, 2005).

However, today this approach is also subject to considerable criticism, which is directed first and foremost at the far-reaching conditions for its implementation. The implementation of the RTI model requires the methodical construction of school, urban, district, and national norms. Hence, schools are supposed to undergo a process of standardization in their curricula, and training is required for school evaluators who lead the school process, in the framework of which classroom and school norms are created during the school year and throughout the years of study. These norms will make it possible to measure whether there is a significant gap between a particular student's achievements and the achievements of his peers. However, the process of constructing the norms is lengthy and entails several risks. The main risk is the degree of reliability of the norms: they may become relative, when in different places the required threshold levels may be different (Fuchs & Fuchs, 2006). In Israel, for instance, it is expected that different norms will obtain in different regions and even among schools in the same region.

Moreover, Gerber (1992) maintains that the implementation of the model is illustrated in the literature regarding its actual implementation. The model assumes that there is a normative pace of progress because of early intervention: intervention is increased and therefore a student whose achievements do not improve at the normative pace is defined as learning disabled. However, the pace of improvement because of intervention is a dimension for which norms are lacking. Who will determine, therefore, when a child is functioning at the appropriate pace? To which norms of change will the child's rate of progress be compared? It is interesting to note in this context that the model does not differentiate between a person who is a slow learner and a person who is learning disabled.

Second, few studies support the effectiveness of intervention beyond elementary school (Scruggs & Mastropieri, 2002). Third, it was found that the level of accuracy of a diagnosis according to this model is not higher than that of the model based on the gap between ability and achievements (Flanagan, Ortiz, Alfonso, & Mascolo, 2006). Fourth, researchers found that teaching in the field according to the RTI model focuses on basic reading skills (phonological processing and fluency) and for the most part neglects the



fields of mathematics, listening comprehension, oral expression, written expression, and to a certain extent also reading comprehension. The focus on phonological processing as a cause of reading deficiency may appear to solve the reading problems of every person who received remedial instruction, since phonological and phonemic processing were found to be the most stable predictors of learning disability over the years (which is why it was the focus of remedial teaching). However, children who successfully complete this process still experience difficulties with reading (Hale, Kaufman, Naglieri, & Kavale, 2006).

However, the most significant criticism of the RTI model comes from the field of assessment: the definition of a child as learning disabled based on the dual gap may transform the definition of the disability into an insensitive and inaccurate definition, so that in essence it becomes a generic definition for “learning problems” of unknown frequency in the population (Kavale, Kauffman, Bachmeier, & LeFever, 2008). The lack of accuracy derives from the lack of agreed upon norms for the measurement of the two gaps, and from the inability to differentiate whether the difficulty derives from low basic ability or focused difficulty (since the child’s ability is not known). Thus, the RTI model does not allow for classification, assessment, and individual treatment.

The following table presents the results of a comparison between the two models.

**Table Number 1: Comparison between the Two Models, RTI and Ability-Achievements**

Gap

<b>RTI</b>	<b>Ability-Achievements Gap</b>
There must be a gap between the class level and the child’s functioning	There must be a gap between ability and achievement
Does not explain the reason for failure	Does not explain the reason for the failure
Unexpectedly low achievements (pace of progress) relative to the scope of the intervention	Low achievements are not expected relative to the ability
The disability is the children in the environment	The disability is in the child

Data from the website of the Ministry of Education in Israel

### **2.3.3 New Psychological Models of Learning Disability**

As a result of the preceding argument, and the development of cognitive tools for assessment, researchers determined several definitions of learning disability with one

common denominator: according to the researchers, the measurement of the intrapersonal gap between cognitive strengths and weaknesses explains, in the best possible way, the failure in the acquisition of reading and arithmetic skills. The following review presents the different models.

Kavale et al. (2008) proposed a model for the operational definition of learning disability, according to which learning disabilities are specific patterns of cognitive strengths and weaknesses (intrapersonal gap), which in a distinct manner influence the development of some areas of achievement. This proposal is commensurate with the formal definitions of a learning disability, but it focuses the need for the unique characterization of every learning disability by preserving the gap model. In this model, the gap referred to is not between ability and achievement, but in the field of ability. This model is supported by rich research into the neuropsychological basis of learning disabilities, which stresses that each student's unique pattern of learning must be considered (Semrud-Clikeman, 2005).

Kavale and Spaulding (2008) propose in addition that the RTI model serve as a process of preliminary filtering that identifies general learning difficulties with the possibility of Specific Learning Disability (SLD) that requires more in-depth assessment. The filtering process is undertaken before the referral, and it is important considering the prominent advantages of the RTI model. Employing RTI as a preliminary stage for assessment preserves the advantages noted previously and does not have the prominent shortcomings of the model.

Hale and Fiorello (2004) built a similar model, the Cognitive Hypothesis Testing Model, in which three components are measured: cognitive processes for which the student displays strength, cognitive processes for which the student displays weakness, and achievements. Like Kavale's model, the gap measured is that between processes in which a student displays strength and processes in which he displays weakness (intrapersonal group). To assess the learning disability, it is necessary to identify a gap between the strong processes and the poor achievements, when the poor achievements are explained by the weak cognitive processes. The educational intervention is derived from the unique profile of the disability discovered through the process of cognitive assessment and is adjusted for it (de Wit, Flory, Acheson, McCloskey, & Manuck, 2007).

Hale, Flanagan, and Naglieri (2006) added to this model and determined that also in the field of achievement it is necessary to clarify areas of strength and weakness and to link between the strong cognitive processes and the fields of achievement where there

is strength. In this way, it is possible to derive precise evaluations of a disability, since the cognitive strengths explain high achievements while the deficient cognitive processes explain low achievements in the same student (Kavale, Holdnack, & Mostert, 2005).

Flanagan et al. (2007) proposed a new diagnostic process based on contemporary theory of intelligence and integrated it into the models described previously. Their model is composed of five stages:

- Stage 1: analysis of the intrapersonal differences between the acquired academic skills
- Stage 2: negation of the possible factors of the intrapersonal gap between the different skills (deficient or inappropriate teaching, retardation, cultural or linguistic gap, emotional difficulties, sensor disability, etc.)
- Stage 3: comprehensive psychological cognitive assessment
- Stage 4: re-assessment of the possible factors
- Stage 5: general assessment of all the diagnostic material collected

The model obligates remedial instruction based on an analysis of the personal differences and thus enables the negation of the factor of teaching quality to explain the gap. In addition, in the framework of the model, familiarity with a child's learning processes is extended, and constitutes the basis for the second stage of the appraisal. Remedial instruction is also provided after the third stage, this time based on knowledge about a child's unique cognitive profile. In the fourth and fifth stages, an opinion may be formed based on an examination of the response to the intervention, which will lead as necessary to placement in special education.

According to the redefinition of learning disability as a disorder in one or more of the psychological processes, a new role is created for the evaluation of intelligence. Indeed, the role of intelligence in the contemporary models is different from its position in the old model of psychological assessment of learning disability. In the old model, the evaluation of intelligence is based on the analysis of subtests. It does not adequately address the neuropsychological dimension of intelligence and serves only for comparison with achievements. In the contemporary models, in contrast, use is made of the C-H-C theory (McGrew, 2005) in which the evaluation of intelligence is performed according to a diagnostic approach called cross-battery assessment (XBA), which is based on numerous batteries of tests and comparisons between them. According to the XBA model, certain intelligence tests are more suited to answering certain diagnostic questions

while other tests are more suitable for other questions. Thus, a student is examined using an intelligence test appropriate for the hypothesized disability, and a process of interpretative supplementation of the test results is performed using the subtests from other intelligence tests, which also facilitate interpretation according to the C-H-C theory. In essence, all the contemporary intelligence tests, WISC-IV, Stanford Binet V, K-ABC II, WJ-III, and WAIS-IV are based on the C-H-C theory or can be interpreted by it and enable neuropsychological analysis of the findings and identification of patterns of strength and weakness. Most of these assessment batteries include both a component of abilities and of achievements, and therefore the interpretation of the tests according to the C-H-C theory enables effective differentiation between competencies and processes. (It should be noted that in Israel this possibility barely exists.)

The C-H-C theory enables differentiation among deficiencies in competencies and among broad and narrow mental processes, which is an important differentiation for the identification of learning disabilities. The competencies, which are broader mental actions, include, for example, quantitative deduction, sequential deduction, logical deduction, etc. The processes, which are narrower mental actions, include for instance perception, working memory, management functions, etc. Accordingly, a deficiency in competencies limits learning and learning output in a way that creates an upper boundary for development when a severe deficiency in abilities is defined as mental retardation. It is possible to see the harm to the abilities when compensatory or bypassing strategies do not lead to a significant improvement (McGrew, 2005). In contrast, a deficiency in the process blocks learning and learning output, when the acquisition of compensatory or bypassing strategies significantly lessens the influence of the blockage. A significant deficiency in the mental process will be defined as learning disability.

## **2.4 Social and Emotional Aspects of Specific Learning Disorders**

A rich body of research that has emerged in recent years focuses on the identification of the social and emotional characteristics of learning-disabled students and the awareness of their important role in the understanding of the functioning and investment of the efforts of children and youth who have learning disabilities (de Wit, Flory, Acheson, McCloskey, & Manuck, 2007). In her pioneering work, Bryan (1999) focused on the research and treatment interest in the social difficulties and the social rejection learning disabled children frequently experience. In a comprehensive article

summarizing her scientific career, she noted that a study that extended over more than 25 years indicates that a considerable number of learning-disabled students are at risk of developing social difficulties in their contacts with their peers and with adults. These social problems, which have implications for sense of wellbeing and academic performance, derive from different sources – primary sources, such as difficulties with social cognition, understanding of complex social situations, disabilities in social communication and behavior regulation – and secondary sources, such as social response to failure and to difficulties with studies and with the integration of frustrations.

Accordingly, as early as 1999, Frith (Frith, 1999; Happe & Frith, 2013) emphasized that every attempt to describe the performance of students dealing with learning disabilities and reading disabilities by means of a one-dimensional explanation, whether biological or neurological, cognitive, or behavioral, is erroneous and misleading. In a broad and contemporary developmental review, studies were presented which emphasize the ongoing, reciprocal relationships between neurological, cognitive, and social-emotional development (Margalit, 2012). Therefore, it is not surprising that to understand the performance of learning-disabled students it is necessary to include in assessment and in treatment the psychological approaches which include reference to the dynamic and developmental nature of the strategies of coping with situations of difficulty (i.e., learning disability and attention disorder). This should emanate from a focus on the strengths and resources of the young people who address the different situations as either threats or challenges (Kuzminsky, 2005). A wide constellation of cognitive and motivational-emotional components which enable the understanding of situations of stress and the ways of coping with them are examined. Reciprocal relationships between the individual and his environment, including reference to himself and to other children and adults, are at the basis of the development of emotions, behaviors, and understanding coping styles that represent a person's efforts to respond to the demands of her environment. Therefore, the behaviors of individuals with learning disabilities should be examined in the framework of the multidimensional developmental model, which includes not only the characteristics of students who cope with academic demands (as a source of stress situations) but also the reciprocal relationships between difficulties and resources (personal characteristics) and relationships related to the challenges of age in the culture and educational and social environment in which they grow up (interpersonal and ecological characteristics).

The salutogenic model focuses on research about factors which increase the likelihood of adjustment, health, and development. In contrast to an approach that focuses on the research of pathology, the disabilities, and the difficulties. The implementation of this model makes two important contributions to the understanding of the behavior of learning-disabled students and their coping styles in encounters with the challenges of education and society (Lazarus, 2006). First, this approach emphasizes the need to examine and identify personality resources and areas of power and competence, such as a feeling of coherence and personal and interpersonal factors of defense, without ignoring challenges and difficulties. The approach rejects the dichotomous conceptualization of the different situations (for instance, disability versus lack of disability) and calls for a conceptualization of dynamic perceptions which assume that every person is found in a specific location on the continuum between health and illness. The salutogenic model has theoretical importance for the conceptualization of human functioning considering challenges and difficulties and has practical significance for the planning of intervention programs. In the framework of this model, the educational or treatment goal is not to “heal” the learning disabilities but to discover ways that will contribute to moving students who are coping with their difficulties toward adjustment in interpersonal areas and learning areas. Success is not evaluated only in terms of the achievement of full mastery over a challenge and surmounting difficulties, but any movement in the desire and adaptive direction, is assessed as progress. The dynamic concept is comprehensive and assumes that not only progress in the adaptive direction but also regression is a natural part of the developmental process. Therefore, when evaluating intervention programs, only a long-term examination, which addresses progress and regression in a comprehensive overview, can contribute to the evaluation of achievements and can ascertain whether they endure.

One may discern two central trends in recent years within international research about social and emotional aspects of learning disabilities:

1. Extension of the focal point of the research from a focused examination of the learning-disabled individual’s areas of strength and difficulties to a multidimensional evaluation that examines not only the personality characteristics of learning-disabled students but also their reciprocal relationships with significant others, their families, and the education system and society at different ages

2. Extension of the range of ages that the research addresses, or in other words, an examination of the learning-disabled individual's method of coping with life challenges throughout the cycle of development, ranging from the pre-assessment stage (kindergarten children) and continuing through the stages of adolescence and development, including adjustment to frameworks of higher education and military service, coping in the professional world, and coping in couple or family relationships.

This research approach comprises dynamic and complex models which are used to study relationships between individual characteristics and environmental conditions and requirements, through the examination of personal and interpersonal resources and areas of difficulty and challenge, alongside the examination of goals, emotions, and the states of mind of young people, and their degree of belief that they will succeed in achieving their various goals in the framework of different roles at different ages. Concepts such as hope, sense of coherence, and self-efficacy have served as the focus, to examine how the individuals cope with challenges in different environments (Idan & Margalit, 2011).

The conceptualization of emotions, not only as a form of global evaluation of the situation in which the coping student is found (Forgas, 2008), but also regarding the theory of the conservation of resources (COR), contributed to the broadening of the understanding of the behavior exhibited by individuals in distress. This theory examines the reciprocal relationships between situations of distress and motivation and provides a basis for the understanding of the reciprocal relationships between an individual's resources and the environment's requirements. In recent years, this approach assumes that reference to the complex constellation of resources (personal and interpersonal) is important, assuming that they are related to one another. Students interpret what happens and respond to events in their world in terms of the goals which they strive to achieve, the resources they can invest to achieve them, which reflect their own perception of their abilities and the evaluation of their chances to succeed.

A broad review of the research that addresses the areas of social information processing, social skills, and emotional abilities of children and youths with learning disabilities indicates the important contribution of integrative approaches (Hobfoll, 2011). Loneliness, or social distress, sense of coherence or in other words, evaluation of the strengths of the self and the coping resources it possesses are defined as continuously globally-oriented toward a view of the world and are managed to a degree that justifies

the investment of effort (Al-Yagon & Margalit, 2013), self-efficacy, the belief that a person has the ability to perform roles (Antonovsky, 1993), and hope, the integration of future perspectives in the identification of personal goals and planning of paths (Bandura, A, 2006). The research findings emphasize that the feeling of loneliness experienced by children and adolescents with learning difficulties not only reflects social difficulties, but also expresses the evaluation of the available psychological resources, reference to the self and social perception, and feelings of distress (Snyder, Lopez, Shorey, Rand, & Feldman, 2003). Before the formal assessment at kindergarten, children at risk of developing learning disabilities reported a high level of loneliness and a low level of coherence, in comparison to their peers (Margalit, 2012). Similarly, learning disabled children of elementary school age (Al-Yagon & Mikulincer, 2004) and during adolescence (Idan & Margalit, 2014) experienced higher levels of loneliness than did their classmates. In addition, research consistently documents that student with learning disabilities has a lower sense of coherence and lower levels of self-efficacy than their peers, so that it is not surprising that their levels of hope for the future are lower. It is possible to relate to these children and adolescents – who cope with learning challenges and cognitive difficulties from early stages of development – as a risk group. The risk refers not only to the social and academic spheres, but also to the students' abilities to develop emotional resources on a level that will ensure that they can cope effectively with the challenges of learning and society. These findings were consistently reported in different cultures (in China by Yu, Zhang, & Yan, in Israel and in the United States by Amaya, McNamara, & Willoughby, in Yu, Zhang, & Yan, 2005).

The phenomenon of distress caused by loneliness was re-examined with the development of the Internet. Interpersonal relationships on social websites became an inseparable part of the social environment of children and youths, and therefore a debate was ignited with full force: do virtual friends contribute to the alleviation or increase of loneliness? Since social relationships on the Internet extend interpersonal encounters and the use of different types of media, different patterns of relationships may be observed. Research indicates a similarity between face-to-face social behavior and social relationships with virtual friends, and in essence shows that the social aspects of the Internet have not alleviated the distress of loneliness. Children with learning disabilities who created relationships with virtual friends (who they did not meet beyond the Internet) still reported high levels of loneliness (Sharabi & Margalit, 2011). It is not clear whether



from the start the lonely children with learning disabilities created many more social relationships with virtual friends, or whether social friendships that were not supported by or integrated into face-to-face relationships contributed to higher levels of loneliness. Regardless of the reason, the research results indicate that these relationships did not alleviate young people's ongoing social distress, as some had projected.

Research into perception of the future and the theory of hope is of special importance, since these two factors predict investment of effort and success in studies. Thus, it is not surprising that this type of research has been at the forefront in recent years (Idan & Margalit, 2014). In literary and romantic perception, hope is the expectation of a good future, but in a research framework, the theory of hope facilitates insight into the complexity and applicability of a perception of hope which includes feelings of personal competence, abilities, willingness to cope, and identification of goals and meanings in life. The theory is based on the personal perception that there is a near future in which change is possible: desired things can happen if the goals are identified clearly and operatively and channels and programs are planned to achieve them, considering possible obstacles, and considering alternative paths. People who have hope identify within it the possibility of self-empowerment and self-regulation, so that they can invest efforts to move in the direction of achieving the goals. Hope has especial importance among young people who frequently cope with challenges, since it is a learned skill that is influenced by failures (which cause it to decrease) and successes and treatment (which amplify it).

Research consistently indicates structured ways to practice hopeful thinking which can make such thinking habitual. Unlike optimism, which is difficult to influence, it is possible to treat levels of hope, to teach hopeful thinking, and to change its levels (Davidson, Feldman, & Margalit, 2012). In conclusion, in recent years research has demonstrated the importance of awareness and referencing of personal emotional resources and interpersonal resources in young people participating in coaching programs for cognitive and academic skills, to increase their chances of ongoing and consistent success as they develop. The engagement with emotional characteristics does not replace the professional intervention programs for remedial instruction in the young people's fields of difficulties. However, formal integration of these topics may contribute to the persistence of their effectiveness and empowerment.

It should be noted that in most studies of young people with learning disabilities a group of individuals was identified with similar levels of resilience in the emotional and social domains as their non-learning-disabled peers. The personal spheres influenced

by the disabilities remain excluded and isolated, disconnected from general personality development. In many cases, the level of resilience reflects personal characteristics (for instance level of hope or level of coherence) and family and educational environmental characteristics (such as sense of coherence of the parents and feelings of closeness to teachers). Research indicates the importance attributed to the emotional resources of the significant adults in the lives of the learning-disabled children in different age groups. The components of the family atmosphere (such as family cohesion) and the quality of the relationships of the fathers and mothers with the children predict the children's level of adjustment (Al-Yagon, 2010). The importance of the relationships between parents and children was documented in the different age groups from kindergarten (Al-Yagon, 2003) and throughout development. The personality resources of the mothers and fathers (their sense of coherence and positive attitude) contribute to and support adaptive development (Al-Yagon, 2012). The research even differentiates between the different roles of fathers and mothers regarding their children's development and adjustment. For instance, close relationships with mothers of learning-disabled children predicted lower levels of loneliness among the children, fewer internalized disorders, and high levels of coherence. In contrast, close relationships with fathers predicted high levels of hope and effort and high levels of coherence in their children (Al-Yagon, 2014). A cohesive family atmosphere also contributes to adjustment, since it is an initial source of social support (Idan & Margalit, 2014).

Alongside the awareness of the central role of parents and the family environment in the empowerment processes regarding children in general and children with special needs in particular, and the importance of the perception of hope and awareness about future chances for the promotion of young people's strengths in their coping with ongoing challenges in learning and development, it should be stressed that teachers and educators make an important contribution to the quality of life and the success of these children and young people. We must remember that students with learning disabilities in integrated classrooms study every day alongside children of normative development. The promotion of the success of the learning-disabled children depends on the teachers' belief in themselves, or in other words in their professional and personal capabilities to meet the many different needs in a heterogeneous class, and their belief in their ability to significantly help students with learning disabilities to succeed. Research indicates that many teachers lack confidence in their knowledge and ability to help students with learning disabilities. It is important to note that the teachers expressed a desire to help

students with special needs in their classrooms, but simultaneously stressed their needs for methodical learning and in-service training, to provide a meaningful and effective response for these students. Therefore, we learn that an important condition for the successful integration of learning-disabled students into classes with their non-learning-disabled peers is to ensure that their teachers have the required knowledge and skills (Levi, Einav, Raskind, Ziv, & Margalit, 2013). Furthermore, the teachers' attitude toward the learning-disabled students in their classes has central importance to their success. Thus, it is not surprising that in a study that examined students' perceptions it was found that the more students perceive their teacher as a "secure basis" (a term from attachment theory), the lower their levels of loneliness and the higher their sense of coherence and personal competence (Al-Yagon & Margalit, 2006). To summarize, it is of key importance to increase the depth of the teachers' knowledge and their confidence in their ability to provide a satisfactory response to the heterogeneous needs of children with learning disabilities, to create a supportive environment which promotes meaningful and empowering learning for all the children in the class.

## **2.5 Identification of Problems in People with Specific Learning Disabilities**

Learning difficulties are expressed first and foremost in the ineffective performance of one or more of the basic learning skills, which include reading, writing (handwriting, spelling, and expression), and arithmetic. These difficulties have implications for functioning in the classroom and for academic achievements in various subjects.

### **2.5.1 Diagnosis of LD**

They may be identified through diagnostic tests and through observation of a student in the classroom, in conjunction with an assessment of the student's output, including assignments, tests, and their analysis. The indications of difficulties include slow reading with many errors, unusual spelling mistakes, written expression that does not meet its objective (such as an answer that is not related to the question posed), mistakes in the performance of calculations or misunderstanding verbal or written problems in arithmetic. The scholastic difficulties are often accompanied by emotional and behavioral difficulties. The identification stage includes noticing these difficulties,

with reference to expectations based on the level of the entire class, and unexplained gaps in the student's functioning. In exceptional cases, a teacher may notice an unusual prominence of a difficulty that necessitates direct referral for assessment.

The assessment of learning disabilities has two main goals. The first goal is to map the difficulties, abilities, and learning styles. The second goal is to propose treatment approaches suitable for the students, to encourage them to develop the required skills and abilities.

The definition of the need for an assessment of a learning disability, according to the Ministry of Education in Israel (Circular 2014):

A person is assessed as learning disabled when his achievements in the standard tests of reading, arithmetic, or written expression, held individually for him, are significantly lower than what is expected according to his age, level of education, and level of intelligence and the learning problems cause significant disorders in his academic achievements or other everyday activities that require reading, arithmetic, or writing skills.

Different professionals use different types of assessment (Spector, 1995). If an assessment is not conducted by learning disability experts, the subject is at risk of an erroneous interpretation of his behavior and abilities and may be placed in a framework that does not constitute a solution to the situations he struggles with because of his difficulties. Parents have the right to choose the type of professional assessment they want for the diagnosis of their children.

In the context of learning disabilities, it is customary to choose a didactic assessment by an assessor who is an expert in learning disabilities, or a psycho-didactic assessment by a psychologist who also specializes in didactic assessment or who works with expert assessors of learning disabilities. The suspicion of attention deficit disorder will be assessed by a psychiatrist, neurologist, or psychologist who specializes in this field and is appropriately accredited.

It is important to differentiate between disability and difficulty. In the professional world, the term "learning difficulty" describes a decline or decrease in functioning for any reason. A difficulty can be described by any factor that evaluates the person referred to (the person herself, parents, teachers, kindergarten staff, etc.). In the context of school, for the most part the difficulties that raise a red flag are slowness, mistakes, or lack of precision and low scores on tests. In contrast, the term "disability" refers to a damaged mechanism, and one may say that an individual has a "disability" only after a diagnosis

is obtained from an accredited professional. In the process of the assessment, it is possible to examine the origin of the reported difficulties and to propose suitable ways of coping. A disability may influence performance, but with the help of treatment, compensatory abilities may be developed to bypass difficulties so that the harm to performance will be as minor as possible. Thus, although one does not "grow out of" a learning disability, which accompanies a person throughout his life, still his academic achievements can certainly improve to the extent of a full realization of his innate ability (Ministry of Education, Circular). However, if the difficulty that is observed in the field does not derive from the disability for which treatment was provided (but from another factor), then it is reasonable to expect that the effectiveness of the treatment will be negligible or that there won't be any influence at all. In addition, the lack of treatment of the true underlying factor causing the difficulty can even lead to exacerbation of the situation. Hence, the differential diagnosis is crucial.

A mistaken assessment may lead to a mistaken diagnosis and thus prevent a person from making progress and limit his or her possibilities at an early age (Margalit, 2012). Today there is great awareness of different situations that may be understood as learning disabilities and impair academic achievements, but since they emanate from different sources, the appropriate treatment for each one is different. For instance, a lack of sleep can significantly impair academic performance and appear similar to a learning disability. However, many such factors can be ruled out through routine tests in the framework of a health clinic. The tests include a hearing test, a vision test, a focus of vision test, monitoring of blood pressure and pulse, and general blood tests including thyroid, iron, vitamin D, vitamin B12, sugar level, etc. These possible reasons for symptoms should be ruled out before referring someone for a diagnosis, and a family physician can help with this.

The existence of a learning disability does not rule out the existence of other factors that may influence optimal functioning at school and in other areas. Therefore, it is important to address the possibility of comorbidity, in which more than one factor may explain the difficulties. If the suspicion arises during an assessment that the source of a difficulty may be comprised of more than a learning disability, then the additional possibilities should be examined and related to accordingly.

An assessment of learning disabilities facilitates understanding of their causes and consequences in various situations. All the information necessary for diagnosis and treatment recommendations is collected during an assessment, to maximize the

understanding of the mechanisms which lead to difficulties in academic functioning. The assessor chooses the areas of the assessment in accordance with the needs of each respondent (Ministry of Education, Circular).

At the start of every assessment, the following background information is collected:

- Reason for the referral
- Students' achievements and current performance in different subjects
- Family-developmental and educational background
- Previous evaluations and assessments
- Past interventions and treatments

To explain the origin of the difficulties, the cognitive mechanisms which form the basis of basic learning skills must be examined. These include:

- Processes of cognitive functioning in the spheres of written and spoken language
- Processes of visual, spatial, and auditory perception
- Executive functions
- Attention and concentration functions
- Memory
- Visual-motor and graphic-motor skills
- Processes of social-emotional cognition

In addition, an assessment must address additional aspects, such as:

- The learner's educational background, strategies, and the teaching methods he was exposed to
- Developmental, emotional, and social factors, such as motivation and investment versus avoidance

The assessment of learning disabilities obligates a multidisciplinary approach and several focuses of assessment, beyond the characteristics of the learning disabilities and the associated mechanisms. The assessment tools are intended to provide an assessor with the information required to write an assessment and diagnosis based on measurement and evaluation, since each tool provides only a specific type of information. It is not possible to determine a diagnosis based on the findings of a single tool.

Although diagnostic tools for different disabilities are constantly being developed, many of these could still benefit from improvement. To determine which tool is the most suitable for a particular assessment, professionals have developed clear rules which correspond to the theory behind the tests. Each new test or tool must be evaluated according to existing standards for the examination of the assessment before it can be

considered a basis for diagnosis. For a given test to be considered a trustworthy diagnostic tool it must meet certain criteria when the aspiration is to achieve the golden mean.

Before employing a diagnostic tool, the distribution of the performance of people of different ages on the same test must be evaluated to create group norms. Recently, the awareness of gender and cultural differences among different measures has increased, and therefore it is necessary to compare the performance of the respondents to the appropriate population. Only when a norm is examined based on a representative sample is it possible to know whether the performance of a particular subject is above or below the expectation of the teste's age. The amassing of these norms is a lengthy and costly process, and therefore many tests are published and utilized in the absence of norms or with a small and non-representative database. A test that does not include norms can be analyzed only qualitatively and it is therefore problematic to reach a diagnosis on its basis.

In addition, it is necessary to ascertain whether a test is valid and reliable. In other words, it is necessary to ensure that it differentiates between normal functioning and deficient functioning in the examined index every time it is administered. This means that it should always identify all the respondents who have difficulties, and not respondents who are on the normal scale. Satisfying this criterion requires considerable resources since to prove this, it is necessary to conduct orderly academic research with a representative number of participants.

### **2.5.2 Secondary Disorders – Characteristics**

Learning disabilities overlap with attention disorder at a high frequency of 40%-60%. Many people with attention disorder also have one or more learning disabilities, such as dyslexia (reading difficulties), dysgraphia (writing difficulties), and dyscalculia (difficulties with arithmetic calculations).

When learning disabilities accompany attention disorder, more adjustment difficulties ensue, and it is harder to cope with the consequences of this combination. In these cases, the didactic assessment, the examination of gross and fine motor skills, and the evaluation of the soft neurological signs are especially important. In cases where a learning disability is identified in the assessment framework, an appropriate treatment response must be provided, in addition to the treatment constellation routinely provided to those with attention disorder.

Attention disorder and learning disabilities have many shared characteristics, which sometimes makes it difficult to differentiate between them. In both cases, most of the symptoms are expressed in childhood following the encounter with the education system and continue to accompany the person throughout his or her adult life. They both may impair academic functioning and lead to secondary emotional and behavioral difficulties, which derive from ineffective forms of coping and the environment's inability to understand and accept the source of the problem. The great similarity between the two often leads to a situation in which they are addressed as a single phenomenon. However, there are significant differences between attention disorders and learning disabilities which have implications for the type of treatment and reference. Hence, it is crucial, starting from the assessment stage, to thoroughly examine whether the reported difficulties in functioning derive from attention disorder, learning disability, or a combination of the two, to adjust the treatment system accordingly.

Both disorders are usually identified at school and assessed by the same therapists. Therefore, a person who has both these disorders is more likely to be sent by a school for diagnosis than a person who has only one, and a person who arrives for diagnosis due to identification of one of them is more likely to be diagnosed with the other as well. Recently, researchers have begun to search for a causal relationship between the phenomena using experimental research; however, these studies are in their infancy and represent a minority approach.

Deficiency in executive function is more common among people with attention disorder in comparison to the general population, especially among those who also have a learning disability. Like the symptoms of attention disorder, which for the most part is expressed initially in childhood, a student with deficiency in the executive functions has frequently experienced many failures at school, despite her and her teachers' good intentions. Like the situation that may pertain as a result of an attention disorder, failures may harm self-esteem, obstruct future learning, and create gaps. Students with deficiency in executive function need great support to help them to conduct themselves in an organized manner, for this kind of support frees them to participate in learning in accordance with reasonable expectations of their age group.

There is an argument among professionals as to whether a deficiency in executive function is an inseparable part of attention disorder or whether these are two separate entities. One reason for this is that difficulties with executive functions are not unique to attention disorder and are also found in other psychiatric disorders.



Most studies (Pullen, Lane, Ashworth, & Lovelace, 2017) support the assertion that from the wide collection of intellectual functions linked to them only certain types of deficiencies in executive function are associated with attention disorders.

## **2.6 Specific Learning Disabilities in Israel**

Ten to fifteen percent of all students in the education system in Israel contend with learning disabilities. Most of these students are integrated into regular classes and their schools are obliged to provide solutions for their students' needs at every stage of their development and enable them to realize their abilities. As such, teachers face a significant challenge: they are required, according to the policy of the Ministry of Education, to implement processes to identify signs of learning disability, and to craft educational and treatment intervention programs that include the necessary adjustments to their teaching and testing methods, as well as responses to their students' emotional needs. The successful integration of students with learning disabilities into the mainstream classroom necessitates that teacher be supported on numerous levels to facilitate such integration.

In Israel, the accepted definition of learning disability, which the Ministry of Education has adopted to make its assessment, is that of the American Psychiatric Association (APA), the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5, APA, 2013). According to this guide, learning disability is a neurodevelopmental disorder with a biological basis that has cognitive implications.

Although these criteria rely largely on performance at school, the need to cope and the ensuing coping strategy with a learning disability influences an individual's development and functioning in all areas of life. Significant difficulties with the acquisition and use of learning skills also influence the social, emotional, behavioral, and executive domains. The combination of a learning disability with emotional difficulties, mental difficulties, behavior disorders, attention deficit and hyperactivity disorders, or social difficulties, is very common. The intensity of the impact of the learning disabilities and the ways in which they are expressed vary at different ages. These characteristics are related to personal resources, interpersonal factors, and environmental conditions, such as academic requirements and family support (Heyman & Fretzel, 2003).

The highest prevalence of children with a learning disability is found at elementary school. Generally, the learning disability is discovered during the first years

at school, but signs indicating the existence of a learning disability, such as delays in acquisition of language or motor skills, may appear in early childhood, and at a later age, usually when a child reaches school, and may influence his or her learning ability. It is important to note that in some cases a learning-disabled student's difficulties may not be discovered during the first years of elementary school but are only identified in a high school or post-high school educational framework. In these cases, the students have succeeded in coping with learning at school, despite their learning disability, but may now encounter difficulties with the increase in complexity of academic requirements, the rise in the level of difficulty, and the expectation that they can build upon previous knowledge. Therefore, learning disabilities may be revealed at different developmental stages throughout life.

Due to the large percentage of school-age children who cope with learning disabilities, such students constitute the largest group of students with special needs within regular educational frameworks (Büttner & Hasselhorn, 2011). In recent years, there has been a considerable increase in the number of students diagnosed with learning disabilities who are integrated into regular classes and in every school, there are many students with learning disabilities – a situation which necessitates appropriate preparation throughout the education system. The Ministry of Education in Israel has worked for many years to prepare the education system and formulate principles for coping with the steadily increasing population of learning-disabled students. Al-Dor (2014) notes that the role of the education system is to ensure the existence of optimal conditions for the normal development of learning-disabled students, rooted in a belief in the value of difference and the aspiration to provide equal opportunity for every student to realize his or her potential. To fulfill this role, the Ministry of Education focuses on providing tailored responses to students both in the academic and the emotional-social domains. Over the past decade, the principles of the Israel Ministry of Education's educational policy toward learning disabled students have comprised four interconnected axes:

1. The developmental continuum axis: the accompaniment of the student throughout all stages of education, from kindergarten to the end of high school
2. The treatment continuum axis: the increase of the ability of a school's educational staff to identify, at an early stage, those students who are suspected of having a learning disability, and to build individualized and group interventions to improve their academic functioning

3. The axis of the teacher as expert in the learning processes: the inculcation of knowledge and tools for teachers so that they can adapt their teaching and testing methods to the needs of learning-disabled students
4. The teacher as a significant adult in emotional and academic respects: the teacher as a significant figure for the student in the mediation of learning; the teacher as an individual who develops a student's sense of self-efficacy, increases his or her motivation, and shapes his or her self-image

These Ministry of Education principles emphasize the significant role of the teacher in each of these axes, ranging from the identification of a learning-disabled student's needs to accompanying a student throughout all his years of learning as a key figure who makes an important contribution to the student's quality of life and success. The Circular of the Department of Learning Disabilities and Attention Disorders at the Ministry of Education published in November 2014 emphasizes the important role of the teacher in the education of learning-disabled students.

### **2.6.1 Teachers Role**

The Circular of the Department of Learning Disabilities and Attention Disorders notes that students with learning disabilities require that their teachers understand the way they learn best. The teachers are expected to be alert and attentive to the ways in which such students learn, to craft teaching alternatives for them, and to maintain a close relationship with the students and their parents. It was further noted that the meaning of the teacher's relationship with a learning-disabled student is central for the student who needs the support of an adult who knows her. Therefore, the following question is asked: are the teachers professionally prepared to meet these requirements? In terms of their training, these teachers were taught to teach students who do not have learning disabilities, in the framework of regular education. Moreover, the teachers teach large groups of students in one class and are required to teach according to a multidisciplinary curriculum, with a commitment to leading students to attain high achievements. Therefore, it is not clear whether they have sufficient resources to teach learning disabled students.

In a class which also includes learning disabled students, teachers must be aware of the learning disabilities and be able to teach these students and help them to advance within the framework of the ongoing teaching of the class and the subjects she teaches.

As stated, one of the principles of the Ministry of Education regarding learning disabled students addresses the teacher as a significant figure for the student. Research by Al-Yagon and Margalit (2006) found that the attitude of the teacher toward a learning-disabled student is an important determining factor in the student's success – when the students perceive their teacher as a secure base and a supportive and significant figure, their levels of loneliness are lower and their motivation to learn is higher. Dor-Haim (2013) adds that frequently learning-disabled students feel that they are not understood at school, that they lack someone to share their feelings with, and that no one is receptive to them and willing to listen to their difficulties and concerns. In his opinion, the role of the teacher is to create a space for these students in which they will feel secure and can share the social anxiety that may accompany their isolation, as well as to provide understanding, recognition of their feelings, and belief in their abilities.

The promotion of the students' success depends on the teachers' belief in themselves as well, or in other words, in their professional and personal abilities to meet the many different needs of the heterogeneous class, as well as their ability to contribute significantly to the success of the learning-disabled students (Margalit, 2014). Many teachers who teach in regular education may suffer from lack of trust or confidence in their professional skills. The research of Levi, Einav, Raskind, Ziv, and Margalit (2013) found that some teachers feel a lack of confidence in their knowledge and their ability to help learning disabled students. The teachers expressed the desire to help but emphasized the need for additional knowledge and in-service training workshops to help them to provide meaningful help for these students. The researchers noted that an important condition of the success of the integration of learning-disabled students into regular classrooms is to ensure that their teachers possess the necessary knowledge and skills. According to Dor-Haim, experienced and professional teachers often find themselves powerless due to the failure of the teaching methods they are familiar with, in their attempts to cope with the difficulties of learning-disabled students. These feelings of powerlessness and frustration derive from a lack of the knowledge and professional skills required to cope with the learning-disabled students in their classrooms.

In addition to the lack of training, which impairs the teachers' confidence in these situations and therefore also their professional abilities, the students' failure to learn also detrimentally influences the teachers' confidence in their professionalism leading to a vicious circle in which they further doubt their skills and abilities, so that their perception of their didactic abilities is also harmed. In cases where learning disabled students display

social difficulties, emotional difficulties, or discipline problems, a teacher's lack of confidence may increase even more, he or she may feel pressure associated with work, and this may also increase the level of burnout (Reiter, Friedman, & Molcho, 1985).

Despite often feeling that they lack knowledge and confidence, it seems that most teachers assume the responsibility for assisting their learning-disabled students. Einat (2005) conducted a qualitative study among several dozen teachers and examined their responses in the context of their ongoing relationships with learning disabled students. According to the researcher, the teachers are the most vulnerable factor in the system, since many of their professional characteristics, such as the need to succeed and to ensure that the students advance, the need to wield authority, and to be appreciated, all lead to a significant sense of responsibility. When teachers' efforts do not bear fruit, the frustration is great and hence their disappointment in themselves grows. In the teachers' experience, the responsibility for a learning-disabled student's lack of success rests on their shoulders. Therefore, it appears that the teachers' perception is that they must do the best they can to ensure that their learning-disabled students make progress.

The support of the school is vital to cultivate a teacher's sense of self-efficacy and belief in her ability to succeed in assisting a learning-disabled student. The school climate that encourages cooperation among the members of the staff and aids and support to teachers helps them to develop positive attitudes toward the integration of special needs students in general and students with learning disabilities (Talmor, 2007). This support may be in the form of material resources – provision of additional hours, especially individual hours; diverse learning materials; a structural-physical environment that includes technological means; tools for identification, assessment, and follow-up, etc.; or human support – teaching assistants, such as aides or, in Israel, girls participating in National Service (Reiter, Laser, & Avisher, 2005), special education teachers, paramedical staff, educational counselors and psychologists, instructors from the Ministry of Education, and so on. Milstein, Bobroff, and Restine (1991) note that the disabilities which have been identified as requiring extra support from teachers are the common disabilities that are often defined as “slight.” These include learning disabilities, attention deficit disorder, and behavior problems. Most of the students with these disabilities are integrated into regular education by teachers who have not received the necessary training to identify such disabilities and therefore require the support of a team comprised of additional professionals, such as guidance counselors, psychologists, and special education teachers. The work of this team entails a continuous process of

identification of students who are suspected of having a learning disability; data collection regarding their performance; follow-up; supervision; and use of a variety of data to evaluate the students' needs, plan educational intervention programs for the improvement of academic, personal, and social adjustment; and in certain cases to refer students to professional assessment for a comprehensive and more focused intervention (Leyser, Kapperman, & Keller, 1994).

### **2.6.2 The Parents' Role**

Throughout all the years of studies, there have been reciprocal relationships between the parents of students with learning disabilities and the educational establishment. In Israel, the Ministry of Education supports parents' involvement, and there is steadily increasing recognition of the importance of the cooperation with parents in general and with the parents of students with special needs to ensure the best possible education for all students. As noted previously, the axis of the developmental continuum in the Israel Ministry of Education policy toward learning disabled students emphasizes the importance of the accompaniment and support of these students throughout all stages of education, from kindergarten to the end of high school. This accompaniment involves an ongoing relationship with the students' parents over the years.

In this context, it is important to note that because of the importance of the academic achievements of children in Israeli society and the fact that they are often perceived as an indicator of the quality of parenting, parents of learning-disabled students face unique challenges and coping with them is frequently painful and difficult. Moreover, although the parents of learning-disabled students are expected to master difficult and complicated coping strategies, they tend to be judged by the environment and pronounced "not good enough" parents who have difficulties coping with the education of their child (Plutnik, 2008). Parents in this situation may feel that they are in a vulnerable position, and their intensive complex relationships with educational professionals may be characterized by numerous conflicts. On the one hand, the difficulties and sense of powerlessness among the educational staff regarding the children with learning difficulties may lead to a critical, judgmental, disrespectful, or inconsiderate attitude toward parents, while parents may relate to the staff with suspicion or aggression, which makes it difficult to build a collaborative team which works in the best interests of the child. One of the difficulties in the relationship between parents and teachers may be differences of opinion about the best way to work with the children.

Many parents of children with special needs, including parents of learning-disabled children, dispute the teachers' professionalism and claim they do not do enough to advance the children.

### **2.6.3 The Role of Institutions in the Inclusion Process of Students with Specific Learning Disability (SLD)**

Today, the inclusion of learning-disabled students in the regular classroom is the reality in every school. The Israel Ministry of Education attempts to ensure equal opportunities for learning disabled students in every classroom that will enable all students to realize their potential and provide an adequate response to students' academic and emotional-social needs. This policy presents teachers of regular classes with a complex challenge. There is no doubt that there has been a change in the way teachers relate to these students. A study by Einat (2005), conducted about a decade ago, shows that many teachers displayed a lack of understanding and acceptance of learning-disabled students, as well as indifference, and even sometimes rejected them. In addition, many teachers evinced suspicion of what they viewed as the exaggerated privileges granted to the learning-disabled students and felt that their efforts to help the students were taken for granted.

It seems that the attempt by the Israel Ministry of Education to transform teachers into learning process experts has not yet been fully achieved. A review of the literature of recent years (Levi, Einav, Raskind, Ziv, & Margalit, 2013) indicates that teachers continue to lack self-confidence in their professional ability's vis a vis student with learning disabilities. Teachers feel that despite their desire to help their learning-disabled students they do not have sufficient tools or professional knowledge to make the necessary accommodations and provide a satisfactory response to the social, emotional, and behavioral needs which characterize the learning disabilities. In addition, the ongoing relationship between the teachers and the parent of the learning-disabled students is often complex and not always a successful cooperative effort that enables the students to make progress. A review of the literature and of teachers' statements indicates a need for collaboration, assistance and support among the different elements that comprise the school. The regular classes are filled with a numerous student and a corresponding number of difficulties. Every student needs special attention, and a learning-disabled student needs even more. The need for additional teaching aids, inclusion hours (special education hours which are provided to the special needs students who have been approved

by an inclusion committee), individualized hours, reinforcement hours, "extended" hours (during which more than one teacher teaches a class at the same time), and technological means for the diversification of teaching methods and approaches to learning are all essential to address the needs of the integrated students.

Knowledge about learning disabilities and their characteristics may help teachers to cope with the inclusion of learning-disabled students. Provision of knowledge about learning disabilities during teacher training and in-service training courses is important and may reduce teachers' objections to the integration of learning-disabled students into the regular classroom, as well as negative attitudes to such inclusion (Talmor, Sharon, & Kaim, 2010). It should be noted that teacher training programs are changing significantly, and many – from early childhood education to elementary school education to secondary school education – now include courses about the inclusion into the regular classroom of students with special needs and learning disabilities. However, while training and acquisition of knowledge are important, in themselves they are not enough. Teachers who cope with learning disabled students in their classrooms need support and accompaniment throughout the year. In this respect, the guidance counselor plays an important role as he or she may convene group and personal teachers' meetings. Almog and Lazer (2011) propose that support sessions for teachers include cognitive components, the transmission of information related to the topic, as well as emotional components, the sharing of experiences, and behavioral components, such as practical suggestions for action and for the adjustment of the scholastic educational environment.

In addition to guidance counselors, there are many different professional factors at work in a school, such as special education teachers, psychologists, therapists, and paramedical professionals. The teacher's ability to cope effectively with the challenges associated with the inclusion of learning-disabled students into the regular classroom depends largely on the cooperative work between her and the professionals listed above. According to Manor-Benjamini (2007), cooperative work facilitates a holistic view of a student in all areas of functioning: developmental, academic, social, emotional, behavioral, and family. This holistic perspective is created through cooperation between the different professionals. These staff members may craft solutions for complex issues that require a wide variety of knowledge and abilities which the learning-disabled student's homeroom teacher may not possess. In addition, encounters with the diverse professional staff members constitute opportunities for teachers to express emotions,



thoughts, difficulties, and successes they have experienced as they work with their learning-disabled students.

While it may be said that the learning disabilities contended within school's challenge teachers' abilities, it is important to note that being willing to attempt to assist learning disabled students to advance is not enough. In parallel to the formation of educational policy regarding learning disabled students, the Ministry of Education must provide more intensive training, supervision, help, and support for the teacher who stands in front of the class, facing all her students. Also, it should be stressed again that it is not only the learning-disabled students who require ongoing supervision and support – their teachers need it as well. The identification of the teachers' needs and their empowerment by means of boosting their sense of self-efficacy will help them cope with the challenge of teaching both regular and learning-disabled students together, in Israeli classrooms.

#### **2.6.4 Students with Specific Learning Disability (SLD) – Statistical Data / Review of the Literature**

In 1996 the Margalit Committee determined that the rate of learning disabilities among children in Israel is 10%. Headed by Professor Malka Margalit, the committee was established at the initiative of then Science Minister Zeev Binyamin Begin and then Education Minister Zevulun Hammer, with the aim of examining how to best realize the potential of learning-disabled students in the educational framework. The ideological basis of the committee's work was the recognition of every person's natural right to equality of opportunities and society's obligation to create the conditions for its realization.

When the topic of learning disabilities entered the arena of public concern, the prevalence of the disorder was estimated at 3%-5%. However, with the increase in awareness, tools, and assessment frameworks, we are finding that the prevalence of learning disabilities is steadily increasing. Conspicuous differences, from 2% to 7%, in the rate of learning disabilities identified in different states across the U.S. suggest a lack of consistency in identification and assessment processes.

Some experts attribute the rise in prevalence to the indirect influence of social-cultural changes. The increase in existential tensions and pressures on the family overshadow concern about a child's learning success and lessen the educational and emotional support that families provide for their members. The increase in the number of

children below the poverty line exposes the broader population to health risks and damage to the functioning of the nervous system. While there is no direct causal relationship between poverty and learning disabilities, often the children in families of limited means do not receive economic, educational, and social support, and thus their chances of coping with academic difficulties are very slim. According to a report from Israel's National Insurance Institute from the beginning of 2008, the number of children who live below the poverty line has exceeded 800,000. As of today, one in every three children in Israel lives below the poverty line. Although in the past it was believed that learning disabilities gradually diminished over the years, new research undermines this assumption and shows that for now, such disabilities are incurable. The new population of learning-disabled adults, who in their childhoods were classified as lazy students with low-level intelligence, and many of whom were expelled from school, will live as adults lacking in education, with poor reading, writing, and arithmetic skills.

In recent years, there has been a steady increase in the number of learning-disabled students enrolled in institutions of higher learning. In 1998, the Council of Higher Education in Israel reported a prevalence of 1.5%-3% of learning-disabled students at local universities. In 1996-1997 the Open University reported the percentage of learning-disabled students as 2.58% and in 2000-2001 the number rose to 4.98%. When the percentage of those who conclude their studies is examined, a rather depressing picture emerges. Research shows that in contrast to 62% of students who do not have learning disabilities and complete their studies, only 3.6% of all learning-disabled students conclude theirs.

A study by Einat and Einat (2007) published in the book *Indictment – Learning Disabilities – Dropping Out and Delinquency*, indicates that 70% of jailed convicts in Israel have learning disabilities and attention disorder. All the inmates were subject to the Compulsory Education Law, and all had already dropped out of the education system in elementary school. In Israel, learning disabled students constitute half the population of students who are in the special education framework.

The implementation of the Individuals with Disabilities Education Act (IDEA) in the U.S. was evaluated in a study which categorized the difficulties of more than five million children aged six to 17 who were treated in special education frameworks during the 1997-1998 school year. The greatest overlap was found between learning disabilities and attention deficit and hyperactivity disorder (ADHD). A survey conducted by the Centers for Disease Control and Prevention (CDC) in the United States among children

aged six to 17 indicates that the prevalence of ADHD without learning disabilities is 4.7% and of learning disabilities without ADHD is 4.9%. The percentage of children assessed as having both disabilities is 3.7%.

There is no relationship between mental retardation and learning disabilities. The very definition of a learning disability negates mental retardation. When a child with a low level of intelligence has difficulties mastering academic skills, the phenomenon is referred to as “learning difficulties” and not “learning disabilities.”

There are different estimates regarding the prevalence of learning disabilities among school-age children, which range from 1% to 30%. The differences among the estimates derive from the ambiguity and the wide range of definitions of the disorders. In the absence of an accepted definition, there is no agreement on the characteristics, development, identification, prevention, or treatment of learning disabilities. Certain learning disabilities can appear with different syndromes. For example, dyscalculia and dysgraphia are characteristics of Gerstman syndrome.

For many years, the dominant belief was that the prevalence of learning disabilities is four times as high among boys. At the time, one of the explanations for this phenomenon was based on the argument that the biological vulnerability of boys exceeds that of girls and that they are more exposed to risk factors that lead to the minimal brain damage associated with learning disabilities.

Another explanation maintains that the school system frequently refers boys for assessment either because their behavior in the classroom tends to be more disruptive, or because greater importance is attributed to their achievements than to the girls' achievements. Girls with learning disabilities who are not referred for assessment or treatment, constitute a high-risk group for future academic, social, and cognitive difficulties.

A learning-disabled child can suffer from one, some, or all the learning disabilities – dyslexia, dysgraphia, dyscalculia, or dysorthography.

The frequency of diagnosis of the disorders depends on the importance attributed to them. Because of the important status attributed to reading in the technological era, there is concern as well as significant awareness regarding the identification, referral to assessment, assessment, and treatment of people with reading difficulties. Thus, dyslexia are considered the main disorder, and accounts for 80% of learning disabilities. Among all students it appears at a rate of 4%-6%.

At present, reading disabilities in the context of disruptions in phonological awareness constitute the most-researched subject in the realm of learning disabilities and their prevalence – at various levels of severity – is estimated at 17% among school students. Developmental dyscalculia appears among 6%-7% of school students. In contrast to other learning disabilities, estimates regarding gender differences are not provided here.

Skills related to written expression, writing, and spelling, are not evaluated with the same thoroughness as are reading skills. However, according to the few studies that have been conducted, the number of people with dysgraphia and dysorthographia is no lower and may even exceed the number of dyslexics.

In 1999, in its annual report to Congress, the U.S. Department of Education reported that 43% of all learning-disabled students were integrated into regular classes: 29% were in partial integration, in that they left the homeroom class for tutorial lessons; 17% studied in special classes for the learning disabled; and fewer than 1% were placed in special education schools.

## **Conclusions**

Numerous definitions and models exist to distinguish among the various learning disabilities. The diagnosis of a learning disability is usually made in childhood and less so in adulthood. Older students with learning disabilities often seek a second assessment to discover whether they have managed to overcome their difficulties despite their childhood diagnosis. The fundamental assumption is that although a division into subgroups is proposed, many people with learning disabilities suffer in more than one area. There is no "clean" division, and every learning disability is characterized by a unique combination of issues and influences. An individual combination or profile of difficulties can be identified more easily by means of a diagnostic model. In addition, learning disabilities affect all areas of life, and not just learning.

## **Chapter 3: Education and Therapy in Israel for Students with Specific Learning Disabilities (SDL)**

To understand the world of a student with learning disabilities in the higher education system, one must first be familiar with the educational frameworks in which he or she grew up, spanning elementary school to high school. This chapter presents an overview of Israel's mainstream education system, including general data and organizational structure. The theoretical models on which the Israel Ministry of Education relies regarding students with learning disabilities are also presented.

### **3.1 The Education System in Israel: Structure, Legal Infrastructures, and General Data**

#### **3.1.1 Structure of the Education System in Israel**

To a great extent, the complexity of Israeli society and its diverse human fabric are reflected in the state education system. The heterogeneity of the education system is expressed in different layers in the system's structure and budget, and in the existence of many types of educational institutions tailored to the needs of the various sectors. The structure of Israel's education system is generally divided into four main sectors: according to age (stages of education); according to the legal status of the educational institution; according to the type of supervision provided; and according to sector. A short description of each category is presented below.<sup>2</sup>

The Israeli education system is often divided into four main stages (or levels of education), in accordance with students' ages:

1. Pre-elementary education: preschool and pre-kindergarten education, for children aged three and four; and kindergarten, for children aged five years old.
2. Elementary education: first to sixth grade, for children aged six to 11 (the most common division) or first to eighth grades, for children aged six to 13.

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<sup>2</sup> Data on the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019.

ICT and Information Systems Administration at the Ministry of Education, "In a Broad View - Numbers on Education System", Entry: May 2019

3. Secondary education: middle school, seventh to ninth grades, ages 12 to 14; high school, tenth to twelfth grades, children aged 15 to 17, or high school for children aged 12 to 17, or high school for ninth to twelfth grades, children aged 14 to 7.
4. Post-secondary and academic education: for those aged 18 and older.

The legal status of the educational institution is determined according to its ownership and the degree of state supervision provided:

1. Official education: state and state religious educational institutions owned by the state or the local authorities; the teachers in this group are for the most part state employees
2. Recognized but not official education: institutions not owned by the state but for which the state has a certain degree of oversight; they are budgeted by the state at a lower rate than official educational institutions (they receive 75% of the budget per student received by an official institution). Because they receive only partial oversight, these institutions have greater freedom to accept students, to employ teachers, and to determine the curriculum. Many of the recognized, but not official, institutions belong to the Ultra-Orthodox education sector, and especially to the two large educational networks in this sector – the independent education center and the *Torani* education. However, there are schools with this status that belong to other religious communities (for example, Christian Arab schools), and several non-religious schools (such as the Democratic Schools). The four-year secondary educational institutions and the upper schools are for the most part not official institutions, although some of them are owned by the local government or the state. The teachers at these institutions are not state employees.
3. Exemption institutions: the Ultra-Orthodox institutions that the education system has recognized as exempt from the general conditions required by the education system, and for which special conditions have been established which exempt them from the obligation to fulfil the directives of the Compulsory Education Law, 1949. It should be noted that the Compulsory Education Law provides an exemption for the parents of a child at the age of compulsory education and not for the educational institution. However, over the years children who were granted exemption gravitated toward certain educational institutions and hence the term “exemption institutions” evolved.

Following the legislation of the Unique Cultural Education Institutions Law, 2008 by the 17<sup>th</sup> Knesset (Israeli Parliament), in essence a new type of educational

institution was created, in which the students are exempt from compulsory learning (and the licensing conditions are determined separately).

The education system may also be divided into categories based on the type of supervision a school receives:

1. State: institutions that do not teach religious subjects and are not defined as religious schools in the Jewish and non-Jewish sector. State education (as well as state religious education) is provided by the state regardless of political affiliation, ethnic, or other association, and is under the supervision of the Minister of Education.
2. State religious: educational institutions run by religious Zionist Jews. These are state education institutions that are religiously observant in their approach and curriculum. The teachers and supervisors at these institutions are religiously observant.
3. “Other supervision:” this is the original definition used by the Ministry of Education. It refers to the educational institutions of the Ultra-Orthodox Jews. The education system in Israel is also divided according to sector: Jewish and non-Jewish, Arab, Bedouin, Druse, and Circassian<sup>3</sup>.

### **3.1.2 Legal Infrastructure of the Education System in Israel – milestones**

The power of the education system and its performance ability derive first and foremost from the legal infrastructure of the system, or in other words, the legislation that determines the education system in the state. The following are the main points of the central laws that determine the functioning of the education system, its areas of responsibility, and the authority vested in its directors.

#### **Compulsory Education Law, 1949**

This law determines that the state is obliged to provide compulsory education for every child in Israel from the age of three to the age of 17 in a recognized educational institution and that the child’s parents are obliged to send their child to this type of educational institution. The objective of this law is to provide equal opportunity in education to all children of the state, regardless of economic, ethnic, or sectoral affiliation. The main topics covered by the law are the right to obtain free education at these ages and the obligation to register a child for school at the age of compulsory

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<sup>3</sup> Ministry of Education, Economics and Budgets Administration (Economics and Statistics Division).

education. Furthermore, the Minister of Education is permitted to grant an exemption from the obligation of registration for studies in a recognized institution in cases where the student studies at a private educational institution (which is not recognized) that is acceptable to him, or if the Minister of Education is convinced that the child cannot study in a regular school or at the recognized institution or is granted permission to be home schooled. (The exemption is provided, as mentioned, to students in institutions recognized as unique cultural educational institutions). The Minister of Education is permitted to obligate, by law, a local educational authority, or specific local educational authorities to open and operate official educational institutions for elementary school education.

Regarding the ages to which the Free Compulsory Education Law applies, the implementation among children aged three to four is only partial (about 40% of the children aged three to four are eligible today for free education according to the letter of the law).

### **State Education Law, 1953**

This law determines the responsibility of the state to establish state education. Following the legislation of this law, the official education system in Israel established state education and state religious education. The main topics covered by the law are the determination of the curricula, complementary programs, supplementary curriculum, and experimental programs; determination of arrangements and conditions for the recognition of unofficial institutions as recognized educational institutions; regulations for the supervision of educational institutions and the appointment of supervisors, principals, and teachers; introduction of the basic curriculum (core curriculum); adjustment of the provisions of the law to the needs of compulsory education of non-Jewish students; and determination of the arrangements for registration and transfer of students.

In the year 2000, an amendment was made to the law that determines the goals of state education, which include: to educate the person to love mankind, to love his people, and to love his land, to be a loyal citizen to the State of Israel, who respects his parents and his family, his heritage, his cultural identity and his language; to inculcate the principles set out in the declaration of the establishment of the State of Israel and the values of the State of Israel as a Jewish and democratic state and to develop an attitude of respect for human rights, for fundamental liberties, for democratic values, for the preservation of the law, for the culture and outlooks of others, and to educate toward peace and tolerance in the relationships between people and nations; to teach the history



of the Land of Israel and the State of Israel, the Bible of Israel, the history of the Jewish people, the heritage of Israel and Jewish tradition, to instill the knowledge of the memory of the Holocaust and acts of courage, and to educate to respect them; to strengthen the power of judgment and criticism and to strengthen intellectual curiosity, independent thinking and initiative, and to develop awareness of and alertness to changes and innovations; to provide equality of opportunity to each and every boy and girl, and so on.

During the term of the 17<sup>th</sup> Knesset (Wörgan, 2008) the law was amended, and the issue of inclusive state education was added. This amendment determines that inclusive state education will be provided which integrates increased studies of Judaica into its curriculum and stresses engagement with Jewish identity and “education for values of tolerance in the heritage of Israel and the maintaining of a shared life and a covenant of destiny and fate between all parts of the people of Israel and the Diaspora.”

### **Supervision of Schools Law, 1969**

This law determines the licensing obligation for schools where there are more than 10 students and where methodical education is provided. Aside from the provisions addressing state supervision over the schools, the law details provisions for opening and operating a school and for the licensing of schools, supervision of safety and health at school, employment of workers in the schools, and the conditions under which a school would be ordered to close. As mentioned, the Unique Cultural Education Institutions Law determines the separate conditions of licensing for these institutions so that the Supervision of Schools Law does not apply to them.

### **Special Education Law, 1998**

The main issues covered by this law are the responsibility to provide free special education for a child with special needs; the appointment of placement committees and appeals committees; and the determination of the eligibility of a special needs child for special education. In the year 2002 this law was amended, and a section was added that addresses the issue of inclusion, which allows children with special needs to integrate into the education system intended for the general population. This amendment determines that the special needs child who the inclusion committee has deemed eligible for inclusion is entitled to additional teaching and study hours and special services. According to the law, every school year the Minister of Education, with the consent of the Minister of Finance, determines the number of students with special needs who are eligible for inclusion.

### **Student's Rights Law, 2000**

This law seeks to determine the principles of the rights of the student in a spirit of human dignity and according to the United Nations Convention on the Rights of the Child, and thus to uphold the laws of education. The main issues covered by the law are: the inculcation of the right to education, the right to take high school matriculation examinations; the right to confidentiality; the prohibition against discrimination for reasons of ethnicity, socioeconomic background, or political affiliation; the prohibition against the use of corporal or humiliating disciplinary measures; the prohibition against the use of any means of punishment in response to an action or fault of a parent; and the prohibition against the permanent removal of a student from an institution without providing an opportunity for a student and his or her parents to present their arguments.

### **Long School Day and Enrichment Studies Law, 1997**

This law adds hours of study and education to the existing hours at educational institutions, to extend and broaden students' knowledge and education, to add education for values and social activity, and to provide equal opportunity in education for all the children of Israel. The law determines that the communities and neighborhoods that will be responsible for implementing a long school day will be determined by the Minister of Education. Today the law is only partially implemented, and the directives of the Minister of Education on the topic pertain only to some of the students in the first to sixth grades and some of the children in kindergarten.

### **3.1.3 Data for the Education System in Israel - Students**

The general data for the education system in Israel are gathered on the forthcoming tables.

Table Number 2: Number of Students in the Education System (Including Kindergartens)

	1948/49	1959/60	1969/70	1979/80	1989/90	1999/00	<u>2018</u>
<b>Students</b>	137,886	551,854	749,533	1,076,194	1,306,000	1,654,822	<b><u>1,838,979</u></b>

Source: Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

According to the table, there has been a steady increase in the number of children in the framework of education in Israel, the place of the state (1948) until today, probably as a by-product of an increase in births in various sectors in Israel and another fact that many Jews came to live in Israel from different countries.

Table Number 3: Number of Students according to Stage of Education, 2018

<b>Education Stage</b>	<b>Students</b>
<b>Public Kindergarten</b>	<b>368,869</b>
Compulsory Kindergarten (age five)	153,379
<b>Elementary Schools</b>	<b>858,380</b>
First Grade	133,191
<b>Middle Schools</b>	<b>253,301</b>
<b>High Schools</b>	<b>358,429</b>
12 <sup>th</sup> Grade	102,398
<b><u>Total Students in Schools without Kindergartens</u></b>	<b><u>1,470,110</u></b>
<b><u>Total Students in Schools including Kindergartens</u></b>	<b><u>1,838,979</u></b>

Source: Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

An analysis of the data across the distribution of the number of students according to the type of supervision and sector reveals that Israeli students make up about twenty two percent of the country's population of about nine million.

Table Number 4: Number of Students in All Schools according to Supervision, 2018

	<b>State</b>	<b>State Religious</b>	<b>Other (Ultra-Orthodox)</b>	<b>Total</b>
<b>Number of Students</b>	1,040,660	200,643	228,807	1,470,110
<b>Percentage of all Students</b>	71%	14%	15%	100%

Source: Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

An analysis of the table shows that most students (71%) in Israel study in educational institutions under the supervision of the Ministry of Education, while the sectors belonging to certain religions include fewer students under official supervision.

### **Number of Students in a Class in Elementary and Secondary School**

The maximum number of students permitted in first to 12<sup>th</sup> grade classrooms in Israel's education system is 40, and the maximum number of students permitted in a kindergarten class is 35. The directives for this matter are not determined by law but are administrative directives from the Ministry of Education. The exception is the limitation of the number of students in first and second grade in one third of the study hours, in

which the basic skills are learned (reading, writing, and arithmetic), which was anchored in law during the 17<sup>th</sup> Knesset. During these hours there are 20 children in a class.

In comparison to most Western countries, Israeli classrooms are especially crowded. The OECD report<sup>4</sup> published in 2008 indicates that in elementary education the mean number of students in a class in Israel is 27.5, while at 21.5, the mean in the OECD is far lower. At middle school, with 32.8 students in a class, the rate of children per classroom in Israel is again very high, as compared to 24 students in a middle school classroom in OECD countries. Of the 37 countries included in the report, only South Korea and Japan have more students per class than Israel does.

Regarding the gaps in mean class size in the Israeli education system, a previous study conducted by the Knesset Center for Research and Information about the distribution of the number of students in a class indicates that:

Table Number 5: Number of Schools and Number of Classes in the Education System

	1948/49	1959/60	1969/70	1979/80	1989/90	1999/00	<u>2018</u>
<b>Schools</b>	611	2,000	2,320	2,367	2,432	3,539	<u>4,017</u>
<b>Classes</b>	4,546	14,824	22,491	30,409	36,168	48,986	<u>53,747</u>

Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

An analysis of the table shows an increase in the establishment of educational institutions and in the number of classrooms in Israel since the establishment of the state until today.

Table Number 6: Number of Students in Elementary Schools according to Legal Status, 2018

	Official	Recognized & Unofficial	Exempt	Total
<b>Number of Students</b>	694,134	164,167	45,079	858,380
<b>Percentage of all Students</b>	76%	19%	5%	100%

Source: Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

<sup>4</sup> OECD - The Organization for Economic Co-operation and Development.

Regarding the division based on legal status, in the official education system the mean number of students in a class is considerably higher than that in the recognized but not official educational institutions and in the exemption institutions

Table Number 7: Number of Students in All Schools according to Supervision, 2018

	State	State Religious	Other (Ultra-Orthodox)	Total
<b>Number of Students</b>	1,040,660	200,643	228,807	1,470,110
<b>Percentage of all Students</b>	71%	14%	15%	100%

Source: Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

Regarding the division according to type of supervision, in the educational institutions under state supervision the mean number of students in a class is considerably higher than that in the educational institutions under state religious supervision and Ultra-Orthodox supervision.

Table Number 8: Number of Students in All Schools according to Sector, 2018

	Jewish	Non-Jewish				Total
		Arab	Bedouin	Druse	Circassian	
<b>Number of Students</b>	1,080,056	281,392	75,119	33,402	141	1,470,110
<b>Percentage of all Students</b>	73%	19%	5%	2%	0.01%	100%

Source: Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

Regarding the division according to sector, in the non-Jewish educational institutions the number of students in a class is considerably higher than the number of students in a class in the Jewish educational institutions.

It should be noted that in January 2008 the Israel government decided on a multi-year plan for the gradual reduction of the number of students in a grade in elementary schools, middle schools, and high schools from the year 2009 onwards, to 32 students per class (and then the government decided upon a more limited application of this plan) and transferred to the districts the outline for the schools to be included in the program. The Knesset Center for Research and Information is currently evaluating the program's performance to date.

### **3.1.4 The Teachers in Israel**

A serious problem that has confronted the education system in recent years is an anticipated shortage of teachers. For the current school year, the total number of teachers (including teachers in Hebrew language learning classes and teachers' colleges) is 131,078.

According to the forecast of the Israel Central Bureau of Statistics, a shortage of more than 10,500 teachers in the entire education system is anticipated. There are a number of reasons for the anticipated shortage, including the aging of the teaching workforce, the erosion of the status of teachers due to internal processes which occurred in Israeli society (and an increase in the level of violence in schools in general and toward teachers in particular), the low teachers' salaries that deter future students and university graduates from choosing the teaching profession (it is possible that the New Horizon Reform will lead to a certain change in this state of affairs), and the departure of young teachers from the teaching profession (because of the rise in the level of education of teachers and the low salaries in the profession).

The analysis of the data in table no 8 shows that in all education systems in Israel, most teachers belong to the female gender at an average age of 40, with the seniority of most teachers ranging from 15-19 years. The weekly teaching hours are 24 and most of the teachers have academic degrees

Table Number 9: Teachers in the Education System, 2007/8, according to Selected Traits

	Hebrew Education		Arabic Education	
	Elementary School	Secondary School	Elementary School	Secondary School
<b>Gender: Men</b>	12%	24%	25%	44%
<b>Women</b>	88%	76%	75%	56%
<b>Mean Age</b>	<b>41</b>	<b>45</b>	<b>36</b>	<b>39</b>
<b>Up to 29</b>	13%	7%	29%	19%
<b>50 and above</b>	25%	37%	13%	16%
<b>Mean Years of Experience Recognized for Teaching</b>	16	19	12	14
<b>Mean Weekly Work Hours</b>	23	23	24	24
<b>Percentage of Those with BA Salary Rank &amp; Above</b>	72.4%	86.3%	71.6%	88.2%

Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

### **Teachers' Salaries**

The education report of the OECD for the year 2008 indicates that teachers' salaries in Israel are far lower than the salaries of teachers in Western countries. The salary of a beginning teacher in Israel, taking into consideration the GDP per capita (in terms of purchasing power), is among the lowest in the world. It is far lower than the mean salary in the OECD (by about 39%) and the gap between it and the salary in the leading countries is tremendous. Moreover, the gap between the salary of teachers in Israel and the salary of teachers in Western countries has increased, when comparing teachers with experience of fifteen years (who earn about 49% less in Israel). However, the findings pertain to the years before the implementation of the New Horizon Reform in the education system. The reform includes a real increase in salary for beginning teachers, and it is expected that it will lead to the reduction of the gap (although it will not be closed).

### **Professional Development of Teachers**

The prevalent perception among researchers and professionals in the field of education is that the process of teacher training and teachers' professional development, from the beginning of their training up to retirement, is a continuum of learning and development. This perception is a product of the understanding that teaching is not a skill or ability that can be acquired completely in the initial stage of training. In the education

system in Israel the mechanism of in-service teacher training workshops has a central (and nearly exclusive) role in the professional development of teachers during their career. Nevertheless, a previous study from the Knesset Center for Research and Information indicates that the Ministry of Education does not have data about the relationship between in-service training for the teaching profession and teachers' personal and professional needs. The outline of the policy for professional development within the framework of the reform stipulates that every teacher will study 60 hours per year for the purpose of professional advancement. It was further determined that professional advancement will be commensurate with the subjects that a teacher teaches and the roles that she fills. In 2009, approximately 20,000 teachers who joined the reform were to participate in about 650 processes of professional development in accordance with this outline.

It should be noted that in 2018, during the 17<sup>th</sup> Knesset, the proposed government law with the goal of re-organizing extensive aspects of the teaching profession (also discussed in the Education Committee) passed in its first reading. It includes directives about licensing and supervision and directives regarding the obligation to supply professional in-service training for teachers.

The success of Israel's education system is measured in students' achievements on the high school matriculation examinations, in the *meyzav*<sup>5</sup> tests, and on the comparative international tests. The following sections present contemporary data about students' achievements.

### **The Meaning of Exams in Israel**

The Ministry of Education in Israel has determined that in the education system a test is a measurement tool or systematic process designed to examine a trait (such as the quality of knowledge or performance, skills) of the student in a particular field, usually through a questionnaire. The quality of the performance can be measured in relation to the performance of the other children in the class or in relation to the study material, according to pre-determined criteria.

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<sup>5</sup> The "meyzav test" is a constellation of tests administered by the National Authority for Measurement and Testing in Education (RAMA), an independent professional state authority affiliated with the Ministry of Education. The objective is to provide school principals with objective pedagogical information about the school, for the purpose of creating work plans and the improvement of teaching and the school climate.



## **High School Matriculation Examinations**

An analysis of the data from the matriculation examinations for the year 2017, according to the socioeconomic cluster of residential communities, indicates that among the weaker population's students' achievements are lower. This is expressed in the percentage of students taking the tests, the percentage of students eligible for the high school matriculation certificate, and the percentage of students who meet the universities' threshold conditions. In addition, despite the increase in the achievements of students in the Arab sector on the high school matriculation examinations in recent years, when the data from the matriculation examinations is organized according to sector, a considerable gap in achievements is revealed in favor of the Jewish sector.

The education system administers several additional tests to evaluate students' achievements and the condition of the education system, the most important of which is the *meyszav* test.

### **The "*Meyszav* Test" (Measures of Effectiveness and School Growth)**

The *meyszav* test has been administered in Israel's education system since 2002. It is based on several measures that are used to evaluate the constellation of aspects of activity of a certain school: the learning environment, the curricula, achievements, systems of relationships (among the students, between teachers and students, between teachers and parents, and so on), etc. Every principal of a school participating in the *meyszav* receives a comprehensive report about the state of the school in three main areas: pedagogical environment, academic achievements, and school climate and work environment. The test for the assessment of academic achievements is held in four subjects: science and technology, native language (Hebrew or Arabic), mathematics, and English. The test is administered in the fifth and eighth grades in elementary schools and middle schools.

Until the 2005/2006 academic year, all elementary and middle schools participated in the *meyszav* test once every two years. Since 2007, the *meyszav* test has been administered in a new format, in which there is an external test in each of the fields of knowledge once every four years and concurrently every school whose students are not tested in a certain field of knowledge each year receives the test booklets and questionnaires from the other schools and conducts an internal *meyszav* test. The schools are not required to report the results of the internal *meyszav* test, which are intended solely

for internal purposes. In addition, since 2007 the *meyszav* test has been administered in native language in second grade.

The results of the *meyszav* tests expose large gaps between different groups of students. There is a considerable gap in achievements between Hebrew speakers and Arabic speakers. In addition, in each sector there is a gap between students from high, average, or low socioeconomic backgrounds. Moreover, among Hebrew speakers the gaps increase over the years, so that the gaps found in the eighth grade are greater than those identified in the second and fifth grades.

### **International Comparative Tests**

#### PISA – OECD Program for International Student Assessment

The PISA (Program for International Student Assessment) test is a worldwide study by the OECD that examines the literacy level of fifteen-year-old students in three areas: reading, mathematics, and science. The PISA tests are held once every three years. At each sitting the students are examined in the three fields, while one field is highlighted. The last study was conducted in 2006 among students from 57 countries (some of which are OECD member states), including Israel, and the highlighted field was science. The research findings indicate that in all three subjects the achievements of the Israeli students were below the mean of the countries where the test was administered and far below the mean scores of the OECD countries. The following table depicts Israel's position in the hierarchy of countries based on the 2006 test and the previous test in 2002. It should be noted that in different studies there is a different number of participating countries.

Table Number 10: Israel's Position in the Hierarchy of Countries according to the PISA

Examined Area of Knowledge	Israel's Position in 2006 among the 57 Participating Countries	Israel's Position in 2002 among the 41 Participating Countries	Israel's Position among the 38 Countries Participating in Both Cycles		
			2006	2002	Change in Ranking
Science	39	33	31	33	Increase by two places
Reading	40	30	31	29	Decrease by two places
Mathematics	40	31	31	31	No change

Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry Knesset, April 2019

Aside from the low average score, the research findings indicate a very great percentage of students who possess low mastery of the sciences and a very low percentage of students who possess high mastery of mathematics in Israel in general and

among Arabic-speakers in particular. In addition, the variance of scores in Israel is one of the greatest among the participating countries. The variance between the schools is great, and the variance is even greater within the schools. Like the scores on the *meyzav* tests, these findings indicate profound gaps between groups and sectors in society, primarily between Hebrew-speakers and Arabic-speakers and between students who come from different socioeconomic backgrounds.

### **TIMSS – Trends in International Mathematics and Science Study**

The TIMSS is a series of international assessments of mathematics and science mastery among eighth grade students around the world. It is organized by the International Association for the Evaluation of Educational Achievement (IEA). This is a longitudinal study conducted once every four years. Israel participated in the TIMSS in 1995, 1999, 2003, and 2007. The test scores from these years were calibrated and organized on a uniform scale determined according to the results from 1995. This scale facilitates comparison between and examination of the changing trends in achievements over time, between countries and between grades within the countries

Table Number 11: TIMSS Results for 2007

	<b>Mathematics</b>	<b>Science</b>
<b>Standard Mean (according to 1995 Results)</b>	500	500
<b>Mean in the Country participating in the Tests</b>	451	466
<b>Test Results for Students in Israel</b>	461	468
<b>Position (out of 49)</b>	24	25

Data for the average number of students per class in Israel: The Ministry of Education's response to the Research and Information Center's inquiry, Knesset, April 2019

The achievements of the students in Israel are similar to those for 1999 but are lower than those for 2003. These research findings also indicate profound gaps between sectors and between students from different socioeconomic backgrounds in Israel.

### **3.1.5 Legislation**

The Israeli education system is regulated both by the laws and legal regulations. The laws are established by the "Knesset of Israel" (The Israeli House of Representatives) and the legal regulations by the Ministry of Education which is headed by the Minister

of Education. The new regulations are distributed to parents and teachers every year and describing the changes in legislation and the new guidelines.

- Compulsory Learning Law (Amendment 29), 2007: Application of Compulsory Education for Eleventh and Twelfth Grade Students: this law determines for the first time that schools are not permitted to filter out students in the eleventh and twelfth grade without ensuring that they have an alternative educational framework. Until the legislation of this law, the Compulsory Education Law only extended to tenth grade. As mentioned, the law was supposed to be implemented gradually from 2007 until 2013. In actuality, the order to begin implementation for the present academic year has not yet been carried out (confirmation is required from the Knesset Education Committee) and a petition was filed with the High Court of Justice against the Ministry of Education on this matter.
- State Education Law (Amendment 10), 2008: Integrating State Education: this amendment to the State Education Law determines that in the institutions recognized by State Education Law education must be provided which integrates increased Jewish studies into the curriculum, and emphasizes engagement with Jewish identity and education toward values of tolerance within the context of Israeli heritage and maintaining a shared life and a covenant of destiny and fate among all the people of Israel and the Diaspora.
- Unique Cultural Education Institutions Law, 2008: this law determines that the Minister of Education is permitted to recognize an educational institution in which students' study from grades nine to 12 as a unique cultural educational institution if “methodical education is provided in it according to the unique characteristic of the unique cultural group studying within it.” Since the only cultural group today which is defined explicitly by law is the Ultra-Orthodox population (although the Minister of Education can recognize additional groups), the law in essence anchors the independence of the Ultra-Orthodox high school educational institutions – the small *yeshivas*<sup>6</sup> – and as such creates a new type of educational institution, which has separate licensing conditions that are determined by law, including conditions that pertain to meeting health and safety requirements. The law ensures budgeting for the students attending these institutions at a rate of 60% of the budget for students in the

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<sup>6</sup> A yeshiva is a Jewish educational institution that concentrates on the study of Jewish traditional religious texts.

official educational institutions and does not obligate the teaching of the state curriculum.

- Compulsory Education Law (Amendment 28), 2007: Limitation of the Number of Students in the First-Second Grades in the Studies of Basic Skills; this law limits the number of students in a classroom in first and second grades in official educational institutions during the ten hours of study in which basic skills are taught (reading, writing, and arithmetic), to a maximum of twenty students. The implementation of this law is also meant to be gradual, both regarding the number of hours and the age groups and was slated to be fully implemented by 2012. In 2009 the law was supposed to be in effect for only the first grade, for five hours of study.
- State Education Law (Amendment 7), 2007: Participation of the Local Education Authority in the Budgets of the Recognized Non-Official Education Institutions: this law determines the obligation of every local government to contribute to the budgets of the recognized educational institutions in its domain at a rate equal to (at least) the rate of contribution of the state in the budgets of these institutions. Until the legislation of this law, the contribution of local governments to the budgets of the recognized institutions was subject to the decision of each local government.
- Rights of Students with Learning Disability in Post-High School Institutions Law, 2008; Supervision of the Psychometric Institutes Law, 2008; Pre-Military Preparatory Schools Law, 2008; Prohibition of Commercial Activity in the Education Institutions Law, 2007; National Library Law, 2007; Public Libraries Law (Amendment 3), 2007.

The following list is a selection of laws that the Education Committee has frequently debated in recent years to monitor their implementation in the education system:

- Integration Law: in 2002 the Special Education Law, 1988, was amended, and an integration chapter was added, called the Integration Law. This chapter determines that a child with special needs whom the institutional integration committee determines has the right to be integrated, or in other words, studies in a regular class in a regular educational institution, is eligible for additional hours of teaching and study and other services. The implementation of this law entailed many difficulties, primarily due to budget limitations. The Knesset Education Committee frequently discusses this topic, which led to an evaluation which was conducted by the Knesset Center for Research and Information which indicated that the current budget for the allocation of integration hours does not provide an

adequate response for all the students who need them. Moreover, the position of the Department of Special Education at the Ministry of Education is that the addition of the budget planned for the years 2008-2010, beyond the budget already provided by the Ministry of Finance did not enable completion of the implementation of the law in the period allotted.

- Free Education for Sick Children, 2001: this law determines that the government must provide free education for every hospitalized child and for every child who remains at home for a period longer than 21 days due to a prolonged illness.
- Compulsory Learning Law (Amendment 16), 1984, Free Compulsory Education for Ages Three-Four: in 1984 the Compulsory Learning Law was amended, and it was determined that compulsory education would apply to all children from the age of three (instead of the age of five, as the law had previously stipulated). The implementation of this amendment to the law has been postponed six times in the framework of the arrangement laws in the years 1985-1998. In 1999 the law was in essence legislated once again and it was determined that the implementation would commence immediately, by order of the Minister of Education.
- Long School Day and Enrichment Studies Law, 1997: the objectives of the Long School Day and Enrichment Studies Law are to add learning and education hours to the existing hours at educational institutions to extend and deepen students' knowledge and education and to add education for values and social activity. The law determines that in the educational institutions where there is a long school day, the study week will not be shorter than 41 learning hours.
- Daily Meal for the Student Law, 2005: the law determines that students eligible for elementary education will receive one hot meal a day. The Ministry of Education, with the agreement of the Ministry of Finance determines which student populations are eligible for the daily meal from among the students in the educational institutions in the communities and neighborhoods where a long school day is implemented.

### **3.2 Children and Students with Difficulties and Disabilities in the Education System**

To ensure the effective integration of children with disabilities into the regular education system, it is necessary to make various accommodations to facilitate their

inclusion. The Special Education Law recognizes this need and determines that an integrated student is eligible, in the framework of his studies in a regular educational institution, for additional teaching and learning and special services.

The law determines the right to the adjustment of the environment so that it will be completely accessible, namely, the shaping and planning of the curriculum to suit each student. To realize this right the law determines that the Minister of Education must decide on a program for the inclusion of special needs children into the education system. Furthermore, it was determined that the state must fund children who are integrated into the regular education system in the same way that it finances children in special education.

Considering the rights to education and equality, international law, and the particular purpose of the law, the necessary conclusion is that obligation to finance by the State applies also to the assistance needed for a child with special needs who is integrated into the regular education system.

### **Individualized Education Program (IEP)**

The special needs student is entitled to come before the school committee at the school where he or she is to study, at the start of each school year, so that the school can determine an individualized education program (IEP). This program aims to help the student to realize his or her potential and of course it must consider the level of accessibility that can be provided to the student.

Different types of student support are discussed in the framework of the IEP, as follow:

- Support regarding the type of accommodations which can be made: the main part of this support is changes and adjustments tailored to the child's abilities and needs, that can be made to the environment, equipment, and activities that the student encounters. For instance, assistance and support for the use of special devices/equipment, such as closed-circuit television, adapted computerized systems, hearing devices, etc.
- Integration of support related to teaching and learning and support for different types of accommodation: Sometimes it is not enough to provide only one type of support, and when more than one kind of support is needed, a school is required to develop an integrated program which includes academic support and learning reinforcement alongside additional adjustments.

Several examples of the types of support that schools provide in the framework of the inclusion program include:

- Teaching in a special environment: support of the student in an educational environment organized and adjusted for his or her needs may comprise physical accommodation (in the case of vision or motor disability, for instance) and technological accommodation including treatment and or learning centers at the school.
- Teaching with special measures: this type of support is provided with the use of special means and aids, such as computerized support, translation support, and support for auditory deficiencies, etc.

### **Accessibility for Mobility Disability**

The Equality for Disabled People Law determines guidelines regarding physical accessibility to educational institutions. In all that pertains to existing education institutions (section 19 33[1]), the Minister of Education requires that directives be determined regarding the establishment of:

- An accessible elevator in the main building of the learning institution
- A disabled-accessible restroom on the entrance floor of the main school building
- Accessibility to the entrance to the educational institution and access to its main building

New educational institutions must be designed in such a way that the entire building will be accessible to the disabled. On this matter it was determined that: The purpose (subjective and objective) of chapter 5(1) in the Design and Construction Law and the second addition of regulations determine special arrangements for the disabled, at the core of which lie the values embracing the dignity of the disabled person and the equality between him and others. On a broad level, it may be concluded that the purpose of the legislation is to enable the integration of the disabled person into society. Its goal is to enable the disabled person to participate fully in society in all areas of life. It is intended to realize the main value of equality in all that pertains to a person with a disability and is intended to grant a disabled person equal opportunity. It comes to grant a disabled person independence and less dependence. It comes to ensure a disabled person's dignity and liberty through the assurance of equality and participation in society in all areas of life. On a more specific level, the goal of the legislation is to ensure accessibility for a disabled person to services in public areas, such as schools. In these



places a disabled person is to be viewed as a citizen, a resident, a student. So that he or she may reap maximum benefit in these frameworks, the same as any other citizen, resident, or non-disabled student – it is necessary to provide, for example, access to the restrooms, for otherwise his dignity is wounded, his right to equal opportunities is obstructed, and his integration into social life is adversely affected.

Indeed, the statutory requirement for the installation of disabled-accessible restrooms in public buildings was intended to make such spaces functional for the disabled, with the main goal being to enable such a person to enter and utilize all public buildings to realize her public goals. The means to ensure the realization of this goal is the installation of restrooms for the disabled, as well as special doors, elevators, and other means to ensure their access to public buildings.

### **Sensory Handicaps**

In the past, organizations for the blind and the deaf expressed support for an initiative to augment learning for blind and deaf students by providing special expert teachers. They argued that when the students with disabilities were fully integrated into regular classes, this adversely affected their acquisition of basic skills, such as comprehension, speaking, writing, and orientation, which are necessary for true integration as they continue through life. However, today the prevailing opinion is that it is necessary to promote integration into the regular education system that inculcates the best skills to enable a student's optimum development. Today, blind and deaf children who do not suffer from additional disabilities are always integrated into the regular education system.

To enable students with special needs to realize their abilities to the fullest, they are assigned to adapted classes during tests. These classes are separate, with testing conditions adapted as much as possible to the students' needs. These classes comprise a relatively small number of students, and the teachers may read the test questions to the students upon request. In addition, in these classes additional periods of time are allotted – usually up to an additional fifteen minutes – as necessary. A similar addition of time may be granted to students who are taking a test in their homeroom class.

Examples of adaptations of testing for students assessed as having a learning disability include:

1. Extension of the time allocated for a written test by 25%-50%
2. Disregarding spelling mistakes

3. Transcribing exams
4. Having a neutral reader read out test questions
5. Increasing the font size of the questions on a test
6. Dictating test answers to a neutral helper
7. Adapting test questions for learning disabled students
8. Adapting test questions for students with hearing disabilities – only students who were confirmed as hearing disabled by “Shema”<sup>7</sup> and the Testing Department are eligible for this adaptation
9. Oral testing

### **3.3 Special Education and Inclusion in Israel**

The philosophical perception at the heart of the idea of inclusion is that a child with special needs has the same rights as a child who is not disabled. Therefore, she has a basic right to learn together with her peers, in one education system.

The implications of separating disabled students from his or peers, including the difficulties that may consequently arise, are described in the professional literature from a number of perspectives. According to Ronen (2007), the separation of a child with special needs from the rest of society, like the separation of people with special needs from others in different areas of life, is discrimination implemented to ease the lives of people who do not have special needs and who prefer to push aside the weak. Therefore, the arguments according to which the unusual child needs a special learning environment to protect him are arguments that indicate discrimination and not consideration.

The referral of children with special needs to special education transfers the bulk of the responsibility from the regular school, which is normative, to the disabled individual and the caregiving staff, and thus liberates the regular education system from the responsibility and need to cope with the problems of these children. While it is true that there are children who need more teaching and learning hours, in principle the learning-disabled child does not need a type of teaching that is fundamentally different from that provided to the regular child. According to this approach, special education teachers are educators with special skills and not homeroom teachers of special children (Ronen, 2007).

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<sup>7</sup> Shema is an organization that works to uphold the rights of the hearing-impaired population in Israel. (The word in Hebrew means listen/hear).

Additional researchers maintain that the isolation of the disabled child in special education frameworks makes it difficult for him to adjust to and cope with the regular population. This difficulty is ultimately expressed in the learning-disabled child's future integration into society as an adult. This separation, the researchers explain, affixes a negative label to the learning-disabled child, a label that could have been avoided if the child had not been separated from regular society. Research indicates that a learning-disabled student's sense of self-esteem may improve when she is integrated into the regular education system, since in this situation she is defined in a less stigmatic manner by her friends (Klingner, Vaughn, Schumn, Cohen, & Forgan, 1998).

Complementary models were created for the philosophical perception of the disabled child as an integral part of society, whose objectives are to achieve the practical integration of the learning-disabled individual in society. Two of these models are the behavioral model, which supports the principle of normalization, and the humanist-educational model.

### **3.3.1 The Behavioral Model – The Principle of Normalization**

In the professional literature the term “normalization” is defined as the “use of normative-cultural means (which employ values, devices, methods) to grant people living conditions (income, residence, health services), which are inferior to those of the average resident, and as much as possible to promote and support their behavior, appearance, experiences, status, and image” (Moshel, 1993).

The origin of the principle of normalization lies in the Scandinavian countries. Emerson (Emerson, 1992) and others sought the individual's personal integration into the regular community, despite any handicap or disability. For them, the possibility of being “like everybody else” was interpreted as the right to live in a pluralistic, democratic society, in which each person can choose his or her lifestyle (Reiter, 1992).

The idea of normalization was welcomed and further developed in the United States where it was expressed in two areas: first in legislation, with the goal of providing individuals with disabilities with equal rights, equal opportunities, and affirmative action so that they could live “normal lives” in the community. The second area is the acceptance of students with disabilities and special needs into the public education system with the aim of preparing them for a normal life (Rotem & Reiter, 2011).

The criticism of the behavioral perception focused on the argument that it calls to mind the medical model according to which it is necessary to “heal” a learning-disabled

person and make him “normal.” The behavioral model in essence dictated methodical approaches and clear stages of assessment, definition of the “illness,” implementation of an intervention program that determines the income, living conditions and subsequent treatment, and examination of the results considering the criterion of health/normality versus illness/exceptionality. The method was found to be effective, was widely deployed at institutions of education and rehabilitation, but during its institutionalization the individual was forgotten. The education system distanced its staff from the view of the individual as a unique being. The goal of normalization may have been achieved, but the price was the isolation of the learning-disabled individuals and their sense of alienation within the community. Furthermore, adults with disabilities also began to make demands and request to live a meaningful and interesting life with the freedom to make decisions.

### **3.3.2 The Humanistic-Educational Model**

Unlike the behavioral model, the proposed humanistic-educational model focuses on the handicapped individual and his or her rights. This model emphasizes the individual as a complete entity and as a focus of the social, treatment, educational, and rehabilitation services. True integration, according to this model, is a two-way activity conducted by both the individual and society, and not a unilateral preparation of the learning-disabled person to be like everybody else. The meaning of true integration is the cultivation of the ability of the learning-disabled person to live a life of dignity and meaning with his or her disability, along with the society's willingness to accept people with learning disabilities and handicaps as complete people and to develop for them the services that should be at their disposal. The key phrase in this model is respect for the individual.

### **3.3.3 The Mainstreaming Model**

Mainstreaming is the oldest model and originates with the American Special Education Law. The population addressed by this approach is those children who have mild to moderate disabilities. It focuses on the scope of time and special circumstances regarding the period when such students will attend regular classes at school. The fundamental principles underlying this model are that a student with a mild to moderate disability should only be moved to a special education class if no other solutions can be found and that the state must provide the student with possible alternatives which satisfy the principle of the “less limited educational environment.” According to this view, for part of the day a special needs student goes support class to receive assistance in

accordance with his or her needs. There are several types of such classes, which differ from one another in the main type of assistance which they provide (Shapiro, 1995). Some examples in Israel are:

1. Remedial instruction: the therapeutic teacher helps the child on a one-to-one basis to master the basic skills: arithmetic, Hebrew language and reading, which are necessary for a child to succeed at school
2. Individual help: the therapeutic teacher helps the student to master the material taught in the regular class; this model is primarily utilized in high school.
3. Classes that focus on the development of life skills: the curriculum in these classes comprises the development of skills such as finding a job, filling out forms, balancing expenses, and income, etc.
4. Classes that focus on the development of learning strategies: emphasis is placed on method rather than content; a group of researchers led by Donald Dashler developed curricula for the cultivation of skills such as attention and problem solving, improvement of reading, vocabulary, spelling, written expression and arithmetic, and guidance in fields such as supervision, and self-esteem

### **3.3.4 The Integration Model**

The main thrust of the integration movement was to educate students with severe learning disabilities side-by-side with their peers, to enable them to create friendships with students who do not contend with disabilities. The students with severe disabilities for the most part was in special classes situated in regular public schools, where they generally spent time with the other students in the afternoon hours, during recess, and at special events.

In the United States, there are several types of special classes for students with learning disabilities:

1. Category-based therapeutic or supportive classes: in which students with the same types of disabilities study, such as students with mental disorders or learning-disabled students
2. Multi-category therapeutic or supportive classes: these include students with different disabilities, who are at a similar level in terms of academic performance or achievement

3. Non-category classes: in which there are students who require a therapeutic or supportive class, in which students aren't differentiated. This model is accepted in the United States to refrain from labeling students according to disability.
4. Therapeutic or supportive class based on abilities: these focus on remedial instruction in a specific problematic field of studies, such as reading or arithmetic.

### **3.3.5 The Inclusion Model**

The idea of inclusion addresses the placement of children with any type of disability in regular education classes with the appropriate services and support which are provided primarily in this framework.

While the mainstreaming model addresses the amount of time in which children with slight disabilities will remain in regular classes according to their ability, and the integration model addresses primarily the proximity and possibility for social interaction among children with severe disabilities and regular children, the perception of inclusion pertains to the partnership and unification of the students with disabilities with their fellow students (peer group) at all levels (Sailor, 1991). Sailor indicates six main aspects within the definition of the term "inclusion:"

1. All students will receive education at the school they choose education that they would be entitled to if they did not have disabilities.
2. In every school the rate of children with disabilities should be the same as in the general population.
3. The rejection of children with disabilities based on the type or scope of the disability is not acceptable.
4. General education must be adapted regarding age and class to disabled students, so that there will not be independent units of special education classes.
5. According to the inclusion model, the preferred teaching approaches are cooperative learning and peer teaching (teaching that occurs during the interaction among students).
6. Support for special education students is provided in the regular class and in other joint frameworks.

### **Stages in the History of the Inclusion Model**

The idea of inclusion first emerged in 1978, with the attempt to integrate the education of students with disabilities into the broader context of general education. The attempt to create comprehensive programs for these students derived from the

fundamental assumption that children with disabilities cannot be discriminated against in education and should be granted access to friendships and partnerships with children their age who do not have disabilities. The following four stages can be identified in the history of inclusive education:

1. The public argument about the rights of the learning-disabled individual (the civil rights argument) preceded the legislation regarding this issue
2. Legal enforcement was spearheaded by the parents of children with disabilities along with professionals, for the correction and improvement of education for the disabled population (IDEA – Individuals with Disabilities Education Act)
3. Research grants were allocated to enable the implementation of inclusive education in the country.
4. The resources of IDEA were utilized for the entire school population, with the production of “secondary benefits” for children in regular education.

A review of the literature about the definitions and approaches of inclusive education shows that gradually the focus has shifted from the concern for the special educational needs of the special education population to the concern for school needs in general and for ways to include resources so that they will provide high quality, highly effective education to all students.

In accordance with the philosophical and ethical perceptions of the learning-disabled student in every state, in different countries laws were enacted that address the rights of the learning-disabled student to integrate into regular education frameworks. The philosophical perceptions at the basis of the laws range between an outlook that sees the learning-disabled individual as having fully equal rights in society and the perception that holds that the learning-disabled individual is an individual who is different from others and because of his special needs he must be in a framework tailored to those needs. Most countries are undergoing a gradual process of extending the rights of the individual, and his inclusion in the regular education system (Blas & Lior, 2002). In Europe, the learning-disabled individual has legal recognition as having almost full rights.

Until the end of the 19<sup>th</sup> century, children with disabilities in the United States did not receive educational services because they were considered uneducable or incapable of benefiting from an education. Toward the end of the 19<sup>th</sup> century, special schools were established for students with disabilities to enable them to advance in society, but in the end, they became like prisons, due to the argument that it is necessary to “protect” the

disabled population from the outside world. An essential change in the development of services for children with disabilities occurred only after World War II. In the 1940s and 1950s special classes were opened for children with moderate disabilities, and in the 1960s special classes began to be opened also for children with more severe disabilities (Koenning, Benjamin, Todaro, Warren, & Burns, 1995).

In 1975 in the United States, the Education for All Handicapped Children Act was legislated, determining that children with disabilities should learn in the least possible restricting environment (Sailor, Anderson, Halvorsen, Doering, Filler, & Goetz, 1989). In several states in the United States, it was ruled that placement in the regular classroom is preferable to placement in a special education school, and that placement in a special class in a regular school is preferable to any other placement. In 1982 a ruling determined that the programs intended for students with especially severe disabilities should be implemented in regular schools and in a framework in which members of the same age group should be included according to their prevalence among the general population (Koenning, Benjamin, Todaro, Warren, & Burns, 1995). In 1990, the law was changed to the Individuals with Disabilities Education Act, and in essence it extended its application to above high school age, with emphasis on the transition to life as a disabled adult in the community. Another law that was ratified in this year was the Americans with Disabilities Act, which broadened the integration of the handicapped in society in economic, social, and political life. As part of this development, significant changes were made in the degree of inclusion of children with disabilities, but very little was done for children with severe handicaps, with about 70% of these children remaining in differentiated frameworks (Kenowitz, Zweibel, & Edgar, 1978). In the mid-1970s, there were those who began to request that children with difficult disabilities be included in regular education. Following debate about the topic, policy changes were introduced, including efforts to include children with severe disabilities in regular education (Koenning, Benjamin, Todaro, Warren, & Burns, 1995).

There are numerous and diverse frameworks in different countries for children with special needs. Some have chosen to adopt one of the accepted methods (special education framework, framework of special classes in regular schools, or integrated classes), while some have chosen to adopt several alternative frameworks, and some prefer to be assisted by other mechanisms.



### **The Budget Policy of Integration**

The source of the distribution of the budgets may be the state, the local government, the special education system, or the school itself. There are countries in which the budget is distributed for each child according to his unique needs, and in other countries the budget is provided as one unit for all children with disabilities who remain in an educational institution. In other words, the school receives the budget according to the percentage of children with disabilities who attend it.

In the following review we address two topics: the factor responsible for the budget policy for integration and the method according to which the integrated children are budgeted for.

### **3.4 Education for People with Specific Learning Disability (SLD) in Israel**

In Israel, there are three main models for the integration of children with special needs into the regular education system.

1. Individualized placement of children with special needs in regular school classes or in regular kindergartens with individualized integration: the children who are integrated on a personal basis are mainly children with learning disabilities, mild retardation, blindness or deafness, or slight physical handicaps; these children receive additional help from an assistant teacher and are also sometimes divided into smaller learning groups (Brands & Nesher, 1996)
2. Special classes in regular schools, primarily for children with mild retardation, deafness, blindness, slight mental injury, and autism (Reiter, 1992).
3. In addition to the two types of integration described above, there are other models of integration such as: integrated classes, in which a limited number of children with disabilities (usually up to eight children) study alongside children who do not have disabilities; the integrated classes have two teachers, a regular education teacher and a special education teacher, who determine the curriculum together; some of the lessons are shared by all the students, while for other subjects the children with disabilities study separately with the special education teacher

Before the establishment of the state, the special education institutions in Israel operated on a volunteer basis. About fifty years ago, the first special education schools opened in Israel, and in 1950 the Bureau for Special Education at the Ministry of

Education and Culture was opened (Margalit, 1997). In essence, two education systems operated alongside each other, on the level of a policy shaper (the Ministry of Education) and a budget shaper (the Ministry of Finance) and in the context of the different frameworks of special education and regular education.

### **3.4.1 Definition of the Disabled Child in Education**

Until the mid-1970s, a category-based definition of a disabled child was accepted in Israel. According to this definition, the type of disability determined the type of treatment. This definition ignored the considerable differences among the children, while emphasizing the common denominator – a disability. The method consisted of teaching the children more slowly and using more means of illustration, on the assumption that their learning ability was inferior to that of regular children. In the 1970s changes were made in the approaches toward people with disability, primarily in the ideology of normalization as developed by the policymakers in Scandinavia. In 1976, a special committee of experts led by Professor Cohen-Raz (1962) was established in Israel, with the goal of re-defining a child with disability, and the goal of special education. The committee determined that the definition of a disabled child should be based on a detailed analysis of a child's normal and impaired functioning in the cognitive, physical, and emotional realms. A child would be defined as requiring special education not according to his type of disability but in accordance with his special needs. The frameworks of special education were first established by the Compulsory Education Law, according to which every child in the five to 15 age range must attend school.

The Special Education Law (1988) passed by the Knesset reads:

When we go to determine the placement of the child with disabilities, the placement committee will give priority to the placement of the child in a recognized education institution, which is not an institution of special education ... the placement committee decided upon the placement of the disabled child in this institution, it will recommend special lessons or treatments to be given to him in the same institution.

The law defines who is a child with disabilities: "A person who because of deficient development of his physical, intellectual, mental, or behavioral fitness his ability for adaptive behavior is harmed and he needs special education."

The Special Education Law legislated in 1988 led to the following four main changes:

1. Extension of the rights of children from learning services to concomitant services: “The methodical services provided by this law to the disabled children, including physiotherapy, speech therapy, occupational therapy, and therapies in additional areas determined and including concomitant services, all according to the needs of the disabled child.”
2. Extension of the therapy and commitment of the education system toward children with disabilities, from age three to age 21
3. Educational integration to the greatest possible extent: priority and preference was for the regular education system as opposed to the special education system, special education services, and treatments in the regular framework
4. Extension of the parents’ participation in making decisions about their children and participating in the placement committees and exposure to parents of documents in the education system pertaining to their children (Lifshitz, 1995).

The spirit of the Israeli law is like that of the American law: integration, but not at any price, and examination of each case according to its own merits. The placement is to be undertaken according to the child’s needs, following an examination of the relevant educational institutions (Chen, Shulman, & Echo, 1988). In its phrasing, the law includes a contradiction between the pedagogical and performance guidelines. On the one hand, the law instructs that preference should be given to placement in regular education institutions over special education frameworks. On the other hand, the structure of the law defines the person eligible for special services only as a person who was placed in a special education institution or in a supportive class in a regular school (Brands & Nesher, 1996).

### **3.4.2 Integration Issues in Israel**

Har (2000) indicates the paradox that exists in Israel between the wording of the law that prefers the integration of children, to the greatest possible extent, and the actual implementation of integration programs. Many children are not integrated into the regular system since only placement in special education facilitates the addition of the resources necessary to provide more intensive attention for learning disabled students and students with difficulties. If they remain within the regular education framework, this generally leaves the school without the required resources. Thus, a process is created in a one-way direction leading from regular education to special education. Students who were assessed, and classified accordingly into special education categories, are removed from

the regular system, and not returned to it because they did not undergo another assessment (Brands & Nesher, 1996).

The following question is posed: Why is there a gap between intentions and actions when it comes to integration? There are several explanations. First, the differences of opinions between the Ministry of Education and the Ministry of Finance prevented the development of a comprehensive program for the implementation of the Special Education Law, and for several years only partial actions were undertaken. Furthermore, except for the declaration of intentions included in the first part of the law, it primarily addresses children within special education and does not add resources for children who are integrated into regular education (Har, 2000). Zaki (1995) links the problem of the vagueness in the laws to the fact that the psychological system of classification does not necessarily differentiate between “trait” exceptionality (such as learning disability) and “state” elements (such as poor socioeconomic background) for the purpose of the placement of the exceptional children in the framework of segregated special education. Data from the Ministry of Education indicate that 80% of the students in the special education framework are of low socioeconomic status. Therefore, the question is: to what extent is there a relationship between disability and socioeconomic status, and to what extent do the diagnostic tools not permit the differentiation between problems in performance deriving from disabilities and problems which derive from socioeconomic difficulties and require a different type of treatment?

One of the implications of the implementation of the Special Education Law was the integration of special education classes in regular education, to differentiate from the treatment of children with difficulties within the regular education framework itself. One of the reasons for this was that the teachers in the regular classes did not know how to cope with children with disabilities. Moreover, the organizational structure of a school that is based on achievement and excellence in studies is not tolerant of or professionally prepared to handle students with difficulties, so that it was easier to transfer them to special classes. There was further concern in the system about the integration of special needs students who might accumulate academic gaps if they could not maintain the level of the rest of the class, which might lead to a display of behavioral symptoms that derive directly from their subsequent frustration and lack of motivation (Zaki, 1995).

The phenomenon of the integration of special education classes in regular education did not constitute an effective solution for children with special needs but rather

inspired professional and public opposition, which was expressed in the report of the State Comptroller.

The special classes, to which the lion's share of the hours was dedicated ... are the most significant and most segregated framework of special education in the framework of regular education. This is the framework that creates the greatest objection of the parents. The individual hours, in contrast, were intended for individualized help for students with special needs in the regular class and in the integrated classes and they are the more flexible framework, which receives most of the parents' cooperation. These two types of solutions (individualized assistance and integrated classes) were allotted very few hours (State Comptroller Report Number 32, in Brandes & Nesher, 1996, pp. 23-25)

In parallel to the process that occurred in the State Comptroller's Office and the High Court, the Ministry of Education sought ways to bring about the implementation of the policy of inclusion defined in the first paragraph of the law. The monitoring of the budget expenditure on the implementation of the policy of integration, demonstrated the gradual increase in the budget investment. In the first years following the legislation of the law, the additional resources supplied were marginal relative to the general special education budget, but in time the budget increased. If in the 1992 financial year the budget for special education was 500 million shekels, in 1996 the budget increased to 1.34 billion shekels. During the 1990s the scope of the budget for special education increased even more, and in 1999 it reached 1.7 billion shekels (Blas, in Lior, 2002). It is not clear whether these data represent the scope of the effort invested in the field or whether part of these resources was dedicated in the past to special education and the change that occurred is only a technical change in recording. The main process that occurred in the education system was the transfer of learning-disabled students from the separate special schools to the supportive classes and in parallel the transfer of students from the supportive classes to regular classes, with an increase in assistance for these students. The special schools remained, therefore, a place of treatment for students with the most severe difficulties, primarily those with mental retardation, behavior problems, and multiple problems.

The Ministry of Education proposed ways to reduce the transfer of children with special needs to separate frameworks, such as the provision of five weekly hours of remedial support for every student who has difficulties with his or her studies. It also determined that a placement committee for special education would not discuss the placement of a student until it was convinced that the school had attempted all possible

ways and means to help a student to integrate into the regular framework. Schools that refer a high number of children to special education would be compelled to appear before the district management to explain the reasons (Zaki, 1995).

In addition to these recommendations, the most significant factor affecting the implementation of the Special Education Law was the masterplan for the implementation of the law prepared in 1994, in which the Ministry of Education committed itself fully to promote the Special Education Law. The program was built specially to deal with the gap between physical-organizational integration and interpersonal-social integration in certain places.

As an expression of the importance that the Ministry attributed to the advancement of special education, the Department of Special Education in the Department of Elementary Education became an independent department. For the purpose of implementation of the law, a number of positions were added to this department, each one of which was responsible for the performance of one of the components of the masterplan (Brands & Neshet, 1996).

The basic strategy for the implementation of the law was based on three fundamental principles:

1. Differentiation: determination of baskets of differential services for disabled students, which are tailored to the specific needs of every student, taking into consideration the student's age and disability.
2. Integration: the implementation of the policy of the integration of the disabled child into the frameworks of regular education, with emphasis on the extra support for of the child in the framework of the regular class.
3. Flexibility: the creation of conditions for organizational and operational flexibility regarding the provision of services, so that it will be possible to meet the needs of every child.

### **3.4.3 "Basket" of Services for Children with Special Needs and Inclusion**

The masterplan determines six baskets of services to be provided to students with special needs according to the population. There is a basic basket for students in the framework of special education, which includes a special education class, a special education teacher, a teaching assistant, and transportation. Additional baskets include the Long School Day for students with severe disabilities in the framework of special education and the basket of special services for students who were placed in a special

education framework. The only two baskets intended for students integrated into regular education are the integration and reinforcement baskets.

The integration basket is intended for students with special needs who are integrated into the regular education framework. It includes a special education teacher, remedial instruction, tutorial lessons, paramedical treatments, art therapy, psychological and educational services, etc.

The reinforcement basket is intended for all children with special needs in the framework of regular education and in the framework of special education. This includes the addition of paramedical therapy or a personal teaching assistant for those who need one, educational services for students who are isolated in their homes, and cultivation of educational initiatives for these children.

These two groups of services are differential in accordance with a child's age, type of disability, and the severity of the disability. The masterplan describes the variables for the allocation of services for the different groups and for the determination of the placement framework that best suits each student, according to the type and severity of the disability. Most of those who benefit from the integration services are children with relatively slight problems who study in a regular class, such as, for example, children with borderline intelligence. To ensure that the students who need it, and they alone, are referred to special education, the law states that only the placement committee, in the composition determined by law, is authorized to determine the placement of a disabled child. The law determines the priorities for the referral to the placement committee, the extent of its authority, the rules and regulations pertaining to the discussion within it, and the possibility of disputing its decisions (Brands & Nesher, 1996).

### **Regional Support Centers (MATYA)**

Regional/community support centers were opened to encourage the integration format. Each such center receives a budget according to population size, the number of learning-disabled students, and the student's types of disabilities in the region for which the center is responsible. These centers provide services for students who are integrated into the regular educational institutions and do away with the dependent relationship between a student's study framework and the basket of services provided to the student. In 2001 there were 67 such centers in Israel (State Comptroller Report 52 B for the Year 2001).

The development of the regional support centers had several central advantages:

1. They ensured treatment support for students with learning disabilities within the framework of regular education.
2. They allowed the regular education frameworks to receive special education services for the treatment of students with different disabilities, who can continue to study in a regular class and be socially and academically integrated, so that there is no need to refer them to the placement committee and to the special education frameworks.
3. They encouraged a systemic community view of treatment approaches for students with special needs who study within the regular education frameworks, with coordination between the different programs being implemented in the education system for the treatment of this population.
4. They nurtured cooperation between the regular education system and the special education system regarding everything related to the treatment of students who require special education services within a framework of regular education.
5. They ensured a balanced allotment of the hours included in the integration basket among the institutions of regular education, in accordance with uniform criteria.
6. They encouraged gradual integration of students in special education frameworks into frameworks of regular education.
7. They facilitated the utmost flexibility in the utilization of the hours in the integration basket, according to the changing needs of the student population in each place.
8. The method employed for resource allocation is based primarily on the total number of children in the school combined with additional criteria (distance from the periphery, parents' education, and additional socioeconomic measures). In line with the masterplan, there was a transition to the basket of services provided to each child from the regional services center, so that oversight of resources would not be school-based but center- or city-based. In addition, schools receive additional resources according to the needs of the children identified, so as to strengthen the regular educational system.

The statistical data regarding the number of students who study in a special education framework illustrate that when the law was being implemented, in Jewish sector education there was a significant decline in the number of special frameworks as integration frameworks were strengthened. In the 1990 academic year, 3.5% of the students in Jewish sector schools studied in special education frameworks, and although



the percentage of students with special needs in the population did not decline, in 1997 only 2.8% of students studied in these frameworks. In the Arab sector the data are less encouraging, as the trend of integration is decreasing more slowly. However, it is possible that many more children in this sector were integrated in the first place.

According to the report from the Committee for the Implementation of the Special Education Law (Margalit, 1997), about 10.25% of school children receive special education services, of whom 2.25% receive extra support in special education schools and in special classes in regular schools, while about eight percent study in the integration framework within the regular education system. The allocation of funds for children who are integrated into regular classes increased in parallel: in 1995 about 140 million shekels were allocated for these students, or 10% of the total expenditure for special education for that year, while during the following five years the expenditure grew to 17% of the education budget. This data represents acceptance and implementation of the policy of integration of children with special needs into regular classes, primarily from 1995 to 2000. Thus, for example, there was an increase in the expenditure for additional teachers in a classroom to work with students with learning disabilities] and for the remedial and paramedical services, all of which are strengthened by the Special Education Law. However, there are great differences in the percentages of the placement of children in special education among different communities and regions in Israel, and among different sectors, such as the Arab sector (Avishar, 1999). According to the Ministry of Education data the number of students in special education frameworks steadily decreased between 1996 and 2000, while the number of students with special needs steadily increased in regular education frameworks during the same period (State Comptroller Report 52 B).

As noted by Blass and Lior (2002), despite the greater allocation of budgets for integration, the manner of allocation does not ensure that children with special needs who in the past had enjoyed the resources of special education will continue to enjoy them. Consequently, the Margalit Committee recommended that every child with special needs is eligible for the resources provided to special education, regardless of the framework in which he studies (special education or regular education). The Margalit Committee recommended that schools receive additional resources according to the needs of the identified children. Additional methods for reinforcement would also be implemented, such as the establishment of school learning centers. The present situation, in which schools have the freedom to decide how to use the resources at their disposal, has led to a situation in which these budgets, intended for children in special education, may benefit

children who were not meant to be their recipients. According to the recommendation of the Margalit Committee, the over-identification of the populations with difficulties that do not belong to special education should be avoided, along with providing resources earmarked for special education to students who do not require them.

Following the report of the Margalit Committee, the Ministry of Education established committees for the implementation of its recommendations. In February 2001 these committees submitted their recommendations, which emphasized the need to reinforce the regular education system with inclusion hours and skilled special education personnel; to develop a school culture in which the social, physical, and academic needs of the learning-disabled child would be taken into consideration; to reward teachers who integrate students with severe disability into their classes; and to place these students in smaller classes. It was decided that the top priority should be to pay attention to the topic of integration itself and to allocate resources to high school students and students in pre-elementary education who had not previously been included in the integration program. It was also decided that increasing the resources allocated to educational frameworks in the Arab, Druse, Bedouin, and Ultra-Orthodox sectors should be prioritized. Regarding all the students integrated into regular education, it was noted that they receive very few supporting resources, but due to budget limitations it was not deemed possible to significantly increase these resources.

### **Different Formats for the Integration of Disabled Children into Inclusive Schools**

In the framework of the inclusion model, there are two approaches to the integration of disabled students into regular classes:

1. Integration class or the integration of a group of children with mild disabilities (mild retardation, learning disability, slight behavioral disorders) into regular classes with the assistance of a special education teacher: the goal is that the class teacher and the special education teacher will strive together to integrate the student with disabilities into the class. The aspiration is that the integrated child will be part of the class and not a "guest with a teaching assistant." The support of the special education teacher is required to demonstrate specific learning techniques, teach students in small groups which include students with special needs, advise and cooperate with the class teacher, adjust the material to these children's needs, and meet with the children in the integrated class to develop strategies for integration (Jackson, 1990).

2. Full inclusion in the regular class (individual integration) or the integration of individual special education students into the regular class: in most of the models of full integration into a regular class, the assistant teacher does not work directly with the student with special needs but advises the regular teacher, who serves as a mediator by providing her with direction and counseling. Another approach is for the assistant teacher to help the student in the regular class. Sometimes she also demonstrates work and teaching methods which are suitable for the entire class and helps with the development of curricula, teaching aids, and assessment methods, thus contributing to all the children in the class. In the inclusion model, the special education system becomes the system that supports the regular education system instead of functioning as a parallel framework. According to this approach, there is no point in removing the child with special needs from the classroom to provide him with reinforcement some, or all, of the time. The special education teachers work together with the regular education teachers in the regular classes. The concept of full inclusion takes the perception to its extreme with the assertion that all children with disabilities should study in the regular education system (Margalit, 1997).

### **Approaches to Teaching and Curriculum Planning in an Inclusive School**

According to Gee (2002), inclusive schools are designed to meet the educational needs of all members of the school community. These schools go a step beyond the integrative models in that their basic assumption is that they belong to all the members of a school community. The inclusive school movement also represents a trend to the improvement and advancement of schools on several levels and does not only engage in the physical placement of children with disabilities in regular education.

The difference in perception between the above models was expressed in decisions regarding the structure of a school, the staff, the curriculum, and the teaching approach. Successful comprehensive schools promote each student's individual ability and grant new possibilities to students by employing different approaches to learning and the acquisition of knowledge. Children with disabilities are perceived as having advantages in certain areas and are not defined as a problem with which the school staff must cope.

## **Implications of Integration on Academic Achievements**

Research reveals contradictory results regarding the influence of integration on the academic achievements of children with learning disabilities. Some studies indicate that the removal of these children to a special class did not improve their achievements, which were better in the regular class. In addition, in the integrated classes where they were also taught by teachers with a background in special education, the achievements of these students were often higher than they were in the special education classes (Moshel, 1993). These findings reinforce the argument presented in the first chapter of this review, according to which children with disabilities do not require a fundamentally different approach to teaching from that employed in regular classes, but rather the addition of supportive assistance (Klingner, Vaughn, Schumn, Cohen, & Forgan, 1998). In other studies, which compared the scholastic achievements of special education students to those of special education students who study in regular education frameworks, use was made of the criterion of mastering the personal curriculum as a basis for the evaluation of achievements. These studies found that the academic achievements of the students with disabilities in special education are not higher than those of such students in a regular education framework. Furthermore, it was found that students with physical disabilities who have a normal level of intelligence and are integrated into regular classes, advance according to their personal program, and attain the goals set for them (Diamond, Hestenes, & O'Connor, 1994).

Studies of kindergarten children indicate that the children with disabilities who were integrated into regular kindergarten had a more advanced developmental level than did their peers with disabilities who were not integrated into the regular system

Conversely, other studies show that there is no single learning environment that suits all types of children with special needs (Klingner et al., 1998). Moshel (1993) cites research which demonstrates that special education frameworks instill the elements of reading and arithmetic for the population of borderline and retarded students more successfully than frameworks of regular education. He even found that the therapeutic or supportive classes have an advantage over the regular class regarding learning in children with mild retardation. It is possible that the conflicting findings derive from the fact that students who were not integrated into regular education frameworks started out with different functional ability than the students who were integrated, or who remained in the regular education system. In addition, most of the studies examined differences between

radically different frameworks, such as full inclusion versus complete separation (Margalit, 1997).

When students with learning disabilities were asked how they perceive the regular class as compared to the supportive or therapeutic class, it was found that the regular class was perceived as more difficult. One interpretation is that the supportive class does not sufficiently challenge students with learning disabilities. Another interpretation is that special education provides students with work at a level commensurate with their ability. All the students who were asked agreed that the supportive class is preferable academically, but that inclusion is preferable in social terms (i.e., in an inclusive framework they can make friends with regular children).

#### **3.4.4 Education for People with SLD in Israel**

The report submitted to the Knesset by the Margalit Committee (July 2000), which sought to discover how students with learning disabilities could best realize their potential in the framework of the education system, indicates that scientifically confirmed assistance and intervention, which are accessible to students regardless of socioeconomic level and cultural characteristics, are essential to prevent the creation of a learning gap, harm to self-image and often-crippling frustration. These intensify the difficulties inherent in disabilities, which are found in all cultural and ethnic groups and at all economic levels. A recent trend within Israel's Ministry of Education is to include students of all ages who have learning disabilities and difficulties in the regular education frameworks. Appropriate inclusion necessitates effective processes of identification of students with difficulties, precise assessment of their strengths and difficulties, and the creation of individualized groups and corresponding school intervention plans. According to this approach, the child and his or her parents are full partners in every stage of the process. A healthy relationship between the parents and the education system is of paramount importance.

In recent years the education system has developed educational programs and processes to provide a response to the needs of students with learning disabilities. Currently, the scope of the programs is still limited, and in regular education frameworks there have been developments in the educational processes of learning and development. However, it is already possible to point to considerable achievements in this field. The accumulated knowledge is very important, both regarding the formation of work principles regarding learning disabled students and for the future application of these

successful experiences. The Department of Learning Disabilities, under the auspices of the Psychological Counseling Service at the Ministry of Education, operates in full cooperation and coordination with the other departments of the Pedagogical Administration at the ministry to develop and implement effective work methods for the advancement of students with learning disabilities. As a main objective, the department assumed the task of ensuring that every school would become an environment that accepts students with learning disabilities and facilitates normal emotional development, academic achievements, and the full functioning of these students as adults in society. All references to students with learning disabilities are based on the principles of responsibility and commitment to the advancement of every student in the academic, emotional, behavioral, and cognitive domains. This approach obviously necessitates systemic coordination and work. The structuring of processes of educational intervention necessitates the formation of a work culture that behaves according to defined standards and evaluates itself in a professional and sensitive manner. For this purpose, it is important to build a skilled multi-professional staff who will collaborate to formulate a school policy and will determine processes for identification, assessment, and educational and treatment intervention, with follow-up after the treatment for students with learning disabilities and after the fulfillment of their diverse needs.

The work model for the treatment of students with learning disabilities was based on this approach. The model expresses two channels of a continuum that are intertwined and addresses two main continua: (1) developmental continuum during studies in the education system from kindergarten until the end of high school and (2) the treatment continuum which helps students who display learning difficulties as a result of a disability, within the entire population of students and its diverse needs. The treatment continuum is intended to ensure that students with learning disabilities will receive support and assistance that will allow them to realize their potential as part of the education system.

As of today, departments at the Ministry of Education implement a number of innovative programs based on this model and address the stages of development within the education system. However, these programs are still being formulated and are not yet deployed nationwide.

Early childhood frameworks: at the Department for Pre-Elementary Education the MAGAN program was developed, which creates integration between treatment and educational areas to meet the needs of children in the pre-elementary education system.

MAGAN staff work in cooperation with the educational staff in early childhood education frameworks. This staff includes professionals from the developmental areas – occupational therapists, speech therapists, developmental psychologists, guidance counselor, and pedagogical instructors – in different compositions. The multi-professional staff counsels and supports kindergarten teachers and parents to provide extra help to the children in kindergarten and intervenes in all layers of prevention.

Elementary schools: the “Extension of the Inclusion Ability” program was developed at the Department for Elementary Education. It maps learning difficulties in the field of language among students in the third grade through the MAAKAV kit, which was developed by Dr. Michal Shani (1999). The program is based on an increase in language-teaching hours and the presence in the classroom of two teachers simultaneously during the remedial hours for the purpose of working in small groups based on mapping. The teachers are accompanied by instructors who help to adjust the learning strategies.

Middle schools: the ELA program (the Hebrew acronym stands for Identification-Learning-Success), aimed at the advancement of middle school students, was developed at the Department for Secondary Education. The program focuses on early identification in which the entire class is evaluated by means of the Michal test developed by the Ort educational network and the Psychometric Center. An intervention program is created to help the students who were identified as having significant difficulties and learning disabilities to advance.

The ELUL Program (Hebrew acronym for Identification of Learning Disabilities and Difficulties) is intended for early group identification and for the creation of a class intervention program for the advancement of students with learning difficulties and disabilities. Through the ELUL test, developed by a staff of experts at Haifa University, it is possible to identify the processes of the acquisition of basic skills in three main areas of learning: the acquisition of a native language (Hebrew or Arabic), the acquisition of a foreign language (English), and calculation skills. The ELUL test can be administered in each age group from first grade to tenth grade. In 2007 the program, developed by the Department of Learning Disabilities was implemented as a pilot in 35 educational frameworks for the advancement of students who were identified as having significant difficulties and learning disabilities.

Early diagnosis of difficulties. The goal of the process of identification is to detect at an early stage those students who may have a learning disability. In many cases,

the process of identification leads to educational interventions that can improve a student's situation. The intention is to identify signs of learning difficulty regarding emotional and behavioral difficulties as well, which frequently accompany learning difficulties. Processes for the identification of learning difficulties will occur throughout the continuum of development and are undertaken by the educational staff at the school with the assistance of a school psychologist and guidance counselor. Deficiencies may already be discovered at the early stages of learning, but the signs indicating a learning disability may also be identified during pre-school or earlier. It should be emphasized that some students with learning disabilities are not identified until they reach high school or university. Students with learning disabilities who managed to cope at school may encounter difficulties as learning requirements become more complex, the difficulty level rises, or when new material is based on previous knowledge which they may be lacking, etc. Difficulties may be detected by means of diagnostic tests, through observations of the student in the classroom, and through an examination and analysis of a student's learning products, including projects, assignments, and tests that he submits. In recent years, the Ministry of Education has developed standard tools that enable the identification of difficulties in learning skills on a group level. Based on these methods of identification, the multi-professional staff will build a work plan for both the systemic and individual level, tailored to the students' different needs. The early identification of learning disabilities is of decisive importance because it significantly increases the chances of addressing the disability through the inculcation of basic skills in alternative ways: students whose learning disabilities are diagnosed at an early stage may benefit from the inculcation of basic skills in alternative ways that are appropriate for them and make it easier for them to master important skills. Thus, to a large extent he or she will be spared the frustration triggered by failure to acquire knowledge as well as the harm to self-image caused by the failure.

Academic integration despite disability. Early assessment enables the learning-disabled student to integrate into regular learning despite his or her disability, by bypassing the areas of disability using different approaches such as recordings, computers, reliance on reading, etc.

Special rights for learning disabled students. From the moment when a student is defined as learning disabled, the education system offers focused efforts to integrate her into the regular education framework despite her disability, by using special teaching approaches, such as teachers who were trained to work with learning disabilities, adjusted



means of testing, etc. The education system in Israel recognizes the special rights of learning-disabled students which enable them to express their ability despite their disability.

Creation of a positive self-image. Early assessment followed by awareness of the child and his or her parents and teachers of the special difficulties he or she must cope with enables learning disabled children to recognize their intellectual and other abilities, to enjoy them, and to use them as the basis for the creation of a positive self-image.

Building an educational intervention. Following the process of identification, the interdisciplinary staff at the school will create an educational intervention program for the advancement of students in general and students with difficulties and learning disabilities in particular and in parallel will document the intervention. Students who need more in-depth assessment will already be referred to it at this stage. The perception of educational and therapeutic interventions for students with learning disabilities is based on the recognition that it is necessary to adapt the intervention to each student's individual needs and that there is no one approach that suits all learning disabilities. The interdisciplinary staff will accompany the process of identification, intervention, and assessment and will synthesize the information to best support the students with learning difficulties and disabilities. For every intervention the multi-professional staff will integrate two main dimensions – didactic and psychoeducational interventions.

Didactic intervention implements gradual learning and training in a multi-stage process tailored to a student's stage of development, areas of difficulty, and the nature of the areas of failure identified for him or her. Didactic intervention entails the provision of assistance to strengthen appropriate learning behaviors, develop effective learning strategies, and follow up on their implementation. Didactic intervention must include appropriate testing methods and monitoring by teachers to evaluate effectiveness of the intervention, in accordance with each student's developmental stage. In addition, it is important that the teacher's attention be directed to preparing a student to choose the best type of testing accommodation, which will grant him or her optimum benefit.

Psychoeducational intervention. This intervention necessitates inclusive reference to the world of the student with a learning disability and is related to emotional, social, and behavioral aspects. Such an intervention depends on the early identification of a constellation of the student's areas of functioning and coping style. In psychoeducational intervention emphasis is placed on the student's personal empowerment and the strengthening of general coping strategies, such as the ability to

adopt an active and initiating position, to stand up for one's rights, and the ability to recover even in situations characterized by lack of success. These processes are included in the intervention created by the teacher and educational staff in consultation and accordance with a psychologist and his or her recommendations. The teacher receives assistance from the school guidance counselor regarding all that pertains to the implications of these processes on the functioning of the group of students as a class. In certain cases, a group or personal treatment intervention will be conducted by the guidance counselor and/or psychologist. In kindergarten assistance may be provided by the MAGAN staff in regions where this program is implemented.

Evaluation of academic performance. A student's academic performance is evaluated during the stages of educational intervention in order to examine its effectiveness for the student and to design the continuation of the required assistance. The evaluation of the academic performance of a student who has learning difficulties or who is suspected of being learning disabled will focus on an examination of the level of achievements in the mastery of learning skills and an examination of patterns of learning, which include learning strategies, organizational ability, and level of performance of learning tasks. Students who do not make the anticipated progress despite receiving intensive assistance are referred at this stage for a more in-depth assessment. The teachers conduct a documented follow-up (and create a student file) which will help them to monitor the student's progress and achievements.

Assessment. In early childhood, children with developmental delay are assessed by an educational psychologist from the Local Authority or by a multidisciplinary staff of developmental medical, psychological, or paramedical experts (at Centers for the Child's Development). The referral for assessment is frequently at the initiative of the parents or the kindergarten teacher and the MAGAN staff with the parents' involvement.

At elementary and secondary schools. The referral to assessment at these stages is undertaken by the educational system when there is concern about a learning disability. The referral is generally the outcome of consultation among the teaching staff and the decision of the school committee. The cooperation between school and parents for the purpose of providing support for the learning-disabled student within a school has more than a few realistic limitations, among them the large number of children in a class, the few hours of individualized work or work in small groups, a lack of support professionals, and so on. These limitations may sometimes lead to a lack of trust among parents regarding the school's ability to cope with the unique tasks that it is expected to

accomplish and to anger at the school for failing in its role. This can even lead to an attempt by parents to assume the teacher's role due to anger and frustration and sometimes even to take the child's place and simply do the homework for him if he finds it too difficult. To ensure that a healthy and positive relationship obtains between parent and child, and that a child makes appropriate progress, these difficult feelings must be confronted, and parents must not assume the role or responsibilities of either teacher or student. The tasks of learning, teaching, informing, and providing emotional support should be divided among the school principal, homeroom teacher, subject teacher, teaching aid, psychologist, or guidance counselor and parents, each one in the appropriate position and area of specialization.

### **3.5 Students with Specific Learning Disability (SLD) in the System of Higher Education – Problems and Challenges**

The main research in the field of learning disabilities focuses on children and especially on the topic of assessment, which barely exists among adults. This is especially problematic in today's work world, where most jobs require higher education. Consequently, more and more adults who are coping with the difficulties inherent in learning disabilities are turning to assessment and seeking solutions to coping with their disability (Gregg, 2014). However, as the research in the field advances, there is growing understanding that the social and emotional implications of a learning disability are different in adulthood (Tur-Kaspa, Margalit, & Most, 1999).

Many maintain that learning disabilities vanish when a person reaches adulthood, because often by that time an individual has developed strategies to circumvent the challenges. However, research indicates a very high likelihood that a child with learning disabilities will grow into an adult with learning disabilities who will encounter difficulties in academic or vocational studies and in the employment world (Raskind, Goldberg, Higgins, & Herman, 1999).

It is argued that among adults with learning disabilities it is the field of social-emotional adjustment, more than the academic field, which requires greater intervention, since few pursue higher education. The academic field becomes less central to their lives, while their social lives become more complex. Adults with learning disabilities, who continue to higher education despite their assessed academic difficulties, are considered

by the research literature to be successful learning-disabled people (Cosden & McNamara, 1997).

According to Margalit (1998), the low sense of coherence experienced by learning disabled students is central to understanding the ways in which they cope with situations of frustration and difficulty and explains why they tend to perceive a learning environment as a threatening situation. Many research studies show that the internal locus of control and high self-esteem are related to a better ability to withstand situations of stress related to learning tasks, perseverance in tasks, and degree of willingness to receive help and instruction (Adams, Proctor, & Briley, 2010). Therefore, as a student achieves a sense of comprehensibility, mastery, and meaning, he will persevere in his efforts to succeed. An adaptive student is also an effective learner, and an active learner. The behavior strategies of a student with learning disabilities are characterized by passive learning, beliefs attributed to factors beyond their control, and acquired powerlessness. Both the mistaken beliefs and the passive approach impair their ability to learn and cause academic problems, to low self-efficacy, to lack of hope, and to lack of motivation (Margalit, 1999).

To achieve optimal fulfillment of the accommodations available regarding teaching methods and testing, it is necessary to listen to students, and to learn about their desires and their opinions about the types of learning and testing accommodations available with reference to their effectiveness. This information must be gathered in a sensitive manner, to characterize differences between students with different types of learning disabilities (Margalit, Efrati, & Danino, 2002).

Research by Henderson (2004) indicates an increase in the number of students with different disabilities in the academic system and especially in the number of students with learning disabilities. In the United States the right to access of the learning disabled is anchored in the federal Rehabilitation Act, 1973, which states that no disabled person, who has abilities in other respects, will be denied participation in a program or activity supported by state funds, and his right to enjoy the benefits entailed by the program and activity will not be denied, and he will not be discriminated against in all that pertains to them only because he is disabled (Fogel, 1998). The main principles that appear in the law engage in the adjustment of the entrance examinations for learning disabled students, guidelines about the system of institutional support provided to them, guidelines about the professional opinion of assessors, and so on. There are similar laws in Britain and Australia, and there too it is prohibited to discriminate against the learning disabled when

they apply to academic institutions, and the support they receive from the institutions and the state is anchored in law.

In Israel the Committee for the Examination of the Fulfillment of the Ability of Students with Learning Disabilities notes that it is possible to discern a rapid growth in the number of students with learning disabilities in institutions of higher learning (Mioduser, & Margalit, 1997), with the Council of Higher Education reporting that 1.5%-15% of the students have learning disabilities. The reasons for the increase in the number of students with learning disabilities are diverse and include changes in expectations and preparation of high school students with learning disabilities for their post-high school studies; an increase in the number and quality of professionals who provide care; an increase in the awareness among parents, teachers, and counselors about the possibilities that students with learning disabilities can attain a higher education; the willingness of many institutions to accept students with learning disabilities who do not meet the acceptance conditions; and an increase in counseling services and in advertisements about academic studies for such students. In addition, the legislation of laws that protect the learning disabled and grant them access and accommodations has led to an increase in the number of students with learning disabilities (Richardson & Wydell, 2003) in higher education.

In recent years there has been growing awareness among Israeli legislators about the principle of equality and inclusion in society of people with special needs. Hence, an increase was observed in the number of people requesting accommodations for the high school matriculation examinations, the psychometric examinations, and the psychometric examination, which enables entry into academic institutions (Henderson & Chinn, 2004).

The rights of learning-disabled students are anchored in a specific law passed in 2008, the Rights of Students with Learning Disability in the Post-High School Institutions. This law anchors the basic right of graduates with learning disabilities to realize their ability and skills, through accommodations to the acceptance requirements of the institutions and through accommodations within the framework of academic studies. The law details the guidelines regarding the integration of learning disabled students in studies at institutions of higher learning and determines several precedents: the anchoring in legislation of the right to accommodations also in the processes of acceptance to an institution, whether they are undertaken by the institution or by an external body; the possibility that the candidate may seek an assessment that will be attached to his or her acceptance request by the body licensed at the institution in the

domain of learning disabilities; application of the conditions of the law on all the institutions of higher education, including institutions of professional training; definition of the rules of support granted to a learning disabled student; and explanations about the accommodations available regarding assessment.

In addition, considering the recommendations of the Margalit Committee (Margalit, Breznitz, & Aharoni, 1998), in recent years the National Center for Testing and Assessment has developed a system for the Council of Higher Education for the uniform assessment of learning disabilities in institutions of higher education. The goals of this system are to formulate a uniform assessment of learning disabilities for the purpose of determining eligibility for accommodations when taking the threshold examination and university examinations and to assess a type of disability and its origin in order to determine the type of accommodations for which a student is eligible and for the purpose of recommending types of assistance during studies (Vogel, Leonard, Scales, Hayeslip, Hermansen, & Donnellis, 1998).

According to a contemporary assessment of the "Leshem"<sup>8</sup> Association, which works to promote higher education among students with learning disabilities in Israel, currently, at institutions of post-high school education, there are about 16,500 students who have been assessed as learning disabled, who constitute about 5.3% of all the students at these institutions. These estimates address the number of students who are assessed as having learning disabilities, but do not include the students who have not been diagnosed. The accepted estimate of the percentage of students with learning disabilities in the education system in Israel, assessed and non-assessed, is 10%-15%.

Wörgan (2008) maintains that adults with learning disabilities are unaware of their inherent ability, and even if they attain achievements, these achievements are still below the level of what they are capable of. He asserts that this phenomenon derives from the fact that adults with learning disabilities find it difficult to process their disability, experience difficulties with social integration, and contend with unresolved mental and emotional conflicts.

Students with learning disabilities experience a constant sense of conflict between personal potential and external expectations and real achievements, between the desire to “surrender” to the difficulties and the development of survival techniques to compensate

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<sup>8</sup> Leshem Association for the Promotion of Higher Education and Employment for Students and Graduates with Learning Disabilities

for their disability (Einat, 2005). Among these students, there is a special combination of abilities and disabilities and each one has his own unique profile (Fogel, 1998). Kozminsky (2005) maintains that a learning disability is not necessarily a limitation situation, although it accompanies a person throughout his or her entire life. When an adult person accepts her learning disability and succeeds in preparing for it, there is an increase in her ability to rely on the support available within her environment without being dependent upon it.

Many research studies have found that individuals diagnosed as learning disabled experience, beyond the academic and cognitive difficulties, social difficulties, low self-esteem, and a variety of emotional difficulties, such as depression and anxiety (Al-Yagon & Mikulincer, 2004). The social-emotional difficulties stem from the fact that the social deficiencies are primary and derive from the impaired processes of social cognition and difficulties in the perception and interpretation of social situations. The second explanation addresses social, emotional, and behavioral functioning as an expression of a secondary problem that develops following the initial problem – the learning disability itself (Shani, 1999).

In a longitudinal study that included two groups of adults with learning disabilities who were divided into the categories “successful” and “unsuccessful,” respondents in both groups reported that their social difficulties accompany them in different contexts. Some reported that they find it difficult to rely on others in the workplace and in social and family leisure time situations, and that they do not know where and how to get to know new people or to create or retain friendships. Many reported a later development of romantic relationships in comparison to people without learning disabilities and difficulties in marital and interpersonal relationships because of dependence and/or lack of reciprocity. In their words, their need for help with certain activities impairs the balance of power in their relationships with significant others. At work they report difficulty being assertive and getting along with peers. However, it was found that the respondents defined as successful, according to a multidimensional scale for the evaluation of success, were actively involved in family, social, and community life and even reported that they play a leadership role at the workplace and in the social group to which they belong. In addition, they showed that they were capable of reciprocity in relationships and reported the existence of significant support networks (Goldberg, Higgins, Raskind, & Herman, 2003).

In the emotional domain, one of the common complaints among adults with learning disabilities is related to the amount of emotional effort they must invest in concealing their disability and in avoidance of their difficulties (White, 1992). They report also high levels of depression and anxiety. It was further found that adults diagnosed as dyslexic report high levels of general mental stress (Gajar, 1996). The self-image of adults with learning disabilities was found to be lower than that of adults without learning disabilities, with the former tending not to have confidence in their abilities and to attribute their failures to themselves (Shani, 1999). However, a research study that compared between a group of students assessed with learning disabilities who received university support services and a control group of students without learning disabilities found that while the students with learning disabilities have a lower academic and intellectual self-perception they are not different from the control group in their general self-image and in their perception of their abilities in non-academic areas (Stodden, Whelley, Chang, & Harding, 2001).

In the late 1980s, many colleges maintained that they offer extensive services to students with learning disabilities, while they offered only short-term programs such as the promotion of learning skills intended for all students. With the rise in the number of students with learning disabilities, the awareness of the topic increased, and consequently the professional level or quality, and types of assistance offered these students in the academic framework has increased over the years.

A review of 650 institutions of higher education in the United States found that the assistance services offered to students with learning disabilities include: accommodations in tests, personal counseling, advocacy, mentoring, development of skills, and organization of learning practices (Rath & Royer, 2002). However, in the framework of academic studies, learning disabled students must request personal assistance and services and accommodations regarding tests, and frequently are required to pay for the assistance they receive. Although students with learning disabilities are legally assured equal access to education, there is no agreement about the components of this equality. In this context, there are two contradictory approaches adopted by institutions regarding equal access to education. The first approach holds that it is necessary to change the student so that he can function fully in every learning environment, while the second approach maintains that it is necessary to alter the learning environment so that the student can succeed despite his disability.



Dahan and Melzer (2010) point to several dilemmas that accompany the institutions for higher education regarding the question of acceptance of learning-disabled students who do not meet the regular acceptance criteria. They hold that on the one hand the academic institutions wish to display openness in the acceptance of students who have the potential to succeed in their studies but do not meet the formal acceptance criteria, yet on the other hand some see this as damaging to the equality of the acceptance conditions. Furthermore, there is concern that many students with learning disabilities will influence the teaching quality, since they require additional explanations during the lesson, accommodations in teaching and testing, and so on.

### **3.6 Therapy for People with Specific Learning Disability (SLD) – Support Programs**

The Report of Israel's State Comptroller from 2012, which examined the attitude toward people with learning disabilities who are candidates for studies at institutions of higher learning, found that support centers for learning disabled students exist in 27 of the 29 Israeli institutions of higher education examined. However, the report also found significant differences in the scope of their work and the variety of the services they offer. It notes that most of the institutions do not have written procedures or guidelines intended for members of the academic faculty about teaching approaches tailored to learning disabled students and that only in a few institutions was there any effort to explain the topic to the faculty members. The Report of the State Comptroller indicates the great complexity facing the academic world, and those who wish to enter it, regarding everything related to the supply of services to students with learning disabilities. Among the existing solutions are several coping and integration approaches that have been adopted by the academic institutions, which make them accessible to students with learning disabilities.

Affirmative action means giving priority to people based on their belonging to a certain group in the population, which is considered weaker, over people who belong to other groups, which are considered stronger. The goal of affirmative action is to correct social gaps and create a balance which more correctly reflects the composition of society through the promotion of the integration of weak groups into society (Maor, 2004).

Einat (2005) maintains that the affirmative action approach of the institutions of higher education in Israel is based for the most part on Article 504 of the American

Rehabilitation Law (1973), from which several principles are derived regarding all that is related to the acceptance of learning-disabled students into academia. The first principle explains that an educational institution is not permitted to limit the number of disabled students which it accepts, when the rest of their abilities are deemed suitable. Furthermore, since the regular acceptance tests (high school matriculation examinations, the psychometric test, and threshold tests) may incorrectly reflect the disabled students' ability and err in the prediction of their success in higher education, the law obligates the acceptance of these scores if the tests were conducted with accommodations. The American law further adds that since the predictive value of these tests is not known in the present, students with learning disabilities are sometimes asked to provide additional information that indicates their strengths and chances to succeed, generally in the form of previous psycho-educational tests and letters of recommendation.

Based on these principles, in the United States, Australia, and Great Britain there is methodical support of affirmative action in the acceptance of learning-disabled students. In accordance with the law, the students receive tailored services – special testing conditions, supportive services provided via learning workshops, support from mentors, supportive technology, and so on (Finkelstein, 2002).

In Israel, the main body that promotes affirmative action for learning disabled students is the "Leshem" Association, for the support of learning-disabled students (and learning-disabled candidates) in the framework of higher education. The work of the association has led to an increase in the number of learning disabled students attending institutions of higher learning, drawing attention to the issues that until now had not been resolved, such as the need to examine barriers to academia which obstruct students who do not achieve the required score on psychometric tests and/or an average score on the high school matriculation examination, although according to other measures that reflect learning abilities they appeared suited to academic studies (Him-Younes & Friedman, 2002).

The Centers for Support and Integration operate in 27 institutions of higher learning in Israel, where they differ in size, scope of activity, and the services they provide (Report of the State Comptroller, 2012). The aim of the Centers of Support and Integration is to allow students to maintain the required academic standard but concurrently to make learning accessible to them and to find ways to compensate for their learning disabilities. According to the Council for Higher Education, despite the

differences among the different centers, it is possible to identify several services which are offered by most of them:

- Individualized personal support: individualized encounters with professionals, to provide students with effective tools and tailored learning strategies to facilitate meeting academic requirements
- Mentoring: personalized mentoring of learning-disabled students by student mentors whose academic achievements are high, and who receive a scholarship in return; the mentoring requires reciprocity, partnership, and the involvement of both participants; it also yields benefit to both sides. Following the mentoring, there is a rise in the level of awareness about learning disabilities, an increase in teaching effectiveness, an increase in the effectiveness of the choice of strategies, and empowerment.
- Workshops: group workshops at the support centers tackle topics such as time management, how to summarize articles, write an academic paper, and so on. The aim of the groups is to provide learning disabled students with a supportive “peer group” as well as tools to encourage successful coping with the learning disability.

The activity at the centers also addresses the dissemination of knowledge about, and the promotion of awareness of the integration of learning-disabled students and the creation of partnerships and knowledge centers which promote engagement in this topic in higher education (Finkelstein, 2002).

The centers for support and integration facilitate the promotion of a learning-disabled student's sense of self-efficacy in different ways. Barga (1996) found that students who mastered learning techniques exhibited self-efficacy regarding learning; deployed techniques for self-improvement; were helped by scholastic and social support from the environment; attained academic achievements; and experienced an improvement in their overall sense of wellbeing.

As part of the constellation of support that includes diverse services, an increasing number of academic institutions are providing various technological aids to help students to succeed despite their difficulties, primarily by focusing on their strengths (Rath & Royer, 2002). In the context of learning disabilities, assistive technology is defined as all technology that enables the learning-disabled person to compensate for specific deficiencies. Assistive technology is not intended to “heal” or to “correct” learning disabilities, and it seeks to emphasize students' abilities rather than their weaknesses (Raskind & Higgins, 1998).

The most common assistive technologies available at academic institutions are text recording software programs that eliminate the need to read, such as audiobooks, spell-check programs, and electronic means to solve problems related to following instructions and a lack of organizational skills, like electronic planners and organizers. Every academic institution provides assistive technology services to the extent of its ability (Rath & Royer, 2002).

Self-advocacy is a form of training that focuses on increasing students' awareness of their learning disabilities and the concomitant limitations, as well as the development of their ability to convey this information to their lecturers so that they can obtain the help they need (Roffman, Herzog, & Wershba-Gershon, 1994). In other words, the students must understand the meaning of the term "learning disability;" know exactly which learning disability or disabilities they have been diagnosed with; which accommodations they require in the framework of their studies to enable them to achieve their objectives; and understand and be able to explain why these accommodations are reasonable. The research studies performed in the field show that the identification of strengths and the awareness of weaknesses are factors that may predict success among adults with learning disabilities (Kozminsky, 2005).

A six-year longitudinal research study was conducted at the Hebrew University of Jerusalem which examined the influences of different intervention programs on students with learning disabilities. The results showed that the process of the students' empowerment advanced as they were given many more opportunities to express their opinion and as their participation increased. The students became partners with the academic staff and the members of the Leshem Association who supervised and monitored the project, and this partnership was reflected in cooperation and dialogue among all the parties involved regarding the best course of action to promote the success of learning-disabled students at the university. This partnership granted the project legitimacy, prevented the development of a paternalistic approach among staff members, promoted equality, and created a supportive community at the university (Kozminsky, 2005). The results of the study show that ongoing self-advocacy among students with learning disabilities may ensure that they choose the most appropriate support frameworks and learning strategies and may help them to create suitable conditions for the realization of their aspirations (Roer-Styar, 2003).

Ongoing and effective self-advocacy includes acting intended to increase awareness among academic faculty members and the entire student body of the needs of

learning-disabled students. These include broadening knowledge about the phenomenon, as well as increasing partnerships with other students and with members of the administrative and academic faculty for the purpose of the promotion of the access and integration of students with learning disabilities and the active involvement of learning-disabled students in every program and action that addresses their integration in the academic institution (Kozminsky, 2005).

## **Conclusions**

A concluding look at the literature review shows that so far, the research has mostly focused on the issue of students coping with learning disabilities during their studies at primary and secondary school. In the higher education system, studies were identified which examined the activities of support centers, and which dealt with assistance programs, tutoring and dedicated aids. Specific programs to improve various learning functions of students with learning disabilities were also identified (Hojati & Abbasi, 2013). The area that has received less attention in the existing literature is the area of simultaneous empowerment of students with learning disabilities in the emotional, cognitive, and social realms. This empowerment may enhance the students' sense of self-worth which can serve as a mediating factor for success.

Support for students with learning disabilities, such as the type which has been supplied at the various support centers by means of the various intervention models, proves that treating one element of difficulty (either cognitive or emotional), or two areas of difficulty (academic and emotional) is not sufficient to maximize academic abilities among students with learning disabilities. The aim of this study is to propose a multidisciplinary treatment approach, which includes strengthening the cognitive, emotional, and social abilities that are affected by the difficulties experienced by students with learning disabilities to enable them to realize their potential.

The goal of working with young graduates with learning disabilities is to ensure that they develop into independent, confident, and well-adjusted adults. The achievement of this super-goal is dependent upon successfully overcoming many obstacles. In academic settings, exams are a significant milestone, and to ensure a desirable result a variety of expectations must be met academic expectations, social expectations, motivational expectations, and cognitive expectations.

This study examines the subjective experience of students with learning disabilities who receive assistance from an intervention program at an academic center. As aforementioned, the examination of those students with LD is important. Thus, such an effort was undertaken with the presented study.

## **Chapter 4: Research Methodology**

The literature review reveals that there is a low sense of self-efficacy among the learning-disabled population, in comparison to the population without such disabilities and disorders. The explanation provided is that individuals with a learning disability experience objective and ongoing difficulties with various tasks and therefore may feel that they lack control with respect to the tasks required of them throughout their lives. When this leads to several failures to adequately complete various tasks, their sense of self-efficacy (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) is likely to be adversely affected.

A summative approach to the reviewed literature indicates that to date the research has addressed the issue of the learning-disabled students' coping during their studies at elementary and secondary school. About higher education, some studies have examined the activity of support centers, while others have addressed assistance programs, mentoring, and designated aids, as well as specific programs for the improvement of various aspects of the learning performance of students with learning disabilities (Dahan & Meltzer, 2010).

The existing literature has focused less attention on the topic of empowerment of students with learning disabilities simultaneously in the emotional, cognitive, and social domains. This empowerment may improve the sense of self-efficacy as Bandura (1996) wrote about it in his research. The approach of student's support centers to date, which has been to tackle one factor of difficulty (cognitive or emotional) or two (academic and emotional), has been revealed as lacking in achieving the maximal realization of academic abilities among students with learning disabilities (Rusk & Dhan, 2005). Due to lack of the comprehensive approach for working with academic students the Holistic Support Model relying on Bandura's theoretical model for self-empowerment was developed. The Holistic Support Model gave the basis to design the Narrative Intervention Program.

The Holistic Support Model appreciates the meaning of holistic (cognitive, emotional, and social) support for the level of self-efficacy of students with SLD. Thus, the Narrative Intervention Program emphasizes the learning aspect of aiding by imparting learning strategies and improving learning and memory effectiveness, in addition to emotional support as in stressful situations that characterize students especially during

exams. Students are assisted in shared learning and sharing experiences and feelings. Bandura's self-efficacy theory was the basis for building a program that supports students with learning disabilities because it also addresses personal parameters and concerns for their well-being. The Program takes the approach, that derives from the specific difficulties experienced by students with learning disabilities and based on the self-efficacy theory (Bandura, 1996), and an individual's perception of his or her ability to undertake behavior that will lead to a certain outcome.

The Narrative Intervention Program based on Holistic Support Model brought the new approach to support of academic students, based on the cognitive (learning strategies), emotional and social domain with leading role of narrative interventions. The program seemed to be effective and fruitful for the participating students, however it had to be confronted research over with students' experiences.

The studies conducted so far in the field of support of students with learning disabilities were not based on a theoretical model for the development of academic self-efficacy in higher education but were mentioned in the context of primary and secondary school students and partially tested in the field. Other studies (Rot, 2009; Kromer-Nevo & Barak, 2006) conducted in respect to students with learning disabilities examined quantitative and non-qualitative parameters such as test scores and what helped these students achieve these achievements. Quantitative research approach was found to be lacking for comprehensive and in-depth information regarding the needs of students with learning disabilities and especially in the higher education system. Therefore, the qualitative research with narrative approach was chosen for designed research in order to hear the voice of the students with learning disabilities and to base the support program on the story of their past and present lives as well as how they see the future of their academic success.

The narrative approach also seems to be useful for the research in terms of delivering better understanding of students with learning disabilities. It is important to gain knowledge of what they consider as helpful in learning process, how do they perceive their self-efficacy in learning, how they feel about their academic status, success and how they assess the support programs dedicated for them. In addition, a support program was built based on Bandura's theory of self-efficacy theory that will try to test whether these variables will help increase the sense of success in learning. Success will



not be measured solely by grades but by the voice of students emerging from the interviews that will be conducted after the support program.

Studies undertaken to date about the adjustments within academic studies to meet the needs of students with learning disabilities indicate that such efforts lead to considerable improvement in the learning of those students who receive assistance (Dahan, Meltzer, & Hadas-Lidor, 2010). Most adults with learning disabilities are aware of the existence of support centers, so that they usually choose to study at institutions of higher learning where such services are available. Some even choose an academic institution according to the quality and scope of the assistance and support provided at its support centers. A sense of well-being and self-efficacy is important to most students in the higher education system and even more important to students with learning disabilities who have decided to study for an academic degree despite all the difficulties they have suffered in the past in primary and secondary school.

Since support for students with learning disabilities was found to be important to them, I found it appropriate to obtain comprehensive and in-depth information based on their experiences in order to offer the improvements into Intervention Program and Holistic Support Model. The narrative approach used for the research will be coherent with narrative approach used within the program and would serve as a basis for better support of students with learning disabilities in the higher education system.

#### **4.1 The Theoretical Basis of the Research Design**

The justification for this study stems from a gap in existing knowledge about students with learning disabilities regarding the support they need during their studies in the higher education system. Most studies of students with learning disabilities focused on young students, rather than graduates aged 18-30 who are studying in the higher education system. In addition, the support currently provided at institutions of higher learning is academic support and no studies have been conducted that have included the examination of emotional and social support. Another important goal of this study is to offer such institutions therapeutic tools with which to support students with learning disabilities.

In the current research I wanted to receive knowledge about the support program and especially about the students' perspective and their experiences. I decided to gather

knowledge with qualitative approach and not the quantitative because I did not want to gather the objective and representative knowledge but deep insight and full understanding of students' perspective.

The narrative research helps to conceptualize the meaning of emotional, cognitive, and social support and to formulate new insights. This clarification is extrapolated from the way participants perceive and interpret these issues (Tzadok & Meltzer, 2005).

#### **4.1.1 The Qualitative-Constructivist Approach**

This study is based on the constructivist qualitative research approach. This approach observes phenomena as the outcome of our structuring (Creswell, 2013), and seeks to describe and explain social and/or human phenomena. The use of this research approach has expanded from education and the social sciences to numerous areas of knowledge that engage in the research of humankind, including human behavior and wellbeing. In fact, even the most dedicated adherents to the positivist-quantitative approach admit that there are research questions that cannot be answered except using the qualitative research approach.

There is increasing agreement among researchers that qualitative research has created new possibilities for the observation and understanding of human behavior and for the creation of new knowledge, while also making social academic knowledge accessible to students, teachers, and researchers, in academia and in the field (Sabar Ben Yehoshua, 2001; Shkedi, 2003).

Within the constructivist paradigm, reality is perceived as a human structure shaped by the respondents' cultural and personal circumstances. This reality does not exist without the respondent since the respondent is a part of this reality. The reality is constructed of the interpretations of the researcher and the respondent and is the basis for the structural perception. The objective of qualitative research is to uncover the reality in accordance with a particular viewpoint. According to the constructivist perception, it is not possible to achieve this goal since there is no one absolute and correct reality. Rather, it is necessary to research different interpretations of this reality through clear experiential memory, which will help to describe and explain matters in their multifaceted complexity.

Qualitative research describes several cases with shared affinity. In this type of research, it is possible to address both phenomenon and findings from various perspectives and to organize them based on the old knowledge in a way that enables the creation of new ideas, new understandings, and new meanings. Unlike quantitative research, qualitative research is performed on a small scale and does not attempt to formulate universal conclusions (Sabar-Ben Yehoshua, 2001).

In qualitative research, data analysis is an analytical process, with intuitive characteristics, the aim of which is to provide meaning and interpretation for the researched phenomenon (Dayan, 2002; Denzin & Lincoln, 2000; Sabar Ben Yehoshua, 2001; Shkedi, 2003; Silverman, 2000). The process of data analysis is the core of qualitative research. Its beginning is characterized by the identification of trends or themes in the material of the findings. The material of the findings addresses all the raw material that the researcher designates as meaningful to the research question, such as interviews, observations, journals, and life stories (Givton, in Sabar Ben Yehoshua, 2001; Maxwell, 2013). In the process of data analysis, the researcher examines the data collected and effects changes and adjustments that derive from the “data itself.”

Researchers working with qualitative approach collect information in several ways, through the cross-referencing of the viewpoints, to increase the trustworthiness of the findings. This may be accomplished through a combination of interviews, observations, photographs, films, documents, and objects. Each type of qualitative research reflects the world in a different way to a certain extent, and the use of various approaches indicates the researchers’ intention to provide more than one interpretation for the research topic. This variety facilitates a simultaneous presentation of realities, as opposed to anyone, objective, reality.

Qualitative research entails the collection and intelligent utilization of a variety of empirical materials – case study, personal experience, internal observation, life story, interview, objects, texts, and cultural products, alongside documentary, historical, and visual texts, and texts of interaction. All these can describe, for instance, moments and meanings of routine and crisis in people’s lives (Sabar Ben Yehoshua, 2001; Shkedi, 2003).

According to Denzin and Lincoln (2016), the preceding provides a generic base definition. Qualitative research is composed of a series of material-interpretative

practices that make the world visible. These practices change the world into a series of representations. Hence, qualitative research encompasses a naturalistic, interpretative approach to the world. Qualitative researchers study things in their natural contexts, intervening as little as possible, to understand or interpret phenomena in terms of the meanings that people create for them (Denzin & Lincoln, 2011).

#### **4.1.2 The Phenomenological Tradition**

The current study employs a phenomenological strategy, anchored in a post-modern theoretical framework that reflects the belief that there is no one objective reality shared by all people, since culture is forced into countless forms of knowledge that is narrated and created in a collective process, in which it is impossible to dismiss personal stories, texts, codes, and previous structures of understanding from the way in which individuals see and experience the world (Sabar-Ben Yehoshua, 2001).

Modern phenomenology addresses Husserl, the founder of phenomenology, who viewed it as the science of “pure recognition” (Gergen, 2001). Historically, this approach opposed empirical psychology, which observed the phenomenon as expressed by Bruyn (1966). This combining of empirical data and attribution of meaning and interpretation and applying it to the same data is vital, since it is only by doing so that psychological research can progress beyond finding quantitative relationships between several variables and enable the understanding of these variables themselves.

The phenomenological approach attempts to replace the individual in the center of the arena. According to phenomenology, the world exists only as a reported phenomenon of existence, and the human experience is the experience of the world. In other words, the human experience comprises every aspect of what an individual experiences, and an experience includes all the elements related to it, such as feelings, sights, sounds, physical sensations, imagination, and memory. One of the main concepts within phenomenological philosophy is “intentional” orientation (the reporting individual is the one who intends the researched phenomenon). It is the individual who grants the phenomenon its existence, and only afterward its essence. It is the individual who saw, or heard, or was angry about the phenomenon. In other words, her presence is necessary since she is the closest to herself. In phenomenological research the researched reality is perceived as a constellation of interactions in the observation of the entire phenomenon, as the research aspires to interpret it through the reconstruction of reality from the

participants' perspective (Hess, 2007; Maustakas, 1994, in Shkedi, 2003; Sabar Ben Yehoshua, 2001).

### **4.1.3 The Narrative Approach**

My research is based on the narrative approach and addresses the different meanings ascribed to a story as obtained from an interview. Narrative research is qualitative research, which focuses on the human experience. The research emphasizes the participant's life story and thus belongs to the narrative category. It identifies the information that is required by the research topic, which can shed light on it from all angles and perspectives, including the description of experiences and recounting of events that occurred at a specific time and over a certain period. Moreover, the description is authentic and provided through a prism of positive or negative personal experiences. Since these are subjective experiences and emotions, the use of narrative qualitative research is essential to this research.

Every qualitative study contains a story-based component that pertains to its participants. However, within qualitative research, narrative research is a subject, for the main data is the stories that the respondents tell. These stories address events that the respondents either experienced in the past or comprise their life process. The stories are the means for the interpretation of the experiences, and do not comprise a historical or scientific truth, but a "narrative truth" (Sabar-Ben Yehoshua, 2001). The research utilizes the narratives to build the research respondent's world if the story remains in the memory or works in memory since it has meaning for the storyteller. Through the story, the teller explains his actions to himself and others and creates himself and his identity (Shlasky & Alpert, 2007).

The narrative methodology focuses on stories, and hence the data of every narrative study are stories – written and spoken, personal and group, life stories and self-narratives. The narrative paradigm seeks to reveal the meaning that people assign to themselves and phenomena in the world.

Lieblich, Zilver, and Tuval-Mashiach (1995) maintain that people are storytellers by nature. The role of psychology, beyond its interest in human behavior and its goal to observe and control this behavior, is to research and benefit and understand people's internal worlds. One straightforward way to accomplish this is through the verbal and

narrative descriptions provided by those who describe their life experiences. An individual's personality and internal reality are reflected by the content and structure of his or her narrative or personal story. Through the narrative, people supply explanations for their actions (Albaz-Lobish, 2001). The narrative or personal life story which a person chooses to tell is essential to his or her very being and thus to understanding it.

Widorshoven (2012) maintained that the relationship between life and story is dual. On the one hand, life appears as something that is possible to describe in a story, while conversely, the stories are perceived as “ideal stories” through which we attempt to depict life. The experiences and life are interrelated, so that personal experiences influence our responses to opportunities we encounter and help us to delineate our personal development.

According to Sabar Ben Yehoshua and Dargish (2001), narrative research studies based on a structured and defined process propose a clear and logical method of investigation. In the narrative analysis, considerable attention is paid to content, but also to the way in which a story is told, based on the understanding that all aspects of a story may be significant to the situation in which it is recounted (Tohar, Asaf, Kainan, & Shachar, 2006). The way in which a person chooses to tell his story and give it meaning is an inseparable part of his life story (Shlasky & Arieli, 2001). The examination of stories facilitates increased knowledge and better understanding of the individual and the characteristics of his environment. Researchers use narratives to gain insight into a subject's world, on the assumption that the story remains in the memory or works in the memory and is told because it has meaning for the teller (Bechar & Mero-Jaffe, 2009).

#### **4.1.4 The Story of Human Memory – The Course of the Remembered Life**

Over the past two decades psychology of the personality has developed in several important directions, including:

- The autobiographic memory or the everyday memory (Neisser & Winograd, 1988; Rubin, 1986; and others).
- The personal coping (Emmons, 1989)
- The feelings that play a main role in the motivation, which are the core of human individualism (Buck, 1985),

- Narrative research and its important impact on the psychology of the personality in particular and on the social sciences in general (Sarbin, 1986).

Singer and Salovey (1993), who researched the “remembered self,” maintain that residing within childhood and adolescent memories are goals, perceived outcomes, and emotional responses that can remain or change over time, images of the private and public self, motivation to increase positive feelings and to reduce the negative ones, and ways to express these emotions.

With respect to an individual’s “remembered life,” Stryker, Owens, and White (2000) asserts that the image of the “remembered life” gives rise to the metaphor of a “club” arising from one's life. He believes that this metaphor provides options for exploration of the way in which a person remembers the club of his life, how this club is built through different friendships, and how these friendships are organized in terms of rank and status.

The term “re-remembering” can be used since it directs attention toward the recollection of the friends and characters that belong to an individual’s life story and the types of “self” that are important to the individual, as well as significant others who are a part of the story. The word “re-remembering” is the “unification possessed of goal and meaning, and it is rather different from flickering shards, passive and continued, of characters and emotions that accompany the flow of the awareness.”

### **The Story of Personal Memory from a Phenomenological Viewpoint**

According to Singer and Salovey (1993), characteristics, plot, and topic of narrative connect between two main systems in the personality: memory and emotion (Singer & Salovey, 1993). In the memories that we recount to ourselves or to others, we tell a story about ourselves. We address the emotions that they produce in us and that enable us to pay attention to repeated topics, which resurface in connection with what is important to us now and was important to us in the past.

The memories provide us with important sources of information. They teach us about the outcomes of the goals that we aspired to achieve (**cognitive input**) and remind us how we felt when we achieved those goals (**emotional input**). In the creation or the discovery of memories from our life experience, we imbue our achievement and self-understanding with meaning, which guides our future behavior.

Singer and Salovey (1993) say that the personal story as a main source of information in the social sciences is not the same as quantitative material, which was clearly intended to be abstract, free of context, anonymous, and objective. Narratives include in them a clear hypothesis: somebody tells, and somebody listens. Instead of removing the communicator and creating a non-personal work, a narrative requires awareness of who the speaker is as well as of the issue he is speaking about. This necessitates connectivity and connection between the speaker and the listener and requires the researcher have knowledge of the world that he or she is studying. This approach is chosen because narrative prevents an individual from "disappearing/ escaping from the world and becoming disconnected from others. Personal memory constitutes the center of the conversation between the listener and the teller. In our society, according to Singer and Salovey (1993), every person becomes a repository of personal legend, a life story that conveys the culture and the rituals of the remembered self. By holding conversations about the memories that define our self, we gain access to the repeated themes and emotional concerns that shape and preserve personality.

## **4.2 Research Objectives and Research Problems**

Before showing the research objectives and research problems, the Narrative Intervention Program based on the Holistic Support Model will be described. It is done to give the full understanding of the objectives and research problems, which were set-up in the qualitative approach and focus on students' experiences and perception of the Intervention Program.

### **4.2.1 The Narrative Intervention Program based on Holistic Support Model**

The Narrative Intervention Program was designed and implemented at Peres Academic Center in Rehovot for first year students studying at academic institution who had been diagnosed with a specific learning disability. The theoretical background for the program was Holistic Support Model corresponding with Bandura's self-efficacy concept, which brought support with learning tools and implementation for narrative interventions.

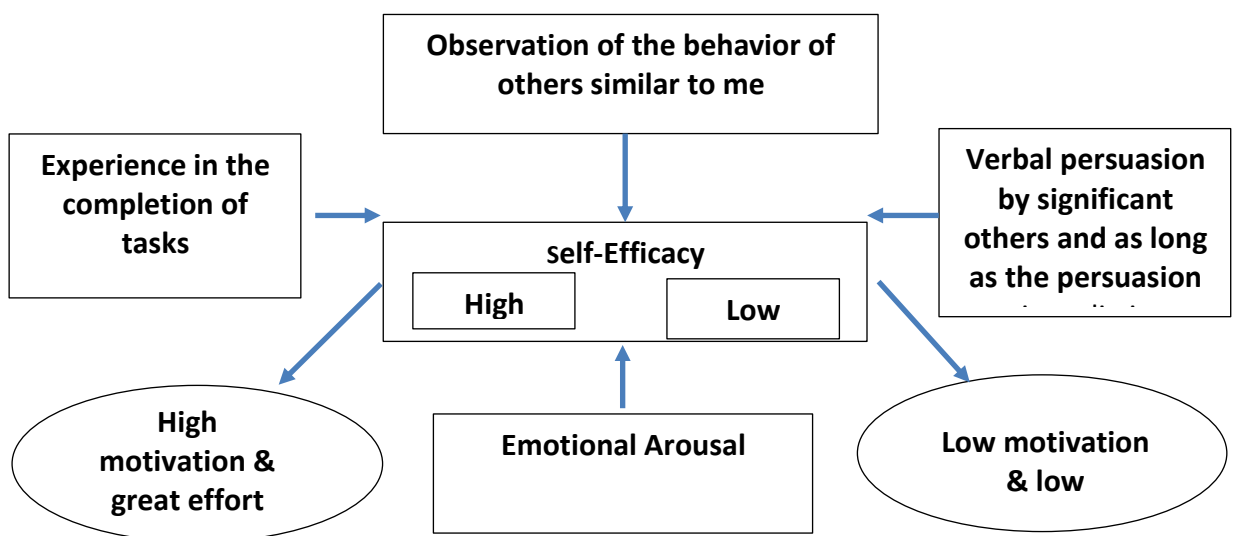
According to Bandura, as illustrated in the following figure, a person with high self-efficacy evaluates his ability to cope with a certain task as high, and this level of efficacy increases the tendency to invest effort in task performance. Low self-efficacy



weakens the motivation to invest effort in the performance of a task and triggers thoughts of failure. Moreover, according to Bandura, the social environment is also a meaningful factor that influences one's behavior. A person judges his behavior considering the observation of his behavior and the behavior of the surrounding environment, and it is also influenced by verbal persuasion from another person who attempts to encourage the individual by telling him that he possesses the ability to succeed. It is important to note that such verbal persuasion is effective only when it comes from someone who is close and significant to the individual concerned, or from someone who is perceived as expert in the field of the task which the individual is facing. Therefore, the behavior is a product both of external processes (the environment) and internal processes (within the individual). The results of the judgment determine the direction the individual will choose, by inspiring either feelings of satisfaction or disappointment, which in turn motivate him to either repeat his behavior or to refrain from it.

An individual's success is also influenced by the emotional component – high emotional arousal, such as feelings of mental tension or anxiety, lead to physiological changes such as discomfort, which decrease the perception of self-efficacy. In contrast, a feeling of calm contributes to the creation of a high sense of self-efficacy.

Figure Number 1: Self-Efficacy in Learning (Bandura, 1997)



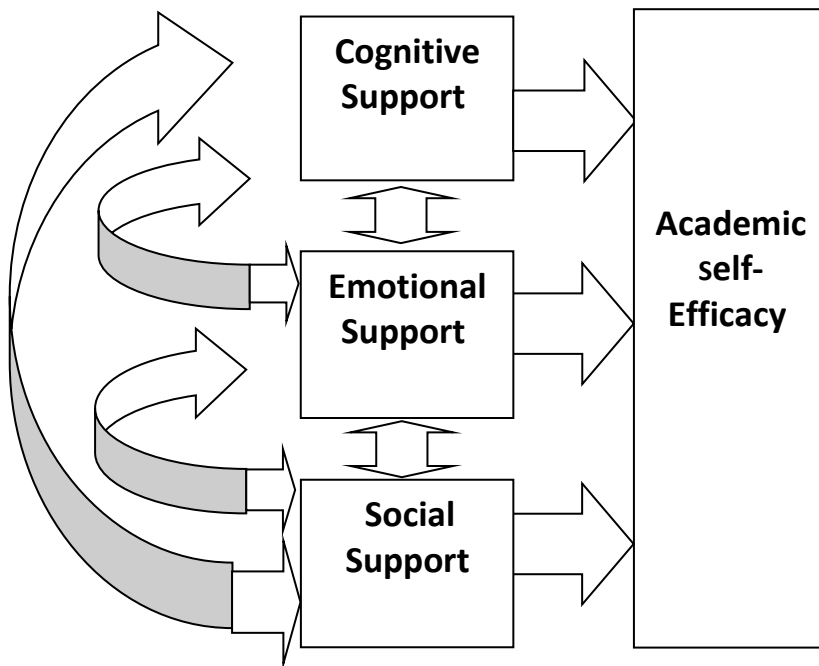
Source: Own work on basis of Bandura concept (Center for Educational Technology Website) <https://lib.cet.ac.il/pages/item.asp?item=13522&kwd=7410>

The objective of working with young people with learning disabilities is to ensure that they will be independent, self-confident, and well-adjusted (Margalit, 2005). The

achievement of this supra-objective depends on successful coping with quite a few obstacles. In academic frameworks, tests or exams are a significant milestone in which the achievement of success requires that several expectations be met academic expectations, social expectations, expectations about motivation, and cognitive expectations.

The Council for Higher Education in Israel defined accommodations to the demands of studies and tests to bypass the difficulties that students with learning disabilities contend with and enable them to express their knowledge. The guiding principle for granting such accommodations is the principle of equal opportunity. However, the heterogeneity of the large group referred to as “students with learning disabilities” and the lack of adequate characterization of the subtypes of learning disabilities detrimentally influence the optimal implementation of these accommodations. Therefore, to help students with learning disabilities, it is important to equip them in learning strategies, but at the same time give them emotional and social support and improve their academic self-efficacy. Those are main elements of the **Holistic Support Model** developed while working with academic students (Figure Number 2).

Figure Number 2: The Holistic Support Model



The support program took place at the Peres Academic Center in Rehovot and was designed for first-year students studying at academic institutions who had been diagnosed with a specific learning disability

The support program at the Peres Academic Center was implemented for the first time in 2019/2020. Before the new program has started, varied forms of casual and non-official forms of support were conducted. Since 2019/2020, due to the experiences with the students I modified the support program according to the Holistic Support Model and designed it in the form of Narrative Intervention Program. The new support program was accepted as the only stable program for first year students, And I accompany the program every year.

A brief description of the content of each meeting during the Narrative Intervention Program follows:

**Meeting 1:** Getting acquainted: discussing expectations, fears, hopes, and dreams; providing initial tips about studies and lectures, reviewing the course obligations as set out in the syllabus, reading articles, meeting with students to those who have already completed the course, reading extensive material about the learned areas of knowledge.

**Meeting 2:** Time management in different spheres of life (to integrate studies, work, family, and leisure time activity): teaching students to define goals and to plan their time, accordingly, following the rule “important – and urgent,” as per Covey’s theory (1989).

**Meeting 3:** Gardner (1996) argues that human intelligence is not one piece, but a sequence of separate intelligences, each connecting to a different realm of life. According to Gardner each of us has a tendency.

Stronger in some areas than in others. According to Gardner, there are 8 types of intelligences: linguistic, mathematical, spatial, musical, motor, intrapersonal, interpersonal, and naturalistic. This theory is important for students with learning disabilities to identify their specific strengths in certain areas and to use this intelligence for learning purposes. Therefore, in this session we will identify the personal learning style of each student.

Learning from a personal perspective, based on the assumption that not all people are the same and each one has his or her unique learning style: One's personal learning style is identified by means of a questionnaire (visual, auditory, or kinesthetic) .memory skills are improved using approaches adapted to personal learning style, for instance, those whose learning style is visual are taught to use a flow chart, map of concepts, tables, use of colors for emphases, local learning and learning according to familiar imaginary paths, while those whose personal style is auditory are shown how to use films, approaches involving learning through sound, learning with friends, by application of familiar music to the learning material, etc., while those who respond to a kinesthetic memory approach will be taught to use methods involving a considerable use of writing and drawing (to illustrate required subject matter); this meeting also addresses the high points of learning, i.e. every individual is most alert and focused during certain hours of the day, and students are shown how to identify and navigate these periods to enhance learning in the framework of the daily schedule.

**Meeting 4:** How to summarize during lectures, and active learning: students learn to differentiate between what is important and what is trivial, and how to develop listening and summarizing skills; students are taught how to identify the main idea in paragraphs, and supporting, opening, and closing sentences; they also learn how to write the best answer and how to answer multiple choice questions.

**Meeting 5:** Effective reading of texts and articles.

**Meeting 6:** Coping with difficulties, focusing, and learning: students are shown how to identify distractions (the Internet, phone, television, etc.); how to divide material into separate, short units; how to cope with challenging learning materials first; and when to take breaks in the learning process to muster strength and develop focus.

**Meeting 7:** Memory: topics covered include the meaning of memory; how one remembers information in the immediate term and in the long term; and various strategies to improve memory are taught.

**Meeting 8:** Stress and test anxiety: a test with Anxiety Questionnaire (Zeidner, Nevo, & Lipshitz, 1988) is administered to ascertain whether or not the individual suffers from it; test anxiety is defined and explained with regard to how it is manifested during tests; coping mechanism in response to test anxiety and cognitive paralysis are discussed; the model, event – thought – response according to the principles of cognitive behavioral

therapy (CBT) is explained; relaxation methods and ways to alleviate tension are discussed, such as exercise, meditation, yoga, mindfulness, calming music, and so on.

**Meeting 9:** Research: related topics are discussed, such as academic writing, and the student is taught how to write a research paper; identify a research topic; choose a research question; plan a research process; and create an outline and a literature review (including merging of texts).

**Meeting 10:** Intermediate summary of the program: groups of two are formed to assist in the learning process; students are advised about how to address a lecturer for clarification of unclear topics; mentors are provided to assist with studies; students are given referrals for supplementary lessons if necessary; time is devoted to discussing difficulties being experienced and positive or negative approaches to coping with learning difficulties.

**Meeting 11:** Presentation: students are taught skills to help them to prepare a presentation in the best possible way.

**Meeting 12:** Preparation for tests: topics covered include, planning study time, studying stages; in-depth reading; summarizing material; rote learning and review of material by helping students to formulate questions about the study material.

**Meeting 13:** Summary and feedback: at the conclusion of the intervention program, students are invited to a summative interview to discuss the process they have undergone and ascertain whether the support model led to a change in the self-efficacy of their learning.

The content of each session focuses on cognitive support, but the crucial component in it was the narrative interventions that were regularly taken to discuss experiences. At the beginning of each session there was an open conversation of all the participants in the program, in which they shared their learning, emotional and social difficulties, which allowed openness and tolerance of all students to each other. In addition, students shared attitudes and experiences in coping with the learning or emotional tasks given to them at the last session.

#### **4.2.2. Research Objectives**

The aim of the designed research is to gain insight into the students' perception of the Holistic Support Model (as illustrated by Figure Number 2) with focus on analysis of

its potential effectiveness in the experiences of students, who participated in Narrative Intervention Program.

The Holistic Support Model relies on Bandura's concept and the students' perception of support and sees a binding relationship among all its components – cognitive, emotional, and social – which necessitates combined and integrated treatment, to lead to the empowerment of students with learning disabilities and maximum realization of their abilities. Holistic Support Model was the basis for the design and implementation of Narrative Intervention Program.

The designed study will focus on three main objectives:

1. Cognitive goal - through the research it will be possible to obtain information about the students' experiences of participation in the Narrative Intervention Program (based on the Holistic Support Model) and their perception of it. The study will also increase knowledge about academic students with LD and a level of understanding of their everyday behaviors, perceptions, and emotions.
2. Theoretical goal - second goal is to rebuild the concepts underlining the Narrative Intervention Program. Research will allow to improve the Holistic Integrative Support Model based on student's perception. It may also apply to Bandura's model of self-efficacy – to expand it in the context of possible support for students with learning disabilities (with insight into the concept from the perspective of narrative approach).
3. Practical goal - the purpose of the research is to offer the higher education institutions and specialists working with academic students (and other adults) with LD the tools and to upgrade the strategies of working with those students. This can cover implementation of the support programs based on Narrative Intervention Program (or its elements) as well as bringing new strategies for treatment and work with students based on the Holistic Integrative Support Model. This will be possible after examining the students' perception and experiences about the program.

Considering these goals, it is appropriate to conduct the research in the narrative approach in order to obtain information heard from the personal voices of students with learning disabilities in the context of the support program offered to them and how it is derived from descriptive knowledge to develop academic self-efficacy.

The objective of this research and the questions that derive from it led to the choice of the qualitative research method, which aims to understand phenomena through the meaning attributed to them by those who experience them (Creswell, 2013). The application of this method to the study revealed that when examining the learning process of students with learning disabilities a subjective approach is also necessary. From the different genres of qualitative research, the present study selected the narrative research genre, which seeks to advance an interpretative understanding of the human experience through people's experiences, as they describe them (Marshall & Rossman, 2011). The study focuses on what is concealed from the eye within the respondents' subjective awareness. The starting point is the awareness that the respondents' voices provide important knowledge that may encourage, examine, and initiate processes of change (Gergen, Josselson, & Freeman, 2015). Narrative research has four justifications: personal justification, practical justification, social justification, and treatment justification, which should be introduced for full understanding of the designed research.

- Personal justification: the research is important to the researcher's life; many narrative researchers view themselves and the participants as partners in the creation of the research and the life process during the research period, and assume that in addition to the respondents, they too will undergo changes; when the participant tells her story, the researcher's story connects to it, and the two stories, that of the informant and that of the researcher, develop into a shared narrative construction (Elbaz-Lubish, 2001).
- Practical justification: according to Sabar Ben Yehoshua and Dargish (2001), narrative research enables the profound understanding of human phenomena and examines practical knowledge and thus leads to change in the research field and contributes to the advancement of the praxis.
- Social justification: the research leads to a change in attitude or in social policy; it enables the silenced voices of unique but weak groups, which are generally ousted from society and isolated from it to be heard (Sabar Ben Yehoshua & Dargish, 2001).
- Treatment justification: Rosenthal (1993) notes that sometimes the encounter between the researcher and the respondents has therapeutic psychological implications for the respondents; the respondents reveal their deepest stories, saturated with traumatic experiences, and thus experience a liberating therapeutic

experience, ease their load, and consequently can use the story another time, this time to build their identity anew (Avdi, 2005).

### **4.2.3 Research Problems**

Based on the aims and goals of the designed research the researched problems were set. Due to the choice of the qualitative paradigm and the narrative approach the hypothesis was not set-up for the research and the list of research problems was modified and broadened during the research process. The final list comprises the three general problems:

1. What are the general characteristics (central categories and main topics) of the personal narratives of students with learning disabilities before and after their participation in the Narrative Intervention Program based on the Holistic Support Model?
2. What are the characteristics of the personal narratives of students with learning disabilities with a focus on chosen themes: perception of disabilities; effect of disabilities on learning; perception of academic self-efficacy; and the factors which contribute to success despite disabilities?
3. What are the perceptions of students with specific learning disabilities about the Narrative Intervention Program (based on Holistic Support Model) in which they participated? What are their experiences of participation in intervention program based on the principles of the narrative approach, and what are their perceptions regarding the influence of the participation in the program on their personal narrative and everyday life?

The following detailed research problems were derived:

1. What are the characteristics of the narrative stories about their past, as told by students with learning disabilities – what are the central categories and main topics of the students' narratives?
2. What are the characteristics (central categories and main topics) of the present narrative of students with learning disabilities (after they had participated in the Narrative Intervention Program based on Holistic Support Model)?
3. What are the characteristics of narratives of students with learning disabilities before and after they participated in the Narrative Intervention Program based on



Holistic Support Model – what are central categories and main topics of narratives according to students' experiences regarding:

- a. perception of disabilities.
  - b. effect of disabilities on learning.
  - c. academic self-efficacy.
  - d. self-perception (self-image, self-esteem).
  - e. approach to life.
  - f. sources of support (family, institutions, programs).
  - g. factors which contribute to success despite disabilities.
4. What are the characteristics of the future orientation toward their studies of students with learning disabilities who participated in the Program?
  5. What are students' experiences of participation in the Program based on the narrative approach (what are their perceptions of Programs' influence on their everyday lives, attitudes, and its meaning for them)?
  6. What are students' perceptions regarding the influence of the participation in the Program on their personal narrative?

### **4.3 Research Procedure**

The most common and effective research tool for data collection in a qualitative research approach to narrative research is the interview, comprising the interaction of questions and answers between two or more people. Interviews conducted in the framework of this methodology are a naturally held dialogue between researcher and participants, in the framework of which participants describe their experiences in their own words (Marshall & Rossman, 2011).

The research tool employed for this study **was two in-depth, semi-structured interviews (see Appendix Number 1).**

The semi-structured interview is directed by the Interview Guide, which is organized according to an array of pre-determined topics and open-ended questions prepared ahead of time. A semi-structured interview enables the researcher to focus on the relevant issues as set out in the Interview Guide, and by asking additional questions to delve more deeply into, and to clarify, issues raised spontaneously by participants during the interview. Questions related to clarification and increased depth may

encourage participants to continue to develop their thoughts until the required clarity is achieved (Ehigie & Ehigie, 2005). To learn about the participants' internal processes, the researcher must ensure that the direction and content of the interview will reflect the participants' outlook and the issues which are relevant for them, by avoiding general representations (Petitmengin, 2006).

Therefore, while the interviews can be different from one another, it is the interviewer's responsibility to ensure that all the **main topics** are covered in every interview. These topics include perception of learning disabilities in the past; coping with the pressure of performing well at school; and identifying who or what helped them to succeed (with special focus on the perception of Narrative Intervention Program based on Holistic Support Model). This is also the strength of the semi-structured interview, which focuses the interviewer and the interviewee on the research question, while also providing space for the researcher's to be flexible in her responses based on her personal judgment (Veal, 2017). When participants feel that they are being listened to attentively, they are amenable to sharing their experiences. Thus, the researcher must be sure to follow the Interview Guide from a neutral position and should be genuinely interested in what participants have to say, which will encourage them to share their experiences (Kvale & Brinkman, 2009).

A central concept of the interview within the narrative research method is the "grand-tour question" – an initiated, general, and broad question that is directed to participants at the start of the interview and provides a general explanation of the issue being studied. A question phrased in general terms invites participants to discuss what is relevant to them as opposed to what is important to the research or the researcher and opens a window to the formation of the narrative (Glaser, 2009). The grand-tour question presented to participants in this study was: "In your opinion, what could help you to succeed in your studies?"

The duration of each interview was between an hour-and-a-half and two hours, and the interviews were conducted according to the Interview Guide (see Appendix Number 1), which was based on several main content fields:

1. The subjective perception of the student with a specific learning disability, for example: What does it mean to you to be a student with a learning disability?

2. The subjective perception of the student and the unique characteristics that differentiate her from her classmates, such as: As you see it, what differentiates you from your classmates?
3. The student's experience of the meaningful systems of relationships he has with his partners in the learning space, for instance: Tell me about the meaningful systems of relationships that you had in the place where you studied, and whether your friends supported your learning.

During both interviews (before the students' participation in the Narrative Intervention Program based on Holistic Support Model and after their participation in the Program) The topic was focus on different aspects of student's life (see Appendix Number 1):

**1) The first interview (before participation in the Intervention Program)** - collected information about student's experiences and life story in the context of their learning disabilities. The goal of the first interview was to learn about the participants' environment and experiences from, to obtain open descriptions that would constitute an infrastructure within which to develop the main ideas and further understanding of the researched phenomenon (Patton, 2015). The choice of this tool was found to be effective for the target population since members of the target population tend to be easily distracted (Lamont & Swidler, 2014) The interview questions sought to provide information about the students' perception of their learning disability and their perception of the reasons for the factors that facilitate academic self-efficacy in their past.

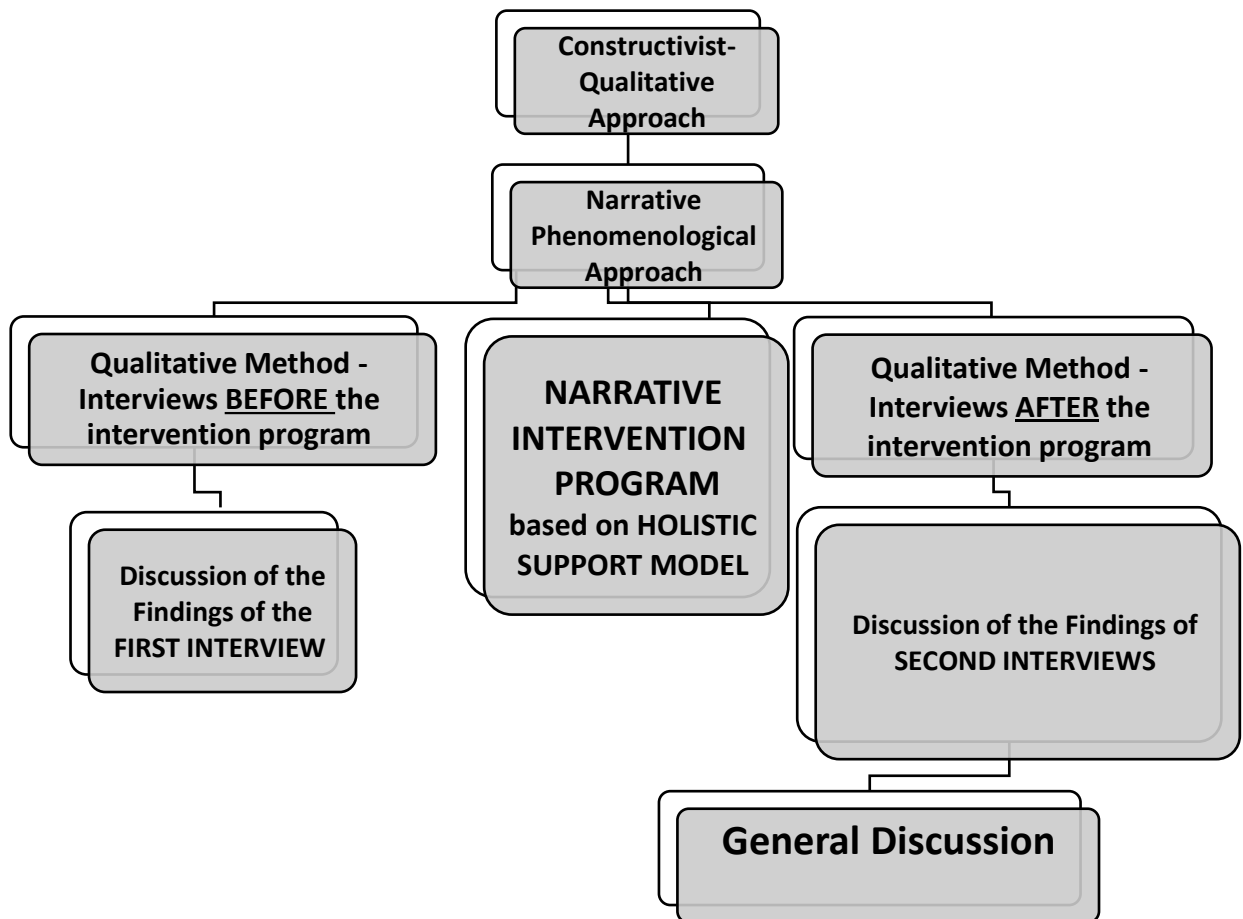
**2) The second interview (after participation in the Intervention Program)** - examined mainly students' perceptions of the intervention program in which they participated regarding its impact on their academic self-efficacy. The goal of the second interview was to learn about the participants' experiences after they participated in the Program: perception of themselves, learning strategies, perception of success and ways of achieving it despite disability (and other topics identified within the analysis of the first interviews). The main interest of second interview were sources of support with special focus on participation in Narrative Intervention Program (its effectiveness and impact on everyday life).

During both interviews I followed the Interview Guide while covering the important topics, and concurrently strived to exhibit sensitivity to participants' responses,

while delving more deeply into the issues that I identified as essential to my research (Morse & Field, 2002). Furthermore, I took notes during the interviews about these topics to ensure that they would be explored more extensively in the future. The use of this technique helped me to highlight and examine these issues during a later stage of both interviews (Patton, 2015).

Despite the shared principles which united all the interviews, each one was unique and imbued with the “interviewee’s spirit,” manifested through the degree of openness and interest exhibited by the respondent; the topics highlighted by the respondent; and the character of the interaction.

Figure Number 3: The Model Reflecting the Research Stages



Source: Own work

## **4.4 Research Sample**

The population research sample was taken from the research population with sampling strategy adjusted to the qualitative approach.

### **4.4.1 Research Population**

The population sample of students with learning disabilities was determined by the researcher based on her knowledge of the characteristics of the target group and the research goal (Patton, 2015). The objective of the focus on this population was to compare common themes that may arise from the fundamentally dissimilar difficulties experienced by different individuals, to achieve an in-depth understanding of the researched phenomenon (Vough, Cardador, Bednar, Dane, & Pratt, 2013).

### **4.4.2 Sampling Strategy**

The sampling strategy is a program of the choice of the research participants and the choice is critical, since it influences the ability of the qualitative research (Collins, Onwuegbuzie, & Jiao, 2006). Qualitative research employs purposive sampling, which facilitates the identification of information-rich cases. In its framework, participants who represent their population group in the best possible way are chosen and they can learn about the researched phenomenon through the rich development of the experience. The aim of this sampling is not to identify a representative sampling constellation, but to identify participants who can provide information that will enrich the data and facilitate understanding of the issue being studied (Patton, 2015). Accordingly, participants must be willing to invest their time, to share their personal story, and to tell it clearly while reflexively observing their experiences (Berg, Grant, & Johnson, 2010).

For the present study, I used the theory-based intentional sampling technique (Patton, 2015), which in this case included the following criteria:

1. Students aged between 18 and 30
2. Students who were assessed in the past with specific learning disabilities
3. Students in different faculties who participated in the Narrative Intervention Program based on Holistic Support Model and met the required criteria facilitated the increase of the difference in the sample on which this research study is based (Marshall & Rossman, 2011) with preference for students who: were willing to converse openly about personal topics, such as social relationships with their

study peers, and difficulties related to their learning disability. In addition, I sought out participants who exhibited a high degree of sensitivity and were adept at expressing themselves, on the assumption that they could describe the researched phenomenon in an in-depth and rich manner.

#### 4.4.3 Sample Description

According to the narrative approach, the narrative sample should range from 20 to 30 participants. Accordingly, based on the principle of theoretical saturation, the present sample numbered 30 participants, where the sample size for the current study was influenced by the process of the data analysis.

The participants in the research were located by publishing an application for the intervention program that was emailed to all students. There was a total of 50 students who applied, of which only 30 students were selected that met the criteria presented.

The participants were engaged in different fields of study (namely: law 9 students, health systems administration 3 students, behavioral sciences 7 students, nutrition 5 students, and business administration 6 students and were diagnosed with specific learning disabilities, such as dyslexia, dyscalculia, and dysgraphia. In addition, women, and men of different ages (as mentioned, the age range was from 18 to 30) and different family statuses were represented (7 married, 23 single). All participants were in the first year of their studies in academic year 2019/2020.

The following table presents the demographic data of the participants in the sample.

Table Number 12: Data for Research Participants

Number	Name	Family Status	Learning Disability
1	Ben	Single	Dyscalculia
2	Roi	Single	Dyslexia
3	Gal	Single	Dyslexia
4	Adi	Single	Dysgraphia
5	Ohad	Single	Dyslexia
6	Dina	Married	Dyscalculia
7	Mor	Married	Dysgraphia
8	Natan	Single	Dysgraphia
9	Moshe	Single	Dyslexia
10	Noy	Single	Dyscalculia

11	Maya	Married	Dysgraphia
12	Lital	Single	Dyslexia
13	Maayan	Single	Dyscalculia
14	Itai	Single	Dysgraphia
15	Omri	Single	Dyslexia
16	Nitzan	Single	Dyslexia
17	Tal	Married	Dyslexia
18	Yonit	Married	Dysgraphia
19	Rinat	Married	Dysgraphia
20	Moriah	Single	Dysgraphia
21	Ilanit	Single	Dyscalculia
22	Shira	Married	Dyscalculia
23	Shoval	Single	Dyscalculia
24	Shiran	Single	Dyslexia
25	Ron	Single	Dysgraphia
26	Haim	Single	Dysgraphia
27	Danny	Single	Dyslexia
28	Shimon	Single	Dysgraphia
29	Yossi	Married	Dyslexia
30	Inna	Married	Dyslexia

\* The names are pseudonyms so as not to reveal the participants' identity.

## 4.5 Data Analysis

In the framework of qualitative research, the data analysis facilitates the creation of descriptive data by means of a general, as opposed to a statistical analytical process, which has intuitive characteristics. The goal of the analysis is to understand the patterns that arise from the data collected and the ideas embodied within them, to interpret them, and to explain why they exist and what they mean in the researched context (Berg, Grant, & Johnson, 2010). To the data analysis, I categorized my work according to three main stages: reading the data, coding the data, and recording the insights derived from this analysis, while anchoring them in the research data.

- 1) The first stage is the **holistic reading of the data**. In this stage, the researcher reads the transcripts of the interviews to obtain a general feeling for the phenomenon. The repeated reading of the participants' descriptions in their entirety enables the researcher to become intimately familiar with the texts and to create an initial and

general picture that may direct the continuation of the process (Marshall & Rossman, 2011). The goal of this stage is to develop “empathetic listening” to the participants’ voices, which helps the researcher to ensure that those voices continue to be heard throughout the research (Corradi, 1991). Beginning with the first one, I performed an in-depth review of the entire interview, and even transcribed the first several interviews myself to create an initial and intimate acquaintanceship with the contents and topics that were raised.

- 2) The second stage is the analysis of the interviews, which comprises **coding the data**. This is a central process in the building of the narrative that is undertaken in relation to the research topic. The analysis of the research data is carried out by coding it and organizing it according to temporary categories and this analysis is already begun in the initial stage of the data collection. An inductive process which is ongoing throughout all the stages of the data analysis creates a cyclical movement between the data collection and the analysis of the data. The theoretical categories and ideas are identified and gradually conceptualized until the stage at which it is possible to create a conceptual simplification of the data and to explain the implicit social pattern that they reveal (Corbin & Strauss, 2014).

In the spirit of the narrative-based research approach, I began the data analysis from the first interview. Following the initial reading of the interview transcript, I analyzed the data according to the principles of discourse description.

- a) In the stage of **initial (open) coding**, an analytical process is performed separately for each interview, during which the researcher disassembles the data and creates distinct and conceptualized categories. The units can include words, sentences, expressions, or processes. The simplification of the data is performed gradually, through several stages. First, it is necessary to organize the data into initial codes through the identification of recurring patterns and the classification of these patterns into distinct units of data, which reflect basic empirical issues. The basic units include a narrow amount of data, and their sizes change according to their nature. The standard procedure during this stage is line-by-line coding, and only infrequently does the idea arise from an entire paragraph that describes whole passages of conversation presented in their full length (Charmaz, 2014).



The initial coding enables us to track the content and the differences between the units of data, and to critically examine “what happens in the data and what does this mean?” At this stage, the researcher must remain open to the theoretical direction that is developing through her interpretation without foisting early ideas onto the collected information. These ideas achieve conceptualization through naming, which derives from the researcher’s world of concepts or even better, from the participants’ world of concepts, in what are referred to as “in vivo codes” (Charmaz, 2014).

It is necessary to re-examine the codes that are identified, to be precise about the codes and their names, and to prevent overlap between them. As the research progresses, the codes should be organized according to categories (Glaser & Strauss, 1967), where a category is a group of codes that includes abstract ideas that connect between occurrences, actions, and interactions with similar characteristics and constitute a characteristic or ideological aspect of the theory. At this stage, each category is independent, and all categories are equally important. The initial coding is a simultaneous process of data collection and analysis, utilizing the method of constant comparison. Constant comparison enables a synthesis of the data into a comprehensive unit, thus creating the categories' theoretical characteristics, which are the initial elements in the development of the theory. Since the researcher does not operate according to early research assumptions, the initial coding is accompanied by repeated reading of the data and the writing of comments regarding categories with the potential to be relevant to the researched issue (Lichtman, 2013).

For this process, I performed a precise reading of the interviews, during which I identified units of meaning for the research participants. I compared the data in each category to other data that were already placed in the same category, and in this way arrived at the creation of the initial categories. For instance, at the stage of the initial coding I differentiated between two types of experiences, where the first type addressed the intrapersonal processes, and the second type addressed the interpersonal processes. In this way I created a database of shared conceptual categories for all the interviews, and this database constituted the infrastructure for the subsequent stages of analysis.

b) **Axial coding** was employed for the second stage of the analysis, in which hypotheses were developed about the dynamic relationships between the categories shared by all the interviews. During this stage, the researcher searches for the central components in each category, examines their relevance, and compares between and unifies the categories, thus forming the subcategories. The goal of this stage is to map and define the relationships between the ideas coded in the early stage and facilitate the discovery of the relationships between the categories and the subcategories (Corbin & Strauss, 2014).

During the initial and the axial coding, the substantive codes are composed (Corbin & Strauss, 2014). This is the conceptual labeling which conceptualizes the patterns found to be central to the understanding of the researched phenomenon and to constitute the infrastructure for the creation of theoretical meaning.

c) **Selective (theoretical)** coding is the final stage in the coding process which includes the integration and refinement of the categories formed in the previous stages of the analysis, with a focus on the main idea at their core. Unlike open coding and axial coding, which facilitate the identification of a variety of categories, theoretical coding helps to identify and focus the main categories and develop their traits and the connection between them (Holton, 2010).

Throughout this stage, in a gradual and integrative manner, the categories develop into ideas that present the main meaning that is reflected in a coherent theory anchored in data. The selective coding has the greatest theoretical power since it produces greater conceptualization than that achieved in the previous stages (Corbin & Strauss, 2014). Although these stages are presented in a linear manner, there is overlap between them, primarily when the cyclical process necessitates the collection of new or additional data. This is a challenging task for the researcher, considering the considerable quantity of data, the multiplicity of the codes, and the complexity of the patterns and the relationships between them (Glaser, 1998).

The goal of this stage is to identify the **central or core category**. The main category that relies on the research data represents the basic process of the research and the other categories are organized around it. In an abstract manner,

the relationships between them conceptualize the storyline – the narrative description of the data (Turner, 2014).

In this study, the storyline that connects between the categories and explains the differences identified among the researched experiences is related to the dialectic movement between the experiences and intrapersonal and interpersonal processes (for example, characteristics of the social relationships between students with learning disabilities and those who do not have learning disabilities). The dialectics between these processes lead to the different components of self-efficacy in learning.

- 3) The third stage comprises the writing or recording, which I undertook after receiving the information from the two interviews I conducted – the first, before the students participated in the support program, and the second interview, following participation.

To sum up, the research process can be described in the form of list of steps consecutively coming one after another (Table Number 13):

Table Number 13: The Stages of the Research Process

<p><b>The flow of the research process:</b></p> <p><b>Step A</b> - Approval from the College Ethics Committee at the Peres Academic Center to conduct the research with students with learning disabilities (May 2019).</p> <p><b>Step B</b> - Ask students to participate in the study (August 2019).</p> <p><b>Step C</b> - First interview of all students (September 2019).</p> <p><b>Step D</b> – Execution of the Narrative Intervention Program (October 2019-january 2020).</p> <p><b>Step E</b> - The interview phase for all students after participating in the intervention program (March 2020).</p>
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Source: Own work

The time that elapsed between the first and the second interview was only six months, after the students had completed the first semester exams in their first year of

study. After conducting several interviews, I began the process of data analysis as I wrote about my impression's vis a vis both the data collection and its early synthesis. Writing is a dynamic and creative process which is part of the practice of analysis. Therefore, Richardson (1999) maintains that there is no need to postpone the writing stage until the researcher has decided exactly what he wants to say and how he will organize and present his arguments. In fact, expressing in writing the ideas that correspond to the categories identified enables the attainment of insights and new phenomena which promote the continuation of the investigation of the process. Hence, the researcher may write several versions of the theoretical framework until it has been completed. Regardless of the reader or the purpose of the research, the final report must be convincing, relevant, clear in terms of ideas, and must present a theoretical integration that reflects the nature of the narrative research (Glaser & Strauss, 1967).

#### **4.6 Assurance of Research Quality**

Ensuring the quality of the qualitative research means assuming personal responsibility for it and faithfully representing the data supplied by participants in the study, while remaining aware of its constraints. (Denzin & Lincoln, 2008). According to the theory of narrative research, constant comparison, the formation of essential and creative questions, theoretical sampling, and implementation of procedures of methodical coding all increase the trustworthiness of the research (Simmons & Gregory, 2005).

To ensure the trustworthiness of the research, I chose to observe four criteria developed by Guba and Lincoln (1994): credibility, dependability, transferability, and confirmability.

##### **1. Credibility**

The credibility of the research reflects its inner validity, internal consistency, and integrity (Schurink, 2009). Through this criterion, the researcher ascertains that what was researched corresponds to what was supposed to be researched (McNiff, 2007). To meet this criterion in the present study the following means were adopted:

- Peer debriefing: An examiner external to the research critiques the research process; his or her role is to maintain the researcher's integrity, supervise the process of the research, and provide feedback about the precision and completeness of the research (Spillett, 2003). For supervision, throughout all

stages of the research I utilized the research advisers as external judges. These advisers were lecturer-researchers from the academic center where the program was conducted, who teach qualitative research methods. From the time when I conducted my first interview, I held periodic meetings with them during which they provided feedback and raised questions which encouraged me to think deeply about my approach to each interview.

- **Conceptual density:** Defined as in-depth familiarity with the research data, to arrive at this it is necessary to examine data versus ideological openness in a methodical manner, with more emphasis on the conceptualization of the data than on its description (Corbin & Strauss, 2014). Repeated readings of the interviews I conducted, and my decision to transcribe some of them myself, increased my familiarity with their content and enabled me to conceptualize the embodied meanings.
- **Creation of conditions for the collection of trustworthy information:** The objective is to build a trusting relationship between researcher and participants. During the interview, I presented myself in an open and personal manner, clearly described the study and its objective, and endeavored to create an atmosphere which would contribute to building trust with participants through empathic listening and expressing genuine interest in their experiences (Guba & Lincoln, 1994). Furthermore, I informed participants that they could choose to refuse to participate in the research and terminate the interview at any point, with no negative repercussions.

## **2. Dependability**

This criterion addresses the possibility that should the researcher perform his or her research a second time similar results would be obtained, commensurate with those produced in the original research. It makes the study accessible to the reader by ensuring that he or she can evaluate the consistency and accuracy of the study by reviewing the entire process of the intervention program. To this end, appropriate logical and comprehensive documentation must be supplied so that the reader understands the research procedures and the rationale behind them and is thus able to rely on the data which they produce. When the research is reliable, the reader can supervise the process of the research (Corbin & Strauss, 2014). To meet this criterion, the chapter on methodology includes full and detailed documentation of all the research stages, ranging

from the shaping of the research question, the choice of participants, reflections about the decision to undertake the study, and examination of the fieldwork to decisions related to the data analysis. The credibility of the study is bolstered when the theoretical arguments are supported by evidence and data from participants (Bryman, 2008). Accordingly, data is accompanied by explanations about the context in which they appear and are supported by statements from participants.

### **3. Transferability**

This criterion reflects the external validity of the research study, or its external consistency. It addresses the degree to which it is possible match the findings to the participants and perhaps to demonstrate their validity with respect to additional situations as well. Qualitative research does not presume to generalize but strives to contribute to an in-depth understanding of the context within which the researched phenomenon resides. The intent is to demonstrate that it is possible to generalize conclusions about knowledge obtained in a certain context to other contexts when there are shared characteristics. Rather than isolate similar variables beyond contexts, the researched environment encompasses detailed descriptions of the contexts themselves (Morrow, 2005). It should be noted that one of the characteristics that differentiates narrative research methodology from other qualitative research approaches is the attempt to generalize the research findings to other similar frameworks (Lodico, Spaulding, & Voegtler, 2010). The intention is not to generalize an exclusive and absolute truth, rather the situational declarations of narrative research are aimed at allowing other researchers to implement them in the research of similar issues (Charmaz, 2014).

The participants' statements; the process of data collection and analysis; the specific disorder which a student is contending with; the research sample; and the participants' characteristics are all described in detail. The same is true for the Interview Guide and the framework in which the interviews were held (Creswell, 2013).

### **4. Confirmability**

This criterion addresses the accuracy of the research, based on the recognition that qualitative research is not objective (Morrow, 2005). Confirmability reflects the degree to which the research outcomes correspond to the data collected, namely, the experience of the participants. It reflects the degree to which the findings are influenced by the researcher's biases, interests, and outlooks. According to this principle, it is

necessary to present the researcher's ontological and epistemological position (Delmar, 2010). The qualitative researcher should be aware of the process of analysis. He must provide in-depth clarification of the perspective from which he reads the interviews, of his position regarding the researched reality, and of his personal and professional mindset, since these influence the analysis of the findings (Anfara, Brown, & Mangione, 2002). According to the narrative research method, reflexivity, of both researcher and participants, is an important tool that helps to achieve this criterion through reference to the confirmability of the assumptions presented and the degree to which they represent the general perceptions of the researcher and the participants (Joannidès de Lautour & Nicolas, 2008). Accordingly, the subchapter presented next describes the researcher's role in the narrative research and focuses on the issue of reflexivity and the means to achieve it.

## **4.7 Ethical Issues**

In qualitative research, ethical dilemmas may arise regarding the collection and dissemination of the findings. Therefore, the researcher must ensure that the benefit produced from the research exceeds the ethical risk the research entails. Although it is impossible to define ahead of time all the ethical dilemmas that may arise during the research process, the researcher must maintain the dignity and safety of the research participants, stemming from an honest desire to benefit them and the group they represent (Koocher, 2007). To realize these principles, several ethical considerations were considered.

### **1. Informed Consent**

The researcher receives participants' informed consent by stressing to them that their participation in the research must be voluntary, and that they have the right not to share information that they prefer not to reveal. In addition, the researcher appraises them of the nature of the research, their contribution to the research, as well as the balance between the benefit that they may gain from their participation and the possible risks. For this study, I addressed the participants openly and independently, with no connection to the authorities at the academic institution, to ensure that their consent to participate was the result of their free choice. To obtain their personal consent in principle, I spoke to each participant over the phone, and explained the research objective in general terms.

At the start of the in-person interview, I presented them with an informed consent form and explained the main ideas orally, to ensure they understood what participation in the study would entail. The informed consent form described the research framework, their right not to address the topics that they prefer not to discuss, and their choice to terminate the interview at any stage.

## **2. Confidentiality**

It is the researcher's responsibility to protect participants' privacy by ensuring that the information they provide remains confidential and ensuring that they cannot be identified. To create an environment in which participants would freely provide maximum information, I assured them that all data was to be used solely for research purposes. Pseudonyms were used to safeguard confidentiality (Merriam, 2009).

A key component of the study is respect for participants and consideration for their wellbeing. Participants may be emotionally wounded if they are asked embarrassing questions or if the interviewer's responses are construed as threatening or judgmental. The researcher must ensure that her questions do not hurt a participant's feelings (Mugenda & Mugenda, 2003). To preclude causing such distress, close attention was paid to the nature of the questions and their phrasing before interviews were conducted. The research directors were asked to provide feedback about the questions as they were presented in the Interview Guide. At the conclusion of each interview, each participant was told that he or she could meet with me again, if he or she so desired, and each one received my phone number. The following day I sent a message in which I thanked each student for participating in the interview. Not a single participant asked to meet again.

## **3. Avoidance of Bias**

The researcher must be direct and forthcoming with participants, must inform them about the nature of the research and describe the procedures it entails, and must avoid intentional biases. However, full exposure of some details of the study, such as a detailed description of the intervention model in advance, is not always possible, since this may create preliminary biases in the participant which may disqualify him (Kombo & Tromp, 2006). Accordingly, participants received a general description of the study, as one which provides an intervention program for students with learning disabilities.



## Chapter 5: Research Findings

This chapter presents the findings of the current study based on a qualitative analysis of the interviews conducted with students with learning disabilities before and after their participation in the support program. Four main themes were revealed during the data analysis, and the themes themselves, as well as the connections between them, provide insight into the inner world of students with learning disabilities and the type of support that they need.

I will bring the voices of the students who participated in the intervention program and the common denominator that emerged from the interviews I conducted with them.

The students' personal voices and the researcher's interpretation of their responses are presented in the context of the research questions, alongside relevant excerpts from both interviews

I have isolated four major themes from both interviews. From the first (and partly from the second) interview, I isolated the categories

- 1) the student's perception of his or her learning disability.
- 2) the effect of the learning disability on life choices.

From the second (and partly the first) interview, I isolated the categories:

- 3) the perception of academic self-efficacy.
- 4) the factors which the students perceive as encouraging academic success despite their disabilities, following their participation in the support program at the academic center.

Several categories emerged for each of the themes as they were analyzed and processed. Those categories were used as the structure to present the research findings within this chapter.

To present the students' personal voices in the most authentic way possible, each interview is presented almost in its entirety. However – they were “cut and” puzzled” and then presented in the new order, creating the narrative according to the four categories listed above. Students' statements are presented with only slight editing. Thus, the life stories of the students are presented as complete stories, edited to delete repetitions of words and phrases to provide a coherent and comprehensible text, but with the original grammar constructions of the student's statements (as far as it was possible to show it within translation from Hebrew into English). In each interview, typical, central and

significant quotes are presented – with *italic style*, quotation marks and indicating the omitted parts with ellipsis e.g., "...certified as learning disabled. “. These quotes reflect a student's perception of his or her learning disabilities, unique view of the term "academic success," and factors which facilitated the achievement of this success. The students' statements were also used as the subtitles for the analysis.

Each interview is followed by the researcher's analysis, in reference to the research questions which examine perception of disabilities; effect of disabilities on learning; perception of academic self-efficacy; and the factors which contribute to success despite disabilities (with special focus on Narrative Intervention Program).

Respondents were often willing to speak extremely openly and sincerely, which is attributed to the creation of trust and the sense of intimacy that was achieved with the researcher during interviews and with the staff at the support center.

## **5.1 The Student's Perception of the Learning Disability**

The perception of the Learning Disability wasn't the initial theme or topic for analysis within the dissertation, but it emerged during interviews (especially within the first round of interviews). An examination of the common denominator that emerges from the students' life stories reveals that most approach their learning disability emotionally rather than by tackling its academic manifestation, as Lital says: "All dealing with the learning disability is emotional rather than academic. If you want to treat someone with a learning disability, you need to deal with it emotionally." And when Nov describes his feelings, he says, "The hard feelings never go away. Even when you are appreciated, you feel uncomfortable and have a hard time enjoying the empathy. The difficulty is related to my subjective feeling that I am failing and unworthy."

Some have learned to accept their learning disability and live with it, just as a person learns to live with imperfect vision by wearing glasses. Haim says: "*The disability is my good friend and is with me all the way... It helps me... If it's 'against you,' it's a shame, and you're looking at the half-empty glass. It's better if you can view it as being on your side, to help you.*".

### ***"Being diagnosed with a learning disability"***

Many of the students noted that the diagnostic phase, when they learned that they had a learning disability, was significant and affected the way they dealt with discovery. Mor says that she attributes great importance to the detection and diagnosis process, which she calls being "...certified as learning disabled." She says that although she was diagnosed at a young age, her mother never told her. During her interview she describes an emotional, exhausting and very difficult journey as she discovered and coped with her disabilities. She was diagnosed after embarking on her academic career when she encountered difficulties for which she sought solutions: *"At the beginning of the semester I had a really hard time, I went on my own initiative and got a diagnosis."*

Yonit also cites her diagnosis as a turning point, or a step that brought with it a sense of acceptance and relief after the "discovery" and led her to take action and to cope: *"It's slower. I'm much better at some things than others."* She emphasizes that there is nothing to be ashamed of in receiving a diagnosis of a learning disability and certainly no reason to hide it: *"I have also reached a point where I am so not ashamed of it. It is a part of life... that's what it is."* Rinat also says that after her diagnosis, she focused on identifying ways to empower herself, and that later she acquired the tools that help her to function optimally. Rinat's is also a story of a late discovery of a learning disability, and of dealing with the implications of identifying the issue at a later stage in life. She says that her search for answers was accompanied by anger and difficulties. Rinat is acutely aware of the issue of learning disabilities, regarding diagnostic findings, the sources of the disabilities, and the emotional toll they take. She says that it was during her high school years, when there was a gap between her ability to express herself orally and her ability to express herself in writing, that she sought help. Dealing with the results of the diagnosis was difficult, as it raised many questions – about the source of the disabilities, and how to deal with that. *"A very unpleasant feeling at this stage of life that you have to check what is happening to you, why you are not successful... "*

Haim is another example of a process of learning to recognize a learning disability following a late diagnosis: Haim begins his story during elementary school, describing it as a time of challenge and struggle – from the start of his school studies he experienced many difficulties, especially with his studies. He describes a complex process, which began with lack of awareness of his learning disabilities, as evidenced by the late official

diagnosis, which was only obtained at the start of his academic studies. He says that his mother perceived him as a "rough diamond." Later in his life his story takes a turn and becomes a tale of "the closing of a circle" and of repair or healing when he comes to see the glass as half-full. He continues to experience difficulties in academia and is finally admitted to college "on probation" for the first year. Haim says that he felt as though he was starting at a disadvantage, on less favorable terms than others: *"I went in the back window, like a thief, and not like everyone else – through the front door."*

### ***Coping with LD***

Some students learn to transform disabilities from a disadvantage into an advantage, like Gal who says: *"The ability to manage myself is related to learning disabilities, [but] I turned the negative into the positive."* On the other hand, she finds that she is obliged to make concessions at certain stages of life. She says: *"I never learned in an orderly fashion. A lot of it because of the disabilities, because learning requires a lot of reading and naturally, I avoided that."* The feeling of lack of choice which is associated with learning disabilities is a central motif in her story. She often sees the half-empty glass even though she says she has found a "quick and clever" solution to every problem. This is apparent when she mentions that sometimes when things are tough, she is tempted to give up: *"One of the things that is difficult for me is to persevere. I get bored quickly."* However, in the same breath she indicates that she knows what would help her: *"I need the stimuli to be more intense, and to have the most visual illustration possible."*

An analysis of the interviews also reveals that many students employ humor to cope with their disabilities. They sometimes choose black humor, but either way it appears to facilitate acceptance of the impairments and smooth the path to moving on and facing the challenges. Mor is an example of someone who views the ability to cope with learning disabilities as a kind of success. She says that a person with a learning disability should prove that "she can." She understands that the first step in coping with a learning disability is to develop awareness, and alongside it the acceptance of the disability, and says that she does this by means of humor. Indeed, Mor uses humor as a means of overcoming difficulties and obstacles, especially those derived from learning disabilities. In her eyes, humor is a strategy for softening difficulties, a way to focus on acceptance and coping. She accepts the learning disability as something natural, another aspect of herself, and is not ashamed of it: *"Dysgraphia is a part of me, it's something I really laugh*

at." Haim expresses a similar sentiment: *"Laughing and telling black jokes about it. The flaws are part of me, and I don't make a big deal out of them."*

### ***"I'm an idiot"***

It was difficult for some students, to admit to having learning disabilities and some felt ashamed, most likely due to a negative approach to learning disabilities in the environment where they were raised. This seems to have been the case for Lital, who sees many of the events in her life in relation to her learning disabilities, which she views as "defects" or "abnormalities." She often describes the way she believes that others treat people with learning disabilities: *"You are just perceived in their eyes as lazy, whining, weak, etc."*

When Yonit speaks of her childhood, she describes difficult experiences: *"On the first day I arrived in first grade, I was told to face the wall. I think I will never forget that in my life."* When talking about people with learning disabilities she uses words like: *"monster," "unidentified object," "mutation,"* and *"idiot."* As a person who has a learning disability herself, she describes someone with a learning disability as an unusual and extreme phenomenon. Her pain is intense and palpable which is likely why she mostly refrains from talking about her past coping with her disability.

From an early age Haim enlisted the assistance of his environment. In elementary school he sought help from his parents and classmates, building a complex relationship with another student who helped him until he abandoned the friendship. He took it for granted that he had to find others who would help him. He says that after receiving a "slap in the face" from the friend who stopped helping him, he understood the importance of interpersonal connection as a lever for his advancement, and later in life as a means for the advancement of others. Nov also describes difficulties he suffered growing up, noting that in the past he suffered from a lack of understanding and acceptance: *"For many years I was considered an idiot... I was always hearing about my untapped potential, how I was capable of more..."* At first it seemed he was describing the criticism of external sources, such as his teachers. But as the interview progressed, it became clear that these statements had permeated deeply within him and influenced his self-perceptions. He appears to view a learning disability as a conspicuous physical disability: *"The disability in a child, it's like being blind... Nature has taken [something from the child]."* He describes how deeply

he has been affected by the negative attitudes in his environment: *"A few years ago I felt worthless..."*

***"I will not lose"***

On the other hand, following the process of coming to terms with their disabilities some students made up their minds that they would prove that could succeed in spite of the obstacles. Mor decided to be forthcoming about her the learning disability at work: *"I decided to maximize my ability, to know what my disability is, and get the most out of it, enjoy it, really enjoy it."* She believes that a person with a learning disability should work hard: *"You have invested, worked, learned – use it. Get the most out of it."*

Gal, on the other hand, prefers not to reveal the fact that she has a learning disability: *"I do not let everyone know that I have a learning disability."*

One group of students was unwilling to discuss the nature of their disabilities and would only talk about how they cope with them. One example is Tal, who prefers not to discuss his learning disability as it affected his childhood, choosing rather to focus on environmental factors. He mentions the disability itself only in the context of his current life – the period of academic study during which he began to receive support.

Nov also prefers to talk more about coping: *"To love what you do and be at peace with yourself even though there is no perfection... You perspire, dream, believe and walk the path... In the end the path will lead you... If you are not afraid to walk it. Life is like an ascent, we climb a mountain and there is always a higher peak, there are moments when you take a break, sometimes to rest, and there are moments when you are patient, and moments when you push yourself. I cry, but it's legitimate."*

Rinat also copes with her disabilities from a position of strength: *"Today I am smarter, I know how to deal with it (to suffer) and cope, but as a first-year student it is not so easy for me... Emotionally, it requires a lot of investment from me, slowly, with the help of the workshop and learning, the emotional side became easier."*

The students' stories show that their perception of their disabilities draws mainly on personal, emotional resources, while their coping styles are comprised of the attitudes of their parents, the environment, and the education system in which they grew up, as well as personal characteristics. Together these build the unique self-image of each

student who contends with learning disabilities and allows him or her to live a chosen lifestyle.

## **5.2 The Influence of a Learning Disability on Life Choices**

The students' life stories reveal that learning disabilities affect all areas of life, not only those related to learning, but also influence lifecycle choices, especially with respect to choice of occupation; relationships with co-workers; choice of spouse; parenting style; choice in relation to society; and of course, choice of field of study for higher education.

### **Employment - *"How shall I explain it to my boss?"***

Gal works in sales for a cellphone company and is responsible for a team that provides customer service. Her story demonstrates that people with disabilities must continuously set goals and aspire to meet them. Coping with her learning disabilities has taught Gal that no one is perfect, and to achieve optimum performance at work, teamwork and partnerships are very important: *"Everyone contributes the good part of himself."* Gal points out that having to contend with a learning disability has taught her not to give up and motivated her to face challenges and continue to set new goals for herself. But even so she does not see her disability as an advantage: *"One of the things related to learning disabilities is that you always have to be in motion and moving forward, you can't tread water."*

Lital sees the impact of learning disabilities as ongoing in all areas of life although she believes that it mainly manifests itself in the spheres of study and employment. She works as a secretary at a law firm, which she sees as a vocation in which she can "manage herself" and find solutions to help her overcome her shortcomings. Lital believes that special concessions should be made for people with learning disabilities in the context of both studies and employment: *"A person with a learning disability needs to understand how he explains this to his boss... Why should a person receive assistance during her studies but not at the workplace?"*

She attributes her success at work to the fact that she was compelled to find solutions to cope with her learning disability: *"It's one of the reasons I can manage in any field... It suits me to create [my own] procedures at work, or 'life procedures' which are my way of life, suitable for life with disabilities."* Lital believes that her disability

taught her to develop a range of problem-solving abilities: *"You develop other skills – abilities and rebelliousness, workarounds, depending on what your disability is. My use of the computer, Word, Excel functions, is above average for most people. I taught myself that it is a workaround. I have a problem, and using the computer helps me to organize myself."*

Yonit's interview shows that she chose to transform disabilities into a source of strength in her professional life in the marketing department of a car company. She expresses surprise that something so difficult for her made a positive contribution to her life. Having a disability makes it easier for her to talk to others about their problems. Today she does not hide her shortcomings, and she says that as her self-confidence grew, so did her self-acceptance. She explains that her background contending with disabilities has taught her how to help others in her work environment, and that she has learned to accept herself with her disabilities, rather than struggle against them.

Conversely, Rinat, who works as a clerk at a bank, chose her job without considering the difficulties it might entail. Her disability creates challenges for her at work, hindering her learning and advancement. However, she says that she has discovered some successful coping mechanisms: *"There are many times I start writing and fail... But then I ask for help."* She also confides: *"I have a hard time because my job requires a lot of patience, and I do not always have that patience, I have to count to ten. Over the years, I have gained experience in how to cope... But there are moments that are really not easy for me, so I usually go out to get some air, clear my head and then come back, or I scribble something."*

### **Parenthood - *"I will do my best for my child"***

Most of the students who participated in the study were not parents. Those students who do have children described feeling a strong sense of responsibility to identify potential learning disabilities in their children at an early stage and said that they would not ignore or dismiss their children's difficulties (as some of their parents may have done with them) and would provide them with assistance at the earliest possible stage, so that hopefully they wouldn't have to suffer because of having learning disabilities.

Mor notes that her disability helps her to formulate her worldview as a mother. She says it also taught her that learning should be experienced through the senses, and



that people with disabilities should use tools, such as using colored felt-tip pens and writing notes to themselves, to help them. She believes that children should be encouraged when they succeed and not criticized if they fail and talks about empowerment processes. Mostly she emphasizes that because of her own disability she was able to identify her daughter's learning disability at a time when others did not recognize her daughter's conduct as an indication of learning disabilities. Mor believes her disabilities allow her to see things differently, so that she is better than others at recognizing children with learning difficulties and knows how to adapt activities and learning approaches for them.

Mor stresses that she believes that her learning disability enabled her to help to diagnose her daughter and to provide the right tools and support. *"In my house she always had a colored felt-tip pen in her pencil case [to help her to highlight and organize her schoolwork], even before the teacher asked for one. So, I think that's what makes me better."* Mor describes the many strategies she taught her daughter to spare her the negative experiences that she experienced as a child at school: *"No one will say she's lazy... It's important to me that she always feels successful... I really feel like I'm succeeding with her."*

Rinat also thinks that her disability had a positive effect on her parenting, and that her experiences led her to believe in herself and her ability to influence her daughter's development, and to provide her with the tools that she herself did not have, and to spare her suffering as well as some of the difficulties she contended with at school: *"I look at my little one and say she can learn. I will show her how to learn. I will turn find her the help she needs; this is my serious belief, in a big way."* Rinat believes that intervening at a young age and being alert to her daughter's difficulties will help her daughter to avoid the difficulties that left their mark on her: *"I do not want you to go through that ... "* Rinat describes issues related to her difficulty with reading, saying that she reads books to her daughter, while dreaming that one day she will be able to read for her own pleasure: *"To sit and read a book? I do it in my dreams. But I know how to read. My daughter is a toddler, and that's what I do – sit and read to her."*

Nov mentions that his father finds it difficult to see himself as successful: *"When he looks at himself, he says he never achieved anything, because he is stupid. But when I look at him, I see that he is a great man. Still, he does not see himself this way and does not believe this."* Nov attributes the difference between him and his father to his

supportive environment, which his father never experienced: *“There is no doubt that what my parents gave me helped me to advance in my life. If my father had received help from his parents, he might be a brain surgeon today, but his life directed him to a different place.”*

### **Relationships - "To get understanding"**

The students who participated in the study have revealed that they have many difficulties in their personal relationships, especially with significant others. Although the connection between learning disabilities and a relationship with a partner is not always easy to discern, in in-depth conversations with students it emerges that learning disabilities impair understanding and emotional containment of their partner in both deep and superficial relationships.

Lital notes that while in most areas she feels she has managed to turn her disadvantage into an advantage this is not the case when it comes to her relationship with her husband. She believes that the conflicts in their relationship are due to her reading difficulties and problems regarding being organized, saying that her husband was impatient with her when she found it difficult to read an article in the newspaper, complaining that she should be able to manage on her own, without extra support, *“...like everyone else.”* She says that he does not always accept that her difficulties are the result of her learning disabilities, and that her mistakes are not due to bad intentions. Lital chose to seek solutions despite the crises, believing that even if a relationship is in a situation of crisis, there is *“...always a way out.”* She says that the price she pays is mainly loss of time and power, and that she is slow at performing tasks: *“The price – which for me is worthwhile – the power is less, in terms of quantity.”* This situation tires and confuses her, but she says she feels she can accept it and is motivated to be more organized. She explains that her difficulties do not pertain to a particular area but affect her entire life.

Tal confesses that his learning disabilities affect the way he conducts himself in a relationship and the way he enters one, saying that the first time he meets a woman he always tells her that he has a learning disability and never attempts to hide the fact. He says he is aware of the implications it has on his life and believes it is important and appropriate to disclose this information to a potential spouse, who would have to deal with it in the future. His disclosure to a woman the first time he meets her is a kind of test he presents her with, and her reaction determines whether she passes that test.

Although a learning disability in one of the partners is just one aspect of the complex factors which affect a relationship, the behavioral patterns I encountered reveal two main types of coping with it – avoidance or receptiveness to the issue and acceptance of the difficulties it may impose on the ongoing relationship.

**Society -*"I have a learning disability. So, what are you going to do about it?"***

As in an interpersonal relationship, in their relationships with society, students with learning disabilities face the dilemma of whether to expose their disabilities or hide them.

The life stories of the participants in the study indicate that the years they spent coping with their learning disabilities have prepared them to reveal their situation, which they are no longer ashamed of. They are also willing to request help and are proud of their successes.

Lital views a learning disability as a lever for personal and social change and fights for justice. She often chooses not to act on her own behalf but on behalf of others with no fear of confrontation. She causes those around her to redefine their worldview, about issues related to learning disabilities. She challenges her surroundings by not allowing her learning disability to prevent her from acting and demands that it produce comprehensive rather than specific solutions as if she is challenging them and saying: *"I have a learning disability. So, what are you going to do about it?"*

Tal chose not to give up on himself and not to allow others to give up on him because of his disabilities and expresses pride in his successes *"I made a clear decision not to give up on myself ...."*. He believes he has changed the attitude of society toward him and describes the change that has taken place as a source of power for him *"The decision I made also made others believe in me. "*. His story deals with growth and development as he moved from a situation he perceives as negative and complicated to a good and satisfying state. The change he experienced is evident on several levels: there was a change in his worldview and attitudes toward himself and others; a change in his ability to trust people; and a new choice to engage in the present and not cling to the negativity in the past. Tal always strives for more. *"I always think of the next destination"* He sets goals and is not content with simply existing. He perceives success as the ability to be meaningful and influential. His desire to be significant pertains to his profession, and to his learning disability. Disability has had a prominent place in his life and the

process of its development. He sees his actions in the context of a repair or correction of the past. Fearing the potentially temporary nature of his successes and their fragility, he is vigilant not to give up on himself or on others around him. His efforts to be a role model for others help him to maintain the growth he has achieved and his sense of success.

Still, many of the participants in the study admit to being afraid to express themselves in class, for fear of being ridiculed, and hesitate to ask fellow students to be their study partners to prepare for exams.

Lital says: *"I dare not ask a question in class, I'm sure if I ask the lecturer a question the whole class will laugh."*

Nov says he makes numerous spelling mistakes, and he prefers to work alone so others won't see them.

Gal says that at the beginning of the year she informed the class that she has difficulty concentrating if there is a lot of noise and requested that they not speak all at once during the lessons.

Although each student appears to devise his or her individual coping method in relation to the environment, all students noted in their interviews that they have no doubt that if their classmates had helped them, they would have been more successful.

### **Studies - "*Choosing the right course for my learning disability*"**

The students reported that their choice of a subject to pursue for higher education was influenced by their learning disabilities and the resulting failures and successes they had experienced at primary and secondary school.

Ben says: *"Because of my reading difficulties I chose to study a subject that required as little reading as possible. During elementary and high school, I had difficulty reading complex and long texts and [the text on] the exams, so I chose business administration because I thought most exams would be in maths and there would be fewer long texts to read."*

Adi also chose a profession involving as little writing as possible: *"Due to my multiple spelling errors when I write, I looked for a profession that does not require much writing. Most tests are multiple choice and I just have to mark the correct answer, and I use a word processor that corrects my errors."*

Shira suffers from dyscalculia and has always had trouble with mathematics. She says: *"Me and numbers are not good friends, every time I see numbers, I start to shake... It was clear to me that I would not study a profession that has numbers and exercises, so I chose to study behavioral sciences. I only have one course in statistics that I have to take."*

The students' stories demonstrate that learning disabilities affect both the cognitive and emotional aspects of major lifecycle events. They also reveal that the coping mechanisms employed are not uniform and are mainly influenced by the students' past and current subjective experiences.

### **5.3 The Learning-Disabled Students' Perception of Academic Self-Efficacy**

When questioned about their perception of their academic self-efficacy, each student revealed a subjective definition of the concept of "success." They defined self-efficacy or success in their studies in the following ways: as the setting of and achieving a goal; as focusing on adhering to the process and not on the result; as in a person's belief that is capable, as reflected in the inner experience of their development, of reaching a state of acceptance of the path.

#### ***"You have to go through this difficulty in order to change"***

Gal defines herself and her successes through activity: *"To engage in academic studies, this is not something I can take for granted; [and the same goes for] finishing the studies, [the important thing is] to make this into an ongoing activity."*

Her story illustrates the gap between her many important actions and her emotions. She tends to downplay her achievements: *"One of the things about a learning disability is that you are not always satisfied with what you have accomplished since you always are in action, always trying to move forward."* Many of the words she chooses express difficulty and frustration, even when she is describing success.

Gal links the perception of success to the achievement of the goal and the ability to complete the task. During her studies, she coped with complex difficulties and tremendous amounts of study material and the workshop helped her to improve her approach to her studies. As she sees it, the fact that she has a learning disability heightens her achievements. *"The main place where I saw a change was in the way I learned to*

*prepare to give a presentation, to give a lecture based on material I studied as I stand facing two lecturers. I had to be well-organized... That's when I experienced academic success... For me, success in my studies is the success of implementing what you learned..."*

Gal speaks about success as a process of change that derives from coping with difficulty, an internal process that a person experiences akin to the system proposed by Anthroposophy: *"You have to go through this difficulty in order to change. At every stage you must discover what is hard for you to deal with. The very attempt to cope is what is meaningful. Not the result. The coping, the process does not necessarily have to be transparent."*

### ***Belief in the Ability to Succeed Even When One Fails***

Mor's story is unique in that she views her coping in the context of her belief in herself. Mor is exceptionally true to herself, her values, and her perceptions. However, she does not think of herself as successful, and finds it embarrassing to discuss success in general. She cannot imagine that her small, personal successes might be of interest to others. Her approach involves what she refers to as "side paths" and "self-realization." She is adamant that the self comes to the world not to satisfy the desires of others, but her own desires and dreams.

In the context of her perception of success, Mor's statements combine values, beliefs, and her view of life in all its spheres: home, family, couple relationship, career, studies, and learning disabilities. During her interview a portrait of Mor emerges depicting a very intelligent woman, able to cope with and find solutions for complex, difficult, and challenging situations.

Mor's first response to the interview was: *"This made me laugh... since I say, 'Certainly there are success stories. But me?'"* As we talked, Mor revealed that her perceptions of success are related first and foremost to her belief in herself. She believes that when she faces a challenge, she will reach her objective and things will work out, even if not in the commonly accepted manner. She says that one shouldn't fear the winding road ahead, but must persevere and work hard, for the effort invested is an integral part of the "journey" and one should not object to it or resist it. Throughout the interview, she was careful to emphasize the process and the effort invested as factors for success, while attributing less importance to the outcome. Despite what Mor described as

the difficulty of finding an appropriate learning framework at middle school, she says she believed that things would work out for her in the end: “...they told my mother that I was lazy and that I would grow up to be a hairdresser. Then my mother shouted, 'Help us! [So, I wouldn't end up being a hairdresser]. I told her: We will do this slowly. Not like everybody else, but in a different way.” It seems that Mor attempted to calm her mother and to instill in her the belief that she should not give up and abandon the fight.

Looking back on the event when she comforted her mother, and considering the way she describes her life, one realizes that even when she was a pre-teen Mor perceived herself as possessing self-efficacy, as even at that age she believed in her ability to define a problem, devise several possible solutions, and take measures to realize her goal. Rather than fear failure, she views it as a temporary state, certain that there are always other options or possibilities, and maintains that the ability to fearlessly identify those options and put them into practice is the true meaning of success: “So you didn't succeed, that's okay. You may succeed next time... There is always another way. I think that it is always possible to try again, and nothing is irreversible, aside from cutting off your hand.”

Mor believes in the possibility of repairing or correcting something that has gone away and believes that the individual is imbued with a profound ability to control and take responsibility for her own life, and to change and influence the future. In her view, a person achieves success when she accomplishes what she sets out to do and surmounts obstacles. In that way, she sees herself as a successful person: “Every goal I set – I reached.”

### **Self-Efficacy as a Personal Experience**

For Lital, success is personified as an honest, principled, socially aware woman who is not content to accept things as they are and seeks "justice." She frequently speaks about the need to live with a clear conscience and to effect change. She is willing to pay a price for her adherence to her inner truth and defines success as the actions that lead to change, mainly in the context of situations in which she was able to change the "perceptions of society" regarding people with learning disabilities. In her words: “My personal truth needs to be clear, otherwise I can't sleep at night.”

Relativity is a key element in Lital's perception of success. Rather than measure success in terms of certificates or grades, she notes that the value of the grade depends on the person and the context in which she finds herself: “We measure things in a certain

way. And it does not always reflect success. Eighty is not always success. Tying your shoelaces after sustaining a head injury is a great achievement for that person, but meaningless for another person.” She defines success as a person’s “inner issue” with herself and not the result of a comparison with others in a relative and measurable way. She contends that people should be directed to an inner focus: *“Sometimes it is necessary to show people that success should be measured relative to a person, and not in relation or comparison to others. People are not accustomed to measuring or experiencing success as something personal and not social, so this is something difficult.”*

Lital describes success as leaving *“...a bitter taste in the mouth,”* referring to it as an elusive component, which may be difficult to clarify and define. She says it usually comes at a price and may be accompanied by tears. *“My successes had a price. The price was tears.”* Lital adds that even when she successfully underwent a process and achieved her goals, she wasn't always satisfied, for while she considered the attainment of one objective, such as completion of her degree, as a success, she felt that she always had to continue worrying about the next objective.

Lital persists in believing that for her, success is elusive, even when she has achieved her goal. This is apparently because as person with a learning disability she has experienced few successes in her life: *“Most people with learning disabilities have not experienced success as children since they had limited academic successes.”*

### **Success as an Experience of Development**

Yonit’s perception of success began with a trend of change in her life, when she was diagnosed with a learning disability. The diagnosis marks a turning point in both her professional and personal life, as it inspired a change in her coping pattern, which moved from being passive to being active; from abdicating or quitting to persisting, persevering, and fighting. She moved from difficulty and frustration to learning to change her behavior and reach her goals: *“A tremendous success story... Success is overcoming something that was hard and feeling true happiness in my heart.”*

Yonit attained success in her studies only at an older age and says she never stops learning: *“What I have achieved today is, in my opinion, a very great success story... Now I want to learn all the time and to go wider and deeper. I simply read professional literature non-stop.”* She differentiates between large successes (perseverance in her studies) and small successes. She mentions the fact that she does not give up, but persists,



and perseveres until she succeeds: *“A very great success is also not giving up. To take something on, and not to let it go. Before this [before participating in the workshop], during my life I frequently gave up. I didn't know then that the most important thing in life is to succeed and not to give up.”* Yonit has developed into a person who perseveres at a task despite the difficulties involved and finds ways to overcome them. She sees a connection between the self-awareness she has developed and her decision not to give up but to find ways to cope with challenges: *“This is a tremendous thing for me... I do not have an answer, but [from the moment I began to study] a great desire was awakened in me that I never felt before, and it motivates me to this day... From the moment I decided to study nothing has stopped me.”* She says that from the minute she discovered that she had been moved from the waiting list and been accepted to her program of studies: *“I realized that from now on I was on my own. In other words, I did not wait for others to help me, it's [my success is] all because of me.”*

Yonit differentiates between what she describes as external successes, such as certificates and formal recognition, and internal successes related to her inner development: *“From the moment I began my studies a power was created in me that I never had in my life...”* She says that her success is an internal experience of development, which goes hand in hand with outside recognition: *“Success for a person with a learning disability means succeeding in attaining achievements like everyone else, despite all the difficulties along the way... Succeeding in overcoming them, surviving within the framework, fulfilling the tasks, completing them, and receiving the certificate, just like everyone else.”*

Haim's life has led him to perceive success as a journey, as a path marked by “white stones,” and not as a “one-time event.” He says that the “white stones” symbolize the journey – the meaningful people and the important experiences he accumulates as he goes through his life. He says he collects these markers and frequently finds opportunities to learn from them; the learning and the process are important to him as they teach him to distinguish good from bad and allow him to collect experiences and insights. He adds and emphasizes that he knows how to continue his path and to find a new direction even when things do not work out as he hoped they would.

Haim's journey begins with fragmentation and develops into unification, into a whole. It begins in minus and ends in plus. He says: *“From the bottom, you climb and climb, and then you have the power to raise other people up. You worry like they worried*

*about you, and you try to help them to move forward as much as you can. You give them a shoulder; you light their way with a flashlight. You help them put the shards together.”*

In both contexts, Haim describes the process he experienced as one of building the self: *“You know you have to establish yourself... You build from what you have.”* And so, Haim believes that he has the choice to recognize the challenge and draw strength from it. He says he managed to move from the bottom to a situation of "perfection," and that now that he has achieved harmony within himself, he provides support for people with learning difficulties and in return receives reinforcement from the environment and feels that he is essential.

Haim experiences success in the ability to "pay forward" things he has learned; to be a partner in the process of supporting others, and he implements this in the field of employment.

Haim's definition of success is not based on material achievement – such as money, grades, or certificates – but on a person's ability to develop and to set and achieve individual objectives. He feels that success is a necessary and strengthening process that develops from within. He views his work as a success because it provides meaning to his life, gives him strength, and gives him a sense of "closure." He says that he derives great strength from the act of giving. Haim describes his decision to work harder to improve after failing a test. He improved his ability to learn by applying strategies he acquired as a participant in the workshop which contributed to his sense of self-efficacy.

### **Academic Self-Efficacy is Temporary**

Tal's statements indicate that he has yet to formulate a clear definition of the concept of "success," as he describes it as relative, temporary, and fragile or as dynamic and changing. He says that as he sees it, from the moment it is achieved, new objectives must be determined, and that success leads to new challenges and makes new demands: *“As you succeed, you need to keep living up to that success and holding on to it and you also have to be able to cope with the success.”*

Tal feels that his success is in the knowledge that he has a destiny that he is irrevocably connected to: *“God destined me for this, to care for others. And I want to run away from this, but I can't.”* He describes success as his ability to help others, to effect change among children, to bridge between parents and their children, to develop social abilities in adolescents, and to communicate with them at their level: *“If a young person*

*lacks social skills and I succeed in working with him and improving his social skills, and he is able to build relationships with people... And suddenly he has somewhere to go to... I go home and say 'wow.' The parents also say thank you and are very appreciative."*

Tal derives satisfaction and a feeling of success from his work with adolescents and says it grants him a deep sense of meaning. He dedicates most of his time to his work. He also perceives success as the ability to "correct" the past – to succeed in life even if one starts out at a disadvantage. He admires people who can implement such a "correction" and achieve a position where they are important, even essential members of society. He attributes less value to income and type of profession than to someone he refers to as a decent person who realizes his objectives: *"If a child [from a disadvantaged background] learns a profession and doesn't become a delinquent or live on the streets or get dragged down by or trapped in the [negative] circle he comes from, this is a success."*

Nov's story is complex. He connects the issue of self-acceptance to many spheres of his life, including his learning disability, employment, family, and couple relationship. He says he is determined to "walk the path" and focus on his goal without surrendering to the difficulties that he experiences, especially those which derive from his learning disability.

Nov first presents his general outlook, which is characterized by three concepts: life, success, and dream. He tends to describe success in topographic or geographic terms, related to the natural world. He views success as a process or journey. When relating to objectives he intends to achieve in the future, Nov sometimes refers to them as "successes," and sometimes as "dreams." He seems to use the word "dream" to describe a particular objective, the attainment of which is designated as success. He aspires to live a life of self-fulfillment, to engage in a beloved occupation, to dream, and to attempt to attain wholeness: *"Success is mainly to be satisfied with yourself, to love what you do and to be satisfied with yourself even though there is no such thing as perfection. You must accept yourself – look at what you have achieved and say, 'I like this'."* He believes that a person who attains such "wholeness" manifests its physical expressions: *"You see the success in the eyes, in the body movements, in the relaxation, in the calm, in the tranquility of the person."*

And yet this image of wholeness or perfection is accompanied by contradictions: on the one hand, there is the desire to be "whole," while at the same time Nov

acknowledges that perfection does not exist, and sometimes it is necessary to compromise to a certain extent. He describes internal struggles as well as his struggles with the environment in his efforts to achieve the elusive wholeness. Still, he says that the cognitive treatment provided in the workshop is helpful: *"I am less of a perfectionist now, and this is a success."*

Although he describes success as a process, at times he refers to localized products as successes: for Nov, working as a tour guide in Paris is considered a success, as is working at a school with a pupil who has special needs. He lists his certificates, his well-stocked refrigerator, and the home he purchased as examples of his successes. In the context of his home and its purchase, he makes a connection between the dream and the success, recounting that he purchased his home with help from his uncle and by taking out a mortgage. The purchase of a home was the realization of his dream to be independent and to live in a permanent location, and he counts the fulfillment of this dream as a success.

Alongside his contradictory definitions of success, as both process and localized products, he also refers to small and large successes. Food in the refrigerator symbolizes a small success which conveys a sense of tranquility, which in turn leads to a feeling of great achievement. Nov considers his earning a tour guide certificate as a large success, enabling him to work in a profession he loves. He says that this success is so great that he cannot describe it in words, for it is the fulfillment of a lifelong dream and he refused to compromise and undertake a field of study in which it would have been easier for him to succeed.

In the personal-academic sphere, he defines success as the ability to pass tests, obtain certificates, receive positive feedback, and to publish articles: *"Academic success is to write, to publish, to conduct research."*

To summarize the students' remarks, it seems that in the context of self-efficacy in learning, past experiences have taught them to focus on the short-term and on process, rather than outcome. They have learned that investment in process is a factor which influences their self-efficacy because it involves accepting difficulties and finding ways to meet challenges and to come to terms with failures.

## **5.4 Factors which Influence Success in Learning despite a Learning Disability – Before and After Participation in the Support Program**

In interviews conducted prior to participation in the support program students were asked to list the factors that they believe contribute to the learning success of students with learning disabilities. They mentioned many factors, ranging from the family circle of parents and spouses to the wider circle of assistance provided at the institutions where they study.

The interview conducted after the students' participation in the intervention program indicates that fellow students can provide significant assistance and contribute to the academic success of students contending with learning disabilities and shows that the personality and beliefs of the students themselves also play a decisive role.

### **Parental Support - "*many things depend on my parents*"**

Gal identifies several factors as contributing to her academic success, with assistance from her parents described as a major factor, as well as her own ability to find coping mechanisms to deal with uncomfortable situations. She often mentions her parents as an important factor in her development and success, noting that they had her assessed at a young age and fully accepted her and her disability. She describes them as tolerant people who were unfailingly understanding about her difficulties: "*Many things are related to my parents and how they raised me.*" Her description indicates that they educated her to succeed and encouraged her not to give up on herself but to persevere to achieve her goals: "*My parents always told me: 'You do not leave in the middle. You must finish what you start. I find ways because I do not have any other choice. Because I have to do this... I was in competitive sports from the fourth grade to the eleventh grade and even continued to compete for a short time after that and that taught me not to give in. The competitions teach you that it is important to finish what you start. You find the strength in your spirit as well, and not only in the body.'*"

To challenge and motivate herself, Gal purposely creates situations in which she feels that she "has no choice" but to succeed. She says that by fostering personal commitment to her goals she ensures that she will fulfill her tasks successfully. Her values are so deeply rooted that they have become inseparable from her perception of success and apparently her parents' encouragement and guidance have endowed her with great

strength and steadfastness, in both body and spirit. She learned not to give up and always to complete what she has begun, regardless of the price she might have to pay to achieve her goals. When she attempts to explain her parents' contribution to her success, she explains how she defines her goals, saying that a person must set a reasonable threshold for herself, which should be slightly beyond her abilities – not too high, but high enough to constitute a challenge: *“My parents... did this well. You set the threshold... a little above your ability and when you attain it, you have made progress, which grants you a feeling of success and the realization that you have taken a step forward.”*

### **Support Program**

Haim frequently speaks about his concept of “home” as a place of love and warmth. He refers to both the “parents’ home,” the home he created with his wife, and the support program. *“It is a feeling like what you experience when you come home, and your wife and daughters kiss and hug you. The support center and the workshop gave me warmth and love, the feeling that somebody is listening to me and that I have a shoulder to cry on.”* When describing the support he received from the workshop, Haim describes what it feels like to cope with difficulties and at the same time to be surrounded by people who aid by reflecting reality more clearly, providing constructive criticism, helping one to analyze situations and make decisions, and supporting the person throughout. He is grateful that in addition to warmth, love, and a listening ear, the program granted him the tools to improve his writing and time management.

As previously mentioned, Haim begins his story by describing his difficulties and struggles, relating that at a later stage there was a turning point in his story, and he experienced closure or what he refers to as a “correction.” He is now able to define his needs, his strengths, and the spheres of his life in which he would like to see improvement. He notes that he has acquired the ability to advocate for himself: *“I now know very well how to express the things I am good at and to describe what I need... In my studies I know how to ask for the help I need from the people [at the academic institution].”*

Rinat also notes that the courage to take action to seek and obtain the help she needs contributes much to her academic success. She defines this as “daring” to act, adding that she was never embarrassed to request assistance from lecturers or fellow students if there was something that she didn't understand: *“I never was embarrassed to*

*ask. This is something I learned... That you must ask. It doesn't cost money to ask a question. You must ask. This is what I would do with lecturers and with friends until I felt more confident about [whatever I was having a problem with]. I am not someone who is easily embarrassed in principle so I had no problem approaching people, but even when it came to my lecturers – I would set up meetings and I would go in prepared and tell them, 'Listen, this is who I am, and this is what I need.'*” In essence, Rinat describes her ability to self-advocate: the ability to be prepared and goal-oriented and to represent herself.

### **Learning Strategies**

Participants also list the support program itself as a success factor. Gal notes that the program taught her to be more organized, focused, and aware, and provided her with helpful new learning strategies. She notes that she was able to study better and to achieve academic success when she was more organized: *“When there are many assignments, I prepare a page to organize each assignment I have to complete according to topic. I create 'organization pages,' otherwise everything gets lost, I become overwhelmed, and nothing gets done. However, there isn't one single strategy but a variety of strategies that I have learned which are related to coping with difficulty and challenge.”* Gal has learned that she attains the best results when she challenges herself and to some extent enforces her own timeframe: *“I set a deadline when to finish the assignments and the steps I have to take to do them, and this helps greatly during the exam period.”*

Mor utilizes the strategies she developed to cope with her learning disability to help her to improve her job-related skills and succeed at work: *“I use all the strategies that are provided in remedial instruction... I don't know any other way. I make all sorts of charts, just like my mother taught me. To do a test in history, I used flash cards, charts, and colored felt-tip pens.”*

The support program granted Lital the tools to enable her to better observe and understand herself and as a result to cope better with her challenges. She says that the program helped her to become who the person she is today, to like herself, and to make appropriate choices. She says while learning to cope with her learning disability she also discovered solutions to cope with challenges in other spheres of her life.

Lital believes that a person with a learning disability perceives things in a unique way and tends to solve problems in an unusual way. She discovered that being more

organized, learning to express herself clearly in writing, and learning how to file and organize material, have been of great help in all aspects of her life: *“Then you need to find the right way. I need to go around with a booklet in my bag and write down the things I want to say during, for example, an acceptance interview. I also would like someone to proofread for me; since this is through my work, to work only on the computer, to work with a journal, with properly organized folders.”*

Lital describes the support program as being an inclusive place that was like "home" for her, where she could learn and speak about her disability freely and feel a sense of belonging to a community. She says that for her the program is a gift that helps her to be calmer, more organized, to develop ideas, and learn how to learn. She credits the program with restoring her self-confidence.

Tal describes the support program as a “lifesaver” and a major academic success factor, adding that throughout the entire period of his studies he maintained an ongoing relationship with the support center personnel. He says the program gave him the confidence and the belief that other people "had his back," saying that until the age of fifteen or sixteen he was convinced that the entire world was evil. However, his experience at the support center has taught him that there are good people in the world, and this has led him to be able to believe in himself.

Rinat notes several factors related to the support program that helped her to succeed and move forward, beginning with how the program taught her "how to learn." She says that the identification of her learning disability, at a late age, was one of the turning points in her life, which led to her meeting the professionals at the support center at the college where she was studying, who taught her how to learn: *“This is to know how to learn, this is not about whether I understand the material or not, but to learn how to learn.”* The exposure to learning skills opened a window to the academic world and granted her the confidence in her ability to cope with academic studies. She says it also helped her to understand herself better, to assess her abilities, to learn and to succeed, and to acquire the tools to become a proficient learner. The assessment clarified her abilities and difficulties, and in her opinion, this awareness is essential to the achievement of success: *“I believe that the secret to success for students with a learning disability is the desire to invest in themselves, the awareness of their disability and the knowledge that they can help themselves.”*



## Defining Goals

Mor's statements indicate that personal choice plays a decisive role in the ability to muster strength. She says that she chooses her life path by defining her objectives and goals to achieve them, and that her orientation toward those objectives and self-realization are the factors that accompany her ongoing internal discourse: *"I feel that everyone has some sort of objective or destiny. And my destiny is... to complete a bachelor's degree and to work."* She says that it is especially important to feel "at one with the self": *"To feel that you did not lie to anyone, including yourself."* Her choices highlight her desires and beliefs – the components that help her to be at one with herself. She strongly objects to the belief that people should behave according to the norms and expectations of others or feel compelled to realize the dreams of other people: *"I do not do things that 'need' to be done, I do things based on the belief that I need to do them for myself, first of all for myself."* Mor says that every person should define his or her own objectives and goals, and that if he or she then invests the necessary effort to attain them, success will be achieved: *"I am very much at peace with what I am, I do not want to be somebody else."* She stresses the connection between an honest assessment of her abilities and the determination of her goals, implying that she is aware of her strengths and weaknesses: *"Every goal that I set – I achieved. It may be that I know what I can [realistically] demand of myself."*

Tal's statements indicate that he may not be adept at defining clear goals for himself or acknowledging that he has achieved success. Nevertheless, he understands that to achieve success he must identify a goal and take steps to attain it: *"A goal is needed, a dream is needed, to aspire to."* Although Tal compares his past to his present and sees considerable differences between them, it is apparent that even in childhood he tried to realize his goals, and at various points during the interview he mentions his refusal to accept an unsatisfactory situation.

According to Nov, a main factor in his success is tenacity of purpose ("stick-to-itiveness") – persevering in whatever it takes to achieve the goals that he set for himself despite the difficulties. He feels that he has shaped his life and succeeded due to his stubbornness, perseverance, ability to transform a difficulty into an advantage, and the understanding that difficulties are part of the path to success. He stresses that he has the strength and the ability to change situations that are not suitable for him: *"I worked very hard for my successes. I sweat, I dream, I believe, and I walk my own path."* Nov is also

able to transform a difficulty into an advantage, often attempting to merge the two, or to view his success through the prism of difficulty. He also believes that his success derives from his ability to both adapt himself to the environment and to change the environment to better suit his needs. He also endeavors not to fall behind with his studies.

Along with the preceding, Nov notes the external factors that help him to succeed. He first mentions the support program, which he describes as a nurturing “greenhouse” that provided him with love, generosity of spirit, and professionalism. He says that the support program provided him with the skills to be better organized, to write high-quality papers, and to search for material. Among the people he credits with significantly influencing his development and his current perception he lists his parents, when he draws a clear distinction between them, (his father was less supportive and more demanding) and a psychologist who taught him to accept himself in all his imperfection. The relations between Nov and his parents are complex and contradictory. His mother supports and encourages him, and he describes her as the motivating force and source of inspiration for his life choices, such as his love of his country and of hiking, and his ability to orient himself. He says that she “reflects his successes back to him,” mentioning that she framed his high school diploma and hung it on the wall. She also set him his next challenge – the acquisition of an academic degree. Nov seems to believe and appreciate that she is trying to “protect” him by steering him toward an academic subject that would not be too difficult for him.

An additional success factor mentioned by Rinat is the ability to integrate motivation, effort, and adherence to a goal. She stresses that she aspires to perfection, is willing to invest endless resources, is motivated to do well by delving deeply and thoroughly into whatever she chooses to study and won't give up until she succeeds: “*I was always hungry for learning.*”

### **Help from the Environment**

Throughout her interview, Mor notes the factors that have helped her, and prominent among them is the support program that provided her with many tools and strengthened her willingness to accept help from others. The program taught her to accept herself and to function more efficiently and most importantly that difficulties can be broken down into more manageable units, for each of which a solution can be found. Now that she is willing to receive assistance from others she can benefit from a supportive

social and family network, which extends to all areas of her life. She has found this especially helpful during exam periods, although even when it comes to managing her household she says: *“All organization is difficult, it's tiring... But truly I have a good relationship with my father, my mother, my mother-in-law, they are all very helpful.”*

Lital notes her struggle with the surrounding environment and says that she feels she must encourage other people to change their behavior and deal with a situation that they are often unaware of and would prefer to ignore.

In addition to the self-containment, self-awareness, and self-acceptance, with which a learning-disabled person must contend, Yonit frequently compares between her close and distant environment. She believes that the people surrounding her also have a responsibility to provide support. She highlights the group as an assistive social network and the family as a provider of assistance and understanding which contribute to success. She maintains that support and containment are crucial for people with learning disabilities: *“A place where they accept you as you are and give you ongoing support.”*

When Haim speaks about success, he differentiates between the two places which provide the factors to achieve it – those within the person and those found in the external environment. Regarding the former, he lists self-awareness (a trait that he developed thanks to the ability to demand his due), self-acceptance, and inner drive. In the context of external factors, he mentions the help he received from others. By integrating these factors, he was able to change and develop and come to view the world from a more optimistic perspective. He further learned to be more flexible in his thinking and to have a more positive attitude toward his learning disability. These help him to see and appreciate the good things in his life and grant him strength, so that even when he fails, he finds a way to persevere and tells himself that the difficulty is part of the process. The roots of this approach stem from his childhood when he had difficulties with his schoolwork and managed to deal with them. Despite the challenges he continued to do his best, believing that: *“If I do not succeed, I can try another direction.”* He says that he has the gift of the insight that failure can lead to growth. About how success is also influenced by the external environment, Haim says that recognition from others transforms success from subjective to objective and that this "visibility" to, or "being seen" by others motivates him to persist in his efforts to prove to everyone, and especially to himself, that he has what it takes to succeed. He says that the ability to accept help from others also contributed to his success. He frequently uses the expression “holding

hands,” to explain that he isn't alone, saying that in every chapter of his life, from elementary school to the present day, he knew how to elicit help from others. During his childhood he was helped by a girl in his class and today he is supported by his friends, his parents, and his wife. He notes that at first, he did not understand the power of this assistance and that only later did he become aware of the importance of interpersonal relationships to lever his own advancement and as a lever for him to contribute to the advancement of others.

Tal attributes great importance to the way in which his environment evaluates and responds to him: *“You did well,” people say this when they think that you have succeeded, but apparently you really have succeeded.*” He says that he doesn't feel the certainty within himself that he is a successful person and only began to feel a sense of satisfaction in recent years when others expressed appreciation of his actions. He says that the environment acts as a "mirror" reflecting part of him he hadn't been aware of, such the appreciation he refers to. For many years Tal believed that people – that the entire world – was evil and he felt the absence of a guiding, nurturing, and strengthening hand. He reveals that as a child he experienced failure, humiliation, and lack of belief in others: *“Apparently my environment when I was a child had a great influence on me, and some of that influence still affects me today. I experienced a lot of failure, in the most personal, most intimate places people did not know how to give me direction, I was constantly feeling humiliated, as though I was being told, ‘You are zero’, ‘You are not successful’, ‘Nothing will come of you’.*” Things only changed when Tal's high school basketball coach formed a close and deep relationship with Tal and continued to support and encourage helped him when he was at college. Tal now believed that there are good people in the world as well, and he began to develop trust: *“People, are not only good, but there are also amazing people, who led me to believe in myself.”* He is well-aware of the people who helped to shape his personality and encouraged him to believe in himself, and he says that he can distance himself from evil and to choose goodness.

### **Ability to Persevere**

Mor understands that to succeed she requires the "space" or freedom to do things her own way. She has learned that being under pressure limits and inhibits her. This theme recurs in several contexts, primarily when she describes conversations with her mother or with her husband. She says that it is counterproductive to pressure her and expect her

to behave in a certain way: *“It is impossible to pressure me. To my husband I say all the time: if you corner me – nothing will be achieved, but if you let me loose, it will be alright.”*

Mor is willing to do things that are difficult for her when she knows that they are to her benefit. For example, she knows that if she swims regularly, she is better able to deal with pressure and so even on cold days she gets herself to the pool because she knows that when she doesn't feel pressure, she can study more effectively.

### **Belief in the Ability to Learn**

Lital lists several factors that encourage her to persevere to succeed. The first and most prominent is the desire to prove first to herself, and then to the rest of the world, that she can succeed. Thus, she says that in the academic context: *“I would study for a doctorate, since I have a need to prove to myself that I can succeed at my studies... In the eighth grade when I took the psychotechnic test they did not believe that I would finish high school.”* Lital feels as though she is always “fighting against the odds” and her efforts and abilities are not sufficiently appreciated, and this encourages her to do her best to prove to herself and to others that she can succeed. She notes that her choice to study within the humanities derived from her need to prove that she could excel in a field characterized by words, and not only in the sciences, where it was clear that she could succeed: *“I have a need to study in the humanities to prove that I can succeed in this field, and I know that is absurd. It would be much easier for me if I studied economics or computers, and I would be more successful, but that's not the choice I made.”*

For Yonit, success derives from self-acceptance, or from the feeling of being at peace with yourself, and from willpower, especially in an academic context. She divides self-inclusion into performing significant acts and to possessing a high level of self-awareness and self-acceptance.

Tal emphasizes his ability to believe in himself as a factor for success, and highlights the fact that he has achieved financial independence and lives on his own as crucial to his sense of success, especially since he says that others did not believe that he was capable of doing so and were sure that he would fail: *“Leaving home? In my eyes, yes, this is a very great success, and it is also a success that I earn my own livelihood. To be independent is success, very great success.”* His statements reveal the two factors which he believes are necessary to achieve success – belief in himself and the desire to

prove to others that he is capable. He says that he made a conscious choice to examine his life and to interpret it in an empowering way, to see the positive elements, and to focus on the present rather than the failures of the past. Additional character traits that he lists as helpful are high motivation and persistence. Even during adolescence, he proved that he was unwilling to give up on himself, when he displayed high motivation and was careful to befriend people whom he identified as positive.

Furthermore, as a teenager Tal did his best to take care of himself, to be in control and not to exhibit wild or delinquent behavior: *“I took good care of myself. I like to be in control... to be good, not to get into trouble. Of course, this is a matter of individual personality, but I made the choice to be in a good place, to focus on good things and not get involved in situations that lead to delinquency. I can't say whether it was a conscious or unconscious choice – I have no idea. I can't say. Primarily I did not give up.”*

Tal also highlights the decision he made not to fail: *“You cannot fall. It is forbidden for you to fall.”* He strongly believes in the individual’s ability to control his own life and that a person is first and foremost responsible for himself.

### **Self-Acceptance**

With respect to self-awareness and self-acceptance as success factors, Yonit says that she began to accept herself following the diagnosis of her learning disability, which was when she first understood the phenomena she was compelled to deal with. Her learning disability was diagnosed at a relatively late stage in her life, when she was in high school: *“I must say that until I reached high school, I was not aware that I was learning disabled. I thought that I was just a person who had difficulties... And then I had an assessment.... which greatly helped me since this led to considerable self-awareness.”*

Another important success factor, according to Rinat, is the desire to prove to herself and others that she is capable: *“To prove to myself that I can do it. I still have that urge today, more so in some areas, but especially when it comes to my major aspirations, the big ones. I demand a lot of myself, so that I will reach a certain threshold.”* She also says: *“I have a constant desire to prove myself. I always want to learn.”*

### **Humor and Optimism**

As previously mentioned, Haim views optimism and humor as an important success factor, and he often refers to the “half full cup.” *“I made a decision to always look*

*at the half full cup"* He believes that each person chooses whether to perceive the cup as half-full or half-empty, saying that every day he chooses to see it as half-full. He also attributes great importance to stubbornness or perseverance as a success factor, pointing out that the path he has travelled was long, arduous, and exhausting *"There were times when I chose to laugh at myself, that I could not read or understand the learning materials .... I decided it was a joke. "* He says that in the beginning, there were no signs of success, and he was obliged to develop persistence, and "combativeness." ..... *thanks to the positive thinking I was able to persevere and insist .... all the way to success"*

As mentioned above both Nov and Tal also made a conscious choice to view their lives in a positive and empowering manner and to persevere tenaciously despite setbacks. Nov notes that positive thinking was not automatic for him but a thinking style he developed over the years as a result of finding a way to deal with the difficulty and thus said: *"Originally I am not a person who thinks positively, it took many years of difficulty to reach such thinking"* Tal mentioned that his parents educated him to be optimistic: *"The parents told me to always be optimistic, at most you will find out that it is a lie".*

### **Journey**

In this study it emerges that following participation in the support workshop the students perceive success as a process or a journey, to which they attribute more importance than they do to the final product, which is measured in grades As Lital said: *"I have come a long way, like a journey in the middle of the desert to get to where I am today."* They perceive success as something relative, expressed in small increments, and they all seem to be motivated to engage in meaningful learning by a sense of mission and destiny Nov noted: *"I tend not to look at the long distances but to look at the small steps I was able to take on the journey. "* They express great hope and belief in themselves and in their ability to cope, to overcome, and to succeed. They believe also that even if one path forward is blocked, another way will be found.

Taken together, the interviews reveal that for all the students who participated, contending with a learning disability involves experiences of deficiency, difficulty, and untapped potential, and these tend to accompany them throughout their lives, influencing all spheres – studies, the couple relationship, friendships, work, and extended family. From an emotional perspective they tend to experience stress and frustration.

## 5.5 Summary

To summarize the findings, chapter one can get the impression from the students' voices that there are many factors that help the student's success with a learning disability and has led to an improvement in their academic self-efficacy. The factors uttered by the students were repeated many times in the first interview and in the second interview, so that it could be determined that they constitute a common denominator to the life story of these students.

The first factor that recurred in almost all the students interviewed was **parental support** from childhood to adulthood. A parent's belief in his son's ability to learn and succeed despite learning disabilities has helped students improve their academic self-efficacy, in addition to the educational support provided by their parents.

Another and very significant factor are **the support from friends**. It is easier for students to get help from their classmates than outsiders. The students talked about the fact that when their peers accept them as they are and help with learning, it significantly increases their motivation and academic self-efficacy.

The students further state that the **ability to accept themselves** as they had greatly helped to improve academic self-efficacy. The students reported that he decided to ignore the difficulties, look at the "half-full glass", and focus on achieving the learning goals.

Other factors are related to the **managerial functions** that most students with learning disabilities have difficulty with and therefore goal setting and perseverance are significant on the path to learning success.

All students mentioned the path to achieving an academic degree as a **difficult journey** and what helps to go through the journey is the optimistic vision and use of a sense of humor. The student points out that marching towards small goals helped them achieve the big goal. Small successes strengthen the belief in the ability to learn provided that all other factors mentioned join the circle of support.

From the second interview, after the students participated in the Narrative Intervention Program based on the Holistic Support Model, it emerged that the group was very cohesive and supportive friendships were formed. The students noted that the **learning strategies** and **time management tools** within the program, greatly improved the state of self-efficacy.



Therefore, it appears that the Holistic Support Model providing emotional, cognitive, and social support, proposed in chapter four, entitled Research Methodology, meets the myriad needs of students with learning disabilities and can assist them to achieve the self-efficacy in their studies that leads to success. This will be described further in the next chapter.

## Chapter 6: Discussion

This study uses the narrative research approach to arrive at a deep understanding of the life stories of a group of students with learning disabilities and the paths they travelled to reach academic studies. Their stories are scrutinized to uncover their perceptions about learning disabilities; the impact of their learning disabilities on the choices they make; the reasons for their success at their studies, and their insights and opinions about the efficacy of the assistance they received through the intervention program provided by their colleges. The Discussion chapter delineates an integrative picture based on the research findings and compares the different themes, presented in the previous section, in the context of existing knowledge about the learning process as it is experienced by students with learning disabilities. In accordance with narrative research methodology, the discussion of the findings describes and explains the relationships between the themes that arise from the research questions. These relationships led to the creation of the Extended Holistic Support Model anchored in data extrapolated from this study (see Figure Number 4: The Extended Holistic Support Model).

This chapter is structured as follows.

The first part of the discussion describes the relationships between the four themes presented in four major themes derived from data analysis of interviews (presented in Research Findings), which are based on the first and the second research questions:

- What are the general characteristics (central categories and main topics) of the personal narratives of students with learning disabilities before and after their participation in the intervention program?
- What are the characteristics of the personal narratives of students with learning disabilities with a focus on chosen themes: perception of disabilities; effect of disabilities on learning; perception of academic self-efficacy; and the factors which contribute to success despite disabilities?

The next section will deal with the third question:

- What are the perceptions of students with specific learning disabilities about the Narrative Intervention Program in which they participated. What are their experiences of participation in intervention program based on the principles of the

narrative approach, and what are their perceptions regarding the influence of the participation in the program on their personal narrative and everyday life?

As noted in the chapter titled Research Methodology, a broad account of the themes arising from the students' statements is presented and their common denominator is identified, to determine the efficacy of the proposed support model (see Figure Number 2: The Holistic Support Model). Finally, the contribution of the research findings to theory and practice is described, followed by the research limitations, and proposed future directions for research.

## **6.1 The Students' Perception of the Learning Disability and the Extent of Their Self-Efficacy and Success in Academia**

The first research question examines and compares the learning-disabled students' perceptions of their chances of succeeding in the academic world both prior to and following participation in the intervention program. The students who participated in the intervention program were asked in an interview with them what their narrative characteristics were due to the fact that they suffered from learning disabilities (according to the first research question in the methodology chapter). Since the students came to the Peres Academic Center when they had already come a long way alongside dealing with learning disabilities, they seem to have formulated ways of emotionally and academically coping that they experienced while in elementary and high school. The common denominator that emerges from their words is that to deal with a learning disability they had to first and foremost accept the disability as part of their personality structure, just as a person has a visual, hearing or any other disability. After the acceptance phase comes the phase of building self-efficacy. To build self-efficacy, they needed both academic and emotional support. Most students noted that emotional support came from two main sources: support from the family, especially support from parents, and social support that came from the peer group. From their words, it seems that the emotional-social support has taken a very significant place in the lives of these students as children and adults.

Despite the journey that the students who participated in the study went through, they came to the higher education system with fears, anxieties, and a lack of faith in the abilities to study and reach an academic degree. Their consent to participate in the intervention program came from a place of uncertainty about the ability to succeed in

academia. The students thought it was a different system from what they were familiar with to date and seemed to have to rely more on themselves than on the environment that would support them (according to a second research question).

The students expressed joy in participating in the intervention program with the goal of gaining managerial tools for coping effectively with learning as well as receiving tools for emotional coping. In interviews conducted with students after their participation in the intervention program, a narrative emerged of the need to support students with learning disabilities. The students' position regarding the support program focused mainly on the socio-emotional aspect, rather than the academic aspect. In their view, it is social and emotional support that enhances academic self-efficacy. The students believed that the strength of the group was in joint support and creating a common denominator for dealing with learning disabilities through sharing emotions and thoughts.

After the participation in the Narrative Intervention Program based on the Holistic Support Model, students see themselves as willing to accept tools of learning strategies and tools to improve managerial functioning, in addition, students expressed a position that the emotional support received to date from parents and family has shifted to social support, in addition to spouses if any.

Table Number 14: The First Research Question: Students' Perceptions of the Factors for Success

<b>Before the participation in Narrative Intervention Program</b>	<b>After the participation in Narrative Intervention Program</b>
1. Educational support 2. Emotional support mostly from parents	1. Educational support 2. Emotional support 3. Social support from family, friends and peers with SLD

Source: Own research

The essence of the research question addresses the study participants' perception of their learning disability, and a latitudinal analysis of their responses indicates that there is no uniform perception. Some students view the disability as both an advantage and a disadvantage, and report that they accept their disability, while at the same time mentioning the "price" that the disability costs on them. It seems that in their perception of their disability the advantages and disadvantages are intertwined. Sometimes they

begin their statements on a positive note and end in a negative tone, or the reverse. Hence, it appears that the perception of the disability is dynamic and that it changes and develops in accordance with life experiences and events and based on interactions within each individual and between each student and his or her environment. As such, the perception of the disability reflects the development of the student's personal identity (Kozminsky, 2002). An identity emerges as the result of the processes of creation of identity, extension of identity, and the altering of identity following self-evaluation of self-image and self-efficacy. The students seem to have undergone a complex process in the building of their identity, comprised of life events, learning attempts, experiences of difficulty, interactions with teachers, with other students, and with parents – all these past elements combining as inseparable parts of their identity. Moreover, these elements exert influence on the present and affect future decisions pertaining to couple relationships, family ties, employment, and so on.

This chapter shows that the students learned to live with their disability and to accept it as an integral part of themselves during course of life. During the intervention program it became clear to them that they learned to cope with it, discovered that it has its advantages, and learned how to contend with the reactions of other people following exposure and/or discovery. Students learned that it is possible to seek help from friends, lecturers and learn properly through learning strategies. Nevertheless, the disability is always present, even if lurking in the background, and it has negative associations, such as a sense that one is flawed, a feeling that one is compelled to adjust in order to live with it. This duality regarding the disability is confirmed in the research of Dahan and Zadok (2012).

### **6.1.1 The Patterns of Student's Perception of Learning Disability**

The students' statements regarding their perception of their disability may be categorized in the following three ways:

1. The disability as a disadvantage: acceptance of the disability and acknowledgement that it takes a toll
2. The acceptance of the disability: a process of rebuilding, in which the individual is required to identify sources of strength, recognize weaknesses, and discover ways to cope. This is a dynamic process that comprises several stages: recognition, awareness, understanding, acceptance of the disability, and

development of an action plan. Several the students succeed in rebuilding their perception of their disability, while others adhere to their original perception; as mentioned, this is expressed in the transition from a positive to a negative description (or the reverse) of the disability in one sentence.

3. The rebuilding of the disability: many students express acceptance of the disability as they rebuild their perception of it. Some note that the disability is a disadvantage, but then quickly express reservations and clarify that they do not see it as a defect. Finally, their statements about their perception of their disability indicate that the rebuilding of that perception enables them not only to take control of the disability but also motivates them to act in general (Gerber, Ginsberg, & Reiff, 1992).

### 1. The Perception of the Disability as a Disadvantage

Most of the students describe negative experiences related to their disability, which make them feel alien and different, estranged from others, and lonely. They refer to their disability with words like: “flawed,” “dumb,” “lazy,” “crybaby,” “weakness,” indicating that the disability influences a wide range of areas and is often perceived as a cognitive, behavioral, and emotional limitation, lacking any positive aspects.

Negative emotions pertaining to the disability are also mentioned in Einat's study (2000), which describes the struggles and suffering of learning-disabled people throughout all their years of study, from elementary school through university. She describes irreversible harm to their social and emotional selves which shapes their attitude toward themselves and the rest of the world.

Several students note that having a disability is tiring, with one describing a sense of exhaustion deriving from the necessity to be constantly coping with challenges related to various aspects of life. Others say that their disability is an inhibiting factor since it often compels them to discard their dreams and replace them with more pragmatic alternatives.

### 2. Acceptance of the Disability

The students present a very sober view of their disabilities. It is clear from their statements that they understand that their disability will accompany them throughout their lives and that they must learn to live with it, to cope with the existing situation, and to acknowledge its disadvantages. Some describe it as a natural phenomenon and an

inseparable part of their identity. They do not struggle against it but rather accept it. They understand that their disability presents them with problems and challenges and consequently they devise coping mechanisms. In other words, the rebuilding of their perception of their disability leads most of them to begin a sentence with a negative characterization of their disability and then immediately shift to its positive expression (Reiff, Gerber, & Ginsberg, 1993).

### 3. Rebuilding the Disability

According to Reiff, Gerber, and Ginsberg (1993), rebuilding is the process that the learning-disabled person experiences when he or she moves from a focus on the difficulties associated with their disability to an awareness of its positive characteristics and aspects. This process contributes to coping and allows the challenges to be overcome. In the process of rebuilding, a person shifts from defensiveness to a proactive position. Through rebuilding he succeeds in identifying and strengthening his belief in the positive aspects of the disability. The identification of positive aspects facilitates acceptance of the disability. This process empowers a person and serves as a source of strength for the necessary ongoing coping. The students' statements are commensurate with the components of hope that Deegan (1988) notes in his article: identification of the problem and then acceptance, commitment to change, focus on strengths and not weaknesses, view to the future and not the past, taking small steps of progress without anticipating great changes in a short period of time, reordering of priorities, and cultivation of optimism.

The students seek to make the most of their situation despite their disability rather than mourn the fact that they have it. The students note the need to "make friends with the disability," to see the half-full cup, to see the disability as an opportunity, or a source of growth. Many recognize that it is necessary to transform the disadvantage into an advantage.

Stubbornness or persistence is often mentioned as a major component in the process of rebuilding toward achieving success, and this is supported by the professional literature (Andersson & Bergman, 2011). Participants in the study also cite the courage "to dare to do" as an important trait that helps them to rebuild their lives. Many confess that their life choices, such as what to study, or what type of employment to pursue, are determined to a great extent by their disability. Some say that the challenges they contend

with in their everyday coping allow them to see the world differently, with greater sensitivity.

They also describe experiencing the drive to continue to prove to others and to themselves that they are worthy, and that what they achieve is not temporary or transient, adding that they must exert ongoing effort to maintain their achievements.

Another manifestation of the acceptance of a disability is the desire to be a model for imitation. In the study carried out by Andersson and Bergman (2011), in which they collected personal stories, it emerged that people with a learning disability had a deep desire to share their experiences with others and to present themselves as a source of inspiration. Other studies show that in the workplace people who managed to overcome their learning disabilities became models of imitation and inspiration for others (Ferri, Keefe, & Gregg, 2001; Riddick, 2003; Vogel, Hruby, & Adelman, 1993). The students' statements also indicate that they are gratified by the knowledge that they serve as a positive example for others.

The perception of a disability as an advantage is an engine for action in people with a learning disability who want to prove to others and to themselves that despite the obstacles, they can succeed. Corkett, Hein, and Parrila (2008) note that one of the motivational success factors for students with a learning disability is the desire to prove their capabilities to others, who doubted their ability to succeed.

One of the disadvantages noted by the students is related to their capacity or stamina, as many feel that they are constantly tired, "carrying a load," and caught up in a never-ending race. However, at the same time, the perceived need to always be trying to move forward with their burden may make them feel obliged to improve the quality of their learning, to succeed in better organizing themselves, and to accept help from the surrounding environment.

Students with learning disabilities also mention that their situation may have a negative effect on the emotional aspects of their couple relationship and their relationships with their colleagues at work. Another disadvantage they describe is that they are often forced to reveal their disability, saying that they pay a heavy price for the disclosure, which makes them feel exposed and vulnerable and believe they are perceived as weak. Conversely, the disclosure is also described as a trigger for change, struggle, increasing another's awareness, and changing the surrounding environment.



A clear-headed vision of their situation is reflected in the students' ability to recognize and talk about both the disadvantages and the advantages of their disability. Some of the advantages listed are associated with a change in the perception and the definition of the problem – sometimes referred to as rebuilding, as described previously – while others are related to the ability to request and accept help, when necessary, to develop organizational tools, and primarily to persevere in the struggle against the obstacles and not to give up. These components – self-acceptance, rebuilding, tools and strategies, and perseverance – were noted as significant success factors.

Some students include humor among the therapeutic tools that help them to accept and cope emotionally with their disability. “Black humor” and jokes about having a learning disability have proved to be an important tool to mitigate pressure and anxiety and facilitate acceptance of their situation.

Humor also serves as a stress reliever in social situations. When emotional tension is created in a social setting, the tension is accompanied by negative emotions. The use of humor, as a surprising, new message acceptable to all, may provoke a spontaneous response of laughter that dispels the negative emotions. It is possible that the use of humor in these situations is also an expression of self-defense, employed when one fears the listener's reaction, or fears being flooded with negative emotions (Wyer & Collins, 1992).

Table Number 15: Second Research Question: Students' Perception of Their Learning Disabilities

<b>Before the participation in Narrative Intervention Program</b>	<b>After the participation in Narrative Intervention Program</b>
Life experience has taught us to accept the disabilities and live by their side.	<ol style="list-style-type: none"> <li>1. Accepting disabilities.</li> <li>2. "Normalization" - The student is not alone, there are other students who suffer from learning disabilities.</li> <li>3. Take care of my needs as a student with a learning disability.</li> <li>4. Academic self-efficacy</li> </ol>

Source: Own Research

### **6.1.2 The Students' Perception of Academic Success**

With respect to the influence of the learning disability on their studies in academia, students reported that it extends to the choice of what to study, the entry into academia, and their experience during the course studies. It is surprising to discover that

such students have such a strong desire for higher education, despite the difficulties they encounter over their school career, from elementary through high school. In many cases they are required to take preparatory courses or to attend pre-academic institutions to be accepted to the programs they choose. Sometimes the extra courses are ongoing for the duration of their studies. Some students receive a "conditional acceptance," contingent upon achieving a mean grade of 70 in their first semester.

The students state unequivocally that they must invest more effort in their studies than the average student. Among the motives they list which propel them toward higher education regardless of the hard work involved are: to prove that they can do it; because they identified a field in which they believed they could succeed; or because they discovered a field which they view as a mission or something they felt internally motivated to be part of, stressing that pressure from their surrounding environment was not a factor in their choice.

An analysis of the students' statements about their perception of success After the support program reveals seven major characteristics of success: (1) success as a process or a journey, (2) success as perseverance toward the realization of a goal, (3) success as a relative component (4) success as a meaningful activity, (5) success as a measurable product, (6) success as self-efficacy or self-acceptance, including a person's belief in himself or herself, and (7) success in society's eyes.

### 1. Success as a Process

All the students refer to success as a process of change and of transition from difficulty to coping and cognitive change. Many describe the process as a journey, as a bumpy road, which includes bypasses and intermediate stages. They see that their heightened awareness allows them to overcome obstacles. Most say that to succeed they had to break down the journey into separate stages and tackle each one on its own until they completed it, before moving on to the next stage. One small step leads to the next and the journey unfolds. The students are aware that success does not occur immediately but requires planning, coping, and ongoing investment; that it comprises stages; and that it requires perseverance. The concept of success as a process that requires continuous investment also appears in Gladwell's book (Axelrod, 2009).

## 2. Success as Perseverance

Tenacity of purpose or “stick-to-itiveness” is also mentioned by all the students, who also describe defining a personal goal that they want to realize. Some note that the act of setting the goal propels them along the path to success, in that it directs and motivates them. Several say that one must be very careful about choosing a goal and ensure that it reflects a person’s strengths and desires. Others note that often the first “doorway” to whatever they wanted was blocked to them, and so they were compelled to search for and find alternative ways to succeed. Mangels, Butterfield, Lamb, Good, and Dweck (2006) note that the ability to surmount failure and to succeed is connected to a thinking pattern. They maintain that the interpersonal difference lies in an individual’s starting point, in whether a person possesses basic belief in his or her ability to solve a problem. In her research about students’ beliefs about their abilities she discovered that it is possible to classify them into two groups: those who believe that the ability changes according to the degree of willingness to cope and solve problems, even if the problems appear to be unsolvable and the second group which comprises students who do not believe in their capacity to change their situation and thus accept the situation as it is.

Most students note that they believe that a refusal to give up is an important part of the perseverance and investment which lead to the realization of a goal. Others describe themselves as possessing the willpower to persist until they realize their goal.

## 3. Success as a Relative Component

The third characteristic of success, according to a number of participants, is its relative nature: “*So I didn’t get 100, I got 80. I say that getting 60 or 75 is also success, everything depends on the person.*” They define success as the attainment of a realistic and appropriate objective and not a goal set in accordance with the expectations of others. Many believe that a person should be measured “against himself” in the context of his or her capabilities, situation, and environment and not be judged according to an objective standard or uniform scale.

## 4. Success as Meaningful Activity

Students list a fourth characteristic of success as the ability to act motivated by meaningfulness. They appear to perceive success as an activity stemming from meaningfulness, from a sense of mission or destiny, even though sometimes the activity strengthens the difficulty inherent in the disability. The belief is that engaging in

meaningful activity leads to a feeling of wholeness and calm. They mention that they all make choices that derive from their own desires and do not necessarily conform to the requests or expectations of the surrounding society. The choice to engage in meaningful activity because it is something loved or enjoyed, is also expressed in the choice of what to study and is not only manifested in choices about engagement. Similar findings emerge from the research conducted by Fink (1995), who discovered that desire is a major success factor. When they have a strong interest in a specific topic, people with learning disabilities are motivated to continue to advance, and even to become experts in their fields. The combination of making a personal choice and engaging in meaningful activity was found to be a central component in increasing motivation, and therefore also in assuring success (Kaplan & Asor, 2004). Several students also perceive their ability to help others as a form of success. This frequently occurs after a student has received assistance himself. This assistance gives rise to a sense of growth, and often the pleasure of this feeling encourages one to "pay forward" what he or she has received. Several students describe their success as being able to pass on what they have learned and experienced, for instance, in the intervention program. Thus, they hope to spare others the difficult experiences they underwent.

##### 5. Success as a Measurable Product

Students also perceive success as a measurable product, such as money or an academic certificate or degree. Most studies that include an element of gauging success refer to such measurable products (Reiff, Gerber, & Ginsberg, 1993). The students say that earning the following measurable products makes them feel that they have succeeded in the same way as people without disabilities: certificates, advanced degrees, receiving desired positions at work, promotions at the work, and financial achievements. All these give rise to feelings of independence and satisfaction. The tangible representation of success serves as proof for the student that despite the difficulties and effort involved, they can achieve it. Some state that they only derive enjoyment from their achievements now when they attain them, but not daily. However, when they feel happy and proud, those emotions override the earlier feelings of difficulty and frustration. With respect to their studies, the students are proud of their achievements on tests. At the same time, some level complaints at society about the fact that the major, and often sole, method of assessment is based on measurable products.

The students' statements illustrate the complexity of their perception of success. Most describe success as adhering to an internal process, to a journey toward a goal, in which one must persevere and perform meaningful actions. For them, success encompasses developing self-awareness and self-acceptance in the context of their learning disability, in learning to trust, and in reaching the point where they have a positive self-image. The common denominator here is engagement in an inner process. Most students do not focus on the final product but rather on how to arrive at it. Only a few measure their success in terms of external measurable criteria.

#### 6. Self-Efficacy

The individual's ability to believe in himself and remain faithful to his desires is another definition of success according to the students, who relate that people close to them have not always supported their choices and on more than one occasion have tried to convince them to make a different choice. However, most say that they remained true to themselves and to their aspirations. Since an individual's ability to be true to herself and her confidence in her choices reflect his or her self-image, the higher the self-image, the more belief the individual tends to have in her abilities, the more courage she will have to tackle challenges, and the more likely she is to persevere and ultimately to succeed. Orth, Robins, and Widaman (2012) also found that self-image is a central and important component of success or failure in important areas of life: emotional areas, interpersonal relationships, and satisfaction at work.

Burden (2008) reviewed 28 research papers about the self-image of learning-disabled students. He maintains that the level of self-image changes over the course of a lifetime, whereas the self-image of pupils in elementary school and middle school is lower than it is for the high school student or adult with a learning disability. Indeed, it appears that among learning disabled students a low self-image is related to childhood experiences at school, and the inability to acquire basic skills, such as reading and basic arithmetic. However, as adults their self-image seems to improve as they interact with the broader circles of personal identity, professional identity, employment, and so on. An explanation of this change is found in the research of Heiman and Precel (2003), who interviewed thirty students with learning disabilities who are currently studying in academia, about the way they see themselves in the present and how they viewed themselves during childhood. They were asked to describe their coping strategies in the past and the present and to describe how they foresee their future. Although the academic

obstacles are often like obstacles with which the students coped in their earlier years. Some of the students reported that after childhood they adopted effective coping strategies and developed resilience using self-encouragement and optimism, which are not strategies that they employed in the past. In other words, the description of the past self-image was different from the present and future self-image. In this study as well, the students describe a difference between their self-esteem in situations related to self-acceptance and belief in their abilities, and about other spheres of their lives.

A person with a learning disability comes to understand that the disability is limiting, and therefore it is likely that he or she will have problems with self-acceptance. The word “disability” indicates a lack, something spoiled, so that it may be harder for such a person to like, believe in, and accept her or himself. This is even more likely to be the case in a society that values perfection. Self-acceptance is influenced by messages from the surrounding environment – as conveyed by parents, the education system, and the peer group. It is an outcome of interaction and of feedback in response to actions and levels of achievement. According to Margalit, the reciprocal relations between the person with the disability and significant others –family, education system, society, and peer group – are important and influence emotional development and self-image.

Sometimes the environment directs the individual to function to attain achievements that it perceives as embodying success, such as pursuing a particular course of study or profession, or conversely, it may convey a message that due to his learning disability, expectations of that individual are lower than they are of others. In some cases, it may steer an individual in the direction of a life path which he doesn't want.

For the participants in the study, their belief in themselves and their self-perception function as an internal locus of control, despite any negative messages from the external environment.

### 7. Success in Society's Eyes

For the students, success in the eyes of society is related to the type of feedback that they receive from their surrounding environment and whether it is commensurate with their own beliefs about themselves and their self-image. It was found that whether a person believes and accepts the feedback transmitted by his environment depends on his self-image, which is changing and developing throughout a person's life based on his or her experiences, including successes and failures. The students understand success through the eyes of another and are willing to obtain feedback primarily from their peers,

regardless of the degree of success which they experienced in the past during their school career. The relationship between self-image, belief in the self, receiving feedback, and success, is also expressed in the experience of negative feedback received by people with a learning disability who as a result had a low self-image (Northway, 2005). It is noteworthy that participants in the study who achieved academic success and enjoyed a sense of "repair" or "correction," are those who received appropriate support and as a result accumulated success. As previously mentioned, these students are more willing to accept feedback from the environment (Noordewier & Stapel, 2011).

As a rule, the students express very little interest in the opinions of others about their lives and their choices, but in the context of the workplace they exhibit great interest in feedback from the environment – in what others think and tell them about themselves. Their statements also indicate that they are anxious to undergo external assessments to confirm their success. People with a learning disability seem to crave appreciation and positive reinforcement from those around them, and the students attribute great value and significance to positive assessments, because in many cases both they themselves and their surrounding environment had grave doubts about their ability to succeed.

Moreover, in the absence of external manifestations of success, some find it difficult to perceive themselves as successful. Several note that although they have at their disposal both external and internal data indicating their success, in order to internalize their success, they require explicit confirmation from the external environment.

## **6.2 Learning Disabled Students' Attitude toward Success Factors before and after Participation in the Narrative Intervention Program**

The students' attitudes toward or perception of success factors constitutes the main innovative finding and contribution of the present study and is the basis for a holistic support model for students with learning disabilities.

A latitudinal analysis of the students who participated in the holistic intervention program reveals that the students came to the support program mostly without faith in their ability to study and obtain an academic degree due to their learning disabilities. After the support program, the students can develop within themselves a locus of control, as described in the causal relations theory (Weiner, 1986), if the following main factors

are present: the ability to define and realize a goal; the ability to accept help; the ability to use learned tools and strategies; continuous, ongoing learning; change in environment (family and friends) as necessary; optimism; and humor. The causal relations theory analyzes how people explain to themselves their success or failure and the factors that led to them. An analysis of the factors reveals a person's perceptions and explains how they understand the outcome and to whom they attribute the responsibility for it (Kozminsky, 2004). The internal locus of control reveals the individual's belief in his ability to influence outcome. When the students refer to motivation, investment of effort, tenacity of purpose, willingness to accept help from others, and intelligent use of strategies, they attribute their success to themselves and their direct actions, and they take full responsibility for their lives. In these cases, students do not ascribe their success to luck or other outside factors. It can be said that the students mainly improved their self-efficacy for learning as reported in interviews after the support program.

Table Number 16: Third Research Problem: Changes that Occurred as a Result of Participating in the Intervention Program in Student Positions

<b>Before the participation in the Narrative Intervention Program</b>	<b>After the participation in the Narrative Intervention Program</b>
1. As a student with a learning disability we need academic support. 2. The learning difficulty causes emotional tensions, stress, and anxiety. 3. The environment is less supportive, and it is not always convenient to ask for help.	1. The support program has provided tools for effective learning. 2. The program provided tools for emotionally coping with the learning disability. 3. The program taught me to stand up for my rights and ask for help from my classmates. 4. The program raised the academic self-efficacy.

Source: Own research

### **6.2.1 The Students' Strategies to Achieve Success in Academia – Effects of Participation in the Intervention Program**

The analysis of content of interviews with students have revealed many strategies used by them to achieve success at Academia. Some factors of being successful were developed by the students beforehand their participation within the intervention program. However, many of those strategies were significantly strengthened or worked out (evolved) during the intervention program.



## 1. Definition and Realization of a Goal

The first success factor, described as the definition and realization of a goal, was mentioned by all the students. This factor has two parts, one derived from the other. The first is the ability to set a goal or objective, for instance, “to acquire an academic degree.” The second is the perseverance, the persistence, the ability to overcome difficulties which may arise on the way to the realization of a chosen objective. This factor is mentioned in research by Goldberg, Higgins, Raskind, and Herman (2003), who discovered that successful people tend to define their objectives in the first stages of their lives and behave in a goal-oriented manner. Andersson and Bergman (2005) found that the ability to persevere predicts academic achievements, as well as level of income and employment. As a rule, in the context of individuals with learning disabilities, defining a goal and perseverance as one strives to achieve it are important components of success (Fink, 1995; Reiff, Gerber, & Ginsberg, 1993). Indeed, the students say that stubbornness, motivation, and perseverance help them to attain their goals. Joussemet, Landry, and Koestner (2008) emphasize motivation as an important factor in success and in the determination of personal goals. They maintain that a person who sets his or her own goals and feels autonomy about them will strive and invest effort to realize them, will experience fewer inner conflicts, and will change behavior patterns according to his or her level of motivation. The self-determination theory of Ryan and Deci (2000) highlights three components that support the existence of motivation and the ability to maintain it: (1) autonomy – a feeling of choice that derives from the self and not from another person, (2) a feeling of efficacy – the individual feels that he is facing a challenge at a level of difficulty commensurate with his ability, and (3) a feeling of belonging – the individual’s activity is related to social circles, communication with them, and emotions of love, concern, caring, etc.

The students have realized that when life seems difficult and complex, they have to change their habits and behave according to a different worldview (which tends to be difficult for them), grapple with the difficulties, and persevere. This insight indicates a sense of personal responsibility to persevere as well as willpower and determination.

The concept of “grit” (Duckworth, Peterson, Mathews, & Kelly, 2007) includes aspects of perseverance, motivation, and refusal to give up when difficulties are

encountered. Like the population studied by Duckworth, Peterson, Mathews, and Kelly, the participants in this study were characterized by a strong grit component.

## 2. Accepting Help

All the students mention the ability to accept help as a success factor. In this context the concept of “help” includes the ability to ask for help, to know what kind of help to request, to accept help, to take initiative, to dare to reveal the need for help, not to be afraid to ask, and not to be ashamed to need help. These components are also related to the broader concept of self-advocacy, which means that a person can speak for himself and defend his rights and ensures that he will receive the services he needs. All the students note that at some stage in their lives they needed help from other people. Most received assistance from their parents and their friends during childhood, which enabled them to progress, and they all appreciate the great importance of help from professionals and friends. They say they learned not to be afraid to ask for help openly and to use it in a systematic way. Fink (1995) and Hellendroom and Rujissenar (2000) emphasize the parents’ function as a meaningful support system.

Accepting help from family, friends, and professionals was found to be a main success factor for people with a learning disability. Fink (1995) emphasizes that over time the circle of support widens to include life partners and friends. The researchers Margalit and Tur Kaspas (1999), Vogel, Vogel, Sharoni, and Dahan (2003), and Corkett, Parrila, and Hein (2008) emphasize the contribution of the ecological model and the role of the social network. Gerber, Reiff, and Ginsberg (1993) strongly emphasize the importance of the social network.

The activity in the holistic support workshops illustrates the contribution of the peer group. In the workshops the students study together in an environment tailored to their needs and engage in cooperative dialogue, as they share ideas for possible solutions. Thus, within the workshops, where the students feel safe, protected, and accepted, they are willing and able to reveal their difficulties. Sometimes, this is the first time that they have dared to expose their challenges to their peers.

According to Asor (2003), the need for connection, belonging, and safety is the need to have close, safe, and satisfying relationships with others in the social environment and to be physically and emotionally protected. An individual also requires a sense of herself as a capable person, who can experience herself as able to fulfill plans, aspirations,

and goals that are not necessarily easy to achieve, and to feel effective. The need for autonomy is the individual's need for direction from within and self-regulation of his or her actions, the need for self-expression, meaning, independence, and freedom of choice. On a deeper level, this is the need to realize abilities and tendencies and to actively adopt goals, attitudes, values, and plans – in other words, to form an identity. The surrounding social environment can either support the individual's natural tendencies to active engagement in life and personal growth or can repress them. Many students maintain that their classmates are not always willing to help them and are not always glad if the student with a learning disability becomes dependent on their help.

The theme of emotional and social support highlights the sense of security, acceptance, empathy, friendship, and warmth that the extended holistic support center provided for the students both through the professional staff and by means of the peer group. The role of the academic support center is to create an inclusive, accepting, and nonjudgmental environment, which helps each person to discover his or her innate strengths (Cohen, 2000).

### 3. Learning Practices, Tools, and Strategies

The support center exposes the participants to a wide variety of tools and strategies as part of the process of learning and problem solving. This approach was adopted for both individual guidance and group workshops. The students frequently refer to “tools,” “strategies,” “tactics,” and “techniques” to describe the knowledge they acquired in the support group. It is apparent that they internalized the world of concepts related to the learning processes. Their intelligent use of these terms indicates high awareness, which facilitates the use of knowledge acquired from courses. The students mention strategies such as breaking down assignments into smaller components, reading a text in both Hebrew and in English to help them to understand it better, organizing material, mapping material, learning how to distinguish between what is relevant or important, research skills, and coping with different types of pressure. One of them notes that the tools she acquired enabled her to succeed and achieve her objective. These tools make it possible to change and improve study habits: *“In the end they teach learning strategies – how to write and what to write, how to write an academic paper, how to summarize lectures, how not to apologize all the time, how to manage time, all sorts of things like this.”*

The discussion of strategies and learning practices always raises the question about the extent to which the new strategies are retained, what is needed to strengthen them, and to what extent they are transferred from one field to another. The students' statements indicate that they assimilated the strategies following participation in the support program and that they became an inseparable part of their life practices in a variety of spheres. In essence, they express meta-cognitive aspects that include declarative knowledge about learning strategies and process knowledge. Several researchers (Brown, 1987) add the following to the definition of strategies and learning practices: components for planning and performance, supervision, and evaluation of the product and its implications.

A person develops when he is aware of himself and his environment and does things that he could not do in the past or changes his behavior. The students say that they continue to integrate the strategies and tools that they acquired during the support program into their studies. Many note that they continue to utilize them in other contexts as well, such as to assist them with time management, identification of keywords, focusing on important things, and using notecards [although this is a tool, not a context]. They also say that participation in the workshop had a positive influence on social aspects of their lives and the development of awareness about how to connect to people, how to address learning as a process, how to ask for help, and how to adopt a tolerant approach.

The students' statements about the contribution of the support program carried out as part of this study indicate that they have internalized the tools and strategies that were provided as well as the positive emotional experience that accompanied the learning and have been empowered by these. The focus on processes, feelings, emotions, and attitudes, has become an inseparable part of their personal lives.

Research by Rath and Royer (2002) confirms the contribution of the tools and strategies acquired at the support center by means of the holistic support model. These researchers examined the effectiveness of a support center and noted that an improvement in academic skills leads to an improvement in academic performance, and that the acquisition of learning strategies contributes to a feeling of self-efficacy and develops self-orientation toward learning.

#### 4. Optimistic Approach

Completing the picture and connecting among the success factors such as perseverance and the ability to compel the environment to adapt to the needs of the learning-disabled person, assuming an optimistic outlook enables the individual to persevere in times of difficulty and crisis. This optimism is expressed in the ability to find alternative ways to cope with obstacles. Corkett, Hein, and Parilla (2008) found that a reduction in negative beliefs contributed to the success of people with a learning disability. A feeling of optimism contributes to a positive view of reality, and this provides the individual with the fuel to motivate action (Duckworth, Quinn, & Seligman, 2009). Several students recommend seeking the positive side in every situation and identifying the humorous aspects or maintaining a sense of humor as effective success factors.

An optimistic approach is expressed in the ability to attribute positive meaning to events, to make progress, to identify opportunities, and not become mired in difficulties. It is accompanied by the belief that things will work out in the end and that there are a variety of ways to solve any problem.

An examination of the success factors listed by the students, shows that there are at least five, in addition to perseverance and goal setting, which focus on changing the individual. All five factors have a dynamic dimension: continuous learning ensures change and cognitive flexibility. In the process of rebuilding, a person with a learning disability shifts the focus from the difficulty to his or her abilities, from a passive approach to an active one, and emphasizes willingness to face challenges. Obtaining tools and strategies leads to a change in learning, and a change made by an individual can compel the environment to meet his or her needs. The common denominator of all the success factors is the individual's increasing self-awareness, and awareness of his or her abilities, limitations, and environment. The support of family and friends has also been found as a significant factor supporting students with learning disabilities. It seems that the very sharing of experiences and feelings with the immediate environment addresses the emotional burden that the student carries and makes it lower intensity even only when they are attentive and empathetic towards the student's distress with the learning disability. In addition, classmates also assist in the academic aspect and make the student with learning disabilities equal among equals, which enhances academic self-efficacy.

## **6.2.2 Resilience and Recovery – Strengthening Students’ Resources with Participation in the Intervention Program**

The interviews also lead to the conclusion that the support workshop was beneficial to participants because it focused on resilience and recovery. Everyone's response to a stressful situation is related to his or her level of resilience, and one's level of resilience enables him or her to cope with a greater or lesser extent in situations of stress and uncertainty. Every person has the potential to cope, and every person has a unique coping style. The model they proposed comprises six dimensions: beliefs and values, expressions of emotion, imagination, cognition, physical activity, and society. In the interviews with the students, it is apparent that their methods of coping correspond to this model of resilience (with some using all the dimensions and others only several). Awareness of their choices of coping styles contributes to each student's philosophy of life for dealing with his or her challenges and provides meaning and optimism which helps them to successfully contend with the trials they must face.

In accordance with the Ayalon and Lahad resilience model, the students who participated in the study noted the following cognitive aspects that helped them to succeed: setting a goal and working to realize it; breaking down the goal into stages; and internalizing tools and strategies necessary to achieve the goal (mostly those related to being organized) and utilizing them.

The resilience model includes a societal dimension, which is related to family and community, both of which can provide love, support, and assistance and contribute to the individual's sense of belonging. The participants in the study attribute major importance to support from the environment, comprised of their parents, other significant figures they encounter, and to the building of a social network composed of friends, fellow students, work colleagues, and life partners. They also describe the support program as playing an important role in their recent experience of success, both due to the tools and strategies provided and the opportunity to meet other students who have a learning disability, saying that it was tremendously meaningful and helpful to realize that the feelings and difficulties they experience as they struggle to succeed in an academic environment are "normal" for people with learning disabilities.

A central characteristic of resilience is hope – the individual’s belief that he can change and succeed. While negative beliefs are weakening and limiting, positive thoughts

alone are not enough. A person must be capable of self-reflection, of an objective assessment of his or her abilities, of applying the results of that assessment to a strategy or plan to make improvements where necessary, and of making decisions to change what must be changed and following through with the required actions. The students' statements reveal issues related to themselves, their ability to change their situation, and their ability to attain a goal in what might be considered an unusual way. They convey the idea that knowing that they have a choice, especially a choice undertaken from love and a sense of meaning, gives hope.

Major weaknesses with which people with a learning disability are all too familiar and with which they must contend is the lack of ability to manage their time, to plan, to organize themselves, and to set and meet goals. In their interviews participants in the study repeatedly emphasized the importance of setting goals and adhering to them, despite the difficulty, as well as the belief that there are a variety of ways to achieve a goal. Many appeared to be surprised by their own successes, while they all believe that just as there are multiple ways to achieve a goal – and that this achievement is usually the result of several factors related to the individual student and to his or her environment or surroundings – there is also more than one way to define success.

### **6.3 Theoretical Contribution of the Research**

The findings of the study also support the stage theory, or psychosocial theory developed by Joan and Eric Erickson. The theory describes the course of life from infancy to return as an eight-stage series, in each of which the person faces a unique conflict between his personal needs and the demands of society. According to Erickson, the key conflict in each of the stages is a crisis that can be resolved successfully or unsuccessfully. Successful coping will manifest itself as finding the “golden path” among the conflicting demands and equipping the person with the tools to better cope with the central conflict of the next stage. Unsuccessful coping will manifest itself as succumbing to social pressures or personal impulses, making it difficult for social adaptation, as well as coping with the next step. According to Erickson, the difficulties in the social emotional field are manifested in children with learning disabilities, difficulties in achieving the developmental stages in the social emotional field, delays in their achievement or partial acquisition. The intervention program assumed that students with learning disabilities are

in an inferior position in terms of the stage acquisition stages and the program is designed to work on past deficits. At the same time, the program was also built on Bandura's self-efficacy theory.

In the early stages of the process of self-inflicted development, parents and the home occupy a central place. Academic self-infliction is less affected by interpersonal comparison than academic self-perception (Pinxten, Sofie, Preckel, Niepel, Fraine, & Verschueren, 2014), and the main factor influencing it is experience. Therefore, parents who expose the child to many experiences and build a warm and supportive environment that encourages curiosity, experience, experimentation, and various ways of problem solving, including support after the experience of failure, cause an increase in the sense of self-infliction in children (Bandura, 1977).

Bandura cites four basic sources of self-indulgence (Bandura, 1997): experience in fulfilling tasks, and in particular experiences that are subjectively perceived as successful; Watching others successfully perform tasks similar to those assigned to the individual, which provides modeling (which elevates the sense of self-infliction, provided the individual perceives himself as able to perform that task successfully); Verbal persuasion of the individual by another person who expresses the belief that the individual is capable of successfully performing the task assigned to him; and moderately moderate psycho-physiological responses to stressful situations and good abilities to regulate these responses.

Academic self-efficacy was found to be influenced by classroom and school systemic aspects, such as a sense of belonging to the school and satisfaction from school (McMahon, Wernsman & Rose, 2009), and social status in the classroom (Nelson & Debacker, 2008), and that children are characterized by higher academic self-efficacy when they experience their teachers as addressing and supporting their emotional and social needs (Hughes, 2011; Ryan, Gheen & Midley, 1998).

Based on this theory a support program was constructed which dealt with the strengthening of the social and academic emotional factors, which according to the students' position, work on these areas improved the academic self-efficacy. The students' experience, as understood through the interviews, can be explained by means of the concepts of resilience and recovery. Resilience enables one to deal with situations of stress and uncertainty. It is associated with personal differences in a situation of response to stress. Lahad and Ayalon maintain that every person has the potential to cope



and that every person has a unique coping style (Lahad, 2000). The model they propose comprises six dimensions: beliefs and values, expressions of emotion, imagination, cognition, physical activity, and society. Indeed, in their coping the students use three components of the resilience model: beliefs and values, cognition, and society. Beliefs and values, according to the resilience model, express a person's spiritual dimension. They are a life philosophy which provide meaning and hope of survival to which one adheres to cope with challenges. This philosophy dictates a person's sense of destiny and mission, such as the need for self-fulfillment. In this study, the students perceive success as a process or journey, which is more important than the final measurable product. They perceive success as something relative that is expressed in small increments. The students are motivated by a sense of mission and destiny to engage in significant activity. They express great hope and belief in themselves and in their ability to cope, to succeed, and to overcome obstacles. They believe that even if one route is blocked, they will find another way.

According to the resilience model, this coping is expressed in cognition – in recognition, in thought, and in the use of cognitive strategies, such as collecting information, solving problems, navigating thoughts, creating a plan, learning based on experience, the search for alternatives, organizing according to priorities through the re-organization of functioning. Indeed, the students in this study note several cognitive aspects that help them to succeed: they set a goal and strive to realize it, they break down the goal into manageable stages, and they internalize tools and strategies, primarily strategies for organization, and implement them. When they confront difficulty, they search for alternatives and solutions. They redefine their disability and through positive thinking can perceive it as an advantage. In other cases, they attempt to adjust reality and the environment to their needs. These methods are also associated with a feeling of control, determination, and responsibility.

The resilience model also includes the dimension of society, which is associated with the family and the community, and this is the major new discovery of the present study. Most of the students note the great significance of society and family in helping them to achieve success as past and continuing providers of warmth, love, support, and assistance who contribute to their feeling of belonging. The students attribute a very meaningful role to their surroundings: their parents, the significant figures they encounter along the way, and the fabric of their social network, comprised of friends, students, work

colleagues, and life partners. The roles they play influence the academic success of the learning-disabled students.

The concept of recovery also attributes an important role to the environment, as it maintains that the environment can lead to recovery only if the individual aspires to live in it to the extent that he is willing to change to do so. When the environment changes to accommodate him, a person feels that he is wanted and belongs (Hadas-Lidor & Lachman, 2007). The concepts of resilience and recovery share common themes: the recovery approach holds that by means of belief and an appropriate environment a recovering individual can achieve optimal fulfillment in the personal, social, and occupational realms. A person in the process of recovery regains his liberty through choice, desire, commitment, setting goals, and determining environmental means to achieve them. A central characteristic of recovery is hope – the individual's belief that he possesses the possibility to recover and change. Lipton (2014), a researcher from the field of cells and biology, strongly emphasizes the importance of belief for the purpose of recovery. In his opinion beliefs control the behavior of genes and their activity, and therefore they control our life and the way in which we live it. This belief is similar to the Cognitive Behavioral Therapy approach (CBT), in which negative beliefs which weaken and limit us become fixed permanently in our genes and induce sickness. However, a change in the environment, accomplished by parents when one is still young, through couple therapy to support the learning-disabled partner, via education and a change in the perceptions and attitudes of the surrounding society, or a change in the attitudes of lecturers or teachers – all these may influence recovery, namely academic success, and this is the main contribution of the present study.

This theory was well-integrated into the students' stories and shed light on what they need to experience self-efficacy in learning. When an academic institution considers providing academic support for students with learning disabilities it should consider students' perceptions of learning disabilities; the emotional aspects which affect their decisions; the support of spouses, friends, parents, and lecturers; and the cultivation of learning strategies to strengthen self-efficacy

## **6.4 Applied Contribution and Innovations of the Research**

The path of the student with a learning disability to the academic degree is not easy, involves frustration, difficulties, disappointments, and failures. To create social equality in providing opportunities for students with learning disabilities to study as well, the higher education system must provide all possible support to help these students complete their studies. It has been found that in most academic institutions help is given to students (Al-Yagon & Mikulincer, 2004), but a notable disadvantage is found in the fact that the existing support programs are not systematic and are not based on theoretical models. This study used the development of a support model based on Ericsson's and Bandura's developmental-social theories to improve the self-efficacy of students with learning disabilities.

Since an adolescent with a learning disability was also a child with a learning disability, it is not possible to ignore the journey the student has gone through so far and find the common denominator that has made coping difficult and recommend preventative measures such as early childhood parenting, emotional care for the child. Working on these areas may bring the student into the higher education system when he or she is more confident and has a larger “toolbox” in dealing with learning.

Erickson's developmental theory emphasizes the importance of normal development at every stage of life. Fixation at any stage can cause difficulties in the child's development and impact on his life as an adult especially when it comes to a child diagnosed with a learning disability. If the child with the difficulties does not receive the support he needs, it may affect his life as an adult and harm him in all Circles of life, as the students said in interviews with them.

The model first proposed in the methodology chapter is found to be preliminary and insufficient for these students, as evidenced by their voices in interviews, after participating in the intervention program. It was found that the factors that increase academic self- efficacy are broader, and each factor needs to be expanded to precise details to pinpoint the assistance their students need, as reported in interviews with them. Therefore, when it comes to exploring the inner world of a student with a learning disability, we cannot ignore his developmental past and what help he received as a child. In interviews with the students before participating in the support program, they said that the greatest help was from the parents who encouraged them and did their best to be

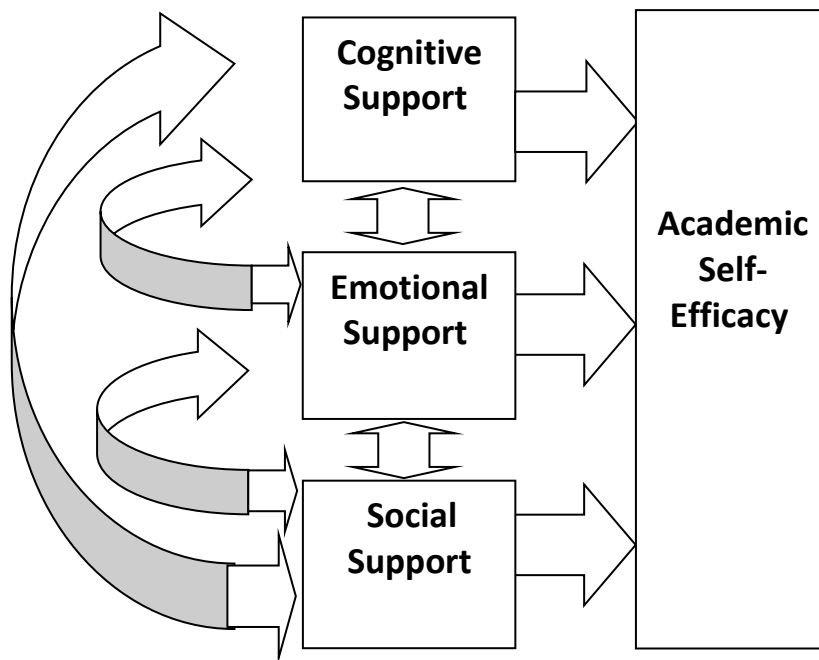
successful. Surprisingly, the students did not point to significant teachers in their lives or intensive learning assistance from a private teacher. Emotional support from the environment seems to be very important in the development of self-efficacy, which led me to resort to a theory proposed by Bandura for the development of this effectiveness. Bandura's social theory emphasizes the fact that environmental support is very important to the individual to realize his abilities and achieve desired achievements. Based on these data, I saw fit to expand the initial model and offer parents whose children have been diagnosed with a learning disability receive specific parental guidance to support their children. According to the interviews conducted with the students, it seems that parental support in old age is replaced by social support, which is the main innovation of the study.

Considering the students' remarks, as emerged from the interviews, there was a need to expand the initial program model and detail the factors for success according to the students' experiences. The broad model based on the life stories of students from the past, how they perceive their disabilities and what helped them. In addition, the model gives us more information about the "tools" that can help them to feel success at the academia.

The contribution of the present study offers a broad view of the life story of a student with a learning disability, with social and emotional emphases that are no less important than the academic support, based on the students' reports during the interviews with them.

In conclusion, a most important component which emerges through the students' statements in relation to their academic success is the development of their sense of self-efficacy. Therefore, the applied contribution of this study is to establish the support program model (see Figure Number 2: The Holistic Support Model) and to extend it to comprise the involvement of the environment, namely family, friends, and life partners (see Figure Number 4: The Extended Holistic Support Model).

Figure Number 2: The Holistic Support Model



Considering the findings obtained and their analysis, the main field that was deeply referenced by students in this study is that there is need to provide treatment for the learning-disabled student on a systemic level in addition to the treatment at the level of immediate assistance, such as attention to feelings, academic reinforcement, and learning strategies.

Every student with a learning disability was once a child with a learning disability. Over the years, this child acquired a heavy “mindset” of failures, successes nurturing, or neglect, on both an academic level and an emotional level. In Israel, the parents of a learning-disabled child tend first to provide individualized learning assistance, to the extent that this is possible. Based on the students’ statements, this study reveals that while the academic aspect must not be neglected it is imperative to also address the emotional aspects of growing up with a learning disability in the immediate environment, among parents, siblings, and friends.

Every child need empowerment, support, and the ability to develop personal resilience especially in times of difficulty and failure. Therefore, the practical recommendation is to provide supervision and support for parents to help them with

guidance and instruction, or to choose any framework of family therapy, starting during childhood, which is focused on treating the person with a learning disability.

This therapy will be empowering and will significantly increase the sense of self-efficacy necessary to succeed. Ideally it will accompany the child contending with a learning disability on his life journey, including completion of studies at an academic institution.

At an older age, the treatment may venture into the spheres of friends, lecturers, and life partners. Academic centers should also provide education for the emotional containment of learning-disabled students by offering practical guidance, mentoring, and reciprocal assistance among the peer group. Many students note that without the support of their friends they would find it difficult to succeed.

The following model presents an extension of the support model for students with learning disabilities considering the findings of the present study.

The initial model focused on three elements of therapy: cognitive, emotional, and social (see Figure Number 2) and was based primarily on Bandura's theory of self-efficacy. Following the attitudes and experiences of the students, as told in the interviews, there was a need to expand these three factors to deeper aspects that combine the need for treatment already in the early childhood stages and later in adolescence and their integration into the higher education system.

Here is a breakdown of the expansion model: Factors 2, 3, and 4 are the first factors proposed in the first model. Factor number 2 - Learning strategies and time management belong to the cognitive factor that may improve self-efficacy in learning. Factor number 3 - Support from family and friends belongs to the social support circle proposed in the initial model. The support of the immediate family is more relevant in childhood and adulthood and less in the age of young adulthood as written in the literature review.

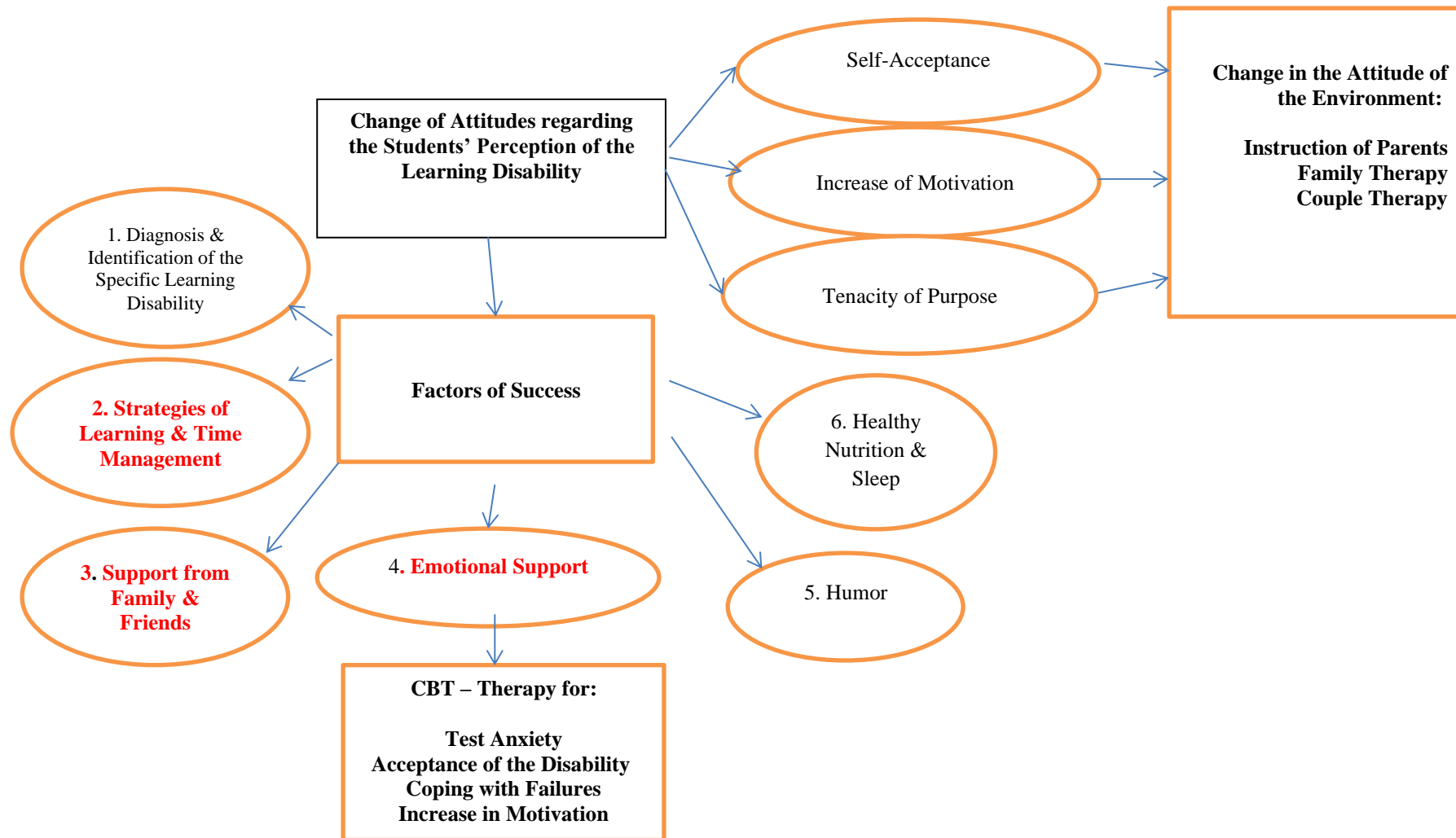
It is important to emphasize two important elements in the social aspect as emerged from the student statements: 1- The support of their classmates is necessary for sharing and getting help. 2- The support of their friends who also suffer from learning disabilities is important to create a sharing of feelings and difficulties and this allows normalization and acceptance with the disabilities.

Factor number 4 is the emotional factor that includes various therapeutic elements as can be seen in the model: cognitive-behavioral therapy, coping with test anxiety,

tenacity of purpose, increase of motivation, optimism, and humor, accepting disabilities and belief in the ability to learn. During the interviews some students also reported maintaining a proper diet, adequate hours of sleep and exercise helped them learn better, they reported that maintaining a healthy lifestyle lowered the level of stress and improved the ability to concentrate and remember.

I consider it very important to use this model already in elementary school to support students with learning disabilities and as the student story in the interviews shows, it is recommended to use the intervention program in the framework of higher education.

Figure Number 4: The Extended Holistic Support Model





In contrast to the model proposed in Chapter 4, Research Methodology, the model that emerges from the research findings shows that the perception and attitude of the learning-disabled student regarding his or her learning disability should already be addressed and established during childhood. If this does not occur, then it becomes necessary to enhance emotional empowerment in the future, in cooperation with an individual's immediate environment (friends and family). Most students note this as a central factor influencing their academic success. In the literature review presented in the first chapter, it seems that building a positive self-image during the period of young adulthood is a significant emotional factor. Self-image is characterized by continuous feelings that are relatively stable over time. However, it tends to be based on a variety of experiences comprising success and failure. It is influenced by both life circumstances and social interactions, as it is also composed of comparisons one makes with those around him with the aim of creating an evaluation of the self. The importance of self-image is its influence on one's functioning, and feelings related to anxiety, pessimism, and even to physical health. In both the initial support model and the extended model, there is a reference to building the self-image of students with learning disabilities, with the understanding that students who feel good about their disabilities and accept themselves as they are, succeed in raising academic self-efficacy.

In research about personality (Doswell, Millor, Thompson, & Braxter, 1988), identity is defined as a person's essential and continuous self, as the inner subjective perception of the self as an individual, or as the entirety of the components through which a person defines herself.

The process of the development of self-identity is the organizing principle that allows an individual to maintain himself as a cohesive personality in sameness and continuity of the experience of the self in the context of social reality. This process enables an individual to answer the questions, "Who am I?" and "What am I?" and "Who and what am I not?" Thus, the individual can evaluate his strengths and weaknesses, address the constellation of his values and outlook, and decide how he would like to organize them. He must answer to himself about where he comes from and what he wants to be.

Moreover, the component of self-identity building is also reflected in the support model based on what has been said in the literature wall about young adolescents (Arnett,2004). At the stage when they are in the higher education system, they are

required to complete the stage of development of their self-identity, what is the purpose in their lives, what are their desires, what are they learning and why are they learning. Students with learning disabilities need mediation in achieving goals (see factor caused because of changing students' attitudes about learning disabilities), and the support model may assist them in this regard. The psychologist, Erikson, who formulated the psychosocial theory of stages, defined the concept of identity as the most meaningful component in an individual's functioning and as such, as a motivating force of all human behavior. The process of the construction of identity occurs as early as childhood; however, it doesn't become a concept of a stable self until adolescence. The process of identity formation during these years requires an individual to continuously define the constellation of personality characteristics that will accompany him from now on, such as: formation of self-image, identification of abilities and competencies, decisions about outlook, setting life goals, decisions about occupation, the positioning of the self in the social environment, etc. In essence, the stage of identity formation constitutes a summative stage: during this period the young person must process and formulate all the information accumulated during the earlier stages, to create his or her desired personality.

In addition, a fundamental change is required among the professionals in academia (lecturers, practitioners, department heads, etc.) so that they recognize the inner world of students with learning disabilities in all its emotional, social, and cognitive aspects and devise a means to support these students, taking these three factors into account, to realize their potential.

There is another element related to biological conditions as emerged from the reports of the students who participated in the research program: researchers (Hershko, Cortese, Ert, Aronis, Maeir, & Pollak, 2021) found that the physical health of the students greatly affects their learning ability. Many studies attach great importance to continuous sleep of at least six hours a night on the quality of learning and another element has been found between a balanced diet and the ability to concentrate and learn. Furthermore, a study published in 2013 in the American Journal of Pediatrics (Ratey, 2013) examined the effect of exercise on brain function and found a positive correlation between exercise and measures of comprehension and academic achievement as well as reading comprehension, memory, and calculation. The research that is being developed on these topics is related to the field of biopsychology.

study of the biological processes that may explain the behavior, especially the processes that take place in the brain and nervous system. Psychobiology is one of the major disciplines included under the broader heading of neuroscience.

Psychobiology researchers often deal with mental and behavioral processes common to animals and humans and test them in animal experiments. Common topics the researchers deal with are sensing, perception, motivation, learning, memory, sleep, and emotion. Over the years, research methods have been developed that have allowed psychobiologists to engage in human research as well, and therefore many of them also deal with topics such as language, thinking, decision making, awareness and gender. Therefore, the physical conditions the brain needs during a learning situation should not be ignored.

The following table summarizes the four most important elements for achieving academic self-efficacy based on the findings of the present study:

Table Number 17: Comparison between the Initial and Revised Holistic Support Model

<b>The First (Initial) Model</b>	<b>The Second (Revised) Model</b>
1. Cognitive Support	1. Learning strategies 2. Time management
2. Emotional Support	1. Acceptance of disabilities 2. Dealing with stress and exam anxiety 3. Humor and optimism 4. Raising motivation 5. Tenacity of purpose
3. Social Support	1. Support of friends and colleagues 2. Family/partners' support 3. Institutional support group (other students with LD)
	1. Physical conditions: healthy nutrition, sleep and exercise

Source: Own research

## **6.5 Research Limitations and Recommendations for Future Research**

The research limitations of the current study are as follow:

First, the very choice of the qualitative research method may create a limitation that is associated with the reliability of the analysis and is derived from the interpretative nature of the analysis in qualitative research. The qualitative methodology views the researcher as an important tool, and therefore the fact that the research depends on the

researcher's subjective interpretation must not be ignored. As the researcher of this study, I too, am not free of thoughts and emotions regarding the researched topic, and despite my paying attention to and being aware of possible personal biases, it is inevitable that they have influenced the analysis of the data and my interpretation of the research findings. To overcome this limitation, I used several techniques that enhanced my reflectiveness, for example, a self-interview, a research journal, and memoranda. These techniques were described at length in section 2.8 and the insights I derive from them are described in section 2.9.

Second, the choice of the qualitative research method may create a limitation that is also related to the validation of the researcher's interpretation of the participants' statements. In other words, to what extent do the experiences, thoughts, and emotions that they describe during the interviews correspond to my interpretation of these aspects? One means of increasing research validity is the validation of interviews by the research participants, referred to in the professional literature as "member check" (Lincoln & Guba, 1985) or "debriefing" (Patton, 2015). Interviews are validated by the participants when the researcher presents them with his or her interpretation so that they can function like a judge who examines the distance between the different versions of the truth (Luborsky, 1994), despite the limitations of this tool (Goldblatt, Karnieli-Miller, & Neumann, 2011). I did not utilize this approach in the current study, although it is possible that involving participants to validate the main themes identified might have increased the validity of the interpretation proposed and possibly even enriched it.

Third, it may be that the research freedom created a limitation related to the decisions I made about the use of the interviews I conducted. During the data analysis stage, I read and mapped all the interviews to an equal extent, to obtain a comprehensive picture, and indeed there is representation of most of the interviews I held. However, although I intended to represent all the interviews equally, I sometimes gave greater expression to certain interviews as opposed to others, because their contents more fully and clearly expressed the issues I sought to research.

Fourth, the research process facilitates several interpretations of the outcomes. The fact that the interviews are held at a distinct point in time does not enable an unequivocal causal relationship to be drawn between the components of the model, but only a connection, and does not allow the relationships between these components to be seen at the different stages of the relationships. It is likely that quantitative longitudinal

studies that examine the components of the model at different stages may shed light on the direction and the causality that exist between the categories. However, it should be noted that the presentation of the data in this qualitative research study is commensurate with the qualitative research studies that were published in journals in the pedagogical field which emphasize the different relationships between the main themes that comprise the research model.<sup>9</sup>

Furthermore, despite my recommendation to provide instruction in the environment of the student with a learning disability, this has not been researched over the years regarding the influence of parental instruction and treatment within the environment and how much this influences the success of learning-disabled students. These recommendations are based mainly on the stories of the participants in the study.

It is important to note that the study was carried out over the course of one year, which is too short a period within which to reach unequivocal insights, and the influence of the intervention program was not examined among students who had completed their studies at an academic center.

Another limitation that must be acknowledged is that the researcher and the subjects were personally acquainted and familiar with the research topic and the goals of the study as well as the researcher's motivation to achieve results that would answer the research questions.

This study poses questions for additional research about how to contribute to the success of learning-disabled students and recommends both expanding the research and integrating the success factors identified here in programs which support students with physical handicaps, such as blindness, deafness, and cerebral palsy, or students with mental disorders, such as post-traumatic disorders, schizophrenia, bipolar disorder, OCD, and others.

Moreover, as someone who works in an academic environment where the awareness of learning disabilities and the modes of available assistance are very limited among the lecturers and the administration, I highly recommend examining the degree of willingness among such individuals to deepen their understanding and change their attitudes.

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<sup>9</sup> See, for example: Creary, Caza, & Roberts, (2015).

Finally, with reference to the last research limitation noted, although the main finding of this study is the crucial importance of providing learning disabled students in academia with emotional support which emanates from their surrounding environment, I also recommend examining the influence of parents' training and homework support which is provided at a young age, on the success of learning-disabled students studying at academic institutions.

## **6.6 Conclusions**

This study examined the coping of students with learning disabilities in the higher education system in Israel. The aim of the study was to offer an intervention program that would help the student to some extent to deal with the learning disability in the academic, emotional, and social aspects.

To understand the life story of students with learning disabilities, a theoretical background was presented that dealt with the journey a child with a learning disability goes through in the Israeli education system until he is an adult trying to integrate into society with a profession that will allow him to earn a decent living.

The literature review was presented as a "funnel" that first examined the status of young people today, different definitions were given to "young adolescents" and recent research seems to show that young people aged 18-35 fall into the category of another developmental stage (contrary to popular belief that development ends At the age of 18), with unique characteristics (Arnett, 200), such as lack of stability in the workplace, less financial independence and some dependence on parents, changing professions and taking risks and gambling regarding decisions in life.

The second chapter of the literature review dealt with definitions for specific learning disabilities: dyslexia, dysgraphia, and dyscalculia. Ways were identified to identify the disabilities and ways of treating and coping with the specific learning disabilities.

The third chapter dealt with a review of ways of dealing with learning disabilities in Israel, from elementary school to the higher education system. It is evident that there are still failures regarding the help given to students in primary and secondary school, the focus on assistance is given mainly on the academic side and less on the emotional and social side. The purpose of the literature review is to show that the research done so far

in students with learning disabilities and the therapeutic approach done to date is not sufficient to understand what students need to increase academic self-efficacy (according to Bandura). The research done to date has focused mainly on those under the age of 18 and less on adults over this age and it seems that the existing therapeutic approach so far is not sufficient to bring about the mental well-being of the students.

To understand the story of the lives of students with learning disabilities, the qualitative research method in the narrative approach was chosen. 30 students from different specializations who were previously diagnosed with a specific learning disability were selected.

Listening to the students' personal voices made it possible to understand what had helped them in the past and what had hurt them from being students with learning disabilities. Many students said they had been supported in the past in individual learning, but most noted that significant support came from their parents who believed they were capable of learning and succeeding. Now that they are adults, they say they are supported by their spouses or classmates. By listening to the story of the students' lives, it is possible to build an intervention program that will test whether this support will help these students improve their mental well-being in everything related to learning and raise academic self-efficacy.

Based on the students' stories, three main supports factors were examined: 1) **learning aids** such as: strategies, ways to summarize lectures, improving and optimizing memory for exams, effective time management during the learning period, etc.

2) In addition, the program included **emotional support** that included assistance in dealing with stress and anxiety related to exams, dealing with the negative thoughts associated with learning disabilities, and so on.

3) Additional support was linked to the **social sphere**, which examined whether a group made up of friends with learning disabilities helps raise academic self-efficacy and if social support is needed from their classmates of students with learning disabilities.

In interviews conducted after the support program, it appears that many students reported that participating in the support program did benefit the sense of well-being and self-efficacy in learning. They particularly emphasized the social side, which was very significant for them. The students reported that they felt they were not alone, they realized that there are other people who like them suffer from learning difficulties and all of them

need academic, emotional, and social support. The students noted that even in the past they were supported by friends, but their parents were more meaningful to them.

After analyzing the findings that emerged from the students' life stories both before the intervention program and after the intervention program, several insights emerged that allowed me to build a broader support program to increase academic self-efficacy.

First, a recommendation for parents dealing with children with attention deficit disorder is recommended to receive parental guidance and emotional support that will help them cope with their child's educational, emotional, and social situation.

In addition, many students reported that humor and optimism are a significant part of emotional coping, in addition to the body's physical concern like proper nutrition, exercise and adequate sleep.

The emphasis on the social side is the significant innovation of this study. The students congratulated for the social support they received and hoped that they would meet this support in other circles in their lives such as the work circle: that their friends or principals would recognize the learning disabilities and accept them as they are, give them equal opportunity despite the disabilities and forgive them for mistakes which are the effect of the disorder (when the person doesn't take responsibility and cannot control them). Social support in a sense replaces the parental support they received when they were young.

This study sheds little light on students with learning disabilities and the journey they go through on their way to the academic degree and their subsequent integration into the work cycle.

The support model carried out in the study can serve as support centers within a higher education system and constitute a significant tool to help students with learning disabilities and this is the contribution of the study.

During the writing of the research work, the corona epidemic broke out around the world. This epidemic has changed many areas in the world and within them also the concept of academic studies. Learning has become distant through zoom or Google Team.

Many students reported significant difficulty in this way of learning and especially students with learning disabilities. From conversations I had with students at the Peres Academic Center, it seems that over time the difficulties dissipated, and



distance learning became more effective, however many elements mentioned in the study could not be reflected due to social distance: students could not study with their classmates, contact lecturers directly or ask questions and attend academic reinforcement classes. Heads of academia must think of creative ways to help students with learning disabilities because it seems that academia will no longer return to teaching in the old format.

Considering the findings of the research and the changes that have taken place in the world in the past year, it seems important to provide the student with tools for self-direction so that he can independently deal with learning materials and achieve academic self-efficacy, identifying students' strengths and weaknesses as Presented in this study. In addition, the lecturers in the academy must also undergo a change in the teaching methods and direct the teaching to a variety of types of students and consider students with learning disabilities. this new context demands new research in the field because it will change the perspective and bring new challenges not only for people with LD But also for therapists.

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# Appendices

## Appendix Number 1: Interview Guide

### Preface for the Interview

Thank you for agreeing to meet and talk with me. I am asking to interview you about the difficulties related to your learning disabilities.

All that you will tell me will remain confidential. I will use it only for the purposes of the research study. With your permission, we will record the conversation on tape. The interview will be transcribed later, and I will be happy to give you, if you want, a copy of the recording and the transcription.

I commit to preserving now and in the continuation of the research confidentiality and to avoid revealing every detail that will identify you and will link the content of your words to you. Your name is not marked on the tape. The interviews will be analyzed according to different topics and not according to interviewees, and thus your identity will remain protected, and it will not be possible to identify you personally from the findings. You are always allowed to ask from me to stop recording the interview. I will respect your request.

In the interview we will immediately hold I will ask you different questions, through which I seek to learn from you about your experience as a student with learning disabilities. There are no right and wrong answers. The way in which **you** see things is what is meaningful.

If I ask questions that you do not want to answer or present issues that you prefer not addressing, then I will respect your desire. You can end the interview at any stage you want, without any implications for you.

The interview will last about an hour and a half. If necessary, we will meet another time.

Your participation may contribute significantly to the understanding of the research in the field of learning disabilities.

## **Appendix 1(A)**

Guide for the interview: Semi-structured in-depth interview for students with learning disabilities

Examination of the Researched Topic in the Context of Life History

### **Opening Question**

I am interested in the life story of students with learning disabilities in the higher education system. Tell me the story of your life from when you remember until today.

### **Focused Questions**

#### **Educational Academic History**

- First indications of the difficulty, response of the environment, and coping
- Who identified the difficulty and in what grade?
- What did you help for learning help – effectiveness of the help
- Response of the family, friends, and teachers in different stations in the school
- In what class did you begin to use accommodations in a formal manner and how did the environment respond?
- How did the transitions from framework-to-framework influence in the context of the learning difficulties?
- What helped you learn for high school graduation exams?

#### **Perception of the Learning Disability and Its Influences**

- When did you have a significant formal assessment, what were you told, and how did your parents react?
- Can you define the difficulty and what it is like?
- How did the friends respond and when did you decide whether to share with them?
- Describe positive and negative experiences regarding the disability?
- How do you cope today academically and with the responses of the environment?
- What do you do in the leisure time hours?
- Do you work?
- Do you think classmates are ready to help students with learning disabilities?

#### **View for the Future**

- What are the chances of success to achieve an academic degree?

- What will you counsel a student after he has begun to study for a degree, and he is in your situation?
- How did the difficulty influence the choice of profession?
- Do you see yourself succeeding in the future?
- What in your opinion will benefit success in the learning?

### **Appendix 1(B)**

Guide for the interview: Semi-structured in-depth interview for students after they receive support

Examination of the research topic in the context of concrete conditions of the present experience

#### **Opening Question**

A half a year has passed since we met. I am still interested in what the students who are coping with learning disabilities are experiencing. Tell me what has happened since you began to receive support until today.

#### **Description of the Cognitive Coping**

- How did you prepare for tests before the support? How do you prepare now?
- Describe an event of a test and what you thought before/after.
- Describe the day's routine during the period of the tests.
- Describe the manner of academic and emotional coping with learning overload.
- Describe a situation in which you felt that your attitude changed to yourself and the studies.
- The support of the parents, lecturers, friends, family – who special did you receive help from?
- Attitude of the friends: social coping – social activity on the campus and outside of it.
- Description of the manner of use of accommodations, their effectiveness, the manner of organization of the college, and the response of the environment
- Describe difficulties – what is a learning difficulty?
- Describe an experience of learning coping – how does this place you versus others?

### **Implications for the Future**

- Results versus expectations – What is the feeling? Were the grades until now according to expectations?
- Description of an event – a day in which you received results in a test and a personal response and response of the environment/domestic partner.
- Thoughts about the continuation of success in the studies and degree of required investment.
- Thoughts about the chances of success in the studies.
- Advice to another student who has difficulties, and he is found at the start of the path.
- Plan for the future and how the learning disability influences the choice of the profession.
- Message to the lecturers and college.