5-2021

Effective Teaching Approaches to Combat Learned Helplessness for Students in High School Special Education

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by

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A Starred Paper

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Science in

Special Education

June, 2021

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Table of Contents

Page

List of Tables 3

Chapter

1. Introduction 4

Research Question 5

Focus of Paper 5

Importance of the Topic 6

Summary of Chapter 2 Research to be Reviewed 7

2. Review of Literature 15

3. Conclusions and Recommendations 42

Conclusions 42

Recommendations for Future Research 45

Implications for Practice 46

Summary 49

References 50

List of Tables

Table Page

1. Summary of Chapter 2 Findings 8

2. List of Strategies and Approaches for Teachers to Combat Learned Helplessness 48

Chapter 1: Introduction

By the time students get to high school, most students have been through 9 years of formal schooling. In Minnesota, the compulsory minimum age for a free education begins at age 5, with a student starting in kindergarten (National Center for Education Statistics, 2017). The Individuals with Disabilities Education Act (IDEA) of 2004 outlines policy, evaluation, qualification criteria, and procedural safeguards for students to receive a free and appropriate public education in their least restrictive environment (U.S. Department of Education, 2004). Throughout a student's learning experiences, those identified and serviced under special education have evaluated and recorded skill deficits that impact their learning and success in school. As time goes on in a student's education, the number of failures they encounter increases and builds up, along with altered reactions to these failures. When a student lacks coping strategies or the ability to modify their response to a problematic situation (American Psychological Association [APA], 2020), such as in dealing with frustration and repeated failure, or they lack intrinsic motivation or self-determination, they have mastered avoiding the task mentally and have learned to be helpless (Eldowah & Alnajashi, 2017). These deeply ingrained attitudes and behaviors impede students' approaches to an academic task and increase their belief that they can't complete any of it. Thus, they set lower goals for themselves and achieve less. As defined by the APA (2017), learned helplessness is a theory related to a person's repeated exposure to stressors out of their control. Over time, an individual's perception of lack of control alters their motivation to change an environmental situation. Learned helplessness in high school special education students is prevalent, and a compilation of strategies and teaching approaches to help combat learned helplessness is explored in this paper.

Research Question

One question guided this literature review:

What are effective teaching approaches to combat learned helplessness for students with disabilities in high school?

Focus of Paper

Through a review of published literature and research, I have identified and reviewed 12 studies discussed in Chapter 2. The studies consist of experimental studies and published reviews of interventions, teaching strategies, and implications for high school special education teachers to support their students to combat learned helplessness and best ways to guide students in reaching their fullest potential. Literature reviewed and discussed are specific to secondary students and special education students, grades 6 through 12, focusing on learned helplessness behavior and building resilience.

The search for scholarly articles and peer-reviewed literature began through the Education Resource Information Center (ERIC), Academic Search Premier, APA PsychInfo, and SAGE Journals Online databases for items related to students with learned helplessness in secondary special education. I used keywords and many combinations of these to delineate studies and articles for review: *learned helplessness, special education students, teaching approaches, fear of failure, locus of control, hopelessness, resilience, academic resilience, growth mindset, student engagement, self-motivation, teaching methods, academic difficulties, perseverance, coping strategies, failure acceptance, mathematics avoidance, mathematical resilience, academic motivation, school anxiety, math anxiety, attribution and learned helplessness, achievement theory, mastery orientation, and self-regulated learning.*

Importance of the Topic

"Failure is not an option. It's just the nagging possibility that keeps me focused." This quote by an unknown author implies an overall attitude about failure. After 10 years of being a secondary special education teacher, I have experienced students with mild to severe learned helplessness. Martin and Marsh (2003), researchers of psychology in Australia, have studied fear of failure and its psychological impacts. They categorized students into three titles: success-oriented, failure avoidant, and failure accepting. The failure accepting students are those who are also known as learned helpless. Their research on these three categories of students and their behaviors and attitudes created a cascading model of failure avoidance. This continuum, listed in order based on both cognitive and behavioral engagement with tasks, going from high to low engagement is success-oriented, failure avoidance type I (overstriver), failure avoidance type II (defensive pessimism), failure avoidance type II (self-handicapping), and failure acceptance (learned helpless) (Martin & Marsh, 2003).

Students lack that true "grit" in solving problems, dealing with setbacks, perseverance, and approach most tasks with an "I can't do that" attitude, a recognizable lack of motivation, and deep-rooted feelings of failure and inadequacies. Their attitude is not only self-destructing to themselves, but others around them also begin to feel the same way about completing work and approaching difficulty. These behaviors and attitudes do not magically go away as students reach graduation, impacting their life beyond high school. Learned helplessness carries over into adulthood, impacting work experiences, social lives, and mental health. When students feel they lack control of the situation and their outcome, they give up before even starting. Being a high school special education math teacher, it is apparent the ingrained mindset and perpetuation of

their parents' attitudes that my students genuinely believe they "can't learn math." Teachers in secondary special education need tools and resources to implement approaches and strategies in the classroom for combating learned helplessness behaviors and attitudes and resources for building motivational resilience (Skinner et al., 2020) to help their students overcome these barriers to success. Some strategies for teachers to incorporate are: creating a student's self-belief, increasing their value of school, helping students transform the learning focus, and allowing students control in their learning (Martin & Marsh, 2003). Also important to build resilience and motivation are ways in which a teacher provides feedback, builds intrinsic motivation by linking key concepts with daily life, active teaching of coping strategies to deal with failure, increasing mindfulness, and a growth mindset. This information guides me to conduct research to develop a list of approaches, strategies, and implications for educators who can quickly access them to help their students reach their fullest potential in any subject in high school and beyond.

Summary of Chapter 2 Research to be Reviewed

Table 1 includes a summary of the research and peer-reviewed literature I have found. They are presented in the table in the same order in which they appear in Chapter 2.

Table 1

Summary of Chapter 2 Findings

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Krejtz & Nezlek (2016)	Quantitative	376 students in three levels of classrooms in Poland. Specifically, 129 students ages 11-14, 132 students ages 14-16, and 115 students ages 17-20 years old. The students remain in their classroom together throughout the day, and different subject teachers come to their classroom for instruction.	Students' feelings were measured using an intellectual helplessness scale with 20 items, an anxiety scale for both math and language, each with eight items, a working memory computerized assessment, and performance of final course grades comparison.	A relationship exists between feelings of helplessness in language and how they affected grades in language, but not math, and feelings of helplessness in math affected grades in math, but not language. These results suggest that learned helplessness and its impact on academic performance are domain-specific and not generalized.
Lackaye & Margalit (2008)	Quantitative	160 students without learning disabilities (non-LD) and 140 students with learning disabilities (LD) in 7th and 10th grade from ten schools in Israel.	The study examined students' grades in math and history and students completing these questionnaires: Specific Academic Self-Efficacy Scale, Academic Self-Efficacy Scale, Loneliness and Social Dissatisfaction Questionnaire, Children's Hope Scale, and an adapted Meltzer scale for effort.	The comparisons between LD and non-LD showed grades for both were significantly different in math and history at both grade levels, significant differences between LD and non-LD for specific academic self-efficacies, general academic self-efficacies, loneliness, effort, and the global measure of hope.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Valas (2001)	Quantitative	1,833 students in grades 4, 7, and 9 across central Norway. 142 boys and 72 girls were identified as having a learning disability.	Multivariate analyses of variances and structural equation modeling were conducted to compare non-low achieving (NLA), low achieving (LA), and learning disability (LD) students, and variables of attribution to ability, attribution to work expectations, helplessness, self-esteem, and depression.	Students with learning disabilities and low achieving students attribute their performance to their ability, showed more helplessness, lower expectations, and lower self-esteem. Low-achieving students were the most depressive. The disability label impacts self- and teacher's perception, increased helplessness behaviors, and the students set lower expectations, achieved less, and showed less motivation to achieve.
Kleinhammer-Tramill, Tramill, Schrepel, & Davis (1983)	Quantitative	24 adolescent students in urban Kansas identified as having a learning disability	Students participated in a summer school program and were divided into four groups: contingent reward for correct performance, 100% reward regardless of accuracy, and 50% reward with random rewards regardless of accuracy, and the fourth group as a control. Students completed two groups of tasks and were given a reward based on the group they were placed in.	Students in the 50% and 100% reward groups took longer to respond and made at least one error compared to the control group and noncontingent reward group. Noncontingent rewards lead to a significant decrease in achievement for students with learned helplessness, along with providing verbal praise during a performance.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Buzzai, Sorrenti, Tripiciano, Orecchio, & Filippello (2020)	Quantitative	1,316 Italian students between ages 13 to 20 (average age of 16)	Student demographic data were analyzed along with results from School-Related Alienation Questionnaire and School Learned Helplessness Questionnaire, and students' academic achievement data based on average scores on written and oral assessments in all subjects throughout the school year.	School alienation is positively correlated with learned helplessness, negatively correlated with mastery orientation and academic achievement. Students who develop school alienation during adolescence experience poor academic performance, learning difficulties, disengagement, and more which impacts academic achievement, mediated by learned helplessness.
Di Tommaso (2010)	Qualitative	20 college students from 6 remedial writing classes at a community college	Interviews with four faculty members, classroom observations to observe student engagement and interactions, and a select sample of 20 students from the six remedial writing classes participated in semi-structured interviews focusing on seven non-cognitive factors.	Commonalities across the participant sample indicate that students in remedial classes who have had or are a positive role model were self-motivated, self-directed learners and less likely to attribute their success to external attributions.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Eldowah & Alnajashi (2017)	Quantitative	157 female undergraduate students enrolled in a neuropsychology class	Participants were split into two groups, a control group and a group receiving a multi-level teaching strategy, explicitly addressing motivation to learn, ability to form concepts of content, and getting consistent feedback on performance. Each group completed self-rating scales before and after the course to determine the attitudes and learned helplessness to the course content and final course grade.	Participants completed a learned helplessness scale and attitude toward neuropsychology pre- and post-course. The multi-level teaching approach positively impacted students' attitudes and achievements and reduced scores on the learned helplessness scale.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Freeman, Stoch, Chan, & Hutchinson (2004)	Qualitative	16 adults in Canada consisting of 8 who dropped out of school but went back, and 8 who completed high school with their same-aged peers.	Participants were semi-structurally interviewed and data collected through audiotaping of the interviews. Questions were open-ended, had descriptive, structural, and contrast questions. Participants spoke about their high school experiences to gain a retrospective perspective on academic resilience and push and pull factors between those with learning difficulties who completed high school on time to those who dropped out but went back.	Intrapersonal, interpersonal, and institutional support systems such as teachers and parents were vital in keeping the students who finished on time to stay in school. Also, students who completed on time compared to the late finishers had activities they were involved in that kept them in school. They were also more goal-oriented and had a sense of purpose while in high school, which kept students engaged in school. Those students who dropped out but returned also only developed their long-range goals once they experienced the workforce.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Irfan Arif, & Mirza (2017)	Quantitative	255 boys in 9th and 10th grade in a public high school in Pakistan who are at risk of failure	Demographic data and academic performance were pulled to identify the students who were at risk of failure to be further selected to participate in the second phase. In the second phase, students completed questionnaires of Students' health questionnaire, Negative Life Events Questionnaire, and an adapted Resiliency Attitude Skill Profile scale. These students participated in an activity-based program for three months focusing on building resilience skills.	The intervention data showed that a resiliency program can positively affect resilience in students who are at risk of failing. Protective factors taught by a teacher who also builds a positive relationship with the students and remain positive and inspiring in their delivery benefit the program as well. Students built protective factors of self-confidence, self-esteem, self-efficacy, internal locus of control, sense of humor, autonomy, and optimism which helped reduce the risk factors that contributed to a student dropping out or failing.
Mirza & Hussain (2014)	Qualitative	20 students of mixed math ability at The Advantage College school in London who are in grade 9 secondary school.	The researcher compiled pre-and post-intervention semi-structured interviews with the students, assessment scores for math content, teacher notes, led students through a project that was completed over six lessons as the intervention and developed a rich task to be implemented in math class.	The implementation of collaborative group work involving rich tasks that gave students specific roles within the group to accomplish a task while providing real-life and authentic learning successfully achieved the standards. It also improved motivation to learn, the content was easily differentiated and achieved, and the students developed independence and self-confidence while doing it.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Carvalho & Skipper (2020)	Quantitative	18 students in England ages 14-16 attending a special education school	The participants completed a 10-week once weekly online growth mindset lesson and reinforcement activities in their personal and social health education class. Students also saw additional growth mindset strategies implemented in their English class and more throughout the school altogether. Pre-, post-, and delayed post-intervention data was collected. The data collected measured mindset, academic resilience, academic self-concept, attitude towards disability, and academic performance.	The data showed that from pre- to post-intervention, mindset and academic resilience improved, but it was not sustained at the delayed post-intervention collection. A growth mindset did not impact academic resilience. Academic self-concept improved, but it was not due to the increase in a growth mindset, likely the intervention itself. Students' positive attitudes towards disability increased, but the negative attitudes towards disability did not decrease, and academic performance did not improve from the intervention.

Chapter 2: Review of Literature

The purpose of the literature review was to examine the effects of learned helplessness on students at the secondary level with disabilities and non-disabilities alike. Some of the research compared behaviors and attitudes of students with disabilities and their general education counterparts to identify specific and underlying characteristics. Also, within the studies reviewed, exploration was done to find ways to combat learned helplessness. The importance of building resilience, self-efficacy, coping strategies, mentorship, and specific strategies for teachers to implement through their instruction to help students overcome their maladaptive behaviors were identified. Some of the studies provide foundations for ways teachers and schools can positively impact students who are susceptible to learned helplessness if early intervention is done.

Krejtz and Nezlek (2016) studied intellectual helplessness related to academic performance in domain-specific areas such as math or language. More specifically, they determined whether higher levels of helplessness in one content area transfer to other domains and the impact the level of helplessness has on academic performance in that area.

The hypothesis was that helplessness is domain-specific, meaning helplessness in math would directly affect academic performance in math. Still, it would not impact levels of helplessness in language or language performance. There were 376 student participants across 14 different schools in Warsaw, Poland, with the group ages split into approximate thirds ranging from 11 to 14 years, 14 to 16 years, and 17 to 20 years old. In this particular Poland school system, students stay in one classroom all day with their teachers rotating in and out for different subject areas.

Intellectual helplessness, anxiety, working memory, and performance were the four areas measured. Intellectual helplessness and anxiety were measured in the first session, and during the second session, 2 weeks later, students completed a computerized working memory assessment. Intellectual helplessness was measured using a five-point rating of 20-item statements related to thoughts and feelings with separate scales for math and reading. Anxiety was measured using two different 5-point rating scales of 8-items each associated with feelings of anxiousness in each subject area. Three areas of working memory were also measured. A coordination function of working memory was measured using a recall of a sequence of dot patterns. The supervision function of working memory was measured using a performance of switching between different responses. Last, the storage while processing function of working memory was assessed by transforming and mentally rotating figures. Performance was measured using students' final course grades based on a scale of 1 (failing) to 6 (excellent).

Several multilevel models were used to analyze the data gathered to measure the relationship between intellectual helplessness and performance on two separate examinations, one for each subject area resulting in negative relationships between helplessness and grades. Precisely, for every one-point increase in math helplessness, the math grade could be predicted to decrease by .56 and for every one-point increase in helplessness in language, the language grade would decrease by .41. There was no significant relationship between helplessness in math and language grade, confirming the hypothesis that helplessness is domain-specific. The researchers believe that anxiety and working memory might have contributed to the above results. There was a positive relationship within-domain between helplessness and anxiety. In order to control for anxiety and working memory, they looked more closely at those areas and found no significant

relationship between working memory and helplessness in math and similarly with language, solidifying the within-domain connection of grades and intellectual helplessness. The age level and school samplings were compared, and the data were consistent with the conclusion that there was no significant difference among the three schools and age levels in the relationships with helplessness and grades.

Learned helplessness should be considered domain-specific; however, it may still have a global component. Extensive research has been conducted related to domain-specific measures of self-esteem related to helplessness and used for several decades, advising future research for helplessness to use domain-specific measures.

Lackaye and Margalit (2008) conducted a study to examine two students' goals with learning disabilities compared to their non-disabled peers. The qualities the researchers focused on were examining the differences between adolescents in specific self-efficacy beliefs in math and history, their achievement in math and history, loneliness, effort, and hope. They also aimed to examine the predictors of hope and future expectations.

Adolescent students are unique in their development with social-emotional levels and their self-perceptions. The researchers wanted to sample students in 7th grade and 10th grade to fully understand how their self-perceptions change over time due to academic and social demands increasing along with increased stress at the high school level.

Self-efficacy, or belief in the ability to be successful, specifically in math and history were explored because students with learning disabilities show achievement gaps in either reading skills or math skills or both. The researchers presented sound psychology research of the impact and relationship self-efficacy has on students with learning disabilities. They also

presented in-depth research on psychological domains of relatedness and loneliness, hope, and effort, knowing that students who struggle with learning throughout their educational experiences have to continue to exert more effort and typically experience more frustration and become tired over time.

Participants for this study consisted of 280 students in grades 7 and 10 who were selected from 10 different schools in Israel. There was an equal number of girls and boys, and there were 120 students with learning disabilities and 160 students who were students without learning disabilities. All student participants attended general education classes, and this study focused only on students with learning disabilities and no other disability categories. The students with learning disabilities all had reading and writing disabilities, and 33% of the sample also had a math disability. They received accommodations and modifications of the general education curriculum and received resource support from special education teachers.

The researchers used several tools to gather the data for comparison: grade reports for math and history, the Specific Academic Self-Efficacy Scale, Academic Self-Efficacy Scale, Loneliness and Social Dissatisfaction Questionnaire, The Children's Hope Scale, and an adapted Meltzer scale for effort.

The comparison of students with learning disabilities, indicated as LD, to their same grade peers without disabilities indicated as non-LD, who received severe failing grades: Math–two 7^{th} graders with LD and two non-LD and nine 10^{th} graders with LD and six non-LD, History–1 7^{th}-grader with LD and two non-LD and six 10^{th} graders with LD and 5 non-LD.

Student participants also completed questionnaires with Likert-scale options from 1 being not sure at all to 7 being completely confident in response to 12 questions about self-efficacy

related to math and history and eleven questions about academic self-efficacy and coping. They also completed a 16-item scale specific to loneliness on a 5-point Likert-scale rating 1 (never) to 5 (always). The Hope scale had six statements students rated from 1 being none of the time to 6 being all the time and an effort scale with four statements ranging from 1 being never to 6 being always.

These data were run through the statistical analysis program Statistical Package for Social Sciences (SPSS) to gather descriptive statistics, reliability coefficients, correlations between grades, self-efficacy, and hope. ANOVA, Partial $Eta^{2,}$ and Cohen's d were calculated along with hierarchical multiple regression analyses to predict hope.

Significant correlations were found between each subject's achievement and its corresponding self-efficacy, but not the other subject. Additionally, significant correlations were found between general academic self-efficacy and loneliness, effort, and hope for both LD and non-LD students, with significant correlations also existing for the non-LD group with academic self-efficacy and math and history as well. The comparisons for LD to non-LD with respect to grades using a MANOVA to identify the main effects for the LD/non-LD groups and class level. Students in 7^{th} grade received higher grades in math and history than the 10^{th} graders in their respective classes and students with LD earned lower grades than non-LD students in both subjects. Self-efficacy comparisons for each subject were run using a MANOVA to determine there was a main effect for the LD/non-LD groups. Using an ANOVA, LD students in both subjects had lower self-efficacy in each subject compared to non-LD students and the general academic self-efficacy revealed main effects for the groups and significant interactions for subjects by groups. LD students' self-efficacy improved from 7^{th} grade to 10^{th} grade while the

non-LD self-efficacy dropped from 7th grade to 10th grade, and LD students continued to have lower scores in self-efficacy than their non-disabled counterparts. A significant difference between LD and non-LD participants was found with loneliness in middle school; however, there was not a significant difference between the two groups at the high school level. Students' levels of effort and hope, as indicated by ANOVAs, revealed students with LD having lower levels of effort and hope at both levels of schooling than their non-disabled peers.

Overall, students with learning disabilities compared to students without learning disabilities were significantly different in the area of self-efficacy in math and history, general self-efficacy, effort, loneliness, and hope, although the gap between the two groups (LD and non-LD) reduced from 7th grade to 10th grade. Students without LD saw a decrease in math self-efficacy and had reduced effort compared to the students with LD who stayed constant because they already faced severe difficulties in math achievement in 7th grade. Levels of hope for both student groups at both grade levels indicated hope and effort reduced from middle school up to high school. However, they still remained slightly discrepant between the groups. It was evident that students with LD have lower levels of hope and show lower achievement and loneliness even though they are supported with accommodations and receive help. Through this study, the researchers were unable to determine whether the developmental mechanisms of students with learning disabilities are domain-specific, and more longitudinal examination needs to be done.

Valas (2001) conducted a quantitative study to examine the consequences of being identified and labeled as having a learning disability or being a low achieving student compared to non-learning or non-low achieving students concerning motivational behaviors toward school.

A multivariate analysis of variances and an analysis of structural equation models were conducted with a sample of 1833 students in grades 4, 7, and 9 in public schools across Norway. Of the sample population, 926 were girls and 907 were boys, all three grade levels combined, with 72 girls and 142 boys identified and receiving special education, 156 of the students were identified as low achieving but not having a learning disability, the remaining 1463 students have no learning disability and were not identified as low achieving. In the multivariate testing, two contrasts were sought—first, the contrast between non-learning disabled and the mean of low achieving and learning disabled. Second, the difference between low-achieving students and students with learning disabilities. The variable factors were attribution to ability, attribution to work, expectations, helplessness, self-esteem, and depression. These measures were scored in mathematics and students' first language. All students with learning disabilities or low achieving students were considered to have similar mean test scores and overall intellectual abilities.

Overall, the results of these statistical analyses shared that non-learning disabled students see their performance attributed higher to their work rather than to their ability, had higher expectations, and showed less helplessness, higher self-esteem, and lower depression levels. Students with learning disabilities and low achieving students attributed their success to their ability rather than their work, showed more helplessness based on teacher observation, had lower expectations and self-esteem, and low achieving students exhibited the most depressiveness of all three groups.

Conclusions from Valas's (2001) study suggested negative consequences of being a student labeled with a learning disability. The negative consequences found were students attributed their performance to ability versus work and teacher observations and their perceptions

contributed to a student's learned helplessness behavior. The students also had decreased self-esteem, set lower academic expectations, and became more depressive than their non-disabled peers. The disability label is stigmatizing, and the expectations of a student with a disability achieving less with the reduced pressure easily accept and expect lower academic performance, which directly impacts a student's motivational behaviors.

Kleinhammer-Tramill et al. (1983) composed a study for the examination of the effects of noncontingent rewards to students with learning disabilities and how they influence learned helplessness.

During a summer school program for students with learning disabilities in an urban Kansas school, 24 adolescent students were assigned randomly to four different groups. Two series of tasks were completed, with the first series consisting of two phases, one being students would receive noncontingent rewards and reproduce a block design with blocks from a design on a task card. The second task of the first series was to rearrange and sequence letter and number blocks with missing information. Students would receive contingent rewards based on three random groupings of a reward schedule: contingent reward for correct performance, 100% reward regardless of accuracy, and 50% reward with random rewards regardless of accuracy. The fourth group was the control group and only participated in the phase two task of the first series. In both sets of tasks, using noncontingent and contingent rewards situations based on groupings, the participants were shown a model of how to complete the task, and the groups were reassigned between phase one (noncontingent reward) and phase two (contingent reward). The second series of tasks had a new experimenter brought in to work with the participants;

however, all students would receive a token for each successful completion of the task within the 40 second time limit. Students had to complete a set of coding problems based on accuracy.

An analysis of variance was performed measuring the latency of task completion. A significant difference for the noncontingent rewards groups of 100% and 50% regardless of correctness had longer task completion compared to the control group and contingent reward group. Students in the contingent and control groups overall had increased accuracy in the completion of tasks compared to the noncontingent with 100% reward group with all students making at least one error.

The researchers determined that noncontingent rewards lead to a significant decrease in performance of students with learned helplessness as does providing verbal praise during a performance. Educators should be mindful of their use of applied behavior analysis (ABA), reinforcement schedules, and their use of feedback to students based on their performance.

Buzzai et al. (2020) examined the connection between school alienation and academic achievement with the presence of learned helplessness and conversely, mastery orientation.

The researchers included background information on the basis of school alienation and what that means in a school setting. There are four dimensions of school alienation, which are powerlessness, normlessness, isolation, and meaninglessness. Students who exhibit powerlessness perceive a lack of control and set lower expectations for themselves. Normlessness in students refers to a lack of respect for authority and rules set forth by the school. Students who show isolation lack a connection to peers, teachers, and their school, and those students who exhibit meaninglessness lack meaningful content connections and view the school activities as pointless. School alienation becomes a problem at the secondary school age and

students do not achieve. They have poor coping skills, set low expectations in their achievement, begin to attribute their lack of success to their inadequacies, which coincide with learned helplessness behaviors. Mastery orientation is the opposite of learned helplessness with students having a stronger self-concept, higher levels of motivation, perseverance to tasks that cause the failure, and a repertoire of coping strategies that help them overcome their obstacles.

A quantitative research study of 1,316 Italian students with an average age of 16 years 4 months and 38.3% who were males, 61.7% who were females from two high schools. Each participant completed a School Learned Helplessness Questionnaire, a School-Related Alienation Questionnaire, demographic information was collected, along with academic achievement data analyzed. The self-report method may have been a limitation to the study due to not being able to directly connect and verify the behavior and the perception of the behavior. Descriptive statistics, correlations, and Cronbach's alpha were conducted using SPSS along with RStudio for structural equation modeling.

Overall, the correlation between school alienation and learned helplessness was positive and school alienation was negatively correlated with mastery orientation and also academic achievement. The results further displayed the total and indirect relationship between school alienation and academic achievement while controlling for the other variables of learned helplessness and mastery orientation. These results were consistent with the research hypothesis confirming the role of school alienation and decrease in achievement academically and the contribution of learned helplessness or conversely mastery orientation on achievement.

Students who experience learned helplessness behaviors, such as feeling a lack of control, disengagement of the content, and poor or non-existent meaningful human connections in the

school setting, lead to school alienation and ultimately school failure. However, the hypothesis connecting students who experience mastery-oriented behavior and school alienation did not show a positive difference in preventing school alienation and academic achievement. Students who feel disconnected to their academics and their school life have a negative impact on their ability to overcome obstacles, an inability to apply positive coping strategies in the face of adversity, and have difficulty performing academically.

The research presented in this study comprised many implications for the prevention of school alienation. These implications include having early intervention programs of the four dimensions of alienation by promoting positive classroom relationships, effective and assertive communication skills of teachers, provide teaching methods that allow students to interact in small groups and cooperative learning tasks, encourage continued communication between the adolescent and their parents, employ supportive teaching strategies to promote student autonomy, increase opportunities for students to share personal experiences and gain perspectives and building self-regulation skills. Also, the school should examine their systems and views of how conflict is dealt with, help students to set goals, teach the use of positive self-talk within students, develop coping strategies, teach students to self-regulate their learning, connect the content with previously learned skills and also how the new skills relate to life beyond the school setting and promote decision-making and problem-solving skills.

Di Tommaso (2010) conducted a qualitative study to explore non-cognitive variables, which are characterized as situational or socio-affective factors that impact a person enrolled in developmental courses and their performance and attitudes towards a remedial writing class at the community college level. After conducting an initial exploratory study to determine which

factors or variables are most influential for student success, the seven non-cognitive variables this study focused on were situational factors of finances, college surrounding, and study management, and socio-affective factors of a student's views of education, views of self, motivation, and interpersonal relationships.

Twenty participants who volunteered to be a part of this study were selected from six different sections of a remedial writing course at a community college in the City University of New York system. Four tenured faculty professors who had extensive knowledge of the school's history and policies were interviewed to gain background knowledge and context of the courses. The researcher conducted observations of six different classrooms for participant observation, classroom interactions, how students engaged and participated in the courses, and how the courses are structured, occurring in both day and night classes. From those six different course sections, students were informed of the study and were offered, on a voluntary basis, an opportunity to participate in the study. The researcher then selected 20 participants from the list to partake in a 60 to 120-minute semi-structured interview focusing primarily on the seven cognitive factors. The researcher then looked for commonalities and themes among the participants.

Participants described socio-affective factors in more length than situational factors. Situational factors consisted of discussing financial aid, employment, and family structure, classroom conditions, transportation, the school facilities, balancing school and life responsibilities, study spaces, registration, and course planning. Socio-affective factors consisted of experiences with teachers, familial and peer support systems, personal sense of

accomplishment, self-confidence and self-efficacy, communication skills, and understanding others.

The findings outlined the connection between the presence or absence of a role model or acting as a role model (i.e., for siblings) in the students' upbringing. Those participants that stated they had a positive role model or served as a role model for siblings were self-directed and motivated learners with less dependence on others for direction. Conversely, those without role models were less likely to participate in their learning. They were dependent on external forces to direct them, and they perceived their success or failure as unrelated to their efforts and more toward their innate abilities.

Interventions and strategies to support the educational success of students with disabilities who do not have a positive role model or are not in a role model position require support in building self-confidence, self-direction, and self-efficacy. Counselors and teachers alike should support students academically and socially/emotionally. Students should be connected with peer mentors who have successfully completed developmental college-level courses and obtain career-related mentors through coursework as well as provided opportunities to become a mentor.

Eldowah and Alnajashi (2017) conducted an experiment with 157 female undergraduate students and their level of learned helplessness and attitudes toward a required neuropsychology course.

The study was conducted to measure the effectiveness of a multi-dimensional teaching approach on the students’ attitudes and achievement. The researchers explored whether there

were differences in outcomes when different instructional approaches were implemented by the teacher versus a control group with the same ordinary teacher-led instruction.

Participants in both the control and experimental groups, four different groups of each, took a self-rating scale at the beginning of and end of the experiment. Two scales were used to collect data, one questionnaire on learned helplessness levels and one questionnaire on the attitude toward the specific scientific course, neuropsychology. The Learned Helplessness Scale included 47 items with a five-point scale assessing areas of negativity, avoidance, inflexibility, and satisfaction. The Attitude Toward Scientific Subjects Scale was a researcher-created instrument tailored to the neuropsychology course specifically. The scale had 30 items to begin with, but after review, one question was removed, so scores were based on 29 items with a 5-point scale.

Scores on the two rating scales before the course and after the course were compared between the control group and the experimental group. The experimental group received a multi-dimensional teaching approach with the instruction attempting to increase motivation, use of a multi-sensory representation for increasing the relationship between content concepts, and the instructor giving more frequent feedback to the students. The instructors aimed to increase student motivation by helping the students to connect the concepts to real-life situations and how it is used practically in the real world, hoping to make the acquisition of the learning more meaningful to the students. The content was also delivered with multiple representations for students to make the connections between related concepts and building on those concepts they have already learned with the use of diagrams, photos, and animations. The students also received multiple modes of feedback through teacher and peer feedback, self-review of their

work, and instead of cumulative unit finals, a series of short quizzes were administered. This gave students more regular feedback, and the researchers felt it was a critical component of the multi-dimensional teaching strategy.

In comparison, prior to the start of the course, an independent sample t-test for the control group and experimental group had no significant differences in the levels of learned helplessness or their attitudes toward neuropsychology. A one-way analysis of covariance (ANCOVA) was done to examine the teaching approach on the learned helplessness scores. The results of the learned helplessness scale with the experimental group showed a significant decrease in levels indicating that the new multi-dimensional teaching approach was effective in lowering the levels of learned helplessness. Another ANCOVA was run to determine the effect the teaching approach had on attitude. The results indicated that there was a significant difference with higher attitudes toward neuropsychology in the experimental group than the control group, thus showing the teaching approach was also effective in increasing student attitude. A Pearson correlation coefficient was calculated to explore the relationship between learned helplessness and students' attitudes toward a certain subject, which concluded a negative correlation between helplessness and attitude. This means that a decrease in learned helplessness increased the attitudes of the course. Additionally, the cumulative averages of assessment scores were compared using an independent sample t-test to analyze the effect of the multiple representations and the impact on student learning. The experimental group had higher scores than the control group, which indicated multiple representations of the material positively impact student learning.

Overall, the results of the multi-dimensional teaching strategy were successful in building student learning and attitudes. It was also effective in decreasing learned helplessness, and it positively impacted overall student achievement. It is noted in the study that it did not individually assess each component of the multi-level teaching strategy and how it directly impacted students' attitudes; however, linking student attitudes with student engagement and interest in the subject matter, along with increasing intrinsic motivation and the consistent feedback they received contributed to the overall learning and improved attitude.

Freeman et al. (2004) conducted a qualitative study to explore persons with learning difficulties and factors that lead them to either stay in high school or drop out.

The researchers defined academic resilience to be "the capacity to overcome obstacles to healthy development and the ability to spring back from adversity." Through that definition, they constructed three factors. The factors were intrapersonal support, interpersonal support, and institutional support which were consistent with students with disabilities who graduated with their class and students with disabilities who came back to finish their education. These factors also examined whether the factor led to the student remaining in school (pull factor) or the opposite, which pushed them away from school (push factor).

There were 16 participants in the Canadian study, all of whom participated in semi-structured audiotaped interviews. Half the participants were high school dropouts but were returning to finish their education at an adult learning center, and the other half were high school graduates. The questions asked during the interview were open-ended questions, beginning with descriptive questions, then structural and contrast questions. The questions asked were about their experiences in high school with regard to interests, friends, teacher and parent support, and

activity engagement such as extracurricular activities. The researchers were conscientious about building a positive rapport and trusting relationship between the interviewer and the participants to ensure open and honest responses.

After the initial taped 30- to 45-minute interview with each participant, the researchers read each interview to analyze the themes into ten categories. Those 10 categories were then categorized into three main categories, to which both groups were analyzed and shared. The researchers independently coded the interviews using the three categories of intrapersonal support, interpersonal support, and institutional support. The last stage of review consisted of the four researchers working collaboratively to discuss similarities and differences between the adults that dropped out compared to the adults that finished high school, all who had learning difficulties. The researchers did not have access to student records for the adults who dropped out of high school to determine if they were officially labeled as a person with learning disability. For accuracy, the researchers used the term, "learning difficulties" to capture the similarities of all participants who had difficulties with academic achievement while in high school.

The adults who were back in school to finish up their education admitted they had experienced the workforce and, through maturity, realized they wanted to achieve more significant goals for themselves. Their goals in their later life and their sense of purpose were consistent findings among the dropout group of adults. These adults expressed that even though they had some positive teachers in their lives, most teachers pushed them away from school. They lacked parent influence to remain in school and their friends did not impact them much at all to drop out or to stay. Consistent among these eight adults was the lack of interest in school

through the curriculum and extracurricular activity. However, extracurricular activities with athletics were more of a predictor to stay versus leave school compared to arts-related activities.

With the eight adults who remained in school to graduate on time with their class, some common findings were identified. The individuals all had goals they set for themselves, had motivation, a sense of purpose, and autonomy to reach their goals. Their teachers had a positive influence on them, their parents were encouraging and supportive, and they had a group of trusting and positive peers. They also were involved in structured extracurricular activities such as school sports and activities, boy scouts, and church groups.

The third component of the analytics compared the two groups to each other with four main differences. The development of long-range goals occurred while still in high school for the individuals that completed high school on time, and the adults who dropped out of high school but were now back to obtain their general education diploma did not develop their long-range goals until they spent some time in the workforce and gained a sense of purpose. The teacher, parent, and peer involvement were different for both groups, as well as their participation in structured extracurricular activities, either in school or out of school.

The comparative findings suggest that supporting students in finding their sense of purpose and building goal orientations for life after high school can influence a student with a learning difficulty in remaining in high school for the duration. Also noted was the importance of maintaining curricular interests, which can also be accomplished through structured extracurricular groups in and outside of school. Lastly, providing more opportunities for parent participation and collaboration between the school and the role parents play to positively impact

their students. Parent involvement through volunteering, coaching or leading clubs, and parent participation in special events at the school supports the adolescent holistically.

Ulusoy and Duy (2013) conducted a study to determine the effectiveness of a psycho-education program and its impacts on learned helplessness and irrational beliefs. Psycho-education programs consist of participant groups with an education focus to develop skills in a specific area. They can be thought of as similar to therapy groups and also employ cognitive behavioral therapy strategies where the leaders are trained and have a theoretical foundation of the content. Psycho-educational groups can be both preventative and intervening in nature, depending on the focus skill area.

The focus of this study consisted of 142 eighth-grade students in a public school setting in Turkey. Participants were selected on a voluntary basis and required parent permission to participate. As a result, the sample selected was 30 students. Student participants were given two measures for initial scoring, Irrational Beliefs Scale for Adolescents and Children's Attributional Style Questionnaire. The Irrational Beliefs Scale for Adolescents had 21 items on a 5-point Likert scale, considering the demand for success, demand for comfort, and demand for respect as three subscales. The Children's Attributional Style Questionnaire consisted of 48 items giving students hypothetical situations to rate the cause. Their scores on the questionnaire were placed into three attributions, and a learned helplessness score was computed. Mean scores of both measurements were taken and those participants that scored above the mean on both measures, irrational beliefs and attribution style, were split into three groups, the experimental group, the control group, and the placebo group. The psycho-education groups were in effect for 10 weekly sessions of 40 minutes and then post-test measures were taken using the same tools.

An initial one-way ANOVA test was used to determine differences in irrational beliefs and attribution styles, those specifically associated with learned helplessness. After the group sessions, post-test scores were run and a mixed between-within subjects ANOVA was conducted to determine the effectiveness of the psycho-educational program on irrational beliefs. Another mixed between-within subjects ANOVA specifically for measuring the effectiveness of the program on attribution styles was run. It was determined that the psycho-educational program on the experimental group showed a decrease in irrational beliefs, but it did not change the attributional style of those same participants. The hypothesis of reducing learned helplessness by increasing optimism and reducing irrational beliefs was not achieved through the researcher's psycho-education programming.

Irfan Arif and Mirza (2017) utilized survey research with true experimental research to determine the impact of a resilience training program as an intervention on at-risk students and their academic resilience.

Their research began with identifying resilience factors into two categories, risk factors and protective factors. Through the research, the intervention program was developed and designed to foster 10 protective factors consistent with resilience in a secondary school in Pakistan. The protective factors measured in the intervention were creativity, internal locus of control, self-concept, self-esteem, self-efficacy, autonomy, a sense of purpose in life, optimism, a good sense of humor, and teacher-student relationships. The aim was to implement the developed intervention program on an initial sample of 255 ninth- and tenth-grade boys aged 14 to 16 years old who were at risk of failing high school and thought of as non-resilient students. Through a two-phase process, the first being demographic data collection, academic performance

gathered through teacher input, and a collection of student information about their parent's education level, socioeconomic status, and things of that nature. Also collected were a Questionnaire for At-Risk Students with two parts, a student's health questionnaire, and a negative life events questionnaire. Based on the first phase of data, students at risk of graduating were identified as the study's target population. Only the students who were found to be at risk completed the resilience measuring scale (RAS) to gain baseline resilience levels. The remaining sample, non-resilient, at-risk students, were split into a control group and an experimental group with a sample size of 32 in each.

Students in the experimental group were exposed to a 3-month intervention program consisting of engagement in one hour per day of resilience-building activities. The control group did not receive any resilience training and continued in school as normal. The researcher and teacher of the resilience activities were unknown to the group and was intentional about developing positive relationships with the targeted participants while using positive motivational strategies and attitude. The researcher's response to the students during the intervention was another important aspect of the program. They implemented compassionate listening, acknowledging and validating the students' struggles, encouraging the students' abilities to overcome obstacles, and giving verbal and non-verbal gestures that were thoughtful and genuine. A post-test of the resilience measuring scale was collected for comparison purposes.

Results of the control group compared to the experimental group showed that the resilience program, as a whole, positively impacted a student's level of resilience. T-test analysis proved effectiveness with resilience mean scores being significantly different between the two groups. This means that teachers can foster students' resilience, helping them continue

developing the ten protective factors and providing a safe and supportive environment for them to do so.

Irfan Arif and Mirza (2017) recommended that teachers should continue to develop strategies to maintain the engagement of all students in a meaningful way while implementing activities that foster resilience simultaneously. Investing in resilience training programs for educators to teach their students to foster resilience providing ways for students with teachers and students with peers to build positive and supportive relationships with one another is also important for building resilience.

Mirza and Hussain (2014) conducted a qualitative study to determine the impact on learning and motivation of math by incorporating rich tasks in the form of cooperative learning groups in the mathematics classroom.

As the rigor of mathematics content continues to build, teachers have a more challenging task of making the math and their lessons meaningful, applicable, and significant to their students while covering a growing list of standards and specific content skills. With the utilization of rich tasks in higher-level math, the teacher makes an activity that supports students in getting the essentials of the skill while also meeting the student where they are at in their learning. A supportive environment and how the teacher presents the task is important and includes the use of inquiry and questioning while students obtain specific roles to complete the task. The collaborative grouping is supporting the student socially while they learn the math skill.

The purpose of this study was to determine the effects of the implementation of rich tasks and collaborative learning on how well students learn math. Qualitative analysis of semi-

structured interviews of students' responses was conducted. The student participants attended a secondary school in London consisting of lower-middle-class students and the school typically does not have high achieving students attend, leaving room for students who transfer in who need to repeat courses and non-English students. The sample directly came from a year 9 class with 20 students. The initial typical teacher-directed math instruction was not working for this group of students, as shown on their summative assessments.

The researchers used pre-and-post interviews, lesson assessment sheets, teacher notes, an intervention-a project, and a rich task building a bridge. Students engaged in six lessons, all 1 hour each, consisting of collaborative work where students were assigned roles within their groups, a rich task of building a bridge was given, teacher questioning and guiding during discussion portions, and some worksheets during their summer term. The learning objectives were tied to math content such as scaling, Pythagorean Theorem, trigonometry, predicting length, plotting points from their experimental data, and more.

Pre-interviews displayed poor attitudes towards math, and students were disengaged from learning math. The interviews also sought student ideas about how to make math more interesting and gauge the students' idea of working in groups to learn math. The post-interviews were administered to determine the effectiveness of using the rich task of building a bridge in a collaborative learning group. The assessment after the intervention resulted in a higher percentage of the content skills. The feedback from the post-interviews showed a positive impact on student learning.

The overall impact on the implementation of rich tasks and collaborative group work in math class increased student motivation to learn math. It also supported students with their

independence and autonomy, and students used collaboration to discuss and come to a consensus to solve problems all while building their confidence. While students were doing the hands-on learning, another critical part of the intervention was the work of the teacher. The teacher carefully mastered a rich task, kept thorough teacher notes during each lesson to support making adjustments and changes for the next lesson, and maintained support throughout the group work with some guiding questions, helping students to sort through their group dynamics. The collaborative group work and rich task combination was successful in increasing student motivation and achievement in math.

Carvalho and Skipper (2020) examined a growth mindset intervention specifically targeting students with special education needs and disabilities (SEND). The study measured the impacts the intervention had on overall growth mindset, academic resilience, self-concept, attitudes towards disability, and academic achievement. The researchers expressed that little research has been done intentionally targeting students with special needs and the effectiveness of interventions, so their target participants were specifically that population.

Growth mindset, a term coined and extensively researched by Carol Dweck, refers to a person's belief that they can change their abilities with effort versus a fixed mindset, which states abilities and qualities cannot change or develop. Developing a student's mindset improves resilience, goal setting, and the perception of the impact effort has on outcomes. Students with a growth mindset choose learning goals to improve intelligence over performance goals that show intelligence, embrace challenges, value effort, have persistence with challenging tasks, and when they fail, they attribute their failure to a lack of effort. Students with a fixed mindset tend to view others' success as a threat and do not willingly accept criticism, and their goals are to appear

intelligent to others instead of trying to increase their intelligence with effort. Academic resilience refers to the ability to overcome challenges throughout school experiences. When a student has a growth mindset, they increase their effort and their expectations of what the outcome will be, which in turn creates resilience within the student. Students who lack academic resilience who also have a fixed mindset exhibit learned helplessness behaviors which create a barrier to academic achievement and success. Academic resilience also refers to a student's self-concept, which is the students' view of themselves and their academic abilities and level of knowledge they possess. Academic resilience and academic self-concept are highly correlated with mindset. Students who employ a growth mindset and have a positive self-concept show more motivation to learn and achieve, and they have a repertoire of strategies to keep them moving forward. Conversely, students with a fixed mindset have a lower self-concept, put forth less effort as a way to have a built-in excuse that their failure was due to lack of effort, not ability or intelligence, keeping their self-esteem intact.

Students with special needs and disabilities are more susceptible to underachievement, lower academic self-concept, and academic resilience, and set lower expectations for achieving success. Carvalho and Skipper (2020) created this study to target students with special needs and disabilities and their growth mindset. It was a quasi-experimental intervention that did not consist of a control group due to the nature of targeted participants and their individualized needs.

The participants consisted of 18 students at the secondary level in London who were identified with special education needs who attend a school for special education students. They were administered pre-, post-, and delayed post-test measures to determine the impacts the

intervention had on growth mindset, self-concept, resilience, attitude toward disability, and academic performance. A 10-week, 50-minute once-weekly growth mindset online learning program was instituted along with intentional activities and discussion as reinforcement of concepts implemented in the students' personal and social health education (PSHE) course. Additional growth mindset strategies were simultaneously implemented in their English class to support the repetition and generalization of growth mindset ideas. Each weekly lesson covered a different aspect of growth mindset and the structure of the lesson remained consistent throughout. Specific teaching strategies supporting growth mindset were used, such as rewording lesson objectives for learning rather than performance goals, task framing to promote effort, and feedback given to students was based on their effort. School-wide efforts to implement consistent language and key ideas of growth mindset were displayed to improve the school environment.

The measures of the intervention were adapted or modified rating scales to support the students' needs and abilities. Students completed the Implicit Theories of Intelligence Scale for Children (mindset), Academic Resilience Scale (academic resilience), Perception of Ability Scale for Students (academic self-concept), Preschool Racial Attitudes Measure II (adapted towards disability), and exam scores from reading assessments to measure academic performance. Bayesian paired sample t-tests and a Bayesian repeated measures ANCOVA were run to determine the effectiveness of the 10-week intervention.

The results revealed students' growth mindset increased from pretest to posttest but not maintained during the delayed posttest. Students' academic resilience increased from pretest to posttest, but no further increase was found from posttest to delayed posttest, which suggests growth mindset levels do not impact academic resilience levels and the increase in academic

resilience can likely be attributed to the intervention. Similarly, self-concept scores increased from pretest to delayed posttest, but from pretest to posttest measures, there was no indication that mindset levels impacted self-concept levels, more likely the intervention itself that improved self-concept indirectly. Students' attitudes toward their disability improved positive attitudes towards disability and did not decrease students' negative attitudes toward disability, showing the temporary influence of attitude, but not sustained. Last measured, students had more of an increase in academic performance prior to the intervention than during and after it, signifying overall less progress while the intervention was implemented.

The growth mindset online program along with reinforcement activities in a personal and social health education class, pieces of growth mindset strategies in English class, and an increased focus in growth mindset ideas school-wide had positive impacts on growth mindset, academic resilience, and academic self-concept while participating in the intervention, but the effects were not long-lasting and were not directly tied together. The intervention did not impact reducing negative attitudes toward disability but increased positive attitudes towards disability, and the intervention did not improve students' academic performance. Growth mindset can change, and students with special needs are good candidates for growth mindset interventions. However, in order to have more of a long-lasting impact, growth mindset strategies need to be administered for longer time periods, practiced in a variety of settings, implemented with technology to support students needing assistive technology, and become a natural component of school-wide culture.

Chapter 3: Conclusions and Recommendations

Spending nearly 15 years teaching, one-third of it as a high school math teacher, the remaining as a secondary special education math teacher, case manager, and coach, it is apparent our adolescent youth, more and more, exhibit learned helplessness not just with math, but with most tasks. I rarely get to work with a student who can see a challenge in front of them and want to set goals, persevere, work hard, and attempt to overcome them. This saddens me because somewhere or somehow during their education, they have learned to believe they cannot do it, so why try; they have given up before even attempting the task even if it is very achievable.

The purpose of my research was two-fold. I wanted to learn more about the psychological theory of learned helplessness and what I can do as a teacher to help students see adversity as an opportunity to grow and achieve and overcome learned helplessness altogether.

Conclusions

Learned helplessness, a term coined primarily in the field of psychology, is interwoven with so many other concepts, all of which are exhibited in students throughout their education. During my research, beginning with learned helplessness, ideas of self-efficacy, self-concept, self-confidence, locus of control, motivation, resilience, and many more were commonly involved in the research. Learned helplessness and helping students to overcome their skewed perceptions was similar to an onion with all the layers it involves. Narrowing my paper to review literature about learned helplessness and choosing resilience as one method to help students to overcome it became my focus.

Within the 12 peer-reviewed research studies I shared in Chapter 2, three were qualitative (Di Tommaso, 2010; Freeman et al., 2004; Mirza & Hussain, 2014), the other nine (Buzzai et al.,

2020; Carvalho & Skipper, 2020; Eldowah & Alnajashi, 2017; Irfan Arif & Mirza, 2017; Kleinhammer-Tramill et al., 1983; Krejtz & Nezlek, 2016; Lackaye & Margalit, 2008; Ulusoy & Duy, 2013; Valas, 2001) were quantitative, and these studies occurred throughout the world.

Three of the studies gave general research information about learned helplessness. Krejtz and Nezlek (2016) determined that learned helplessness for school subjects is domain-specific and not a generalized behavior across all school subjects. Lackaye and Margalit (2008) along with Valas (2001) examined comparisons between students with learning disabilities and low achieving students to students without learning disabilities and the achievement levels, levels of helplessness, their attribution placement (amount of effort versus ability), levels of self-confidence, self-esteem, self-efficacy, and motivation. It was found that students with learning disabilities have higher levels of learned helplessness compared to students without learning disabilities and students attributed their success or lack thereof to their ability and not the amount of effort they put forth.

The remaining nine studies reviewed focused on a strategy or possible solution to reduce learned helplessness. Of the nine studies, two ideas had reverse effects and increased learned helplessness behavior. Kleinhammer-Tramill et al. (1983) an older, but relevant study, acknowledged that the use of non-contingent rewards decreased performance for students with learning disabilities and increased learned helplessness behaviors. Buzzai et al. (2020) found the connection between school alienation during early adolescence and academic achievement and how learned helplessness is also involved. They defined school alienation as lacking control of their own lives, the disconnect between content learned at school and their lives, lack of a trusting relationship with a teacher, disengaged parents in their education, and other factors.

Their feelings of alienation led to reduced academic achievement, which was mediated by learned helplessness.

The last seven research studies reduced learned helplessness behavior or offered possible solutions or a teaching strategy to combat learned helplessness. Similarities with the participants in Di Tommaso (2010) and Freeman et al. (2004) were adults with learning difficulties, who were not the targeted age group for my research. However, I included these studies because they highlighted a retrospective perspective and commonality that a student with a positive role model and strong interpersonal support system, such as a parent, teacher, coach, or community member, showed evidence that they were self-directed, goal-oriented, and had a high engagement in their education and higher overall resilience. Ulusoy and Duy (2013) attempted to reduce learned helplessness by making students aware of their irrational beliefs and identify strategies to combat them through a psycho-educational program. The intervention program was partially effective in that it reduced irrational beliefs, but it did not impact learned helplessness. Eldowah and Alnajshi (2017) directly modified the teaching approach to build motivation and resilience to an unpopular but required neuropsychology course for undergraduate students. Although the participants were in their first years of college, the results of the teaching approach had a positive effect on motivation to learn a commonly disliked course, performance was increased, and learned helplessness was reduced.

Mirza and Hussain (2014) found that implementation of collaborative learning combined with rich tasks in math improved students' motivation to learn math, the content was easily differentiated, higher achievement was reached, and students became more independent and confident. Similarly, Irfan Arif and Mirza (2017) along with Carvalho and Skipper (2020)

implemented a resiliency program and growth mindset instruction respectively for 10 to 12 weeks. Both studies found that intentional programs and instruction were effective in keeping at-risk students in school or it temporarily changed the mindset. These studies also determined the culture of the school, how teachers present themselves, the relationships they built, and their delivery impact the long-term effects of the programs.

Recommendations for Future Research

The 12 examined studies offered insight into future research topics. Learned helplessness and the corresponding connected ideas have been researched heavily. However, continued exploration of studying helplessness within measures in specific domains needs to be sought, especially for students with disabilities. That means, specifically studying math helplessness or helplessness in social situations or other domain-specific areas (Krejtz & Nezlek, 2016; Lackaye & Margalit, 2008) to include data other than a global measure of helplessness and offer possible treatment options for learned helplessness. Conversely, Freeman et al. (2004) suggested more research be studied to see students with learning disabilities holistically as well as to measure students with learning disabilities and their resilience.

Lackaye and Margalit (2008) also suggested researchers need to study longitudinal changes for the effects of developmental changes as they move through childhood, adolescence, and adulthood in students with learned helplessness, and ways to promote hope and prevent loneliness for students with learning disabilities. Research using longitudinal studies to track school alienation beginning in elementary school through high school (Buzzai et al., 2020) should also be done.

As stated in the research studies that compared students with learning disabilities or low achieving students to their non-disabled peers, more research needs to be conducted specifically for low achieving boys, with and without learning disabilities, and how school experiences affect their motivation (Valas, 2001). A closer examination of the process the school system takes to identify and serve students with needs in special education. The examination should further investigate whether learned helplessness is produced by the instruction and strategies implemented in classrooms or if placement in special education is at fault for inducing learned helplessness behaviors (Kleinhammer-Tramill et al., 1983). Di Tommaso (2010) discovered the importance of role model relationships or the significance of being a role model. Her research indicated that more needs to be done to determine the ways in which students view the various types of role model relationships and how to best incorporate mentoring and advising to support students. Lastly, although growth mindset has been widely studied, the creation of reliable and valid measures of existing growth mindset practices that are naturally implemented in the classroom needs to be gathered (Carvalho & Skipper, 2020).

Implications for Practice

Through reading, research, and the literature review process, it is apparent there are many opportunities educators can support students in reaching their fullest potential. Even though students at the secondary level have learned certain behaviors and attitudes throughout their education, there are still ways teachers can help students to break down learned helplessness and build resilience.

With the 12 studies reviewed, I noticed that learned helplessness and a lack of resilience at the secondary level exists across cultures, countries, and education systems, not just students

in the United States. I learned that when teachers can intervene early with students, be trained on resilience and growth mindset ideas, and implement strategies within their daily teaching, students can overcome these maladaptive behaviors. These strategies are applicable to all levels of students, with and without disabilities alike. When a school or classroom teacher sees a problem, ensuring they institute interventions for longer periods of time and continue to review and practice resilience skills are beneficial to students' resilience growth. Schools should integrate growth mindset strategies and ideas into the school culture and curriculum for longer-lasting effects. Teachers should focus on work goals, not performance goals, by supporting students to see that their effort impacts their success, not their ability or inability. Role models and intrapersonal relationships are critical to supporting students at risk or who exhibit high levels of learned helplessness.

Being a 14-year teacher and knowing teachers' plates are always full, time is of the essence. To help teachers access a quick reference list, I created a table with helpful strategies and ideas to implement in their classrooms to help combat learned helplessness in their students.

Table 2

List of Strategies and Approaches for Teachers to Combat Learned Helplessness

Increase Student Self-Belief	● Help students focus on strengths rather than deficiencies. ● Break concepts into smaller tasks. ● Build confidence and intrinsic motivation. ● Teach the overarching skills of time management and study skills. ● Build student awareness of learned helpless behavior and fixed mindset. ● Support students in recognizing their progress in increasing independence. ● Teach students to challenge negative self-talk. ● Create more opportunities for success.
Increase Student's Value of School	● Increase relevance of the academic content to the world outside of high school. ● Make connections to student interests. ● Mastery based vs. performance-based skill attainment. ● Evaluate and shift grading practices. ● Provide more frequent feedback (mini-quizzes vs. one big unit test at the end). ● Celebrate progress, not perfection. ● Reinforce student effort (shift from external locus of control to internal locus of control)
Increase Student Engagement	● Incorporate student choice. ● Use multiple teaching approaches. ● Provide multiple opportunities to work with content presented in a variety of ways (multimodal). ● Utilize collaborative group work and rich tasks. ● Increase collaboration among counselors, advisors, and mentors. ● Academic intervention along with social and emotional interventions. ● Involve parents. ● Connect students with peer mentors. ● Provide opportunities to become a mentor.
Foster Resilience	● Teachers should model resilience. ● Resilience training for teachers and adopt strategies in regular teaching practice to support students in fostering resilience. ● Promote student-teacher relationships. ● Foster academic self-determination, confidence, and feelings of competence. ● Promote creativity, build self-esteem, self-efficacy, autonomy, optimism, and independence.

Summary

"Success is not final; failure is not fatal; It is the courage to continue that counts," as stated by Winston S. Churchill. Overall, the plethora of studies I chose to review helped me discover that what I do as an educator either supports my students in overcoming their learned helplessness or contributes to it. Of the 12 studies reviewed, learned helplessness is an issue for students with disabilities and students without disabilities who are at risk of failing. Prevention and intervention can support all students in changing the way they view themselves and their achievement. The way we teach and interact with students to foster resilience is one critical component in helping students combat learned helplessness.

References

American Psychological Association. (2020). *APA Dictionary of Psychology*. https://dictionary.apa.org/.

Buzzai, C., Sorrenti, L., Tripiciano, F., Orecchio, S., & Filippello, P. (2020). School alienation and academic achievement: The role of learned helplessness and mastery orientation. *School Psychology*, *36*(1), 17–23. https://dx.doi.org/10.1037/spq0000413

Carvalho, E., & Skipper, Y. (2020). A two-component growth mindset intervention for young people with SEND. *Journal of Research in Special Educational Needs, 20*(3), 195-205. doi:10.1111/1471-3802.12472

Di Tommaso, K. (2010). The connection between role model relationships and self-direction in developmental students. *Research & Teaching in Developmental Education*, *27*(1), 4–23.

Eldowah, A. M., & Alnajashi, S. A. (2017). The effectiveness of a multi-dimensional teaching strategy on students' attitudes and level of learned-helplessness. *International Journal of Psychological Studies, 9*(3), 1. doi:10.5539/ijps.v9n3p1

Freeman, J. G., Stoch, S. A., Chan, J. S. N., & Hutchinson, N. L. (2004). Academic resilience: A retrospective study of adults with learning difficulties. *Alberta Journal of Educational Research*, *50*(1), 5–21.

Irfan Arif, M., & Mirza, M. S. (2017). Effectiveness of an intervention program in fostering academic resilience of students at risk of failure at secondary school level. *Bulletin of Education and Research*, *39*(1), 251–264.

Kleinhammer-Tramill, P. J., Tramill, J. L., Schrepel, S. N., & Davis, S. F. (1983). Learned helplessness in learning disabled adolescents as a function of noncontingent rewards. *Learning Disability Quarterly*, *6*(1), 61–66. https://doi.org/10.2307/1510867

Krejtz, I., & Nezlek, J. B. (2016). It's Greek to me: Domain specific relationships between intellectual helplessness and academic performance. *The Journal of Social Psychology*, *156*(6), 664–668. https://doi.org/10.1080/00224545.2016.1152219

Lackaye, T., & Margalit, M. (2008). Self-efficacy, loneliness, effort, and hope: Developmental differences in the experiences of students with learning disabilities and their non-learning disabled peers at two age groups. *Learning Disabilities: A Contemporary Journal*, *6*(2), 1–20.

Martin, A. J., & Marsh, H. W. (2003). Fear of failure: Friend or foe? *Australian Psychologist*, *38*(1), 31–38. https://doi.org/10.1080/00050060310001706997

Mirza, A., & Hussain, N. (2014). Motivating learning in mathematics through collaborative problem solving: A focus on using rich tasks. *Journal of Education and Educational Development*, *1*(1), 26–39.

Skinner, E. A., Graham, J. P., Brule, H., Rickert, N., & Kindermann, T. A. (2020). "I get knocked down, but I get up again:" Integrative frameworks for studying the development of motivational resilience in school. *International Journal of Behavioral Development*, *44*(4), 290–300. https://doi.org/10.1177/0165025420924122

National Center for Education Statistics. (2017). *State education reforms.* https://nces.ed.gov/programs/statereform/srp.asp.

U.S. Department of Education. (2004). *Individuals with disabilities education act.* https://sites.ed.gov/idea/about-us-department-of-education/.

Ulusoy, Y., & Duy, B. (2013). Effectiveness of a psycho-education program on learned helplessness and irrational beliefs. *Educational Sciences: Theory and Practice, 13*(3), 1440–1446.

Valas, H. (2001). Learned helplessness and psychological adjustment II: Effects of learning disabilities and low achievement. *Scandinavian Journal of Educational Research*, *45*(2), 101–114. doi:10.1080/00313830120052705