

SOUTH-WEST UNIVERSITY “NEOFIT RILSKI”

FACULTY OF PEDAGOGY

**DEPARTMENT OF MANAGEMENT OF EDUCATION AND SPECIAL
PEDAGOGY**

Dana Barak Harel

The Influence of the Type of Learning Framework on the Level of
Social Anxiety, Sense of Belonging, and Sense of Self-Efficacy
among Reading Disabled Adolescents

AUTHOR’S ABSTRACT

of a dissertation to award the educational-and-scientific degree
Ph.D. in Special Pedagogy

**Academic Supervisor:
Prof. Pelagiya Terziyska, PhD**

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The dissertation was discussed and referred for defense before the scientific jury of the Department of Management of Education and special at the Faculty of Special Pedagogy of South-West University, "NEOFIT RILSKI".

The dissertation has 168 pages total and consists of an introduction divided into several subsections, 4 main chapters with separate subsections with a review of the literature, the research method and tools used, findings and conclusions, discussion containing the summary and conclusion, as the analysis and research is presented in 20 tables, list of references and 12 appendices. The list of reference literature consists of 209 titles in the Hebrew and English languages.

The defence of the dissertation will take place on June 25, 2021 at 10.30 am at an open meeting before a scientific jury consisting of Assoc. Prof. Dr. Daniela Botseva, Assoc. Prof. Dr. Katya Dionisieva, Prof. Dr. Snezhana Nikolova, Prof. Dr. Dr. Katerina Karadzhova, Prof. Dr. Venetka Katsarska

The materials on the defense are available to those interested in the Faculty of Pedagogy of SWU "Neofit Rilski".

The author of the dissertation is a teacher of special education (B.Ed., M.A.). She had six special education classes in a regular six year school (seventh to twelfth grades). She was a lecturer in the Oranim Academic College in the Special Education Department. Today she works as a pedagogical instructor in the elementary school and trains teaching staffs in data-based teaching practices.

Table of Contents

I. GENERAL DESCRIPTION OF THE DISSERTATION	1
1. Introduction	1
2. Topicality and Relevance of the Research Topic	4
3. Object and Subject of the Research	8
4. Problem Researched	8
5. Author's Argument	9
6. Objective and Tasks of the Dissertation	9
7. Research Methodology	9
8. Limitations of the Problematic Scope of the Ph.D. Work	142
II. STRUCTURE OF THE DISSERTATION	15
III. DISSERTATION SUMMARY	16
IV. DISSERTATION CONTRIBUTIONS	18
V. PUBLICATIONS RELATED TO THE DISSERTATION	20
VI. CONCLUSION	19
REFERENCES	22

I. GENERAL DESCRIPTION OF THE DISSERTATION

1. Introduction

The trend of the inclusion of students with special needs, including reading disabilities, has strengthened recently in the general education system (Heyman, 2004; Ministry of Education, 2018; Ziv, 2014). This trend is an expression of the perception that the inclusion has a beneficial influence both academically and emotionally on all the students (Neon, Ben, & Marom, 2011). In addition, the regular education system holds an additional framework of learning of the special classes in the regular school.

In the present research study, we sought to clarify whether the different learning frameworks have influence in the emotional and social aspects, and specifically on the feeling of self-efficacy, on the feeling of belonging, and on the feeling of social anxiety. We focused on the population of reading disabled adolescents, since in the period of adolescence the burden of the emotional coping that comes with adolescence, alongside the coping with the special emotional-social challenges posed by the reading disability, makes this population especially sensitive (Al-Yagon & Mikulincer, 2004; Lackaye & Margalit, 2008; Lackaye, Margalit, Ziv, & Ziman, 2006).

This research study examined differences in the level of social anxiety, sense of belonging, and sense of self-efficacy between reading disabled students who learn in the special education class (promoting) and reading disabled students who are integrated in the regular class, in comparison to students without disability. In addition, the research examined the relationships between social anxiety and self-efficacy, between social anxiety and sense of school and class belonging, and between sense of self-efficacy and sense of school and class belonging. We hypothesized that these relationships would be stronger among reading disabled students who learn in the special education class in the regular school in comparison to students with reading disability who learn in the regular class (inclusion) and in the two groups the

relationship would be stronger in comparison to students without disability.

Furthermore, we also examined the influence of the independent variables: reading disability, type of learning class, attention disorder, age, place of residence, and duration of time the student learns in his class on the variables of social anxiety, sense of self-efficacy, and sense of belonging.

A total of 64 students (with and without reading disability) who learn in the seventh to ninth grades (ages twelve to sixteen) in three regular schools in the north of the country participated in the research study. Of them, 43 students are assessed as having reading disability: 19 students in the regular class (inclusion) and 24 students in the special education class. The control group consisted of 21 students who do not have reading disability from the regular classes of the same schools, chosen randomly. The research study used the following research instruments.

1. Personal information questionnaire composed especially for the research study
2. Test of word reading efficiency (TOWRE) reading single words (with vowel marks¹ and without vowel marks) (Torgesen, Wagner, & Rashotte, 1999)
3. Social Anxiety Scale – Revised (SAS-R) (Le Greca & Stone, 1993)
4. Psychological Sense of School Membership scale (PSSM) (Goodenow, 1993a)
5. General Perceived Self-Efficacy (GSE) (Zeidner, Schwarzer, & Jerusalem, 1993).

In contrast to what was expected, statistically significant differences were not found between students with reading disabilities and students without reading disabilities in the level of social anxiety, in the feeling of general belonging to the class and to the school, and the feeling of self-efficacy. However, statistically significant differences were found in the sub-indices of two questionnaires. In the sub-index of the questionnaire of sense of class belonging, “relationship with the peer group” it was

¹ In Hebrew the vowel sounds are represented by different configurations of dots and dashes that appear under, above, and in the consonant letters. It is possible to write – and read – the Hebrew language with and without these vowel marks.

found that students without reading disabilities have higher scores in comparison to students with reading disabilities who learn in the special education class. In the sub-index of “perseverance ability” in the self-efficacy questionnaire it was found that students without reading disabilities have higher scores than do students with reading disabilities integrated in the regular class. The examination of the possibility of the prediction of the independent variables of the dependent variables found that the variable of “reading disability” predicts the sense of academic self-efficacy.

The research findings shed light on the possibility that the learning environment (class and school) is a factor in the promotion of the mental wellbeing of students with reading disability in the education system. The discussion presents possible explanations of the findings, as well as the research limitations.

2. Topicality and Relevance of the Research Topic

The inclusion of students with reading disabilities in the regular school necessitates special pedagogical and didactic organization. This organization is meaningful, not only in the scholastic aspect but also in the social-emotional aspect of the student. The objective of the present research study is to examine the possible influence of the learning framework on the variables of social anxiety, sense of belonging, and sense of self-efficacy among adolescents with reading disability (with and without attention deficit hyperactivity disorder, ADHD) who learn in regular schools in special education classes (which promote them) and those who learn in regular classes (inclusion classes), in comparison to students without disability.

This examination is relevant to what happens today in the educational system in Israel for a number of reasons. The first reason is the high frequency (about 80%) of reading disability among those defined as learning disabled (Shaywitz & Shaywitz, 2008). The second reason is the constant deliberation of the makers of policy and decisions regarding the framework most appropriate for learning disabled students

(Kaplan & Danino, 2002; Shavit, 2007). The third reason is the likelihood of extensive influence of the reading disability on the student's emotional and social aspects (Al- Yagon, 2010, 2014; Eissa, 2010; Goldston et al., 2007; Huntington & Bender, 1993; Jansen, Scherer, & Schroeders, 2016), including characteristics of considerable importance to the individual's development and wellbeing, such as sense of self-efficacy, sense of belonging, and social anxiety, as will be discussed in the continuation.

In the state schools (regular schools) in Israel it is possible to find two frameworks of learning for students with special needs – inclusion in the regular class or special education classes. A student with reading disability is integrated in a learning framework according to the severity of the harm to his academic and emotional functioning and subject to his parents' desire. In many countries (Britain, the United States, Australia, the countries of Europe, and Israel), the effort to integrate in the regular classes students with special needs, including students with reading disability, has failed because of pedagogical and didactic difficulties (Avramidis & Norwith, 2002; Avramidis et al., 2000, Evants & Lunt, 2002; Shavit, 2007). Despite the difficulties with the inclusion of students in the regular classes, the Ministry of Education has defined the inclusion as a main objective – the objective of inclusion. Inclusion in the educational context refers to integration, normalization, mainstreaming, and an enabling and cultivating environment (Ministry of Education, 2012). At the basis of the perception of inclusion there is the assumption that over-classification and labeling lead to compartmentalization, or in other words, the distancing of students who have difficulties from the regular classes and the over-referral of the students with special needs, including students with reading disability, to classes of special education in the regular schools. This perception led to the situation in which students with special needs are integrated today, more than in the past, in the regular classes. Despite this perception, the number of special education classes (in the regular schools) has not decreased, since they provide more tailored and diverse responses to the students' special needs. These classes are called promoting classes.

These two frameworks are distinct from one another pedagogically and didactically. They are different in their composition and character and thus may offer different social-emotional experiences for the learning disabled student. Thus, for instance, the special education class offers the reading disabled student interaction with other students who have difficulties. His disorder is not especially prominent in light of the existence of other disorders among his classmates, but it is intensively apparent throughout the time of the stay in the class because of the labeling of the special class. In contrast, the inclusion class offers on the one hand an experience of a regular learning environment and on the other hand prominent difference in the group of students whose difficulties are not as prominent as that of the reading disabled student. Either way, the coping with the reading disability in each one of the frameworks can offer a fundamentally different social and emotional experience and shape a different social and emotional course of development for the student. The difference between the two frameworks raises the issue of the relationship between the type of scholastic-educational framework and the student's emotional-social experience.

The choice to focus in the present research study on the reading disability, from among the different learning disabilities, derives from its unique characteristics. This disability has the highest frequency among those assessed as having a learning disability (Shaywitz & Shaywitz, 2008). It is not found in the boundaries of one scholastic subject or limited learning skills, but rather it has a comprehensive influence on scholastic success, since reading is a central element in the curriculum (Kozminsky, 2004). Reading disorder requires special reference on the part of the class teachers, and therefore it makes the students who have it into special needs students, whose disability may be overt and felt in the class (Scarborough, 1998; Torgesen, Wagner, & Rashotte, 1994). However, its influences are apparent beyond the scholastic domain. Hence, a significant gap in the quality of reading generally causes a profound sense of lack of ability and negative self-perception (Givon & Cohen, 2009).

The coping with a reading disability has emotional influences from the moment it becomes overt and felt. Since the disorder does not

disappear over time, its influences on the student's emotional world continue and even change over the years (Bruck, 1993; Fletcher et al., 2007; Gregg et al., 2008; Ransby & Swanson, 2003). The respondents in the present research study are adolescents. Students during adolescence bear a dual burden of emotional coping with the turbulence of adolescence, alongside the coping with the special emotional challenges that the reading disability imposes. Because of the importance of the perceptions of the self (Eccles, 2004), from the significant emotional experiences at this age three main aspects were chosen: sense of self-efficacy, sense of belonging, and existence of social anxiety that influences the adolescent's mental wellbeing (Ben Gal, 2004; Ma, 2003; Peleg, 2011; Tabassam & Grainger, 2002). Each one of these feelings can be influenced by the manner of functioning and by the result of the fulfilment of the concrete tasks (in this case, reading) that give the adolescent feedback regarding on what is expected of him and in relation to the peer group. The period of adolescence constitutes an important stage in the building of the adolescent's independence and cognitive and emotional resources are invested in it (Givon & Cohen, 2009). It is possible to examine the emotional influence of the reading disability and the scholastic environment of the adolescent through different factors that compose his mental wellbeing.

In the present research study, I will focus on the sense of self-efficacy, sense of belonging, and social anxiety for the following reasons. The **sense of efficacy** was chosen since it is built from the collection of experiences of the past (Bandura, 1977, 1995; Usher & Pajares, 2008), including in our context the continuous difficulty with reading. In addition, during adolescence the self-efficacy takes a significant role since it is related to self-direction in learning: choice of the learning programs, academic horizon, and scholastic achievements, including success in the high school matriculation examinations (Katz, 2002). Therefore, the continuous difficulty with reading may leave the reading disabled adolescent at an inferior position in the context of sense of efficacy in relation to his peers without the disability. The **sense of belonging** was chosen since during adolescence it is a meaningful factor in the creation of motivation, commitment, achievements in the studies,

and even dropping out from the school (Bandura, 1977, 1995; Einat & Einat, 2008; Usher & Pajares, 2008). Therefore, it is important to examine the relationship between the reading disability and the adolescent's feeling of belonging to the school and to the classroom. Last, **social anxiety** will be examined since research studies have found that adolescents with reading disability feel more confusion and anxiety in situations in which they are required to read aloud and they exhibit more behavior problems (Eissa, 2010; Goldston et al., 2007). A relationship was found between learning disability, and reading disability, and social anxiety (Ben Gal, 2004; Peleg, 2011; Riddick et al., 1999). However, there is room to clarify whether the type of class in the Israeli schools has influence on this variable. Insights in this field will help with the placement of the students into the different classes, their absorption, and the way of fulfillment of resources given to them. On the macro level, this is budget and management, while on the micro level, this is time, professionalization, teaching, and recruitment of the professional staff (Shavit, 2007).

3. Object and Subject of the Research

In this research study, I will clarify the possible influence of the learning framework (special education class or regular class) on the socio-emotional perception of reading disabled adolescents (with and without ADHD). The three dependent variables chosen are the level of social anxiety, the sense of belonging, and the sense of self-efficacy. The independent variables are the learning framework and the existence of reading disability.

4. Problem Researched

As aforementioned, the implications of reading disability do not end only with achievements in the studies; a reading disability has influence on the adolescent's daily experience. Therefore, the research study will posit the following research questions:

1. How does the learning framework influence the emotional perception of the reading disabled adolescent? Or in other words,

what is the difference between the daily experience of the reading disabled adolescent in the different learning frameworks in the aspects of the feeling of efficacy, social anxiety, and sense of belonging?

2. Is there a relationship between social anxiety and sense of self-efficacy?
3. Is there a relationship between social anxiety and sense of belonging?
4. Is there a relationship between sense of self-efficacy and sense of belonging?

5. Author's Argument

The main hypothesis is that the learning framework (the special education class / the regular class) has influence on the level of social anxiety, sense of belonging, and sense of self-efficacy of adolescents with reading disability who learn in the special education class, between students with reading disability integrated in the regular class and students without disability.

6. Objective and Tasks of the Dissertation

The present research study focuses on the emotional aspects of reading disability. This focus invites a broader look at the student's coping and a more in-depth examination of its implications on the student's wellbeing. This is a shift from seeing the child as only a student to seeing the child as a whole person; this is a shift from technical engagement in products and in one limited area, the learning in the school, to a broad engagement in implications of the reading disability on all areas of life. This is a focus that seeks to ask the question of what is the emotional price that is paid by the reading disabled student for the extensive use of resources in order to conceal the disability and to deal with it. When going to address this part of the student's experience, the following question arises. What are the main feelings that may be harmed in the student? It is possible to give different answers. In the present research study, I chose to focus on three

feelings that are built as a result of the person's experience in the world: the sense of self-efficacy, the sense of belonging, and the sense of social anxiety.

Therefore, the objective of the present research study was to examine the influence of the type of learning framework on the level of social anxiety, sense of belonging, and sense of self-efficacy between reading disabled adolescents who study in the regular schools in the regular classes (inclusion) and reading disabled adolescents who study in the regular schools in special education classes, in comparison to students without reading disability.

The tasks, as they appear in the dissertation, are as follows:

1. Review of the descriptive and research literature in the field - legislation, treatment approaches, and research findings related to the sense of efficacy, sense of belonging, and social anxiety.
2. In-depth clarification of each one of the research variables and the impact of the reading disability on it.
3. Examination of the possible influence of comorbidity between reading disability and attention disorder.
4. Definition of the research population and the method of data collection – research instrument and research process.
5. Analysis of the quantitative and qualitative data collected.
6. Discussion of the data and raising possible explanations for the data.
7. Presentation of the contribution of the research study.
8. Presentation of the limitations of the research study.
9. Proposals for continuation research studies and/or future research studies.

7. Research Methodology

Research Respondents

A total of 64 students aged twelve to sixteen who study in the seventh to ninth grades in a number of schools in the north of the country participated in the research study, in three groups. These schools primarily include students from rural communities (kibbutzim² and moshavim³). The subjects were chosen in a convenience sample. The first group consisted of 24 students who were assessed as having reading disability and who learn in the special education class. The second group consisted of 19 students who were assessed as having reading disability and who are integrated in the regular class. The third group, the control group, consisted of 21 students who do not have a disability and were chosen randomly. All the respondents belonged to schools in communities with an intermediate socioeconomic status. The research study was performed with the permission of the school principals and parents. The students with reading disability were classified into research groups on the basis of the confirmation of the diagnosis obtained from the school indicating the reading disability and on the basis of the validation of the diagnosis using the single words reading test (with vowel marks⁴ and without vowel marks).

The **experimental group** included students who were defined as having reading disability according to a main criterion of fluency and accuracy in the decoding of written words. The respondents took a reading fluency test, and data was collected regarding the percentage of mistakes. The experimental group included only those whose reading fluency was found lower by at least 1.5 standard deviations from the age-appropriate mean, according to accepted norms. This group included all

² A kibbutz (plural: kibbutzim) is a collective community in Israel traditionally based on agriculture.

³ A moshav (plural: moshavim) is a type of Israeli community, typically a cooperative agricultural community.

⁴ In Hebrew the vowel sounds are represented by different configurations of dots and dashes that appear under, above, and in the consonant letters. It is possible to write – and read – the Hebrew language with and without these vowel marks.

the students who are integrated in the regular classes and the students who learn in the special education classes.

Research Instruments

Personal Information Questionnaire

The questionnaire was composed for the purpose of the research study and provides background data relevant for the research study.

TOWRE – Single Words Test (with Vowel Marks and without Vowel Marks)

The TOWRE (Torgesen, Wagner, & Rashotte, 1999) examines the effectiveness of reading of single words (104 words) with ascending order of complexity. The respondents were asked to read the words aloud, as many words within 45 seconds. The research study of Katzir, Schiff, & Young-Suk (2012) found a reliability of $\alpha = .95$. For the purpose of the examination of whether there are differences between the research groups in the degree of the success in the two tasks in the reading test, use was made of single factor variance analysis, ANOVA. The results of the variance analysis are presented in Table Number 1. As can be seen in Table Number 1, a difference was found between the groups in the two tasks. The *Tukey* tests at a level of significance of $p < .05$ reinforce the argument that these are different populations.

Table Number 1: Distribution of the Indices of Success in the Reading Test in the Two
Tasks among the Three Research Groups

Research Group, M=Mean, SD=Standard Deviation, CV=Coefficient of Variance										
Task type	Reading Disabled						Not Reading Disabled			Difference
	Inclusion class (n=20)			Special Education Class (n=23)			Regular Class (n=22)			
	<i>M</i>	<i>SD</i>	<i>CV</i>	<i>M</i>	<i>SD</i>	<i>CV</i>	<i>M</i>	<i>SD</i>	<i>CV</i>	
Vowels	.81 ^b	.08	10%	.78 ^b	.10	13%	.91 ^a	.10	11%	10.75***
No vowels	.89 ^{ab}	.07	8%	.84 ^b	.10	12%	.94 ^a	.08	9%	7.73**

** $p < .01$; *** $p < .001$

^{a,b} cataloguing of the research groups according to the results of the continuation test

General Perceived Self-Efficacy Questionnaire (GSE)

The questionnaire was composed by Zeidner, Schwarzer, and Jerusalem (1993) and translated by Vendover (1997). It is based on the theory of Bandura (1977) and includes ten statements on a scale of four levels. The present research study uses a general research instrument for self-efficacy, which was converted to a specific area of academic self-efficacy. In the present research study a reliability of $\alpha=.69$ was found.

Psychological Sense of School Membership Scale (PSSM)

The questionnaire was composed by Goodenow (1993a) and translated into Hebrew by Israelashvili (1997). The questionnaire includes eighteen statements on a scale of five levels, ranging from 1 – “not at all” to 5 – “all the time”. The present research study found adequate reliability ($\alpha=.86$). Two open-ended questions were added to obtain a broader picture regarding the perception of the student in this context, for instance “Describe in your words what makes you feel comfortable and satisfied in the classroom.”

Social Anxiety Scale Revisited (SAS-R)

The questionnaire was authored by Le Greca and Stone (1993) and translated into Hebrew by Peleg and Dar (2001). The questionnaire consists of 22 statements that address three scales: ‘fear of negative evaluation’; ‘avoidance of new situations or distress in new situations’; ‘avoidance and distress in general situations’. The respondents must rank themselves on a scale of five levels, ranging from 1 – “not at all” to 5 – “all the time”. The scores range from 20 to 110. A low score in the questionnaire indicates low social anxiety, and the opposite is also true. In the present research study, reliability of $\alpha=.91$ was found.

8. Limitations of the Problematic Scope of the Ph.D. Work

The main limitations of the present research study derive from the size and the nature of the sample. Because of constraints pertaining mainly to the degree of cooperation of the schools, the sample was a convenience sample and was not large. It included a segment of a unique population that does not represent other sociodemographic groups characteristic of society in Israel. The schools where the research was carried are unique schools with a rural-agricultural nature, and therefore it is possible that the findings do not indicate what happens in urban schools in Israel, and the lack of urban research subjects in the research does not enable the generalization of the findings to this population.

Another limitation relates to the fact that in the reading tests sufficiently prominent differences were not found between the research groups and the control group. It is possible that the reason for this is that we did not have access to the assessments of the students with reading disability, aside from the general information we received from the schools on the existence of their reading disability.

Another limitation pertains to the fact that the research was performed through self-reporting questionnaires, which are sometimes influenced by the bias of social desirability. It is possible that the respondents felt the desire to be perceived positively by themselves and by the researcher. Hence it is possible that these questionnaires do not reflect in a trustworthy manner the subject’s situation (Kruger & Dunning, 1999; Job & Klassen, 2012; Nelson & Harwood, 2011).

Another limitation pertains to the high percentage of students with ADHD and reading disability (Barkley, 1988) and the difficulty with the detection of research subjects with reading disability without co-morbidity of ADHD. The research study had no choice but to include subjects who were assessed, in addition to reading disability, with ADHD, a disorder known to increase the risk of social and emotional difficulties (Mayes, Calhoun, & Crowell, 2000).

II. STRUCTURE OF THE DISSERTATION

The dissertation opens with an introduction and research rationale. It is built of four chapters: theoretical and research review, research method, findings, and discussion. There are 138 pages in total. The main text includes 8 tables. In the appendix there are another 11 tables and 5 research questionnaires. The bibliography list includes items that include research studies from all around the world, including Israel and Bulgaria.

CONTENTS

INTRODUCTION

FIRST CHAPTER. Review of the Literature

- 1.1. The Special Education Law and the Inclusion Law
- 1.2. Research on the Implementation of the Inclusion Law in Israel and in Bulgaria
- 1.3. Reading Disability and Social and Emotional Characteristics of Reading Disability among Adolescents
- 1.4. Sense of Self-Efficacy
- 1.5. Need for a Sense of Belonging
- 1.6. Anxiety, Social Anxiety, and the Relationship between Reading Disability and Social Anxiety
- 1.7. Summary

SECOND CHAPTER. Research Method

2.1. Research Respondents

2.2. Research Instruments

2.3. Research Process

THIRD CHAPTER. Research Findings

3.1. Examination of the Research Hypotheses

3.2. Additional Findings – Qualitative Analysis

FOURTH CHAPTER. Discussion

4.1. Responses of Subjects to the Open-Ended Questions on Feeling of Belonging

4.2. Responses of Subjects to the Open-Ended Questions on Satisfaction with the Academic Achievements

4.3. Relationship between Research Variables

4.4. Summary and Conclusions

4.5. Applied Recommendations

4.6. Research Contribution

4.7. Research Limitations

4.8. Suggestions for Future Research

III. DISSERTATION SUMMARY

In the framework of the present research study, an attempt is made to broaden the knowledge regarding the influence of the learning framework on the level of social anxiety, sense of belonging, and sense of self-efficacy among students with reading disability who learn in the special education (promoting) classes and in the regular (inclusion) classes. The research hypotheses were partially confirmed. Differences were not found between students with reading disabilities and their peers in the level of social anxiety, feeling of general belonging to the class and to the school, and sense of academic efficacy. However, differences

were found in the sub-indices of some of the questionnaires. In the questionnaire of sense of class belonging in the sub-index of “relationship with the peer group” it was found that students without reading disability received higher grades in this sub-index than did students with reading disabilities who learn in the special education classes. A difference was found in the level of self-efficacy between the research group and the control group, a difference that is expressed in the sub-index of ‘perseverance ability’. In addition, higher perseverance ability was found among students without reading disability in comparison to those with reading disability who learn in the inclusion class. It was further found that the independent variable “reading disability” predicts the sense of academic self-efficacy. In the examination of the correlations between the research variables, a correlation was not found between social anxiety and self-efficacy in the research group. In contrast, in the general index of the questionnaire of the sense of belonging to the school a negative correlation was found between the sense of belonging to the school and the social anxiety among students with reading disability who learn in the special education class and in the control group. The sub-index of “acceptance”, which composes the variable of “sense of belonging to the school”, was found related negatively to social anxiety both in the research group and in the control group. It is important to note that in our research study it was not found that the sense of class belonging is related to general situations of anxiety but to specific situations in which the inclusion students feel that they are judged and measured by the environment.

The research findings may contribute to a broader perspective in the field of the emotional implications that the reading disability has in connection to the learning framework – special education versus inclusion in regular education. In contrast to what was expected, significant differences were not found between students with reading disability integrated in the regular classroom and those who learn in the special education class. However, it is likely that the finding derives from the uniqueness of the schools where the data were collected and from the developmental age of the research participants (adolescents with reading disability who learn in the schools of the Administration for Rural Education in the regular classes and in the special education

classes). The finding regarding the sub-indices in the questionnaires of sense of class belonging and sense of academic efficacy of the inclusion students emphasizes the need to address this population in a didactic and pedagogical manner. The finding in relation to the positive correlation between the sense of self-efficacy and the sense of belonging in the inclusion group and the negative correlations which were found between the general index of the sense of class belonging and social anxiety among only the inclusion students emphasizes the influence of the social-learning environment on the emotional world of the student integrated in the regular class and focuses the need to continue to examine this influence regarding variables not examined in the present research, such as the nuclear family and teachers.

In this context, there is room to offer challenging but not frustrating tasks (social as well as academic) so as to strengthen the student's belief in his ability to succeed, which will give a place for the expression of other abilities that are not necessarily academic. These tasks may advance and develop the sense of academic efficacy and influence the sense of social belonging. It is important to note that the optimal integration of students with reading disability is an outcome of the school organizational climate and the attitudes of the integrating teachers.

IV. DISSERTATION CONTRIBUTIONS

The scientific contributions are divided into two groups - theoretical and applied ones.

Main theoretical contributions:

- The research conducted complements existing knowledge in the field of reading disorders while comparing different learning frameworks.
- The results of the research reveal and show the sense of belonging to the class and the school among students with reading disabilities, a factor that has not been studied so far.

- A difference has been found between students with reading disabilities integrated in a regular class and those who study in a special education class in the sub-index of “peer group connection”, which belongs to the sense of belonging to the class.
- The research reveals the possibility that the nature of the school where the data were collected could influence the findings and conclusions.

Main applied contributions:

- The applied consequences that result from the findings reinforce the importance that should be given to the influence of the learning environment on the student's world.
- The focus in the different learning frameworks in the mainstream (public) school, i.e. the regular class (inclusion) and the special education class (promotion), is important for strengthening the trend of inclusion in Israel.
- Students with reading disabilities who are integrated into the regular class often deal with their disabilities in two aspects. The first aspect is the objective difficulty due to reading disorders (reading, writing and spelling), and the second is the attitude they receive from their surroundings.
- The findings of the study show the need for pedagogical training that will draw students' attention to inclusion with greater sensitivity and allow them to find the strength to cope with their disabilities and to form a greater sense of control both of their successful results as well as of their failures.
- Resources also need to be allocated to activities such as media, theater, music, drama, carpentry, intelligence, etc., which will allow more students with reading disabilities (and learning difficulties in general) to reveal their strengths and develop their normal abilities.

- The findings and conclusions of this research can help decision-makers in distribution committees.
- Resource teachers need to be trained regarding the implications and consequences of the findings of this research.

V. PUBLICATIONS RELATED TO THE DISSERTATION

Barak Harel, D. (2019). The Influence of Type of Learning Framework on the level of Social Anxiety, Sense of Belonging and Sense of Self – Efficacy among Reading Disabled Adolescents, *Social Science, Publishing Complex – UNWE*, 48-70.

Barak Harel, D. (2019). The Challenge of Inclusion – From the Beginning of the Development of the Special Education Frameworks until Today. *Social Science, Publishing Complex – UNWE*, 71-79.

Barak Harel, D. (2021). The Influence of the Environment on the World of the Learning Disabled Student. *Journal Pedagogy* (in press).

VI. CONCLUSION

In the framework of the present research study, an attempt is made to broaden the knowledge regarding the influence of the learning framework on the level of social anxiety, sense of belonging, and sense of self-efficacy among students with reading disability who learn in the special education (promoting) classes and in the regular (inclusion) classes. The research hypotheses were partially confirmed. Differences were not found between students with reading disabilities and their peers in the level of social anxiety, feeling of general belonging to the class

and to the school, and sense of academic efficacy. However, differences were found in the sub-indices of some of the questionnaires. In the questionnaire of sense of class belonging in the sub-index of “relationship with the peer group” it was found that students without reading disability received higher grades in this sub-index than did students with reading disabilities who learn in the special education classes. A difference was found in the level of self-efficacy between the research group and the control group, a difference that is expressed in the sub-index of ‘perseverance ability’. In addition, higher perseverance ability was found among students without reading disability in comparison to those with reading disability who learn in the inclusion class. It was further found that the independent variable “reading disability” predicts the sense of academic self-efficacy. In the examination of the correlations between the research variables, a correlation was not found between social anxiety and self-efficacy in the research group. In contrast, in the general index of the questionnaire of the sense of belonging to the school a negative correlation was found between the sense of belonging to the school and the social anxiety among students with reading disability who learn in the special education class and in the control group. The sub-index of “acceptance”, which composes the variable of “sense of belonging to the school”, was found related negatively to social anxiety both in the research group and in the control group. It is important to note that in our research study it was not found that the sense of class belonging is related to general situations of anxiety but to specific situations in which the inclusion students feel that they are judged and measured by the environment.

The research findings may contribute to a broader perspective in the field of the emotional implications that the reading disability has in connection to the learning framework – special education versus inclusion in regular education. In contrast to what was expected, significant differences were not found between students with reading disability integrated in the regular classroom and those who learn in the special education class. However, it is likely that the finding derives from the uniqueness of the schools where the data were collected and from the developmental age of the research participants (adolescents with reading disability who learn in the schools of the Administration for

Rural Education in the regular classes and in the special education classes). The finding regarding the sub-indices in the questionnaires of sense of class belonging and sense of academic efficacy of the inclusion students emphasizes the need to address this population in a didactic and pedagogical manner. The finding in relation to the positive correlation between the sense of self-efficacy and the sense of belonging in the inclusion group and the negative correlations which were found between the general index of the sense of class belonging and social anxiety among only the inclusion students emphasizes the influence of the social-learning environment on the emotional world of the student integrated in the regular class and focuses the need to continue to examine this influence regarding variables not examined in the present research, such as the nuclear family and teachers.

In this context, there is room to offer challenging but not frustrating tasks (social as well as academic) so as to strengthen the student's belief in his ability to succeed, which will give a place for the expression of other abilities that are not necessarily academic. These tasks may advance and develop the sense of academic efficacy and influence the sense of social belonging. It is important to note that the optimal integration of students with reading disability is an outcome of the school organizational climate and the attitudes of the integrating teachers.

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