

Bethel University

Spark

All Electronic Theses and Dissertations

2023

Promoting Resilience Through Reading in Secondary School

Drewe V Peterson
Bethel University

Follow this and additional works at: <https://spark.bethel.edu/etd>

Recommended Citation

Peterson, D. (2023). *Promoting Resilience Through Reading in Secondary School* [Master's thesis, Bethel University]. Spark Repository. <https://spark.bethel.edu/etd/1015>

This Master's thesis is brought to you for free and open access by Spark. It has been accepted for inclusion in All Electronic Theses and Dissertations by an authorized administrator of Spark. For more information, please contact lfinifro@bethel.edu.

PROMOTING RESILIENCE THROUGH READING IN SECONDARY SCHOOL
A MASTER'S THESIS SUBMITTED TO THE FACULTY
OF BETHEL UNIVERSITY

BY
Drewe V. Peterson

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

August 2023

BETHEL UNIVERSITY

PROMOTING RESILIENCE THROUGH READING IN SECONDARY SCHOOL

Drewe V. Peterson

August 2023

Program Director: Molly J. Wickam, MBA, Ph.D.

Thesis Advisor: John Bergeland, Ph.D.

Abstract

This thesis reviews 33 articles to examine a possible correlation between resilience and reading and how reading might be used to promote resilience in the secondary-school setting. Resilience is in need, especially post —COVID-19. Globally and locally, in Minnesota there is a mental health crisis among adolescents. This paper explores the protective factors of resilience, the empathic effects of reading, reading habits, reading interventions, and using reading as a therapeutic tool, called bibliotherapy. The discussion includes a correlation between gender and reading habits, sociability and fiction reading, pleasure reading and positive emotions, and traits of resilient individuals and how pleasure readers may possess those traits. Implications for future research should include reading intervention to find causation between reading and resilience.

Table of Contents

Abstract	3
Table of Contents	4
Chapter I: Introduction	5
Definition of Terms	7
Research Question	8
Chapter II: Literature Review	9
Resilience Protective Factors	12
Effects of Reading	34
Reading Habits	45
Reading Intervention	69
Bibliotherapy	77
Chapter III: Discussion and Conclusion	85
Professional Applications	87
Limitations of the Research	89
Implications for Future Research	90
Conclusion	91
References	92

CHAPTER I: INTRODUCTION

Cast iron is hard, brittle, and when bent, it will snap in half. Wrought iron is soft, pliable, and does not break when bent. Cast iron is non-resilient, while wrought iron is resilient. This metal elasticity metaphor encapsulates the essence of non-resilience versus resilience (Fredrickson & Tugade, 2004). Resilience is the ability to “bounce” back and successfully adapt to adverse situations, or even daily stresses of life. It equips individuals with the fortitude to overcome challenges and develop coping mechanisms to handle social, academic, and vocational obstacles (Artuch-Garde et al., 2017). Resilience is dynamic, but it is not only an innate trait. It can be developed over time depending on one’s family, community, and social systems (Kim et al., 2013). If resilience can be developed and learned, then schools and teachers can help students foster resilience.

Resilience is in dire need at this moment in time, post-Covid-19 pandemic, especially for adolescents. According to the WHO (2021), one in seven 10–19-year-olds worldwide experience mental health disorders. Anxiety is the most prevalent, with 4.6% of 15–19-year-olds affected, while depression comes in second with 2.8% of this population affected. Failure to deal with these conditions in adolescence inhibits individuals from leading fulfilling lives into adulthood, adding to the importance of learning coping skills to manage emotions (WHO, 2021).

As a recent reading interventionist at Champlin Park High School in Minnesota, funded by Elementary and Secondary School Emergency Relief (ESSER), I worked with students to help alleviate damage to reading proficiency due to school lockdowns during the 2020 COVID-19 pandemic. It was clear to me that behind poor reading proficiency was poor mental health affecting students’ abilities to focus at school. A 2022 Minnesota Student survey revealed that after the COVID-19 pandemic, anxiety and depression were higher than at any other time in history (Minnesota Department of Health, 2022). According to the Minnesota Department of Health (2022), anxiety and depression afflicted 29% of 11th-grade high school students in 2022 as opposed to 23% in 2019 (pre-pandemic). This uptick in long-term mental health disorders is alarming and needs to be addressed. The solution could be fortifying oneself with resilience with the low-cost therapy of books.

Since reading proficiency is one way to predict future career success, researchers have examined reading proficiency scores to measure resilience (Cappella & Weinstein, 2001; Gómez & Rivas, 2022). While reading proficiency has been used as a marker of resilience, reading itself has seldom been studied as a tool in which to build resilience. Armfield et al. (2021) conducted a study on abused and neglected children ages 5-6 and found that being read to at home was one of the biggest protective factors for creating resilient children in the face of adversity.

Like any challenge, learning to read in early childhood is a big hurdle, and children early on in school must have some resilience to tackle reading (Liew et al., 2009). Studies have shown that reading proficiency in early childhood predicts future success in secondary school (Cappella & Weinstein, 2001; Liew et al., 2009); however, far fewer studies have focused on resilience and reading proficiency in adolescents (Cappella & Weinstein, 2001; Gómez & Rivas, 2022). According to Cappella and Weinstein (2001), “It may be increasingly difficult to alter a negative trajectory later in students’ schooling” (p. 758). Thus, it remains critical for educators to implement strategies with the aim of increasing resilience in secondary schools.

The act of reading includes emotional involvement between the reader and the storyline (Djikic et al., 2012). Readers involve themselves in the lives of the characters and see different perspectives through the characters. As well, reading evokes emotions and empathy that simulates real life circumstances (Nünning, 2017). To this effect, if a character in a book overcomes a challenge and builds resilience, then could a reader experience similar feelings of overcoming that challenge? The psychological process between reading and the emotions it arouses begs to be studied: “If we were to seek to understand ourselves and others better in the social world,” Djikic et al. (2012) suggested, “we could benefit from spending time with the simulations of fiction in which we can enter many kinds of social worlds, and be affected by the characters we meet there” (p. 237). With this said, if being read to at home during childhood builds resilience, then could high school-aged students facing adversity build resilience from reading? The obstacles educators face with encouraging high school students to read is lack of motivation, low self-efficacy, and poor reader identity (Christman et al., 2003; Frankel, 2016; Walker, 2003).

Therefore, strategies need to be explored to promote reading in the classroom for students to obtain resilience from the reading experience. This literature review will focus on how the act of reading builds resilience and strategies or interventions educators can use to encourage reading for this purpose due to the unique challenges that are posed by this age group and the rising mental health crisis.

Definition of Terms

Throughout this thesis, I frequently refer to these three terms: resilience, pleasure reading, and bibliotherapy. Listed below are the definitions to these terms and explanations of their applications in this thesis.

Resilience

Merriam-Webster (n.d.-b) defines resilience generally as “an ability to recover from or adjust easily to misfortune or change.” More succinctly in this paper, resilience is the coping and adaptation to adversity or stress. There are two types or senses of resilience that are used in this paper. The first sense refers to psychological resilience, which is resilience when faced with trauma, situational stress, adverse situations, and mental health issues. The second sense refers to academic resilience, which is resilience when bouncing back from a negative academic trajectory, the ability to deal with setbacks and still have successful academic or vocational outcomes, and the ability to meet the demands of school expectations such as meeting deadlines and taking exams. The different senses of resilience are based on the context.

Pleasure Reading

I primarily use the nomenclature pleasure reading to refer to any reading that one does in one’s free time or independent reading time at school. Pleasure reading is reading that is not graded. Pleasure reading includes books that a student usually chooses to read on his or her own based on his or her own interests. Other terms or phrases used to refer to pleasure reading include ludic (play) reading, leisure reading, reading for pleasure, recreational reading, reading as a leisure or free time activity, reading for fun, independent reading.

Bibliotherapy

Merriam-Webster. (n.d.-a) defines bibliotherapy as “the use of reading materials for help in solving personal problems or for psychiatric therapy.” Bibliotherapy includes fiction books and nonfiction self-help books.

Research Question

The guiding research question this thesis will explore is: How does reading in the secondary-school setting promote resilience? First, I will examine the protective factors that contribute to resilience. Then, I will review the unique and powerful psychological processes that reading has on emotions and how they relate to resilience. Further, I will explore reading behaviors and motivations and the role of reading interventions. Last, I will aim to understand how reading can be used to heal as a possible therapeutic tool (e.g., bibliotherapy).

CHAPTER II: LITERATURE REVIEW

At the start of my research, I intended to evaluate studies about adolescents from school systems (high school specifically) within the United States (as those are the ones with which I am familiar) as it pertained to adolescent reading habits and resilience levels. That scope was too narrow, however, and as I delved further into my investigation, I found relevant research articles about resilience and reading. Subjects' ages ranged from 3-62; although the majority of subjects studied were middle school, high school, and undergraduate college students. The majority of the studies (12) were from the United States. Four studies took place in Spain, three in Australia, three in South Africa, two in Canada, two in Greece (one of which also included Cyprus), two in Turkey, one in Sweden, one in the Netherlands, one in Chile, one in China, and one in Iran. I input keywords into Bethel's library search, Google Scholar, and Google's general search engine. Eight articles I included in my literature review were referenced in research articles I found, and six were suggested from the databases themselves.

The databases from Bethel University's library included Elsevier España, Elsevier ScienceDirect, SAGE, psychArticles, EBSCOhost, ERIC, Frontiers in Psychology, PLOS ONE, International Journal of Pediatrics, Sagamor Publishing LLC, APA PsychNet, Science, ResearchGate, PubMed, PubMed Central, School Librarian's Worldwide (SLW), Routledge Taylor and Francis Group, PROJECT MUSE, Wiley International Literacy Association, JSTOR, and SSRN. Search terms or keywords were resilience, reading, reading habits, pleasure reading, effects of reading, high school, adolescents, students, academic achievement, literature, reading and empathy, metacognition, reading and literature and prison, fiction and empathy, mental health and resilience, mental health and reading, mental health and bibliotherapy, bibliotherapy, leisure reading, literary fiction and empathy, literary fiction and theory of mind, fiction reading and social cognition, literature and leisure, reading and mental health, health benefits of reading, reading and motivation, reading skills, reading competence, intervention, COVID-19 and reading habits, self-regulation, reading motivation, reading self-concept, positive youth development, reading and anxiety and depression and stress and bibliotherapy, emotion regulation, pleasure reading and academic success, emotional intelligence and resilience, and emotional intelligence and reading.

My search began with typing “resilience,” “reading,” and “high school students” into Bethel University’s library database search. No relevant studies surfaced. I typed the phrase, “reading books promotes resilience” into Google’s search engine. A popular science article referencing Armfield et al. (2021) appeared, showing that reading books was the best protective factor against childhood maltreatment; I found this article through Bethel’s library search. Armfield et al. (2021) was the only academic peer-reviewed article I found that showed a correlation between reading and resilience; although colloquially, people regularly posit the resilience benefits of reading. I determined that I needed to search for resilience in the context of school (including college) separately from reading. From there, I found a handful of relevant resilience articles. Then, I searched for articles about the benefits of reading, as it is also commonly understood that reading develops empathy in readers. After that, I inquired after studies about pleasure reading, reading habits, and reading interventions. Finally, I searched for articles about how reading can be used as a therapeutic tool, known as bibliotherapy.

In the end, I categorized the studies into five different themes: resilience protective factors, effects of reading, reading habits, reading intervention, and bibliotherapy. When I began sorting the articles into their respective categories, I first assembled articles about resilience under one theme, as a third of the articles examined were about resilience. Within this category, I noticed they all concluded with protective factors that were assets of resilience. Next, I organized four articles that were directly related to the effects of reading (i.e., empathy, theory of mind, social cognition, and changing personality traits) with one article that tested factors to rule out possibilities explaining those effects. Then, I compiled the articles that focused on reading habits (e.g., traits of pleasure readers, leisure-time habits of reading, reading habits at school, and intrinsic and extrinsic motivation) and grouped them together. I ascertained that 11 articles fit under this category. Three articles concentrated on reading interventions or using reading as an intervention, which I arranged under the same category. Finally, the three remaining articles were about the health benefits of reading and exploring the use of reading as a therapeutic tool, bibliotherapy, which I sorted as the fifth and final theme.

Resilience Protective Factors

Resilience protective factors, as a category, contains 11 articles. The first ten articles showcased different protective factors that lead to resilience, while the eleventh article, D'Emidio-Caston (2019), was a case study about a teacher preparation program that equipped teachers in social-emotional learning as a way to train them to promote resilience in students, meaning teachers can be protective factors in students' lives. Armfield et al. (2021) discussed reading as a protective factor for resilience. Fredrickson and Tugade (2004), Arici-Ozcan et al. (2019), and Babb et al. (2022) discussed the roles of positive emotions, cognitive flexibility, and emotional regulation when dealing with stress in relation to resilience. Christman et al. (2003) exhibited how social networks, gender, age, and ethnicity related to resilience, and then Cappella and Weinstein (2001) highlighted the role that gender and ethnicity played in reversing negative academic trajectories. Gómez-Molinero et al. (2017) and Artuch-Garde et al. (2017) touched on emotional regulation and cognitive strategies as protective factors for resilience, then Baniani and Davoodi (2021) and Gómez and Rivas (2022) discussed metacognition, motivation, and self-efficacy as they relate to resilience.

Effects of Reading

There are five articles in this literature review that analyzed the effects of reading. Bal and Veltkamp (2013) examined empathy, Castano and Kidd (2013) explored Theory of Mind, and Dodell-Feder and Tamir (2019) investigated social cognition. Djikic et al. (2009) exhibited how literary fiction influences individuals, and Mar et al. (2009) tested which individual factors such as personality traits, a tendency to immerse oneself in fictional worlds, and gender could be ruled out as an explanation of the effects of reading.

Reading Habits

This category contains 11 articles in total. In a seminal work by Nell (1988), different factors about prolific leisure readers, including their psychology, speed, and physiology, were measured. Thus, three studies by Nell (1988) will introduce the reading habits theme. Gagen-Spriggs (2020) probed the question why students read for pleasure, while Duthie et al. (2005) surveyed how students spent their leisure time, including reading. Labby et al. (2016) examined how pleasure reading impacts academic

success and teachers' attitudes on pleasure reading. Merga and Moon (2016) showcased the different social influences at play in adolescent reading behaviors. Savaşkan (2022) explored motivations behind pleasure reading, and Alatalo et al. (2022) surveyed students about their motivations to read specifically at-school texts. Guthrie et al. (2006) studied intrinsic and extrinsic motivation as it relates to reading fiction and nonfiction texts at school. Finally, Chalari and Vryonides (2022) examined students' reading habits during the COVID-19 lockdowns.

Reading Intervention

The fourth theme that emerged pertains to reading intervention. Frankel (2016) examined, through a case study, how adolescents dealt with their reading identity when placed in a reading intervention class. Alarcón et al. (2019) explored the connection between emotional intelligence, motivation, and competency in reading interventions. Alvarez et al. (2018), while not officially considered an intervention, but a mediation group nonetheless, examined how dialogic literary gatherings (DLGs) played a role in the social reintegration of prisoners.

Bibliotherapy

The final studies I reviewed fall under the bibliotherapy group. Frantzana et al. (2018) reviewed the health benefits associated with reading, Beck et al. (2017) analyzed how books could be used as treatment for children and adolescents suffering from trauma, and Jiang et al. (2018) examined the role books could have in the treatment of depression and anxiety in children and adolescents as an alternative to expensive therapy.

Resilience Protective Factors

According to Armfield et al. (2021), reading can promote resilience. Armfield et al. (2021) researched how well children could functionally adapt, or be resilient against, adverse experiences at home, as well as identified the respective factors. Adverse experiences included abuse, neglect, witnessing violence, and/or having a parent with mental illness. The researchers examined the protective factors that led to children being more resilient, along with the risks associated with poorer functioning, and how those differed between boys and girls.

The sample group included children born in Southern Australia between 1986 and 2017 who had completed the Early Australian Development Census (AEDC) and were part of iCAN (Impacts of Child Abuse and Neglect) project. The boys and girls were chosen if they had linked data from the AEDC. Armfield et al. (2021) procured deidentified data from SA NT DataLink, a nationally accredited data linkage authority in Southern Australia, to merge data. The full study sample included all children in the Southern Australia cohort with linked data from the AEDC, which included a subsample of children who had been under investigation by the Childhood Protective System (CPS) for maltreatment. The Southern Australia Department for Child Protection (DCP) categorized CPS involvement by how involved it was with families and to what degree of harm was caused. High maltreatment risk included investigations where children had either substantiated or unsubstantiated indications of sexual, physical, or emotional abuse or neglect. At the time of the study, AEDC data was taken when children were 5 years of age up until 6 years of age. This subsample either had “very high” or “substantiated” suspicion of childhood maltreatment.

Armfield et al. (2021) followed boys and girls separately, ages 5-6, from the start of primary school to commencement. Armfield et al. (2021) used multivariable logistic regression analysis (multivariable logistic regression model was used to examine differences between high maltreatment risk children who had poor resilience and those demonstrating functional resilience) with a sample size of 3,414 “high risk” children who had CPS involvement, meaning children under investigation of abuse or neglect. Teachers completed the AEDC using the Multiple Strength Indicator (MSI), a survey to quantitatively measure patterns and predictors of developed strengths which were used to define resilience.

CPS involvement had a negative effect on functional resilience. Furthermore, nearly 51% of the children determined to be “high-risk” showed resilience. Being of older age, lacking “emotional conditions,” and being read to at home were all protective factors. Among these, being read to at home

was the most significant protective factor. In fact, both boys and girls who were read to at home were three times more resilient than those not read to at home. Boys who had been maltreated had significantly less resilience than girls, especially if they had a disability or lived in a rural area. In addition, children who were read to at home by a parent, despite having been maltreated, adjusted to school better because it provided them with an early learning environment. Girls succeeded better at school than boys, which suggests boys would require more specialized attention to adjust to school.

Fredrickson and Tugade (2004) conducted three studies to investigate how positive emotions played a role subjectively, cognitively, and physiologically in relation to resilience. They asked, “Are positive emotions merely by-products of resilient modes of thinking, or do they serve some function in the ability of resilient individuals to cope effectively in the face of stress?” (p. 320). Fredrickson and Tugade (2004) utilized a multimethod approach to investigate the psychological and physical elements of resilience in studies 1 and 2, how positive appraisals and positive emotions regulated physiological arousal in response to stress in study 2, and how real-life stressors were mediated by positive emotions in study 3. The researchers predicted positive emotions would give resilient individuals an advantage in emotional regulation.

Study 1 applied psychophysiological procedures to test the relationship between emotional regulation and psychological resilience, examining the durations of reactivity to stress. Fredrickson and Tugade (2004) hypothesized that high-resilience individuals, when compared to low-resilience individuals, would: 1) report greater positive emotion, 2) deem the task less stressful, and 3) have faster cardio recovery after the stressful task. Additionally, they hypothesized that the presence of positive emotions would account for faster cardio recovery.

The participants in Study 1 consisted of 57 undergraduate students at the University of Michigan. Seventy-four percent of the participants were female, ages 17-40. The ethnic breakdown of the participants was: 35 White, seven Black, eight Asian, one Hispanic, and six from another or unspecified

ethnic background. When participants arrived at the experiment room, they were told they would have to prepare a speech, the speech would be videotaped, and the speech would then be shown to their peers for evaluation.

Before participants were briefed about the speech, their positive and negative emotions were assessed first using a modified Positive and Negative Affectivity Schedule (PANAS), where they had to rate the extent and number of emotions they felt in that moment on a five-point Likert scale. Second, participants' cardiovascular reactions were recorded and measured (this remained continuous throughout the rest of the experiment). The six cardiovascular measures were: heart rate (HR), finger pulse amplitude (FPA), pulse transmission times to the finger (PTF), pulse transmission time to the ear (PTE), diastolic blood pressure (DBP), and systolic blood pressure (SBP). Then, participants were instructed they had 60 seconds to prepare a three-minute speech about a topic that still had yet to be revealed. Third, participants were measured on their cognitive appraisal about their speech preparation, rating themselves on a seven-point Likert scale, answering questions like "How threatening do you think it will be to complete the speech task?" Then, they were told the topic was "Why are you a good friend?" This was followed by instructions that the participants did not actually have to deliver the speech. Fourth, they completed an emotion report on the number of emotions they felt during the study. This consisted of fourteen emotions (e.g., frustration, happiness, interest) on a seven-point Likert scale. Fifth, they rated their cognitive appraisal of the speech task. Sixth, their trait of psychological resilience was assessed on an Ego-Resilience Scale to moderate their responses to fluctuating situational demands using a four-point Likert scale with 14 items.

The results illustrated a parallel between one's psychological and physiological states and reactions. There were high rates of physical rebound to baseline levels following the arousal of negative emotions, buffeted by positive emotions. This illustrated that resilience was a physical phenomenon as well as a psychological one. Also, positive emotions assisted in quicker recovery in more resilient

individuals than less resilient individuals after negative emotion was initially aroused, proving that experiencing positive emotions were key to having the capacity to be resilient.

Study 2 was set up similarly to Study 1, in that it involved telling participants they would have to prepare a speech, except this study involved a threat condition and a challenge condition. The purpose of Study 2 was to examine how cognitive appraisals affect psychological resilience. The threat condition consisted of *threat appraisals*, where participants were prompted to think of the speech task as a danger that exceeds one's abilities to be able to cope or escape, whereas the challenge condition consisted of *challenge appraisals*, where participants were prompted to think of the speech task as something that could be overcome with one's abilities. Fredrickson and Tugade (2004) hypothesized that high-resilience individuals compared to low-resilience individuals would 1) experience more positive emotions, and 2) recover quicker from the threat condition speech task. They also hypothesized that when induced to appraise the speech as a challenge, the duration of cardiovascularity would be similar between low-resilience and high-resilience individuals. Last, they hypothesized that positive emotions would again moderate the effects of resilience by measuring the duration of cardiovascular reactivity (for the threat condition).

The participants in Study 2, also undergraduates from the University of Michigan, included 57 students. Their ages ranged from 18 to 22; 49% of them were female. The ethnic backgrounds of the participants were: 46 White, two Black, three Asian, one Hispanic, and five unspecified or other. When the participants arrived for the study, they were instructed about the speech task preparation, only this time they were randomly assigned two different sets of verbal instructions for the different conditions. For example, in the challenge condition they were told, "Remember to think of the task as a challenge to be met and overcome" (p. 326). On the other hand, in the threat condition, they were told, for example, "Remember that your speech will be videotaped and that your performance will be viewed by Michigan professors for evaluation" (p. 326).

The following measures assessed in Study 2 were identical to Study 1: the Ego-Resiliency scale, emotion reports scale, cognitive appraisals scale, and cardiovascular reactions (DBP and SBP were taken out from analysis due to equipment failure).

Study 2's results found that higher trait resilience was associated with an increase in the positive emotions of eagerness, excitement, happiness, and interest. In the threat condition, positive emotions partially explained group differences in resilience according to the duration of cardiovascular recovery from negative emotions. This suggested that positive emotions and the induction of perceiving something as a challenge versus a threat is an important consideration for resilience. In the threat condition, high-resilient participants showed a shorter duration of cardiovascularity when positive emotions were present. In the challenge condition, however, high and low-resilient participants' durations of cardiovascular reactivity levels did not differ. With *challenge appraisal*, low-resilient participants may have similar physical qualities to high-resilient participants when positive emotions were present. This implied that low psychological resilience may not automatically predestine someone to poor outcomes of emotional regulation difficulties, and that negative emotions could be effectively regulated through a psychological reframing of situations.

Study 3 studied participants' psychological resilience, subjective emotion, and positive and negative ambient mood (like Study 1). Unlike Studies 1 and 2, Study 3 included a writing task. The writing task was an open-ended, free-writing exercise where participants were asked to write about a current life problem. Fredrickson and Tugade (2004) hypothesized high-resilient individuals compared to low-resilient individuals would 1) experience higher positive emotions, and 2) find more positive meaning in negative circumstances. They also hypothesized that positive emotions would moderate the effects of psychological resilience through positive-meaning finding.

The participants in study 3 were also undergraduate students from the University of Michigan, consisting of 192 total participants, ages 18-23, and were comprised of 143 White, 21 Asian, 8 Black, and

four Hispanic individuals, with an additional 16 of which were of an other or unspecified ethnic background. Sixty-five percent of these participants were female.

Additional measures for study 3 included a modified five-point scale and a seven-point scale from Moo's (1988) Coping Responses Inventory Ratings created for this study. The seven-point scale included questions like, "To what extent do you feel you might find benefit in this situation in the long-term" (Fredrickson & Tugade, 2004, p. 329). First, participants were told this was a study on emotions, then they completed the self-reports on ambient mood and the psychological resilience scale, followed by the short essay, and the emotion report (to indicate the extent to which they felt a number of emotions in response to the problem they were facing), and then rated to which degree they found possible meaning in the problem they described.

Study 3 revealed that high-resilient participants reported higher levels of positive ambient mood and a higher level of responses to problems with positive emotions (eagerness, happiness, excitement, interest) compared to low-resilience participants. The presence of positive emotions was mediated by positive-meaning finding. This demonstrated that writing could strengthen one's capability to cope with negative experiences, showing writing could be a mediating factor accounting for the difference in positive-meaning finding.

In sum, mediational analyses revealed that positive emotions might contribute to emotion regulation, demonstrated by the accelerated cardiovascular recovery from negative emotional arousal in Studies 1 and 2, and by finding positive meaning in negative circumstances in Study 3. Studies 1 and 2 showed that positive appraisals could benefit one's physical and psychological well-being. Individuals with higher resilience also had more positive emotions amid stress and negative emotions, meaning positive emotions might be advantageous in coping with stress. Thus, positive emotions are traits that equip resilient people with the ability to rebound physically and mentally from negative emotional events.

Arici-Ozcan et al. (2019) studied how cognitive flexibility played a role in college students' abilities to regulate emotion in relation to resilience and distress tolerance. Per Arici-Ozcan et al.'s (2019) research, college students' mental health concerns have spiked drastically since the 1980s. The rise in mental health concerns could be due to maladaptive strategies to cope with distress; however, distress tolerance, which is an extension of resilience, is one's ability to tolerate negative or stressful situations, which leads to better health outcomes. Therefore, the researchers were curious to study the relationship between resilience and distress tolerance as protective factors of dealing with stress. Furthermore, cognitive flexibility, the ability to think flexibly and change perspectives more easily, is linked to resilience and distress tolerance. Arici-Ozcan et al. (2019) explained that "distress tolerance, which indicates the power to control emotions, is related to one's ability to be cognitively flexible and to regulate emotions" (p. 526). Therefore, if one has a higher distress tolerance, he or she is better able to sort through his or her feelings and can then formulate different ways to resolve situations. Thus, Arici-Ozcan et al. (2019) sought to answer how cognitive flexibility mediates emotions in connection to resilience and distress tolerance.

The study participants included 1,114 university students in Turkey (771 = female, 343 = male). The mean age of the participants was about 21 years. To assess the students, Arici-Ozcan et al. (2019) used the following scales: Distress Tolerance Scale (DTS), Cognitive Flexibility Scale (CFS), Difficulties in Emotion Regulation Scale (DERS), and Resilience Scale (RS). Each scale was a five to seven-point Likert scale in which the students rated themselves. The study (surveys with Likert scales) was quantitative, voluntary, and filled out with pen and paper. While the study highlighted no direct effect between distress tolerance and resilience, there was a correlation between distress tolerance and resilience. Of note, in consequence to distress tolerance increasing, cognitive flexibility increases significantly, and in consequence to that, resilience increases too. Conclusively, then, cognitive flexibility

is a moderating factor when it comes to distress tolerance and resilience. Therefore, being cognitively flexible in one's emotions can help to be more tolerant and resilient in the face of difficult situations.

During the recent COVID-19 pandemic, schools and universities were shut down and students became isolated from the school environment, switching to online school virtually overnight. As a result, the effect the pandemic had on students' mental health is of great interest. So, it is important to consider which protective factors might have been operating during this time so that students could be more resilient against the negative effects of the pandemic on mental health. Babb et al. (2022) conducted a study that looked at emotional regulation difficulties and resilience among college students, how those were regulated during the COVID-19 pandemic, and how this affected their mental health. The aim of the study was to see how the COVID-19 pandemic affected college students' anxiety, depression, well-being, and insomnia. The researchers hypothesized that college students with higher levels of emotional dysregulation (e.g., depression, anxiety, and insomnia) would also have lower levels of resilience, and that students with more resilience would reduce their chances of changes to their mental health during the pandemic.

Three hundred twenty-one college students enrolled in undergraduate psychology classes participated in the study. The participants were from a large, urban, non-residential university in the southern United States. Most of the students were classified as "non-traditional," meaning they were non-residential and were older adults with families and/or jobs. Researchers surveyed their mental health, emotional dysregulation levels, and resilience during the pandemic. They used quantitative studies (i.e., Likert scales) to collect data. They used the Patient Health Questionnaire to screen for depression, the General Anxiety Disorder Scale to screen for anxiety, the Insomnia Severity Index to measure insomnia, the WHO-5 Well Being Index to assess for positive qualities of life, the Difficulties in Emotion Regulation Scale to assess emotion regulation difficulties, and the Multidimensional Individual and

Interpersonal Resilience Measure (MIIRM) to assess for resiliency factors. To adjust for mental health experiences prior to the pandemic, they issued an anchoring prompt.

In sum, those with higher levels of emotion dysregulation had lower levels of resilience. They had greater increases in depression and insomnia during the pandemic and higher decreases in overall well-being. Meanwhile, lower levels of resilience were correlated with higher levels of depression, anxiety, and insomnia. Resilience factors moderated increases in depression, anxiety, and insomnia, but there was no relationship between resilience and well-being. Overall, students who could regulate their emotions experienced fewer mental health issues when faced with challenges, and resilience was a protective factor that positively regulated emotion and moderated mental health issues. The authors suggested these results indicate there should be more post-COVID-19 pandemic mental health services to support students on college campuses.

Christman et al. (2003) studied the protective factors that predict resilience among urban high school students. Looking at social support networks, Christman et al. (2003) attempted to identify which social networks predicted academic achievement and resilience based on ethnicity, gender, and age. The research questions in Christman et al. (2003) were as follows:

RQ 1. Are there significant differences in academic achievement by ethnicity, gender, or age?

RQ 2. What factors predicted resilience among urban high school students by ethnicity, gender, and age?

RQ 3. What factors predicted resilience among urban high school students by ethnicity, gender, and age? (p. 65)

The researchers focused on one Midwest high school in an urban area, in which 480 participants were enrolled in winter of 2001. The students in the study were identified based on their state-standardized test results taken in 8th and 11th grades.

Christman et al. (2003) collected data from the Resilience Assessment Module, a self-reported questionnaire. The questionnaire consisted of 56 questions, assessing students' perceptions of protective factors (i.e., home, peer, school, and community) and resilience assets (i.e., cooperation and communication, empathy, self-awareness, problem solving, and goals and aspirations). For each item, participants were asked to score themselves on a Likert scale. This questionnaire collected demographic data as well, cataloging students' ethnicity, gender, and age. Additionally, the researchers collected the participants' academic achievement using mean scores from their standardized tests in reading, math, science, social studies, and language. The 11 protective and resilience factors included in the analysis were: "home caring relations, home high expectations, school caring relations, school high expectations, school meaningful participation, community caring relations, community high expectations, and community meaningful participation" (Christman et al., 2003, p. 66). In conjunction with data analysis and discussion, the researchers examined ethnic groups, gender, and age discrepancies.

Ethnicity, gender, and age were found to be influential in how resilience and academic achievement was predicted among urban high schoolers. Compared to Asian, Black, and Hispanic students, White students had the most diverse factors forecasting their academic achievement and perceived resilience, as well as having a wider support network. According to variations with age, older students scored much higher in Cooperation, Communication, Empathy, and Problem Solving, although 9th and 12th graders were nearly equivalent when it came to predicting resilience and academic achievement. Furthermore, the gender differences showed that females had a wider variety of protective factors in predicting academic achievement than males.

In a leading-edge study by Cappella and Weinstein (2001), they examined the protective factors involved in students' abilities to turn around their initial trajectories of low achievement prior to high school into intermediate-to-high achievement upon high school graduation. They cross-examined the psychological, demographic, behavioral, and environmental domains that lead to this reversal in

achievement to interpret successful preventive intervention in schools and academic resilience. What set this study apart from its predecessors was the investigation of the proximal risk factors—low achievement starting earlier in school—rather than distal risk factors, such as low socio-economic status, minority status, and coming from a single parent household. Since early struggles in school predict future struggles later in high school, focusing on proximal risk more accurately traces academic turn-around, since some students facing distal risk may have never struggled in school. The researchers sought to identify the protective factors that lead initially low-achieving students in 8th grade to make significant strides in academic improvement by 12th grade. The researchers predicted that demographic domains (white, high SES, two-parent household, and female), psychological domains (self-concept, locus of control, and future academic goals reported in 8th grade), behavioral domains (involvement in extracurriculars and self-reports of academic preparedness in 10th grade), and environmental domains in school (reports in academic curriculum, support in transition to high school, and peers who value education in 12th grade) would accurately predict academic resilience (i.e., reversal of poor academic achievement). They also predicted that each domain, if significant, would significantly predict academic resilience independent of the other domains.

Cappella and Weinstein (2001) traced this achievement reversal through a national, longitudinal database called the National Educational Longitudinal Study of 1988 (NELS-88). Cappella and Weinstein (2001) selected students from the NELS-88 database that tracked the academic trajectories of nationally represented 8th graders. The NELS-88 researchers pulled 1,052 schools and randomly selected 24 students from each school across the nation with an initial sample of 24,599 students. From this sample, the NELS-88 researchers pulled a subset of students and followed them through 12th grade. NELS-88 continued to collect data every two years by surveying students, parents, and school administrators, and pulling standardized test scores in reading, math, social studies, and science. Cappella and Weinstein (2001) used the NELS-88 database to collect information about the 8th and 10th grade reading

achievement test scores, 10th-grade school administration surveys, and high-school student transcripts. They defined risk as students with the lowest 8th grade proficiency reading scores and academic resilience as students with those scores who also scored at or above average on reading proficiency tests by 12th grade. Cappella and Weinstein categorized students as “nonresilient” from the NELS-88 database if they dropped out or continued to score low on reading proficiency tests in 12th grade. The study sample included all public school students who had also participated in each “wave” of the NELS-88 data collection, had completed demographic information, and had test scores. This subsample consisted of 1,362 students. Of that subsample, 84% of students had usable data.

Cappella and Weinstein (2001) looked at reading achievement scores on standardized tests of students who scored not proficient on their 8th grade tests and tracked them until 12th grade. They looked at the demographic domains from student and parent surveys. The parents were given SES surveys to indicate the parents’ level of education, occupation, and income level. Students filled out surveys about their race/ethnicity and their gender, as well as family composition (whether they came from a two-parent or one-parent household). They looked at psychological domains that were given as surveys to students in 8th grade about their self-esteem, locus of control, and future educational expectations. For behavioral domains, they examined the 10th-grade reports on preparedness for class (e.g., homework completion, having necessary class materials) and the number of hours they spent participating in extracurriculars. For the school environment factors, Cappella and Weinstein (2001) examined whether students completed the minimum requirements for their high school curriculum (four English credits, three Social Studies credits, and two credits in each Math and Science). They also surveyed students about how their peer groups valued schooling (e.g., how they felt their peers valued grades, studying, attending class). The school environment factors also included surveys about support during the transition between 8th and 9th grade, such as their parents attending their 9th grade orientation. The data analytic strategy to assess these four domains separately were run using a series of four simultaneous multiple regression analyses.

In this ground-breaking study, Cappella and Weinstein (2001) found that 85% of the national sample remained at the low or basic reading levels, although 15% of students who had low reading proficiency scored at or above reading level by 12th grade. The protective factors against proximal risk included being White, female, having an internal locus of control before transitioning to high school, and taking the academic curriculum. Although SES and family income played a role in academic resilience, a combination of internal locus of control, high educational aspirations in 8th grade, and academic curriculum in high school explained the relationship. Furthermore, gender and race were better predictors than SES. Additionally, 8th grade educational expectations can predict resilience four years later with exposure to academic curriculum in high school.

Gómez-Molinero et al. (2017) explored how suburban adolescents used different cognitive strategies and abilities to manage emotions in the development of perceived resilience. Gómez-Molinero et al. (2017) asserted that while there are studies on how resilience plays a role in adolescence, there is a lack of studies on the process of obtaining resilience through coping strategies at this particular life stage. One of the risk factors that Gómez-Molinero et al. (2017) pointed out about this age group is that low socio-economic status can lead teenagers to engage in risky behaviors, in part because having lower socio-economic status can cause mental health problems and difficulties adjusting to the social scene at school. That is why Gómez-Molinero et al. (2017) sought to study how some adolescents develop resilience and emotional regulation abilities (ERA) despite their circumstances, especially in their adaptation to school. The researchers proposed that along with verbal intelligence and personality, high ERA would be a predictive factor of perceived resilience in adolescents. The researchers also predicted that the appraisal of cognitive-emotional regulation strategies would increase perceived resilience. This research emphasizes the importance of strengthening resilience in adolescents under a risk context, and how they develop the cognitive and emotional abilities to do so.

The participants involved in this study included 164 Spanish adolescents in 8th-grade from a middle school and in 9th-grade from a high school in a suburban area in Jerez de la Frontera, Spain. The average age of the participants was 14, and they were about equal in gender (53.9% male). The students completed the materials for the study, questionnaires with scales, during class time. Participation was anonymous and voluntary.

Gómez-Molinero et al. (2017) assessed resilience, emotional regulation abilities (ERA), and cognitive-emotional regulation strategies. To control variables, personality traits and verbal intelligence were assessed. To test resilience, the researchers employed the Resilience Scale for School Children (ERE). There were 27 items on this test that focused on three resilience factors: *identity-self-efficacy* (perceived strengths of self), *networks-model* (perceived support of others), and *learning-asking for others' assistance* (perceived solving abilities of one's own problems and others' problems). Participants scored themselves on a five-point Likert scale. To measure ERA, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), Spanish edition, was used. The MSCEIT measured four skill groups of emotional intelligence (EI): perceiving emotions accurately, using emotions to facilitate thought, understanding emotions, and managing emotions. The MSCEIT is a problem-solving performance test about emotions with hypothetical situations. Participants must respond and identify the "most adaptive way to regulate one's own and others' emotions." Students scored themselves on a five-point Likert scale. To test cognitive-emotional regulation strategies, the Cognitive Emotion Regulation Questionnaire (CERQ), Spanish edition, was used. CERQ is a 36-item questionnaire that measures cognitive-emotional regulation strategies in response to stressful life events. Again, students scored themselves on a five-point Likert scale.

Participants completed the High School Personality Questionnaire (HSPQ), Spanish edition, as a control variable. This test contained 140 items to assess the personality traits of adolescents and their relation to school and social activities. The HSPQ contained factors for personality traits (e.g., sociability,

ego-strength, excitability, dominance) in which students scored themselves. Lastly, and as another control variable, participants were assessed on general intelligence via a standardized, 24-item, multi-level test of general intelligence for verbal reasoning and understanding, spatial aptitude, and numerical and abstract reasoning. The researchers only reported the verbal intelligence score.

Gómez-Molinero et al. (2017) found that adolescents tended to perceive themselves as moderately to strongly resilient. This concluded that low levels of ERA are low at this stage in life, although adolescents who had higher ERA also had higher perceived resilience, which meant they may have better mental health outcomes and well-being, and less depression. There was a positive correlation between resilience and ERA, self-blame, acceptance, focus on thought/rumination, and positive refocusing. There was a negative correlation between resilience and dominance on the personality test. The results also revealed that resilience perception could be improved through positive reappraisal as an emotional-cognitive strategy to promote one's ability to positively reinterpret stressful life situations. Sociability to some degree resulted in a better perception of resilience. Conclusively, sociability, ERA, and positive reappraisal are good predictors of efficient social functioning. This meant that even though participants recorded themselves as facing adverse situations, their ability to interact with their environment was a resilient response. The most protective factors contributing to resilience were positive affectivity, self-efficacy, and self-esteem. Finally, this study concluded that verbal intelligence, most personality traits, age, and gender were not significant factors in relation to resilience.

Artuch-Garde et al. (2017) examined the relationship between resilience and self-regulation by studying how self-regulation acted as a protective variable in the resilience of high-risk youths who joined Initial Vocational Qualifications Programs (IVQP). The researchers explained that youths who do not finish compulsory secondary school lack the foresight of their future and are at high risk for social exclusion, failing to meet the minimum requirements to enter the job market. IVQPs are preventive programs instigated in Spain through regional and local governments. Started in 2008, IVPQs provide

students who did not finish compulsory secondary school a chance to earn vocational training, their last effort to procure Secondary qualifications. Students 16-21 who have not finished Spain's compulsory secondary school requirements are eligible for this program. However, 15-year-old students at risk of dropping out or with continuous truancy issues are also considered.

Artuch-Garde et al. (2017) were interested in which factors within self-regulation showed significant associations with resilience variables as well as predictions of resilience variables. The researchers hypothesized that self-regulation factors (i.e., goals, perseverance, decision-making, learning from mistakes) would be the greatest associative and predictive strengths in relation to resilience. Another aim was to ascertain the interdependent relationship between self-regulation and resilience. For this aim, the researchers hypothesized that the same total resilience score would show low-medium-high levels of self-regulation.

This study included 365 students (71.2% male; 28.8% female) from 27 schools with IVQPs spread geographically throughout the Navarra area in Spain. The researchers held interviews with the schools that agreed to participate. The ages of participants were 14-15 (19.7%), 16-17 (69.9%), 18-19 (8.5%), and 20-21 (1.9%). The students were enrolled in either one of these types of schools: public schools (61.1%), non-profit agencies (20.5%), and subsidized private schools (18.4%). There were two IVQP modalities: Vocational Workshop (55.3%) and Basic Program (44.7%).

The instruments used in this study were the Connor-Davidson Resilience Scale (CD-RISC), Spanish edition, and the Short Self-Regulation Questionnaire (SSRQ). The CD-RISC consisted of 25 items that were grouped into five subscale dimensions measuring one's ability to cope with adversity (e.g., 0 = not at all, 4 = true nearly all the time). The SSRQ contained 21 items and had two dimensions on it with Likert response choices ranging from 1-5. The study followed the participants through the 2012-2013 school year. The testing was scheduled via telephone, first the SSRQ, and then the CD-RISC. A few weeks were left in between the two tests, and personal visits were made by the researchers to apply

the tests. All the students who were involved were informed about the nature of the tests and participation was voluntary.

Artuch-Garde et al.'s (2017) first objective and hypothesis, which referred to the association between predictive structural analysis, was partially achieved. According to the results, some positive and statistically significant correlations between goal-setting and learning from mistakes were found; both were significantly related to resilience factors. Self-regulation was found to be important for influencing resilience, as was setting goals, although self-regulation was indirect and materialized from learning from mistakes. Learning from mistakes was the number one factor to predict the following three factors of resilience: coping and confidence, tenacity and adaptation to change, and tolerating a negative situation. Higher resilience levels were found in students who had higher self-regulation scores in socially at-risk situations. Therefore, goal-setting and learning from mistakes were the most important factors. For self-regulation, when mistakes were detected, modifying behavior showcased that metacognition, an essential element, was at play. The data also indicated that persevering in search of solutions predicted tenacity. The second objective and hypothesis of this study was validated, in which interdependent non-linear relationships between the levels of the two scales were found, and it was established that low-middle-high levels of self-regulation were complemented by comparable differences in the three levels of resilience. The independent groups had statistically significant differences between them. The researchers contended that this demonstrated a consistent relationship between the two constructs reinforced by previous studies (Connell & Dishion, 2006; Eisenberg & Spinrad, 2004).

Baniani and Davoodi (2021) posited that anxiety and stress partnered with academic failure and a lack of academic resilience significantly negatively affects students' quality of education. Baniani and Davoodi (2021) sought to investigate how metacognitive beliefs played a role in achievement motivations and academic resilience in high school students. This study, a cross-sectional research with a correlational design, aimed to predict how metacognitive beliefs influenced those results.

This study involved 162 first year high school students (79 male, 83 female) in Shiraz, Iran, ages 15-16. The students were from districts one and two from Shiraz, which were randomly selected out of four districts. In total from these two districts, four schools were randomly selected. Two of the schools were homogenous genders: one school was comprised of all girls and one school was comprised of all boys. From the total number of classes in each school, two classes were randomly selected, and subsequently questionnaires were sent there. Evidence was gathered using multi-stage cluster sampling. As this study was conducted in 2020, schools were closed due to COVID-19. As such, questionnaires were provided in PDF and WORD files to the schools' principals and counselors. The schools sent the questions to the students using WhatsApp messaging. Students sent the answers back to the principals and counselors, who then sent the information back to the researchers. Out of 180 questionnaires collected, eight were excluded and 162 were used for analysis.

The first questionnaire that students completed was the Academic Resilience Inventory (ARI). This was a 29-item questionnaire with three subscales: positivity, future orientation, and communication skills. Students rated themselves on a 5-point Likert scale. The next assessment was the Metacognition Questionnaire (MCQ-30). This was a 30-item self-report scale that measured individuals' beliefs about their thinking that included five subscales: cognitive trust, positive beliefs about anxiety, cognitive awareness, dangerous thoughts, and a need to control thoughts. Students rated themselves on this questionnaire using a 4-point Likert scale. Lastly, students completed the Achievement Motivation Questionnaire. This assessment had 29 items with questions expressed in incomplete sentences. Students then had several options provided for them after each sentence; there were four options from which they could choose.

Baniani and Davoodi (2021) found that students' metacognitive beliefs, indeed, significantly predicted their resilience. In fact, 44.4% of changes in student resilience could be explained by cognitive trust and cognitive awareness from the MCQ-30. Those two factors were found to play the most

significant role in student resilience. The MCQ-30 contained questions about memory. There was a negative relationship between cognitive trust and resilience. Instead of relying on memory, one can use reasoning and analysis to solve conflicts, but relying on poor memory, having a lack of memory in one's actions, and lacking trust in one's memory (all cognitive trust) reduced resilience. Baniani and Davoodi (2021) expected a negative academic resilience correlation with cognitive trust. Overthinking, keeping thoughts under constant control, and constantly checking on thoughts, which is part of cognitive awareness, all reduce resilience. Moreover, Baniani and Davoodi (2021) contended that worrying about solving problems, performing poorly, and avoiding problems does not contribute to constructive conflict resolution, and reduces academic resilience. The prediction of a negative relationship between these beliefs and academic resilience was expected. Achievement motivation also significantly predicted students' resilience, as 15% of the changes in student resilience were explained by achievement motivation. The relationship between metacognition and academic motivation and resilience was found to be significant. Baniani and Davoodi (2021) contended that being motivated (the driving force of behavior) is the basis for determining one's goals and following through with them. This is significant for resilience. Being more motivated and trying harder to achieve goals tend to be characteristics of students who have positive perceptions of their inner characteristics and abilities. When one feels more in control of their education, then anxiety and fear of failure is lower. Taken together, committing to a goal (endurance), and not worrying about failing is significant for learner resilience.

When investigating how resilience is related to reading, it is important to consider how the motivation to read is related to resilience and thus improves reading achievement. Gómez and Rivas (2022) explored how motivation and resilience improved reading achievement for eighth graders in a socially and economically depressed region in Chile. They focused on reading comprehension and the associated motivational and resilience factors, such as self-efficacy, intrinsic motivation, and learning orientation. The resilience factors included future projections, willingness to share emotions, and family

support of those who participated. Gómez and Rivas' (2022) research highlighted how students living in high socially vulnerable communities exhibited motivation and resilience. Although systemic, social, and economic factors affected the entirety of the students' school experiences, the researchers focused on individual reading factors, such as comprehension, motivation, and resilience to emphasize individual reading experiences.

The researchers were determined to ascertain positive reading achievement despite students having low socioeconomic status. The research questions were “a) Is there a relationship between reading comprehension and dimensions of motivation and resilience in contexts of high vulnerability in the Chilean educational system?” and “b) if there is a relationship, what are the main features of these dimensions according to the perception of the students?” (Gómez & Rivas, 2022, p. 360). They surveyed 192 eighth-grade students living in high social vulnerability contexts from six schools across the O'Higgins Region in Chile. These schools differed in size, socio-economic status of students, and in which rural areas they were located. They also consisted of a mix of public, private, and voucher schools. The sample group was chosen because it was part of the National School Vulnerability Index based on what proportion of students at the schools were at social risk. They used a mixed methodology of quantitative and qualitative data to study the six schools using reading comprehension texts, questionnaires about resilience and motivation, and interviews with students, parents, and school staff. Resilience and motivational dimensions, such as individual, familial, school characteristics, individual interests, and personal perceptions were analyzed, and revealed the multidimensional nature of resilience and motivation. The analyzed data categorized students into high, average, and low-reading achievement groups.

Even though it was a highly segregated educational system, self-efficacy, motivation, and family support led to higher reading achievement, thus showcasing the positive influence of student and familial

experiences on reading achievement. Reading motivation and resilience played a significant role in reading outcomes.

In D'Emidio-Caston's (2019) article, the author records historic and recent information, practices, and knowledge about social-emotional development. Included in this report is a case study about a teacher education program at Antioch University in Santa Barbara, California. For the purposes of this review, I highlighted the practices from this program that successfully implemented social-emotional learning (SEL) as the basis of its instructional methods and learning strategies. The teacher candidate program aimed to create a caring learning community for its students that focused on students' social and emotional welfare. The case study from D'Emidio-Caston (2019) showcased best practices implemented by 44 teacher candidates at Antioch from 2014 to 2019 who served schools on California's central coast. The data from the case study was collected from teacher candidates' narratives that described their practices. The teacher candidates in this study were intentionally placed, worked with cooperating teachers (CTs), attended university field supervisor meetings, had small-group seminars, and created cohort communities.

The lesson plans used by the Antioch candidates were framed around Book 2 of Krathwohl, Bloom, and Masia's (1964) proposed *taxonomy of affective objectives* that is lesser known than Bloom's Taxonomy. On Antioch's formal Lesson Plan template, candidates were primed to think about cognitive and affective development with every lesson plan they taught, as well as social expectations. Courses offered in the program included *Conflict Resolution and Mediation*, a self-reflective approach to the philosophy and pedagogy of the program to promote SEL, and *Resilience Education and the school community*, in which Marilyn Watson's *Learning to Trust* (2003) was a required text that highlighted practices about inclusion for challenging students that fosters empathy and belonging. Assignments from Antioch's program included a Sociogram that candidates completed aimed to unveil classroom social

dynamics, a Caring Learning Community plan to create a positive learning climate, and “Who Lives with Me” to familiarize oneself with students’ home lives.

Antioch’s teacher preparation program provided a theoretical framework for integrating SEL training into its teacher education. The most powerful insight that captured the effectiveness of the program derived from analyzing two Master’s students’ narrative descriptions. The two students wrote their theses on practices they had learned in the program and how they implemented them in their professional classrooms. D’Emidio-Caston (2019) noted, “the MA theses of both graduate students complement each other to present a powerful narrative of both theory and practice presented by Antioch” (p. 138). The success of the program relied on its implementation, adhering to the main educational objectives, and its effectiveness, as analyzed by the student narrative reports. The information captured in this case study detailed how a successful social-emotional intervention can be taught to potential teachers to create caring learning communities.

SEL needs to be valued throughout educational institutions with pedagogical programs that focus on “I messages, mindfulness, conflict resolution, and micro-bonds” (D’Emidio-Caston, 2019, p. 139), as the case study highlighted in this article proved. Intentionally creating caring learning communities through best practices is an effective intervention for social-emotional development in classrooms.

Effects of Reading

Bal and Veltkamp (2013) were interested in the relationship between reading fiction and empathy. Their study investigated whether reading fiction can cause one to become more empathetic based on transportation theory, where one becomes emotionally invested in a work of art. Bal and Veltkamp (2013) contended it has long been assumed that reading fiction makes one more empathic, but it had never been studied in a realistic setting to conclusively rule out the possibility that empathic people simply tend to read more fiction. The purpose of this study was to investigate how the level of emotional

transportation plays a role in changing empathy after reading a fictional narrative. The researchers predicted that higher emotional investment in a fictional narrative positively affects empathy in people.

Bal and Veltkamp (2013) conducted two experiments to see whether peoples' level of empathy changed after reading fiction and how long increased empathy levels lasted after reading fiction. The researchers also measured the level of emotional transportation in each experiment. In both experiments, nonfiction was used as the control group. Nonfiction was used as the control because it is logico-scientific, which means it is aimed to explain events, not captivate emotions like fiction.

The first study was comprised of 66 Dutch students, 52% of which were female. The students were an average age of 26 years old, and they spent about three hours per week reading fiction in their daily lives. Thirty-six of the participants were randomly assigned the fiction condition, and 30 were randomly assigned the control condition. For the control condition, participants read a few newspaper reports from the Dutch newspaper *De Volkskrant* and for the fiction condition, participants read "The Adventures of the Six Napoleons" by Arthur Conan Doyle, a Sherlock Holmes' story. After reading the texts at home, participants filled out scales using the self-report method. The scales consisted of an emotional transportation measure, an empathy scale, and a study-irrelevant scale (to hide the purpose of the study). To measure empathy over time, participants were given another digital questionnaire to fill out at home a week after reading their randomly assigned texts. The scales included were an empathy scale and irrelevant scales.

The second study was similar as it contained a fiction condition and a control condition (nonfiction). The participants consisted of 97 undergrad students (none of whom were from the first study). Fifty students read the fiction condition, chapter one from *Blindness* by Pulitzer Prize winner José Saramago; 47 students from the control condition read articles from another Dutch newspaper called *NRC Handelsblad*. The average age of the participants was 24; 74% of them were female. Like the first study, after reading the stories online, participants filled out scales using the self-report method on

computers at home. The questionnaire consisted of an emotional transportation measure, narrative understanding and attentional focus measures, an empathy scale, and irrelevant scales. One week later, participants completed a digital questionnaire at home, including an empathy scale.

Bal and Veltkamp (2013) found that in Study 1, empathy increased after one week of reading the fictional story; however, in Study 2, empathy decreased after time due to less emotional investment, or transportation, into the story. Overall, the participants involved in the experiments had higher levels of transportation into Arthur Conan Doyle's story than José Saramago's. Although, in both studies, when participants were transported, their empathy rose, while when they were less transported, their empathy decreased. The effects of emotional transportation and empathy were not found in the control condition when participants read nonfiction. Moreover, in Study 2, the participants' empathy actually decreased when transportation increased after reading nonfiction. Conclusively, when readers read fiction and they are emotionally transported into the story, their empathy enhances, but when readers read nonfiction, their empathy does not increase even if their transportation is high. Since the researchers controlled for comprehension, lack of transportation was not due to text difficulty. Also, the effects were not due to negative or positive emotions. Even when negative emotion was experienced, empathy was not affected because emotional transportation had occurred.

Castano and Kidd (2013) contended that literary fiction cultivates Theory of Mind (ToM), the ability to empathize and understand others' mental states that enhances social relationships vital to civilization, in contrast to popular fiction or nonfiction that does not cultivate ToM. Castano and Kidd (2013) characterized literary fiction as works that are canonical or have won awards. Castano and Kidd (2013) regard literary fiction as polyphonic and writerly, meaning it has a variation in sounds, words, and grammar, and disrupts our expectations, in comparison to popular fiction (adventure and romance), which is readerly and confirms our expectations and stereotypes about characters and the world. Literary fiction "uniquely engages the psychological processes needed to gain access to characters'

subjective experiences. Just as in real life, the worlds of literary fiction are replete with complicated individuals whose inner lives are rarely easily discerned but warrant exploration” (Castano & Kidd, 2013, p. 378). Moreover, the researchers noted that readers of literary fiction engage in ToM processes because they must interpret the thoughts and feelings of characters.

The purpose of the study was to determine whether literary fiction cultivates ToM, which is the leading question (the researchers hypothesized that it does). To test the hypothesis, Castano and Kidd (2013) compared the effects of reading literary fiction to nonfiction in a first experiment, and then compared the effects of reading literary fiction to popular fiction in experiments two through five.

The first experiment in which the researchers compared the effects of reading fiction to nonfiction consisted of 86 participants. Participants were randomly assigned to read one of six short texts; three were fiction and three were nonfiction. They were assessed on the following tests: a false-belief test to measure cognitive ToM, the Reading the Mind in the Eyes Test (RMET) where they identified emotional expressions, and an Author Recognition test to assess participants’ familiarity with fiction. They were also assessed on affect and engagement (on a transportation scale). Participants also recorded their demographics. Participants who failed to give probabilities and were univariate outliers on the cognitive ToM test were eliminated from the study.

Experiment two replicated the findings of experiment one while also expanding it with different texts and measures of ToM. This experiment differentiated the effects of reading popular fiction and literary fiction. Participants were randomly assigned to either category. For the literary fiction condition, participants read three excerpts from literature that had won a National Book Award. For the popular fiction condition, they read three excerpts from bestsellers on Amazon.com. The researchers used the Diagnostic Analysis of Nonverbal Accuracy 2—Adult Faces Test (DANVA2—AF) and the cognitive ToM from experiment one, along with the Author Recognition test, transportation scale, and demographic information.

The third experiment copied experiment two about literary fiction versus popular fiction, but the source material for the literary fiction was different. Three stories were 2012 PEN/O. Henry Award Winners for short stories. To measure affect, a Positive Affect Negative Affect Scale (PANAS) and single-item report of sadness was used. In experiment four, the same texts from experiment three were used with an additional two new stories for each condition. Experiment four used the RMET and Yoni test. On the Yoni test, participants inferred characters' thoughts and emotions through linguistic and visual cues in the texts.

Finally, in the fifth and last experiment, experiment four was replicated. This time, Castano and Kidd (2013) tested whether subject variables (e.g., education, age, gender) affected variables among the subjects. The literature consisted of three works from the PEN/O. Henry Prize winners and three works from popular fiction found in an anthology. Participants were randomly assigned in the literary fiction condition, popular fiction condition, and no-reading condition. The assessments for experiment five were RMET, Yoni, and PANAS. Additional items were an assessment on sadness and happiness and the Author Recognition Test. Participants measured themselves on the transportation scale, their level of enjoyment when reading the texts, and whether they thought it was "excellent" literature for the two reading conditions. Participants recorded their level of education, gender, ethnicity, and age for this experiment.

The findings substantiated Castano and Kidd's (2013) hypothesis that literary fiction magnifies ToM; however, the experiments only demonstrated that these were short-term effects after reading literary fiction. The first two experiments revealed that reading literary fiction, when compared to nonfiction, enhances affective ToM. Additionally, experiments two and five showed that ToM effects are distinctly different after reading literary fiction compared to popular fiction. This is important to note as the Common Core called for a reduction of fiction in English classes.

Dodell-Feder and Tamir (2018) undertook a meta-analysis to assess whether the glimpse into fictional characters' minds has real-life social implications. In other words, they sought to answer whether reading fiction really does help people navigate the social world. In this analysis they asked: "Does fiction reading causally improve social cognition?" (Dodell-Feder & Tamir, 2018, p. 1713). The researchers also asked, if it does indeed improve social cognition, to what extent does it do so? Dodell-Feder and Tamir (2018) defined social cognition as how we process, interpret, and respond to social information. In their meta-analysis, they dissected how reading fiction affects Theory of Mind, empathy, and prosocial behaviors. They also focused on how social cognition is measured and compared it to both reading nonfiction and no reading.

Since this was a meta-analysis, Dodell-Feder and Tamir (2018) searched PubMed, PsychoInfo, and Web of Science to find research literature about fiction reading and social cognition. The search terms the researchers used, for example, were *fiction AND social cognition OR social skills*. Their search included articles from February, 2016 to August, 2016. In addition to searching for published articles, Dodell-Feder and Tamir (2018) found unpublished data on the listservs from the Society for Personality and Social Psychology (SPSP) and the International Society for Empirical Study of Literature and Media (IGEL). Other unpublished articles were found from contacting authors themselves. The criteria for inclusion in the meta-analysis were as follows: have a "true" experimental design and assign participants randomly to conditions, compare fiction to nonfiction or no reading at all, and have a measure of social cognition (e.g., empathy, Theory of Mind, prosocial behaviors).

Of the 52 possible texts found, 14 studies were regarded as permissible to be included in this meta-analysis. Next, Dodell-Feder and Tamir (2018) extracted the data and coded the studies using multilevel random-effects meta-analysis. To regulate the study-level factors, the researchers coded the 14 studies with the following seven variables: *publication status, comparison group, social-cognitive measure, dependent variable format, dependent variable social process, and participant characteristics*.

The article analyses were run on the Open Science Framework where the effect size was calculated, the data was synthesized, the analysis was moderated, the sensitivity was analyzed, and publication bias was ruled out. Fifty-three effect sizes from 14 studies (that were obtained from 1,615 fiction participants and 1,843 control participants) were analyzed.

Dodell-Feder and Tamir (2018) found that fiction readers indeed performed better on social cognition measures than nonfiction readers and non-readers. Their findings bolstered their hypothesis that there is a causal effect on social cognition from fiction reading. The findings were strong across analyses of all 14 articles used and were not due to publication bias. The impact of reading fiction is a small but reliable factor in enhancing social cognition. This is meaningful because throughout one's lifespan, in terms of social connection to others, it has the potential to positively affect people, such as improving overall well-being, keeping illness at bay, and extending one's life.

Djikic et al. (2009) studied the facilitating effect of art on personality. This examination was conducted in a controlled laboratory experiment. Djikic et al. (2009) were interested in how art might move somebody enough to actually alter their personality. This experiment looked at how literature, in particular, as an artform moves people. A dependent variable was created for this experiment to register shifts in participants' experiences or perceptions of their own traits after reading a short story (art condition) and a control story with the same content, but in a documentary format (control condition). The main difference between the stories was the artistic form. The researchers hypothesized that an artistically recognized short story would cause significant shifts in one's self-reported traits compared to exposure to the same story but in a documentary format. They hypothesized that this shift could happen after being exposed to art even in laboratory conditions. They tested the potential mediational role of emotion in this process as well.

The short story chosen for this experiment was Chekhov's (1899) *The Lady with the Toy Dog*. Chekhov, a Russian author, is considered one of the best short story writers, and this particular story is

considered his best. Therefore, this story was chosen for its indisputable artistic merit. The story is about two married people who have a love affair. Its Flesch-Kincaid score is 6.7 and it contains 6,367 words. None of the participants had read the story before. The comparison text was created by the researchers for this study. The researchers ensured the story's events remained the same, but changed the form (i.e., literary, fictional). Instead, the text was constructed as a court document representing the characters' divorce proceedings. Within the documentary, the main protagonists retell the courtroom about their involvement with one another. The comparison text was controlled for length (6,358 words) and its readability (Flesch-Kincaid Grade Level = 6.7).

The participants included 166 first year undergraduates at a large urban university in Canada (112 women, 54 men). The average age of the participants was 19.5 years old. All participants were fluent in English.

After being briefed about the nature of the experiment, participants answered questionnaires at Time 1, the Big-Five Inventory, and the Emotions Checklist. The Big-Five Inventory is a 44-item scale measuring the Big-Five personality dimensions: extraversion, conscientiousness, agreeableness, emotion stability/neuroticism, and openness. Participants responded to descriptive phrases of each Big-Five dimension prototype, rating themselves on a five-point Likert scale. The Emotions Checklist contained 10 emotions (e.g., sadness, anxiety, happiness) on an 11-point scale, where participants rated the intensity of how they experienced each emotion (zero = least, 10 = most). Then they were randomly assigned to read either the short story (experiment group) or watch the documentary (control group). At Time 2, participants completed the manipulation check, which was a five-point Likert scale checklist about to what extent they would apply adjectives to the text they read. This included adjectives like *artistic* and *interesting*. The manipulation check was used to determine which text they perceived as more artistic. Then participants were given the Big-Five Inventory and Emotions Checklist again (Time 2). After the materials had been collected, a computer was programmed to randomize the presentation of

questionnaires and the order of items within the questionnaires to diminish answers if participants tried to adhere their answers at Time 2 to be the same or different from previous answers at Time 1.

Djikic et al. (2009) discovered that the trait changes on the Big-Five Inventory showed significantly higher trait changes on the art condition than on the control condition from Time 1 to Time 2. The emotions check revealed significantly greater changes for the art condition than the control condition from Time 1 to Time 2. The research confirmed the hypothesis that art could cause significant changes in self-reported experiences of traits under lab conditions while mediating the role of emotions (manipulation check). The researchers concluded the differences that occurred in personality trait changes were due to the artistic form of the short story rather than the participants' interest levels or the contents of the story.

Based on the consensus from Mar et al. (2006) that reading narrative fiction cultivates empathy in readers, Mar et al. (2009) wanted to put it to the test to eliminate other possible factors that might explain this phenomenon. Mar et al. (2009) contended that trait personality, especially openness to new experiences, the tendency to be drawn into narrative fiction, and being female are all factors that might explain why readers appear to gain more empathy after reading narrative fiction. Mar et al. (2009) insisted that in order to demonstrate that exposure to narrative fiction does really have this impact on empathy, other variables would have to be ruled out.

The researchers first tested for trait correlates using the Big-Five Personality Inventory for fiction and non-fiction reading, then controlled for the inclination to be drawn into narrative fiction and gender. Then, the researchers tested the participants' perceptions of their social world. This was to examine the correlation between exposure to fiction and real-world social cognition. The researchers predicted that fiction readers are the opposite of how bookworms are portrayed. For example, readers are often stereotyped as those who immerse themselves in a fictional social world as compensation for the lack of a real social network and are lonely, socially awkward, and depressed; however, Mar et al. (2009) disputed

that stereotype. In sum, Mar et al. (2009) examined the relationship between narrative fiction and empathy by controlling for trait openness, narrative engagement, and gender to rule out possible observed effects of empathy, and investigated social aftereffects of reading (e.g., social network size, social support, loneliness, depression).

There were 252 participants, of which 175 were female. The ages of the participants ranged from 17-38. For most participants, English was their first language. To begin this investigation, participants completed an Author Recognition Test (ART) to determine how much exposure they have had to print by checking a list of recognizable names of authors, which included some fakes or foils. ART correlates with book-reading and other behavior, though the ART was revised for this study. First, participants were assessed on their exposure to narrative fiction, which included 50 authors' names and was divided into five genres (e.g., thrillers, romance, science fiction). Second, participants were assessed on their exposure to non-narrative expository nonfiction, which included 50 authors' names across five genres (e.g., philosophy, science, business). There were 40 foils.

Next, participants were measured on their personality traits using the Big-Five Inventory and their likelihood to be absorbed in fantasy using the Fantasy Subscale of the Interpersonal Reactivity Index (IRI). The Big-Five Inventory had 44 items. The Fantasy subscale of the IRI contained seven items (only one item did not refer to immersion in narrative). Participants rated themselves on a 5-point Likert scale on questions such as, "I really get involved with the feelings of the characters in a novel" (Mar et al., 2009, p. 143). After controlling for those variables, participants completed the Mind-in-the-Eye task (MIE), an objective task-based way to measure empathy. The MIE requires respondents to examine still pictures of celebrities' eye regions and then choose four possible mental states their faces might display. To control for differences in vocabulary, the researchers provided a list of mental state terms for the participants.

Participants were then tested on their levels of isolation. Using a Social Network Index (SNI), participants scored themselves on the number of high contact roles (12 possible) they possessed and the number of people they had within their social networks. After that, participants completed the Interpersonal Support Evaluation List—College version. They assessed themselves on four subscales, marking them as “probably true” or “probably false.” The four subscales were: Tangible (perceived availability of material aid), Appraisal (perceived availability of someone to talk to), Belonging (perceived availability of people to engage in activities with), and Self-Esteem (perceived positive sense of self in comparison to others).

Finally, participants were measured on their levels of loneliness, stress, and depression to determine whether readers are less socially isolated. Mar et al. (2009) used the UCLA Loneliness Inventory (UCLAQ-LI) for loneliness, a 4-point Likert scale that measures the degree to which someone feels connected to the people around them. They employed the Perceived Stress Scale (PSS) for stress, a five-point Likert scale to measure participants’ stress and coping responses. Respondents indicated the frequency of certain thoughts and emotions they had. Mar et al. (2009) used the Beck Depression Inventory (BDI), a test commonly used to assess clinical depression, to measure for depression. Respondents indicated which of the four states of depression on the test were self-applicable.

The results for the ART, in which very few foils were checked for both men and women, revealed that exposure to fiction predicted performance on the task for empathy, even after gender, age, English fluency, trait openness, and trait fantasy had been statistically controlled. This ruled out the likelihood that individual responses were merely the case for the association between fiction exposure and empathy. Males had less exposure to narrative fiction than females, and males also scored higher on the ability to see oneself in a story and simulate the experiences. For the IRI Fantasy test, individuals who were more easily drawn into fictional narratives tended to perform better when asked to infer the mental states of others. For those exposed to more nonfiction, based on the ART results, there was a possible association

with loneliness and a negative relation to belongingness. On the other hand, more exposure to fiction revealed that participants had a higher self-perceived availability of confidants. The connection between nonfiction and loneliness was not insignificant, but there was also no consistent association between nonfiction, social network, depression, and perceived stress. The Big Five traits were ruled out based on the data that individuals who were more open to experiences tended to enjoy more fiction and performed better on the empathy tests. That finding ruled out at least one major explanation for the likely relation between narrative fiction and empathy. Trait fantasy was an independent predictor of empathy ability, and it controlled a variety of individual variables in differences, including one's exposure to narrative fiction. Mar et al. (2009) reflected, "It seems that a ready capacity to project oneself into a story may assist in projecting oneself into another's mind in order to infer their mental states" (p. 421). Additionally, the researchers predicted correctly that the lonely bookworm stereotype of literature readers is not true; in fact, frequent readers of narrative fiction were found to actually have wide social support networks and were neither lonelier nor more stressed. In contrast, nonfiction readers, the majority of whom were male, had more negative outcomes (e.g., less social support, lower self-esteem, more depression) as compared to narrative readers, the majority of whom were female. There was a partial correlation between exposure to nonfiction and MIE, however, it was not statistically significant. Additionally, the sample of participants tested with more exposure to nonfiction was associated with loneliness and a lower sense of belonging, which were symptoms consistent with poor social abilities.

Reading Habits

Nell (1988) performed a series of studies on individuals engaging in ludic reading. Ludic reading describes reading as "play," thus ludic reading can be considered "play reading." Nell (1988) defined ludic readers as those who read at least one book per week for pleasure or relaxation. The first study in Nell (1988) investigated the interrelations between reading ability and reading habits (i.e., reading books, newspapers, and/or magazines for pleasure).

Nell (1988) hypothesized that reading ability, measured by reading comprehension speed, would be positively correlated with the quantity and time spent reading books, but not magazines or newspapers. He also hypothesized that ability-related measures (sorting-time and book choice decision time) would adhere to the pattern. Secondly, Nell (1988) hypothesized that reading time and the quantity of books read would have opposite outcomes for reading magazines and newspapers. Lastly, the Frustration Index and reading span were predicted to positively correlate with book reading (as “addictive”) versus newspaper or magazine reading.

There were two participant groups. The first group consisted of 129 students (47 female, 74 male), most were first- or second-year college students (average age = 20.6 years old) in South Africa. Eighty-seven spoke English at home and 34 spoke Afrikaans at home (eight omitted due to incomplete data). Seventy-one students were bachelor’s degree students at the University of Port Elizabeth studying first year English, and 58 were diploma students from the Department of Civil Engineering and Building at Port Elizabeth College for Advanced Technical Education. Twenty-seven of the 71 BA students in 1976 were involved in a follow-up study in 1978. Twenty-four were completing their third-year English literature courses (one completed two years of English Literature Studies and two completed two years).

The second group involved in this study were considered “ludic readers.” Nell (1988) recruited 16 of the ludic readers, while the rest responded to an ad calling for “bookworms” to participate in a study. In total, there were 33 ludic readers. Ludic readers were those who read a minimum of one book per week for pleasure (although most read more). The mean age was 37.2 (14 male, 17 female). There were no parameters on home language, education level, or reading preferences for the ludic readers group.

Participants began this study by taking a Reading Comprehension Speed (RCS) test. This measured raw reading speed from the comprehension questions. Participants were told to read as fast as they could at a comfortable rate where they could still understand what they were reading. After reading, they answered three easy multiple-choice comprehension questions. They were asked to read again,

adjusting their speed up or down from wherever they stopped after the warm-up. They were timed for two minutes. Next, they completed a Reading Habits Questionnaire. They recorded how long they read at different times of the day (e.g., after lunch, in bed before sleep) and which time they enjoyed reading most. They recorded their reading quantity (i.e., books read monthly and weekly, and daily number of magazines and newspapers read). Then, they were told to imagine they had to stay at a strange hotel where they had nothing to read and were asked how they would feel. They rated themselves on a 4-point scale, then rated themselves on a 3-point scale reading statements about what they would do about it. This was the Frustration Index. It was computed by summing together their feeling and action scores. After that, reading span was measured, that is, an indirect measure of motive strength during reading measures by asking subjects to say how long they would continue to read a book they liked very much if they were able to continue reading it without interruption for as long as they liked. Next, they were asked about how long it would take them to pick a book out at a bookstore that they wanted to read (sorting time). Last, they completed a Reading Preference Test that contained 30 brief extracts from books and rated which ones they would like to read, rating on a scale from one to four.

The results showed that despite any career or language differences, females spent more time reading books than males. This carried over to other reading habit variables. College males, for both language groups (English and Afrikaans), read fewer books for less time than the rest of the sample. The fastest readers were female English University Students, and the slowest readers were college Afrikaans males. English University female students read ludic books for longer every day (165 minutes) than the whole group (125 minutes) and male Afrikaans (53 minutes). This supports a strong relationship between reading books and reading ability. Secondly, the Frustration Index was higher for groups that spent the most time reading books and lower for those who spent less time reading books. Heavy book readers were more dependent on reading than those who read less. Third, there was no support for the hypothesis that

book reading was reciprocal to magazine or newspaper reading. Book reading time decreased as newspaper and magazine reading time decreased.

“As books taste, so are they eaten” (Nell, 1988, p. 16). The second study in Nell (1988) sought to determine whether ludic readers “bolted” or “savored” text while ludic reading to prove that, within text flexibility, ludic readers read at an invariant pace. Nell (1988) studied skilled reading and long, continuous, and readily comprehended texts of ludic readers’ own free choice under response-free conditions. Did readers “savor” the passages they most enjoyed by reading more slowly?

The subjects were the 33 ludic readers in study 1 of Nell (1988). The ludic reading vehicle was three books the subjects were told to bring with them. They sampled the first 50 pages of possible books until they found three that they considered to be the best books that were especially enjoyable that they felt they could read for some time. They rated their expected enjoyment of each book. The highest-rated was set aside for the second, criterion, laboratory session, while the lowest-rated was returned to the subject, and the remaining book was used in the first and second laboratory session. Before the study, subjects were assigned enjoyment ratings to recount episodes of reading they would find especially enjoyable (to which enjoyment was at 100%). The scale asked subjects to rate well-remembered passages in a very recently read book, a book under distracting circumstances, and the three books brought to the first laboratory session.

The 33 ludic readers were monitored for their page-by-page reading speed for 30 minutes during the second lab session. The reading began in the lab a few lines before the point at which the trial reading of subjects’ most preferred book had stopped, usually page 50. There was no control for comprehension. Each subject participated in two identical lab sessions a day apart, the first for habituation, and the second for data recording. The sessions were timed in the laboratory with subjects’ laying semi-supine with their backs to the observation window (page numbers noted and eye and head movements seen in mirror).

Timing was based on a digital counter. Eleven electrodes were affixed to the readers, constraining their movement to set it apart from natural reading.

The Reading Mood Questionnaire comparing their usual ludic reading experiences to that of the laboratory sessions resulted in no significant differences between their most enjoyable reading experience and reading in a laboratory. Their awareness of distractions were judged less significantly than reading under distracting circumstances outside of the laboratory. Their results were compatible with their everyday experiences in which they were able to lose themselves in a book even under compromising conditions. The mean reading speed on 113 pages that were specified as most liked was 394 WPM versus 534 other pages at 479 WPM. The difference was significant, however, with this data, it is not possible to determine whether reading more slowly on the most liked passages was due to reduction in reading rate or because the passages were read and reread more than once. The standard deviation on the mean reading rate for most-liked pages was almost half that compared to other pages. Nell (1988) concluded it was possible that ludic readers are flexible when reading passages and move from skimming or near-skimming for less enjoyable passages. Thirty-five percent of readers moved from reading (i.e., the upper limit of reading with full comprehension of each thought) to skimming in the course of their pleasure reading. Conclusively, Study 2 of Nell (1988) demonstrated that within-text flexibility was predictably complemented during pleasure reading, bringing into question that natural reading happens at a constant momentum. Instead, ludic readers' within-text reading rate was variable.

Study 4 in Nell (1988) researched the physiological mechanisms behind ludic reading. The aim of this study was to understand and measure the physiology of ludic reading.

The subjects were the same 33 ludic readers from Study 1 of Nell (1988). Subjects were affixed to electrophysiologic transducers that led to a 077 16-channel polygraph machine that produced hard-copies of data. Each subject took part in two identical lab sessions one day apart. The total time for each session was 30 minutes. The readers laid in the same semi-supine position as Study 2 with their backs to the

observation window. There were three electromyograms (EMGs) connected to different parts of their faces. EMG1 was on their occipitofrontalis (forehead muscle). EMG2 was on their levator and depressor angulioris (smiling muscles at the corners of their mouths). EMG3 was attached to their platysma (the sheet-like muscle between their chin and larynx). Other variables that were measured were their respiration rate (RR), heart rate (HR), skin potential (SPR), and heart period (HP). Before the experiments began, participants were told to relax to record baseline measures. Cardiac responding was recorded during ludic reading sessions and four other cognitive task periods were used as controls: a three-minute work reading task using a cognitive psychology text, viewing a series of affectively neutral photographs for two minutes, doing six mental arithmetic tasks, and three different visualizing tasks for 90 seconds.

Nell (1998) predicted that there would be raised, fluctuating arousal when reading a passage perceived as pleasurable. The results revealed that although ludic reading is described as “relaxing,” it was more physiologically arousing and labile than baseline responding. Deactivation was predicted when the subject stopped reading and closed his or her eyes. Nell (1998) proposed a possible explanation was that bedtime reading is attributed to a precipitous fall in arousal. Hard reading and mental arithmetic caused a rise in arousal, but it did not cause more arousal than ludic reading. There was a high level of activation with EMG3, the platysma muscle, during ludic reading and hard reading, which suggested that subvocalization occurred. The electrode placements were just as sensitive to swallowing, making it possible that reading is associated with swallowing. During ludic reading, attention to external stimuli took precedence over cognitive processing. The heart rate accelerated during hard reading and arithmetic tasks. Ludic tasks, on the other hand, did not accelerate heart rate the same, possibly meaning that cognitive processing is more important than stimulus detection. Mean responding was most elevated during reading one’s most-like pages, and this trend suggests heightened physiological arousal contributed to perceived pleasurableness of most-enjoyed reading. The increased fluctuation on EMG2 during most-enjoyed reading was also more variable. There was an increase in HR during reading most-

liked pages, suggesting cognitive processing takes precedence over stimulus detection. Also, large increases in heart rate lability indicated competing deceleration responses, associated with orienting response, marked during most-enjoyed reading.

Gagen-Spriggs (2020) conducted an inquiry about why students chose to read for pleasure. The researcher defined reading for pleasure (RFP) as books students choose themselves, at their appropriate reading level, that are also not part of their school curriculum. Gagen-Spriggs (2020) cited that the benefits of RFP included higher academic achievement, cognitive development, social and emotional well-being, and literacy levels.

Gagen-Spriggs (2020) conducted this inquiry at the school at which she was a librarian, an independent, all girl's private school in Brisbane, Queensland, Australia. All participants were from this school, 54 students in grades 7-9. This study included both quantitative and qualitative measures. The quantitative measures consisted of a Likert scale (crosstabulations of motivated to unmotivated) questionnaire and nonparametric testing. The qualitative measures included deductive content analysis and informal data-sifting.

The participants completed two-part online surveys in their own time over two weeks. Part A contained 20 multiple-choice questions derived from the Adolescent Motivation to Read Profile. Part B consisted of eight open-ended questions developed by Gagen-Spriggs (2020) for the purpose of this study. The questions asked students about the role of potential social agents in relation to reading, the impact of school libraries and school librarians, and what encourages students to read. Gagen-Spriggs (2020) designed the questions in order to test the theory that students who engage in RFP have certain people in their lives who influence them to read, with specific references to teacher-librarians.

Gagen-Spriggs (2020) found, in general, the students surveyed were motivated to RFP. First, participants who place a higher value on reading and have a lower self-concept may not be great readers, but they value reading. Second, students are less likely to value reading, in part because of the pressure to

achieve in academics. Third, students with a lower self-concept who place a higher value on reading are more likely to RFP. Fourth, positive role models like friends, teachers, teacher-librarians, and fathers were mentioned as people who influenced their reading. Fathers were mentioned by two participants, but mothers were not mentioned at all. However, this is consistent with studies that show a parent or family member is a good influence on the likelihood one would RFP. Students also reported that teacher-librarians and library programs had a positive impact on RFP. Teacher-librarians were cited as influential because of their passion for books and reading, their ability to help students find books, and their skills at recommending appropriate books for students. One student suggested that a wider range of new books with different themes and content that adults might be incognizant about should be included in the collection of books at the school library (e.g., LGBTQIA+ books). This suggests that libraries' collections might not have met the needs of the student population. When asked "What makes you read?" common answers included the "right" book, an eye-catching cover or interesting blurb, a good recommendation from a teacher or friend, and something that had them "hooked" and kept them engaged (e.g., genres like mystery, adventure, humor, science fiction, and romance). Students also said they enjoyed books that kept them guessing, such as ones with more complexity and a little bit of "everything," implying a mix of genres and themes (e.g., romance story in a science fiction novel).

Overall, when students see themselves as good readers, they have a higher positive relationship with reading and are more likely to engage in RFP. Students with high AMPR total scores reported themselves as being good readers. Additionally, positive attitudes led to reading. Students who were good readers and had positive attitudes about reading were more likely to engage in RFP.

Reading is a salient tool for language acquisition and refining literacy skills. It increases vocabulary and word knowledge, heightens comprehension, and expands lexical capacities. This is true through whatever medium, whether that be books, magazines, or newspapers. Duthie et al. (2005) studied how reading compared to other leisure-time activities in older children and young adolescents. They

examined what these youths chose to read for fun, as well as whether there were any age or gendered differences between students ages 11-14. Duthie et al.'s (2005) main purpose was to investigate what students ages 11-14 liked to do in their free-time and how reading fit into it.

The participants consisted of 100 sixth graders (50 boys, 50 girls) from five different classes in middle schools and 100 ninth graders (50 boys, 50 girls) from five different classes in high schools. The sixth graders were 11-12 years old, and the ninth graders were 14-15 years old. The schools examined were all public schools in western Oregon that served lower middle-income neighborhoods. Over 90 percent of the students were White who spoke English as their primary language (typical of the Oregon population). All students who participated were considered average achievers with no language or learning disabilities or no reception of special education services. Duthie et al. (2005) studied this age group because this is when gender differences between boys and girls start to emerge, and students spend less time on solitary leisure activities and more time on social activities with their peers. It is also when the main focus of teaching reading is no longer about decoding.

Duthie et al. (2005) designed and administered surveys to the classes in the study. Teachers were asked to volunteer their classes and students were tested in a large-group fashion. The two-page survey was titled "Student Questionnaire." An examiner in each classroom would read the survey questions out loud and then allow students time to respond to each question. The first question asked students how they spent their free time. Options for this question, for example, were, "reading," "shopping," and "sports." The list of activities included solitary activities, like reading, and more social activities, like shopping. Question two asked students how much time they spent on reading outside of school. Options for this question, for example, included "none," "5-10 minutes," and "10-20 minutes." Question three asked students which types of reading material they enjoyed. Some examples from the survey included novels, poems, and newspapers.

In sum, the most common activity all students in the study enjoyed was listening to music (78%). Reading was moderately popular as a leisure activity (51%). Therefore, reading was a moderate activity amongst the eleven- to fifteen-year-olds. This study also revealed that interest in reading declined as students became older, while e-mail increased (consistent with the trend that social activities increased with age). The results also showed some gender differences between boys and girls. Boys tended to prefer video games and sports, while girls tended to prefer talking on the phone, using e-mail, or shopping. Boys spent more time not reading than girls. Among all the students, magazines, novels, and comics were the most popular materials to read and plays, technical books, and newspapers were the least popular materials to read. Older students tended to read more magazines compared to younger students surveyed. Girls also preferred to read more poetry than boys. Duthie et al. (2005) concluded that while reading in one's spare time has bountiful benefits on language and lexical acquisition, social and physical activities are healthy ways to spend free time too.

Merga and Moon (2016) was part of a bigger research project called the West Australian Study in Adolescent Book Reading (WASABR). WASABR looked at attitudes and engagement in book reading in Western Australia among adolescents. Merga and Moon (2016) took the multiple facets of adolescent book reading from this study and composed it into a cohesive whole to present the social influences on recreational book reading among the population studied. Merga and Moon (2016) addressed the following research questions from WASABR: First, how often and how much are adolescents reading for pleasure? How frequent and what is the number of books? Does it differ between boys and girls? Second, what are their current attitudes toward reading? Do they find it enjoyable? Is there a difference between boys and girls? Is it socially acceptable? Do technological developments and media influences impact attitudes toward book reading? Third, how do parents, English teachers, peers, and friends' attitudes toward reading influence adolescents' reading habits and attitudes? Fourth, what changes in school policy and practice are implied by the findings if book reading prospers?

WASABR was a mixed-methods study. Students filled out a 41-item survey either in online or paper form. There were 182 responses total. There was a qualitative field on the survey where students could contribute ideas they wished to share. After each survey had been completed, two participants from the schools studied were randomly selected (controlled for gender only) to participate in a semi-structured interview surrounding the topic of recreational book reading. The participants were from 20 high schools around Western Australia. There was one year-8 class (65%), and one year-10 class (35%) from each school. The students ranged from 13-16 years old (53% female). These schools were chosen as a representative sample of the population that displays the diverse demographics of Western Australia. For instance, 3% of participants were indigenous Australian, 14% were non-English speaking, and 21% were born in a different country than Australia. None of the students involved in the study were receiving special education services or literacy support.

The students' self-reported frequency and volume of books read for pleasure from WASABR revealed that 64% read books at least once a month with regularity, while 36% read more than twice per week or infrequently. Thirty-six percent read less than once per month. This displayed that over a third (38%) of students were considered avid or daily readers, reading for an hour or less per day. Recreational book reading was not extensive compared to other recreational activities such as TV, internet, and sports. Fifty-three percent of students read less than once per month, and 16% read no books for pleasure per year. Girls were found to read more than boys. Avid readers were considered to read more than twice a week and reluctant readers were categorized as reading less than once per month. Forty-five percent of boys were reluctant readers, while only 27% of girls were reluctant readers. Avid readers were more likely to be girls (43% girls, 30% boys).

For the second research question about the attitudes of reading, 49%, nearly half, agreed or strongly agreed with the statement, "I like reading books in my free time." Less than a third (27%) disagreed or strongly disagreed with the statement. This showed that the attitudes on reading were more

likely to be positive or neutral than negative. Eighty-one percent of girls and 61% of boys were positive or neutral with their attitude toward reading for pleasure. Merga and Moon (2016) asked whether the gender differences revealed different parental and cultural expectations for boys, pointing to prior research that shows mothers tend to take on the primary role of reading to children when they are young and that it is seen as a “feminine” activity. Furthermore, when given the statement, “It is not cool to read books,” only 9% of students agreed with this statement (11% of total boys, 7% girls).

Participants responded that their preferred mode for recreational reading was traditional book reading, even if over half of the cohort had access to ebooks. Avid readers also did not utilize ebooks frequently. Student responses pointed to the aesthetics of paper books over ebooks, frustration with devices and downloading, and a perceived lack of performance and ownership over digital book files. Some students were enthusiastic about the immediate availability of ebooks. Only a small group were involved in social networking around books, generally these were females, avid readers, and participated in popular fanfiction sites. On the other hand, the availability of other technology (i.e., TV and internet) made it more likely for students to engage in these technological activities because they were perceived as “more fun.”

There was a significant positive correlation between parents’ book reading frequency and attitudes toward reading and children’s reading frequency. Students with parents that were more interested in reading were also more likely to continue being engaged in the number and frequency of books. Avid readers were found to have at least one book-interested parent. Results found that parents tended to encourage and support reading (e.g., giving books as gifts). As for friends’ attitudes impacting recreational reading, there was a low positive correlation between adolescent attitudes and friends. For peer-group attitudes, there was a higher positive correlation between peer-group attitudes and books reading for boys than for girls, but it was not statistically significant.

Fourteen percent of infrequent book readers said they disengaged because of a perceived lack of skills, access, choice, and other physical and cognitive factors. When asked about reading conditions that impacted their reading in classes, 31% said they were unable to sit still for required reading in English classes. Despite high access to books, 39% of infrequent readers struggled to find an “interesting book.” WASABR asked what would make them read more and respondents indicated choice and access to attractive and diverse books, time availability and allocation, concentration, and encouragement. When asked about English teachers’ influence on recreational book reading, their perception was that English teachers in high school provided less encouragement than primary school teachers.

Labby et al. (2016) compared the academic success of students who read for pleasure against students who did not read for pleasure. The researchers focused on academic success in the core subject areas of English, mathematics, science, and history. Labby et al. (2016) also surveyed teachers about their perceptions of pleasure reading and academic success in these four core subjects. Their interest was threefold: whether pleasure reading increased grade averages in these core subjects, whether it minimally increased the grade averages, or whether reading for pleasure made no impact at all on grade averages. The main questions were as follows: Did students who read for pleasure have higher grade point averages than students who did not read for pleasure? And, if pleasure readers did have higher grade point averages, would teachers in English, history, science, and math be more willing to have independent reading in their classes?

The study was conducted over a nine-week grading period. Participants included 65 11th-grade students from a rural Southwest Texas school. The students’ average ages were between 15-17 years old; they were either in honors classes or grade level III core subject classes. All students who returned their signed consent forms and completed the surveys in full were involved in this study; they were also all from the classrooms of the teachers surveyed. Fifty-four percent of the students were White, 23% were Hispanic, 20% were Black, 2% were Asian, and 2% identified as an “Other” ethnic background. The

students included both males and females, but the researchers did not collect separate data documenting the gender breakdown. The educators involved were from all core content areas (i.e., English, math, science, history). They had either been teaching for at least two years or 30-plus years. The students were divided into two groups: those who self-identified as pleasure readers and those who identified as non-pleasure readers.

The methodology used was an embedded design composed of both quantitative and qualitative data. The students completed a 10-question survey about their reading habits, both past and present. The educators completed a five-question interview about their philosophy on reading and what they believed pleasure reading's role should be in the classroom. The student questionnaire was a Reading Interest Survey with five questions about enjoyment of pleasure reading, their past reading, time spent on reading, how many books they owned, and how many books were in their house. They answered using a five-point Likert scale. There were two yes-no questions and two open-ended questions at the end. The educator survey was used to measure teachers' opinions on the impact reading for pleasure has on academic success. The questions asked focused on their philosophy on self-selected pleasure reading, why high schools do not allow time for self-selected pleasure reading if studies suggest it heightens student performance, whether or not they thought students struggling with writing was because they did not read enough, if pleasure reading is proven to increase academic success and student behavior, then why is it not allowed in the classroom, and why they think so few students read for pleasure. After the surveys and questionnaires were completed, the researchers collected the students' grade point averages from the first nine weeks of instruction from the counselor's office.

Overall, Labby et al. (2016) found that students who read for pleasure, in both honors and grade level courses, had better marginal increases in their grade averages: 0.11% increase in English, 1.71% increase in science, 4.43% increase in math, and 2.05% increase in history. Nineteen students out of the 65 surveyed identified themselves as pleasure readers (29%), as opposed to 46 (71%) who very rarely or

never read for pleasure. The majority of students were not pleasure readers and did not enjoy or find reading pleasurable. Twenty percent reported they never finished a book, and 51% said they had read two or fewer books per year (including required reading books for school). Only 33% owned 15 or more books. Pleasure readers averaged higher grades in all subject areas that were measured, but they were only marginal advantages in English and science, whereas math and history saw significant advantages. For instance, honors students and grade level non-pleasure readers' grade point averages were 88.63% and 78.63% in English, and honors students and grade-level pleasure readers had average grades of 91.82% and 75.63% in English. Math, on the other hand, had the largest advantages for pleasure readers. Non-readers in honors and grade-level math had averages of 87.53% and 82.33% grade averages, but pleasure readers in honors and grade-level math had 93.64% and 83.75% averages. Honors non-pleasure readers still had higher combined grades than grade-level students. Non-reading level students had a 3.0 higher average percentage points at the end of nine weeks than pleasure-reading students at grade level in English, but pleasure-reading honors and grade-level students had higher grade point averages in the other core subjects (i.e., math, science, history). Furthermore, students in honors classes who identified as pleasure readers in English had a 3.19% higher grade point average than non-pleasure readers in English, which raised the overall average for English.

All educators interviewed for this study expressed an interest in learning about more benefits of pleasure reading in the classroom. All four of the core subjects' teachers agreed that they thought reading for pleasure was beneficial to students. They also all agreed that there was no longer time in their classrooms for pleasure reading due to state-mandated curriculum and standardized tests. They said that they saw higher scores in student writing with pleasure-reading students because those students were better at expressing themselves in writing. The teachers also all agreed that texting and social media had a negative impact on writing due to the short-hand expressions. The teachers thought that pleasure readers were exposed to more vocabulary and interesting sentence structure and syntax than non-pleasure readers.

Half of the teachers disagreed that they should allow silent reading in their classes because they thought that it would be counterproductive to classroom management, as few students would actually engage in reading. All of the teachers generally agreed that the decline in reading for pleasure was because students had few role models who read for pleasure; they were burnt out from reading programs in elementary and middle and junior high schools; they had parents who did not emphasize reading for pleasure and were poorly educated; students were too involved in clubs, jobs, and extracurricular activities; and students had underdeveloped imaginations because of technology use.

Savaşkan (2022) maintained that Turkey did not have significant achievement in reading comprehension skills in PISA (International Student Assessment Program) in the years 2009, 2012, and 2015. PISA is used to determine academic achievement of students on an international platform by comparing them to other nations. According to PISA results, Turkey had moved back in reading skill rankings over the years. Turkey ranked 39th out of 69 countries in PISA in 2009, 42nd out of 65 in 2012, 50th out of 72 in 2015. In 2015, the rate of students with lower proficiency (level 1 and below) in reading skills increased when compared to 5th level and above in PISA in 2019. In 2015, there was also a decrease compared to 2012. Savaşkan (2022) asserted that school is the most effective environment for students to acquire reading skills. They also claimed that motivation is the most important factor behind the acquisition of skills associated with student beliefs, goals, and values. Savaşkan (2022) sought to determine the reading motivation levels across high school students and whether there was any significant difference between reading motivation based on gender, grade level, SES of parents, education of mother, education of father, newspaper subscription frequency, internet access, and reason for not reading. Savaşkan (2022) highlighted that the importance of reading encapsulates many benefits for high school students socially, environmentally, and societally. It can also help students with their communication skills. Savaşkan (2022) wanted to find variables that affected reading motivation of high school students.

The researchers suggested the interpretation of findings and results could eliminate main factors that prevent high school students from reading and that could lead to improved reading habits.

The researchers used relational screening as their research model. This was aimed to describe current past cases in detail and to determine the existence of covariation between two or more variables.

Participants included 1,070 volunteer students attending nine high schools in the Sinop province in Turkey during the 2019-2020 academic year. Study data was collected with two forms: demographic information and the Adult Motivation Scale (Turkish language edition). The Adult Motivation Scale contained four factors and 21 items (19 items were finalized for analyses).

As for results, variables such as gender, newspaper and magazine subscription frequency, internet access, and reasons for not reading were all contributing factors on reading motivation for high school students. This study also revealed that school type, SES levels, and the educational levels and occupations of parents were not factors in reading motivation. Female students showed higher reading motivation than males. According to Savaşkan (2022), these results pertaining to females and reading motivation are consistent with other studies that show female students are more likely to be inclined to read through the extrinsic motivation factors, and as grade levels goes up, extrinsic and intrinsic motivations go down. This study also confirmed that school type was statistically significant in terms of lowering motivation. The frequency of newspaper and magazine subscriptions were found to heighten reading motivation. Savaşkan (2022) suggested that schools should improve their reading materials in school libraries and classroom libraries to support students in acquiring better reading skills and ability to obtain books. Internet access was also found to improve reading motivation. The most significant reason given for not reading was “time constraint.” The researchers suggested that it is essential for schools to review methods, techniques, and approaches to help students develop reading habits. They also proposed that any effective methods used to attract students to reading and motivate them to read should be adopted.

Alatalo et al. (2022) inquired about students' reading practices at school and what motivated them to read school material. The theoretical framework behind their study was the Self-Determination Theory (SDT), which describes different types of regulation that motivates reading. For instance, this theory posits that extrinsic motivation can lead to autonomous behavior and self-determination, and that autonomous motivation comes from more than just being interested in something. The different subtypes of extrinsic motivation that are more autonomous are: *identifying* with being a reader and *integrating* one's sense of self into being a reader. Additionally, there is *introjecting*, such as reading to avoid looking bad, and *extrinsic*, doing what someone tells you. According to this theory, classroom conditions can be developed to elevate self-determination and autonomous behavior (Deci & Ryan, 2000; 2008; 2020).

The three questions the researchers asked were, "1. How do students perceive themselves as readers? 2. How do students perceive their school-related reading difficulty? 3. What types of motivation for school-related reading do students express?" (Alatalo et al., 2022, p. 105). Related to question three, the researchers also sought to uncover what would cause students to read more school-related texts.

Alatalo et al. (2022) studied 259 students (124 boys, 135 girls) from grade 6 middle school and grade 9 lower secondary school. Note, in the Swedish school system, grades 4-6 are middle school and grades 7-9 are lower secondary school. Since this study was part of a larger survey (measuring students' total amount of reading at school and how that reading amount would relate to students' type of motivation), the students selected in this investigation were all chosen based on their previous answers for follow-up interviews. The students came from 16 classes from different schools. The grade 6 and 9 respondents were chosen either because they had read a lot despite having low levels of motivation or did not read but had high levels of motivation (this was determined from the previous study). All students came from an average socio-economic background in semi-rural Sweden (27% foreign background, 49% one or more parents had a post-secondary education or above, and 10% attended independent schools).

In the spring of 2018, five researchers interviewed the 259 grade 6 and 9 students during or shortly after the students' lessons in four school subject areas: Chemistry, Swedish (L1), English (L2), and History. These school subjects were selected to acquire responses about the different types of reading practices in these classrooms. Four of the researchers interviewed 101 students in grade 6 and 93 students in grade 9 in Chemistry (five = 6th, two = 9th), Swedish (L1) (43 = 6th, 44 = 9th), History (31 = 6th, 36 = 9th), English (L2) (22 = 6th, 11 = 9th). An undergrad research assistant interviewed 65 6th-graders during and shortly after Swedish (L1) lessons.

To answer the first research question, about how students perceived themselves as readers, the researchers gave students a questionnaire that consisted of 24 questions and items that assessed students' views of themselves as readers and their school-related reading practices. Nine of the 24 questions were selected for the purposes of this study. Additionally, the researchers added a 5-point Likert scale for the students to rate themselves on the following statements: 1. "I see myself as a good reader," 2. "I want to be a good reader," "I know how to be a good reader," and "I read a lot in my leisure-time." Then, the researchers asked the students an open-ended question about what they could do to become better readers.

For the second research question, about how students perceived their reading at school, the researchers asked students whether they found the reading during the previous class "difficult," "in-between," or "easy." The open-ended question requested the students to specify why they found the reading to be that way.

To obtain answers for the third research question, about what directs students to be motivated to read in class, the researchers asked students why they decided to read the text during their previous class. Students could choose from five alternatives; two of them were autonomous and three of them were controlled. The open-ended question for RQ3 was, "What would make you read more at school (in all subjects?)"

Alatalo et al. (2022) found that, in general, students want to be good readers, and that when they reach grade 9, they believe they know how to become better readers. On average, girls tended to want to become good readers more than boys and read slightly more in their free time. From grade 6 to grade 9, girls' self-concept as readers did not drop. Both age groups believed that reading more makes a good reader. The older students understood that becoming a good reader required more than fluency and speed, and more than half of the grade 9 students thought qualitative measures could improve reading comprehension. Alatalo et al. (2022) concluded that the decreasing amount of reading practices at school in Sweden could not be explained simply because of students' lack of will to become better readers or their awareness of how to become better readers. For RQ2, most of the boys and girls thought the reading materials at school were easy. Grade 6 especially found the texts to be easy, the main reason being that the selected texts were too easy. Very few students reported that the teachers' instructions were the reason why reading was more difficult or easy, leading the researchers to conclude that students are not aware that classroom instruction can impact their specificities as a learner, and could further support them to tackle complex texts. Interestingly, students who perceived the texts as easy credited themselves and their reading abilities as the reason why; whereas, those who perceived it as difficult pinned it on the text rather than their reading ability. The former could demonstrate how having a strong self-concept as a reader is integrated in identity, making students more susceptible to classroom autonomy and self-determined behavior. The latter, however, provides insight that teachers should be more aware of how students perceive themselves as readers when it comes to selecting texts. This study also uncovered that students in grade 6 felt mostly underchallenged, which could cause them difficulty in grappling more challenging texts in secondary school. Furthermore, Alatalo et al. (2022) found that students in higher grades were mostly driven by controlled motivation, which the researchers thought could be due to the increase in accountability as students get older. Half of the students (mostly males and students in grade 6) surveyed said they would read more if the texts were more interesting, and if they had the freedom to choose. The

researchers suggested this result points to the importance of teachers allowing more student choice in what they read. Also, almost half of the students (girls and students in grade 9) revealed that they would read more if externally instructed to do so. In conclusion, Alatalo et al. (2022) suggested that teachers could ensure students are reading extensively to develop more competence in their reading, while also challenging them to read texts that students find more personally interesting or meaningful. This could allow students to identify themselves as readers more, which in turn could evolve them into more autonomously motivated students with more self-selected behaviors. This led the researchers to also posit that schools and the classroom environment have a lot of potential when it comes to strengthening students' self-conceptions as readers. Teachers could institute reading practices that instigate students' sense of self-duty with external expectations of the classroom while also providing more student choice based on personal tastes and interests to heighten students' internal motivations and autonomy.

Guthrie et al. (2006) examined the relationship between intrinsic motivation and reading, and processes that might have been involved in students changing their motivation to read. Guthrie et al. (2006) sought to answer how this change occurred. In this article, intrinsic motivation referred to students' curiosity about new books and topics, their immersion in reading for long periods at a time, and their preference for longer and more challenging texts. Extrinsic motivation, on the other hand, referred to reading for grades, prizes, stickers, making the teacher happy, and competition. The authors of this study wanted to find out the degree to which students' circumstantial interests in reading could extend to intrinsic reading motivation in the long-term. This study explored students' changes in intrinsic and extrinsic motivation across time and whether the increases in situational motivation would lead to an increase in generalized intrinsic motivation for reading. Situational interest and intrinsic motivation were examined independently for informational texts and narrative texts. The authors predicted that motivations for reading either informational texts or narratives would not be highly correlated.

Guthrie et al. (2006) studied 3rd-grade students from seven different classrooms in two mid-Atlantic state schools. These students were part of a Concept-Oriented Reading Instruction (CORI) program. CORI was a 12-week reading instruction program that integrated both science and reading. The classes met 90 minutes per day. This study followed students during the first six-week Science unit that focused on ecology. CORI integrated reading strategy instruction and motivational practices all related to ecological issues and concepts in science. An inquiry-based program, students generated their own questions and chose texts based on topics about which they wanted to learn. The texts available for students to choose from were a mix of informational and narrative, as well as some poetry, and all related to topics on ecology. The program incorporated tests for comprehension and book discussions.

The guided research questions were as follows:

- 1) How interested are children in information and narrative books provided in an elementary school program designed to foster reading motivation and comprehension?
- 2) What are children's reasons for reading their favorite book, and are these reasons more intrinsic or extrinsic?
- 3) How do children's situational interests in different books and their general intrinsic and extrinsic motivation for reading these books change over time? (during the course of the program)
- 4) How do situational reading interests relate to measures of reading comprehension? (Guthrie et al., 2006, p. 94)

One of the tools in this study used to examine what students were reading was the Reading Interest Log (RIL). Guthrie et al. (2006) used the RIL to split students into two different groups: 1) favorite books were informational texts at first, second, or both administration(s) on RIL, and 2) favorite books were narrative books at first, second, or both administration(s) on RIL. The RIL assessed students' interest in books, particularly intrinsic and extrinsic reasons for reading texts, assessing their change in their level of interest and their reason for reading the books. The RIL was administered at weeks two and

seven of the program. Students could log both narrative and informative texts; and in each log, students could record how interesting they thought the books were on a five-point Likert scale, and which books they found to be the most interesting. Available reasons to check off included three intrinsic (e.g., talking to friends) and three extrinsic (e.g., made the teacher happy).

Students in this study also completed an abbreviated version of the Motivation for Reading Questionnaire (MRQ) the September prior to starting the CORI program. This self-report questionnaire was used to assess different aspects of reading motivation, including intrinsic and extrinsic reasons. There were 29 items on the MRQ and students rated themselves on a four-point Likert scale. In December of the school year, students also completed the Gates-MacGinitie Reading Comprehension test to test for reading comprehension.

Guthrie et al. (2006) found that 55% of females and 45% of males were most interested in narrative texts. Conversely, 32% of females and 68% of males were most interested in informative texts. This demonstrated a distinguishable gender pattern (i.e., boys were more interested in informative texts and girls were more interested in narrative texts). The most frequently circled reason students recorded a book as their favorite was it corresponded to their “personal interest.” More intrinsic motivations for why students selected books and engaged in social discourse about books started low and then increased as the program progressed. For those who chose informative texts as their favorite, their intrinsic motivation for reading increased, namely as a desire to talk about books with friends was cited as the most circled answer. Those who chose narrative texts as their favorite actually decreased in their extrinsic motivation, such as the sole reason being to get a good grade. The MRQ data revealed that those who logged informative texts as their favorite at administration 1 did not change in their extrinsic motivation, and intrinsic motivation increased from September to December. On the other hand, those who selected narrative texts as their favorite at administration 1 showed no significant difference in intrinsic

motivation; however, extrinsic motivations declined. Additionally, there were no differences in reading comprehension scores between those who chose narrative or informative texts as their favorites.

Chalari and Vryonides (2022) studied the impact of COVID-19 lockdowns on students' reading habits in Greece and Cyprus. Greece and Cyprus had strict lockdown procedures during the 2020 pandemic, which had further repercussions on class inequalities. In their research, they considered the interactions of cultural resources and reading, as there were still educational advantages of reading for adolescents despite school lockdowns. Data was collected via online surveys, focus groups, and semi-structured interviews with adolescents. The research questions centered around how adolescents' reading habits have been shaped by the COVID-19 lockdown and to what extent they still contribute to cultural assets in the digital era. They used a mixed methods approach which included an online survey, face-to-face focus groups, and online one-to-one interviews.

Four secondary inner-city public schools in Nicosia, Cyprus and four in Athens, Greece were chosen on purpose to capture diversity of experience. The students mostly came from lower middle-class and working-class families, although all classes (low, middle, and high) were represented in this study. Chalari and Vryonides (2022) conducted their research while face-to-face schooling was suspended for students during the winter and spring semesters of 2021. A total of 527 participants answered questionnaires [(236 from Cyprus, 264 from Greece; 326 females (62%), 201 males (38%)], 527 students total. The average age was 14-16. There were 425 students (80%) that were native to Greece or Cyprus, and 100 (20%) from a migrant background. In Greece, there were eight focus groups with 28 students (aged 14-16 8 male, 20 female). In Cyprus, 42 students (aged 14-16; 18 male, 24 female) met one-to-one with the researchers through semi-strict interactions (42 meetings total).

The survey questionnaire was online, and respondents were given 30 minutes to complete it. There were six parts students answered about themselves: 1. Demographic information, 2. School performance and emotions during lockdown, 3. Well-being (quality of life and material conditions), 4. Experience of

COVID-19, emotions during first and second lockdowns, habits, and activities, 5. Effects of pandemic on their everyday lives, and 6. Thoughts on the role of school tackling impact on pandemic. Students were asked to indicate how they spent their free time during the first and second lockdown. Some of the options included reading books (not school related), watching TV, talking to friends online, and studying. The focus groups and semi-structured interviews aimed at exploring adolescents' perspectives of the pandemic on their well-being and their thoughts on the school's role in tackling the impact of the pandemic. The questions were all open-ended and clear-cut, including an open-ended question asking them how they spent their free time during the lockdowns.

The results showed that adolescents read books very rarely. They spent most of their time during the lockdowns watching TV, playing computer games, or surfing the internet. The data did not search for any varying patterns of media device use. The researchers concluded that reading practices are diverse and mediated by cultural contexts, social influences, places, conditions of access, and personality. Also, students had an increased dependence on digital technology during the lockdowns. Just because students were not reading books, it did not mean they were not reading. For instance, social media is a form of reading, but as a digital text. This shows the shift from paper-based reading to internet-based reading. Thus, the access to reading is not merely the number of books read anymore, but what has been clicked on, shared, or downloaded.

Reading Intervention

Frankel (2016) observed the identities students exhibited in reading intervention classes and how those identities were situated in their *figured worlds*. Frankel (2016) defined *figured worlds* as how one might situate his or her identity “within specific social, cultural, and historical processes” (p. 40). Frankel (2016) contended that placing students within literacy intervention courses positions a student's identity as a poor reader and “whether or not a student accepts—or partially accepts—the poor reader identity depends in large part on his or her history as a reader” (p. 40). Frankel (2016) employed a case study to

observe the behaviors of students in reading intervention classes and expressed her findings in words. Her leading research question asked how these students situated their reading identities within their understanding of literacy and the figured world of their intervention classrooms.

Frankel (2016) observed two 9th-grade literacy intervention classes in two different schools and districts: Enhanced Reading with Mr. Taylor at Northern High and Reading Workshop with Ms. Cheung at Southern High. Frankel (2016) collected data from these classrooms during the 2010-2011 school year. The classes were chosen because they were taught by teachers who were considered “exemplary” and who had been teaching reading intervention for more than five years. The students—Dennis in Enhanced Reading with Mr. Taylor and Tory in Reading Workshop with Ms. Cheung—were chosen based on letters they had written to their teachers at the beginning of the year. Both letters piqued the researcher’s attention because the students displayed individual agency and situated themselves as “good readers.” Mr. Taylor, White and in his early 30s, angled himself through a sociocultural perspective as a reading interventionist. Ms. Cheung, bi-racial (Asian/White) and in her mid-30s, taught her class through her training in reading strategies.

Frankel (2016) was a participant-observer in both classrooms and stated her role as a researcher in the classes. She spent 36 hours observing in Enhanced Reading and 33 hours in Reading Workshop. During her observations, she composed notes written by hand in a notebook, which she later transcribed on the computer. She collected students’ artifacts, such as notes the students had written in their notebooks, handouts, and worksheets. During class, she had informal discussions with the class. Privately, Frankel (2016) formally interviewed each student and teacher involved in the study. Over the course of the study, she interviewed Dennis one time (he did not remain at Northern High) and Tory, Mr. Taylor, and Ms. Cheung three times. All interviews were audio recorded. Through ATLAS.ti (a qualitative data analysis program), Frankel (2016) created codes—*reading-history*, *reading-changes*, and *reading-school* to construct student profiles. She identified histories-in-person of students to code for unique instances of

agency and constructed a conceptually ordered matrix with dimensions about students' and teachers' beliefs about being a good reader.

Both students' histories-in-person, or reading identities, conflicted with their placements in literacy intervention. They both challenged the idea they were “struggling readers.” Dennis, Black and a male, negotiated his identity based on an award he claimed to have won in 3rd grade for reading the most books. He believed in agency and was adamant that a good reader finds books he or she likes and is not told what to read. This conflicted with Mr. Taylor's reading philosophy, as he believed one should think positively about reading and read often and a lot. Dennis “contested” his placement in the class by frequently being late, skipping, and distracting others, although when he was engaged, he communicated his “superior” reading capabilities by correcting other students' mistakes. Mr. Taylor and Dennis also had conflicting beliefs about why Dennis was in the class. Dennis believed he was placed there because of a knee injury that kept him out of P.E., while Mr. Taylor believed it was because he was not engaged in reading. Dennis was removed from the class and Northern High after one semester because he brought a firearm to school.

Tory, who was white and female, on the other hand, was a good reader and good student who acquiesced with classroom norms. Both Ms. Cheung and Tory believed Tory did not belong in the class. Ms. Cheung utilized her training in reading strategies and literacy coaching to her class, which she believed would help students become better readers and help them in other subjects. Tory demonstrated how good of a student she was by engaging in class discussions to display her mastery and knowledge of the content. She rejected the struggling reader label but did not openly oppose any classroom norms or expectations. Ultimately, Tory successfully transferred out of intervention, which validated her identity as a good reader and student who did not belong in Reading Workshop.

In Frankel's (2016) study, both students showcased similar acts of positioning but had different responses to them by "(a) their and their teachers' histories-in-person and (b) institutional constraints of the classes" (p. 52).

Alarcón et al. (2019) deepened the examination into the relationship between emotional intelligence and reading competence in secondary students. They obtained objective data designed to apply to future teaching practices that rely on the personal, social, and professional development of students. There was a non-equivalent control group and an experimental group. The control group followed the official curriculum of the region in which this study was located, while the experimental group was involved in reading intervention with four records: pretest (p1), posttest 1 (p2), posttest 2 (p3), and posttest 3 (p4). For cohesiveness, both groups were individually followed up without disrupting the daily classroom practices. The language and literature teachers collaborated in the study and received the same instructions as the intervention group.

The researchers hypothesized that secondary students with strong reading competence would score higher in reading and emotional intelligence, and that the intervention group with compulsory readings would not encourage self-motivation in students and in effect would not improve reading competence or emotional intelligence development. They also predicted that the intervention would affect students differently regarding the relationship between gender, reading competence, and emotional intelligence. Alarcón et al. (2019) conducted the study in junta de Andalucía (the Regional Government of Andalusia) in Spain. All schools in the study were publicly-owned and located in medium socioeconomic status areas. Participants consisted of 521 high school students total (244 male, 277 female), ages 15-16. In the intervention group, 258 students participated (122 male, 136 female). In the control group, 263 students participated (122 male, 141 female). The students in both groups were followed for two years.

The control group followed the junta de Andalucía curriculum. The experimental group followed a reading intervention. In the intervention, a list of the best books in the world or in history were identified through a Google search. From that list, 30 books were randomly selected in the intervention (e.g., *The Portrait of Dorian Gray* by Oscar Wilde, *Much Ado About Nothing* by William Shakespeare, *Metamorphoses* by Ovid, *The Hobbit* by J.R.R. Tolkien). There were 30 sessions of intervention, each session was 15 minutes long. There were 30 readings (five per quarter, 15 per course). The sessions began with the teacher explaining the reading, which included contextualizing the work, providing biographical information about the author, and providing a summary. Students were instructed to read the books at home.

First, the Wong and Law Emotional Intelligence Scale (WLEIS), Spanish edition, was used to test emotional intelligence, a Likert-type scale with seven points that evaluated EI in an organizational scope that was grouped into four dimensions. The dimensions were evaluations as follows: one's own emotions, others' emotions, use of emotions, and regulation of emotions. Second, the researchers administered a 20-question reading competence test, a questionnaire specifically designed for secondary education students. It was composed of five texts, three of which were continuous, and two of which were discontinuous. There were about 274-426 words presented in an expository or argumentative manner for the continuous texts and 130 words minimum in the discontinuous texts. Questions were both open and closed and were mainly multiple choice. The questions covered the categories of informational retrieval, integration, reflection on content, and analysis of form of text. Third, they supplied students with a 50-item questionnaire about their reading habits, their families' reading habits, and their families' socioeconomic status (only the reading habit questions were considered for analysis in this study). Some questions asked whether the reader reads, their father reads, or their mother reads. Other questions included whether they ask questions about reading, talk about reading, are aware of their tastes in reading, or if books are spoken about in their homes.

Based on the results from the WLEIS, emotional facilitation and emotional management were correlated with academic performance. The authors of this study, Alarcón et al. (2019), concluded that this correlation proved reading competence led to better academic performance; thus, the capacity to improve emotional intelligence can be trained. Differences in gender were also found. For instance, females in the experimental group had higher adjusted means in reading competence than in the control group with no reading intervention. However, females did not score equally in emotional intelligence. There was a direct relationship between consolidated reading habits and emotional intelligence and reading competence. By the end of the intervention program, emotional intelligence and reading competence had improved, with females showing results in reading competence but not in emotional intelligence. Trained reading likely resulted in better reading competence all around. This proved that using concrete activities focused on texts can help with reading competence training. The researchers recommended that an intervention of this style could be used for training low competence readers, while pleasure reading should be encouraged for all.

According to Alvarez et al. (2016), dialogic literary gatherings (DLGs) were previously carried out in a male prison in Basque Country, Spain with positive results. The DLG program enhanced the prisoners' readiness to return to society. Alvarez et al. (2016) sought to successfully replicate that experience in a different context (i.e., a women's prison, different location, professional team). The evidence collected from the prison in Basque country suggested that DLGs could be replicated in other prison contexts to prepare prisoners for social reintegration.

Alvarez et al. (2016) affirmed that of all the countries in the European Union (EU), Spain has the highest rates of imprisonment with longer sentences. Alvarez et al. (2016) explained that there are three different models, or schools of thought, when it comes to prisons and corrections: custodial, rehabilitation, and reintegration. The custodial model is predicated on confinement and punishment, while the rehabilitation model focuses on reform. The reintegration model's objective, though, is to provide

structures and create goals for inmates to successfully reintegrate into their families and communities. The utmost important structures for supporting reintegration, according to Alvarez et al. (2016), are education and community. Education enhances skills and prepares one for the job market, while the role of community helps one adjust to the world at large. DLGs fulfill both of those, as they facilitate learning through reading and community building through discussion and the fostering of communication skills.

To conduct this study, Alvarez et al. (2016) gathered communicative life stories and data from focus groups with the female inmates who participated in the DLGs along with in-depth interviews with the volunteers.

This study was conducted in an all-female prison in Catalonia, where the majority of inmates had substance abuse problems. Ten permanent participants were involved in the DLGs, but only eight voluntarily participated in sharing communicative life stories, and of those eight, two preferred not to be interviewed. Three of the women were younger, between the ages of 25-35 (2 = Roma, 1 = Moroccan). The other five participants were older, between the ages of 40-55 (2 = Roma, 1 = Moroccan, 2 = Spanish). None of the female inmates had a basic education, and most of them had difficulty reading and writing. The volunteers, a university professor and a PhD student at the University of Barcelona, served as moderators in the DLGs. The study started in May 2012 and was held for one year.

The process of the DLGs began with the group agreeing on a book to read. A particular individual would read the agreed upon pages and choose at least one paragraph. Then she would explain her reasons for choosing a certain idea on which to focus. The rest of the participants would then be able to share reflections on the ideas shared by the reader. The volunteers played the moderator role in the DLGs. The moderator had a certain position of power and facilitated turn-taking and encouraged active listening skills, ensuring that even the quiet participants took a turn to share their ideas. Occasionally, the inmates took on the responsibility of the moderator.

The themes covered in the interviews were the participants' personal views on DLGs, changes the inmates perceived in themselves and their peers, and their expectations for the future upon release from prison. The volunteers interviewed the prisoners twice during this study: one interview prior to the overview of the inmates' personal transformations, and the other interview was a communicative focus group with six participating inmates. Interpersonal dialogue between the volunteers and inmates was tantamount to promote collective reflections on shared experiences by the inmates in the focus group.

The focus on this study for data analysis was the transformative elements aimed at creating pathways to overcome barriers and enable social transformation. Some of the data collected included the effects of reflection on the participants' personal and collective biographies, the effects of dialogue on the participants' capacity for personal and social transformation, and the participants' desire for change. For example, one individual, Sherezada, was observed by a moderator as being usually aggressive, but in a therapeutic setting, he saw a change in her. She had the book *Mother Courage and Her Children* by Bertolt Brecht clutched under her arm and wanted to participate in the DLGs. She was motivated and engaged in the activity. Her perspective and motivation were changed without coercion, probably due to the climate of egalitarian dialogue. Another example was Maria, an older Moroccan woman, who recalled interactions with her uncle who encouraged her to read. According to Maria's testimony, he, "...always told me not to waste time fighting but to spend it reading" (Alvarez et al., 2016, p.1052). This showed that reading and discussing stories and themes in classic literature promoted participants to reflect on their own biographies, which enhanced their self-criticism, and also enriched values obscured by their criminal trajectories. Additionally, the diverse cultural groups brought the participants together to share their personal biographies and ideas in literature, creating a culture of respect for people of different cultural backgrounds.

In conclusion, this study displayed the successful transfer of DLGs to a different context, supporting the idea of using DLG as a potential intervention in prisons to promote social reintegration.

Three specific feats, Alvarez et al. (2016) asserted, were that DLGs create opportunities for dialogue and communication within a community, they ensured equality and mutual respect, they enabled views and feelings to be freely expressed, and they generated relationships through the sharing of profound discussions and debate. They also allowed participants to share their past and be personable, which was found to be transformative and increased self-confidence. Prisoners became more critical of their lives and how they envisioned them when they spoke with the volunteers. Another important factor of the DLGs was that access to the best works of classic literature served as a critical element because they could take these universal stories seriously and delve deep into their own and collective biographies. This allowed the participants to be more critical of themselves and analyze possibilities for educational pursuits in their futures. The challenge of the books was the impetus for wanting to change their academic identities because it proved that they saw themselves as capable and able to study or earn a degree. This in turn enhanced their sense of agency to transform their trajectories in life, enhancing their beliefs in themselves and their abilities. Since this study proved that DLGs could successfully be replicated in a different prison, and within a female context, this supports the idea that DLGs can be transferable to different populations. Alvarez et al. (2016) suggested high risk youths because they face similar challenging life circumstances.

Bibliotherapy

According to Frantzana et al. (2018), reading activates both hemispheres of the brain, allowing them to communicate with one another. Reading can also help the respiratory and cardiovascular systems that help automatic functioning such as breathing and heart functions. Accordingly, Frantzana et al. (2018) conducted a meta-analysis to explore the health benefits of reading to see what the effects of it were in the promotion of a quality life.

Frantzana et al. (2018) pulled articles from Medline, Google Scholar, and Hellenic academic libraries Link. They also searched Google to find scientific books about reading and health. Some key

search words were “reading,” “leisure,” and “health.” The language was restricted to English and Greek only. Thirty reference sources were included in this study.

Frantzana et al. (2018) pinpointed several health benefits pulled from their meta-analysis. They found reading can help protect the brain from harmful substances like lead, reduce stress by helping people escape in books and lower their anxiety due to relaxation, help concentration by helping people focus in an “effective and objective way” (p. 2), fight insomnia by regulating one’s circadian rhythm, prevent dementia by helping keep the brain active, treat strokes by using alternative synapses in the brain to create new neural pathways, and prevent obesity by being affected by characters in books. Frantzana et al. (2018) suggested that in order to optimize these health benefits from reading, it is important for people to choose what they like, read what they feel like at the time, find a good quiet place with nice lighting for optimal relaxation, and keep books at an appropriate distance from one’s face to prevent eye strain. They also suggested that bibliotherapy can be used as treatment, that is, reading can be used to treat maladies based on these findings.

Beck et al. (2017) explored research literature on bibliotherapy as an effective way to treat trauma in children and youth (3-18). Bibliotherapy is Greek for “book healing.” Beck et al. (2017) expounded that books can be used as a therapeutic technique because the subject can live through the experiences of characters and follow them as they grow, tackle problems, and gather new insights. Bibliotherapy can involve group discussions, art, and creative writing. The main purpose of this research was to discover how bibliotherapy could be used as a recreational therapy intervention to improve childhood outcomes due to trauma through a literature review. The research questions asked were whether bibliotherapy is an effective treatment to address traumatic symptoms in children and youth who have experienced trauma, what the outcomes of using it as an intervention are for that group, and whether it could be used by recreational therapists as well.

The stages of bibliotherapy are *identification* (identifying with others—characters in a story—who have experienced similar situations), *catharsis* (becoming emotionally engaged in a story and the emotional release of pent-up emotions), *insight* (realization that problems can change or resolve—the coping strategies mirrored in a story), and *universalism* (realizing they are not the only ones experiencing the present pain and that others also feel pain and can experience similar situations). Types of bibliotherapy include *cognitive* (cognitive-behavioral changes using literature directly referring to fears, anxieties, and behavioral difficulties), and *affective* (repressed thoughts and emotional self-exploration). Categories of bibliotherapy are either *clinical* (used by psychotherapists, counselors, and other licensed health professionals for patients with emotional and behavioral issues), *developmental* (self-help books for personal well-being; employed by teachers, school counselors, and parents) and *client-developed* (journaling and writing to address concerns between writer and characters; self-implemented).

Some of the benefits and outcomes of bibliotherapy include a heightened self-esteem, positive coping, empathy, lessening of depression and anxiety-reduced stress, and a better self-concept and self-efficacy. Additional benefits are coupled when discussions are used to help the subject process emotions across emotional, social, and cognitive domains.

Beck et al. (2017) searched for articles on CINAHL Plus, Education Research Complete, ProQuest Medical Library, ProQuest Psychological Journals, PubMed and PubMed Central, SportDiscus, PsychInfo, ERIC, PsycArticles, Science Direct, Social Work Abstracts, and Social Science Abstracts. The search was intended to identify outcomes of using bibliotherapy with children and youth who have experienced traumatic events. The keywords searched were bibliotherapy, children, trauma, pediatric, effects, and disability. A total of 720 articles were found using these keywords.

The criteria for research articles to be included in this study were articles on bibliotherapy with children and youth, literature reviews on the process and benefits of bibliotherapy with children and youth, and articles summarizing bibliotherapy techniques. Other literature included anything on

recreational therapists using bibliotherapy as an accessible way to identify practices, benefits, outcomes, and techniques to use in practice. Beck et al. (2017) included relevant, peer-reviewed journals on youths 3-18 (not adults). Articles generally about bibliotherapy used for trauma or experiences leading to trauma (abuse and neglect; NOT siblings with disability) were included. Also, all types of studies, including randomized control trials, case studies, and mixed methods were included in this literature review. Articles that were excluded were studies about specific disabilities, such as autism and anxiety disorders. Articles about bibliotherapy, as a complement of psychotherapy, were also excluded due to being too specific to diagnose and treat specific mental health issues.

There were a total of nine usable articles for this literature review. The dates of the peer-reviewed articles ranged from 1993-2015. There was a significant amount of research on bibliotherapy, but a lot of it was irrelevant because the effects of bibliotherapy on children and youth with traumatic experiences was too limited. Most of the articles summarized other findings of utilizing bibliotherapy and provided recommendations on the process of using bibliotherapy as an intervention. Few research articles used randomized control trials to compare the effects of bibliotherapy with experiences of trauma. Some themes were that few researchers completed multiple studies on the use of bibliotherapy with youths and children experiencing trauma. Publication dates (1993 and 2015) were also a trend, which was unexpected because bibliotherapy has been around since the 1800s. The researchers were surprised that they were not able to locate earlier publication dates or prior implementation techniques to compare against newer studies. Another theme was the variability and differences within reviewed studies, including a varying number of research participants, different settings used, the male to female ratio, and the diagnoses of participants in all studies involving children and youth (5-16) with varying diagnoses of trauma related to natural disasters to abuse and neglect. Four of the nine studies involved use of group bibliotherapy. The outcomes identified were that every study reviewed had significantly improved from the use of different bibliotherapeutic techniques, such as decreased social anxiety, depression, improved communication,

coping, and self-expression. According to Beck et al. (2017), the research supports the use of bibliotherapy with children who have experienced trauma.

Regarding the first research question, the effective treatment of symptoms was supported by various outcomes in the studies finding that subjects had improved abilities to cope with life changes, trauma (including abuse), neglect, foster care and adoption, aggression, chronic illness, natural disasters, parental mental illness, terrorism and societal acts of violence. The researchers in the literature supported bibliotherapy for its ability to produce positive outcomes including improvements in emotional and behavioral problems, communication skills, and coping. The second research question was supported by the positive outcomes across cognitive, behavior, and emotional domains. The cognitive outcomes were coping skills, conflict resolution, problem solving, attitudinal changes, and realization about others. The emotional outcomes were empathy, positive attitude, self-image, identity and expression of feelings, reduction of self-blame, and enhanced self-concept. The social outcomes were new interests, personal and social adjustments, identifying and utilizing supportive adults, and respect and acceptance of others. In terms of question three regarding bibliotherapy's use by recreational therapists, there did not seem to be any information except for one literature review. This literature review recommended the use of bibliotherapy for recreational therapists as an evidence-based intervention to improve children's coping of trauma using recreational therapy processes of assessment, planning, implementation, evaluation, and documentation. No other articles were found for recreational therapists, per se, but the studies all conclusively agreed that since bibliotherapy facilitates teaching coping strategies and improves self-esteem, that it is within scope of therapeutic practices. Therefore, the use of books and literature, games, art, music, and discussion are all interventions used by recreational therapists. Recreational therapists' training and understanding of child development, therapeutic processes, ability to facilitate groups, and debrief patients also demonstrated bibliotherapy's use as an intervention. Beck et al. (2017) surmised that

recreational therapists could use bibliotherapy as a technique when working with children and youth who have experienced trauma.

Jiang et al. (2018) asserted that there are few meta-analyses on the effectiveness of bibliotherapy's use to treat anxiety and depression disorders in children and adolescents. According to Jiang et al. (2018), depression and anxiety disorders are the most prevalent disorders afflicting children and adolescents. The risks of these disorders going untreated go as far as suicide complete or a persistence of problems into adulthood that effect overall quality of life. Cognitive-behavioral therapy is currently the most common form of therapy used to treat anxiety and depression; however, it is expensive and restricts access to those who live in countries that have low-to-medium socio-economic statuses. The aim of this study was to conduct a conventional meta-analysis to compare bibliotherapy alone as a therapeutic technique to treat depression and anxiety in children and adolescents. Whatever results suggest, bibliotherapy is considered as a more affordable and accessible form of therapy.

Using PRISMA guidelines the researchers searched five relevant electronic databases: PubMed, Embase, Cochrane, Web of Science, and PsychINFO in January 2017. There were no language restrictions, or restrictions on the publication year or publication type. Jiang et al. (2018) searched using standard strategies with text words and subject headings. Some search terms included depression, mood disorder, anxiety, fear, phobia, panic disorder, "selective mutism," neurosis, "school refusal," "mixed disorder," adolescent, teen, pubescent, child, school, student, bibliotherapy, book, and "self help." The researchers also reviewed information on ClinicalTrials.gov and World Health Or's trial portal. Additional randomized control trials (RCTs) were obtained by scanning the reference literature of initial search results and relevant review articles. The researchers also contacted authors for supplemental information.

RCTs were included if they compared bibliotherapy alone with control conditions in the treatment of children and adolescents with depression and or anxiety disorders. Jiang et al. (2018) defined

bibliotherapy as a treatment if self-help books were used as a guide for patients to make changes, if patients worked through the steps of therapy with or without the help of a parent, if there was limited contact from the therapist, and if there was no therapist report. To be considered for this study, the research literature needed to fit this definition. Research literature was considered in his study if waitlists, non-treatment groups, treatment as usual, and psychological placebos were used as control conditions. Two independent reviewers selected studies for inclusion, and divergences were resolved by consensus. The researchers scanned citations at the title or abstract level and then recorded a short list of potentially relevant studies that were reviewed in full to ensure inclusion on the criteria. Materials included in this study were anything with RCTs (cluster and crossover), children and adolescents (6-18), and a selected diagnosis of depression or anxiety. If bibliotherapy was used as an adjunct to psychotherapy, it was excluded. Jiang et al. (2018) excluded studies if they were about maintaining treatment or preventing relapse, and where bibliotherapy was not used specifically to treat anxiety or depression. Some articles were eligible in this investigation if the psychiatric disorders were comorbid with anxiety and depression. Efficacy was defined as mean change scores in depression and anxiety symptoms. Acceptability was defined as the proportion of participants who discontinued treatment. The random effects model was used. An intervention-to-treat analysis was conducted.

A total of 1,290 records were identified through the initial database search. After excluding 291 duplicate records, 999 potentially relevant studies were left. Of those, 832 articles were excluded because of irrelevant titles and abstracts. Then, two reviewers independently read 37 studies. Out of those studies, 29 were excluded due to duplicate nonrandomized design and no controls of interest. Also excluded were studies on adults with data on children or adolescents not extracted separately. Eight studies remained for this review. In those eight studies, 979 patients met all the inclusion criteria for meta-analysis. Similar scales used across the studies were the Hamilton Rating Scale for Depression, Children's Depression Inventory, Beck Depression Inventory, Center for Epidemiologic Study Depression Scale, Anxiety

Disorders Interview Schedule. Sample sizes consisted of 30-252 patients (mean = 101/trial). The dates ranged from 1998-2016. The mean age was 12.8 years old. More than half of the subjects studied (58.98%) were female. The mean number of sessions was 8.71. The total treatment duration was 8.25 weeks. Four of the studies reviewed were about treating depression, and four were about treating anxiety.

Jiang et al. (2018) found that bibliotherapy was an effective treatment for reducing depressive symptoms in adolescents, but less so for children with anxiety (although bibliotherapy was better than the control groups, except it was not significantly different). Common books used in bibliotherapy were *Feeling Good*, *Helping Your Anxious Child: A Step by Step Guide*, and *Feeling Good*. A probable reason for anxiety treatment being less effective was that it had a greater discontinuation than the control conditions. Children either resisted or reported having “no time.” Jiang et al. (2018) suggested minimal phone contact with a therapist may encourage higher rates of program completion. The researchers for this study also concluded that bibliotherapy led by a parent or parents may be the best way to implement this type of therapeutic technique because of the trust between parents and children and their presence in children’s daily lives. Jiang et al. (2018) also conjectured that family-focused intervention may be optimal to address depression. A home-focused bibliotherapy intervention for children with anxiety demonstrated significant improvements in anxiety over time. Therefore, family-focused bibliotherapy may be more acceptable and effective.

CHAPTER III: DISCUSSION AND CONCLUSION

This thesis reviewed 33 research articles total that examined protective factors related to resilience, the effects of reading, reading habits, reading interventions, and bibliotherapy. This thesis sought to answer how reading promotes resilience in the secondary-school setting by studying these different dimensions of a rather abstract question.

One of the most surprising results from this study were the differences in reading and resilience in gender. Females were found to read more in their free time than males; therefore, they were more likely to be considered avid readers (Alatalo et al., 2022; Duthie et al., 2005; Merga & Moon, 2016; Nell, 1988). Females also expressed higher motivations to read than males, especially extrinsic motivations if they read texts at school (Alatalo et al., 2022; Guthrie et al., 2006; Savaşkan, 2022). According to the literature reviewed here, this is due to the female tendency to be more agreeable and compliant than males. Females also read more fiction than males, while males tend to read more nonfiction (Duthie et al., 2005; Guthrie et al., 2006; Mar et al., 2009). Being White and female, in terms of gender and ethnic lines, were the greatest predictors of resilience and academic achievement (Cappella & Weinstein, 2001; Christman et al., 2003; Frankel, 2016). In Armfield et al.'s (2021) study, girls were also more resilient than boys and succeeded better at school. Females tended to have a larger perceived social network when compared to males (Christman et al., 2003). This was consistent with Mar et al.'s (2009) findings that concluded females read more fiction than males, and nonfiction reading was correlated with higher rates of loneliness, less social support, and a lower sense of belonging.

The connection between social support and reading also took prominence in this investigation. One specificity not fleshed out in Armfield et al. (2021) was whether it was the familial relationship between the parents and children that helped the children be more resilient, or the contents of the stories the parents read to the children, or perhaps a combination of both. Gagen-Spriggs' (2020) survey showed that positive role models were important factors as to why students chose to read for pleasure. This included parents' book reading, which was apparent in Merga and Moon's (2016) research as well, where

avid readers had at least one parent who supported and encouraged pleasure reading. Similarly, in Gómez and Rivas' (2022) study, familial support led to higher reading achievement.

Furthermore, the connection between fiction and sociability was apparent. Reading fiction produces empathy (Bal & Veltkamp, 2013; Mar et al., 2009) which is the ability to understand the feelings of others and is a facet of emotional intelligence; it also improves Theory of Mind – the ability to infer the mental states of others (Castano & Kidd, 2013; Mar et al., 2009), and improves social cognition—navigating the social world through social cues (Dodell-Feder & Tamir, 2019; Mar et al., 2009). Fiction, not nonfiction, popular fiction, or non-reading was able to produce these social effects. While Mar et al. (2009) ruled out trait openness as one of the reasons people who read fiction tend to be more empathic, that is, the personality trait that is more open to experience, Djikic et al. (2009) showed that personality traits can shift after reading literary fiction. This highlights the facilitating factor of reading, commonly referred to as being “moved” by it. Also worthy of note, higher levels of empathy happens only when a reader is more emotionally involved in the text (Bal & Veltkamp, 2013). This could explain why the females in Alarcón et al.'s (2019) intervention group improved their reading competence but showed no change in emotional intelligence since the literature in the intervention was chosen for them, thus lack of emotional investment could be possible.

Since reading improves social connection to others, and being socially connected is healthy for overall well-being and staving off illness (Dodell-Feder & Tamir, 2018; Frantzana et al., 2018), could it also produce more positive emotions in people? In their landmark study, Fredrickson and Tugade (2004) proved that positive emotions were traits of resilient individuals. In one of their experiments, writing was found as a pathway for positive-meaning making in stressful situations. Since reading is a similar outlet to writing, could reading something pleasurable also have this effect? In Study 2 of Nell (1988) ludic readers were found to lose themselves in their books, even under distracting circumstances. Then, in Study 4 of Nell (1988), even though ludic reading was described as relaxing, it was actually quite arousing. This arousal of pleasure implies a connection to positive feelings. In fact, Nell's (1988) finding that reading may have a physiological effect that causes one to swallow more, might point to a Pavlovian response that

pleasure readers have to text: they salivate more upon reading pleasurable passages as if they were hungry for text. In both Fredrickson and Tugade (2004) and Nell (1988), where physiology was measured, positive emotions and pleasurable passages were able to get participants back to baseline physical levels, meaning a quicker recovery from stressful tasks. Additionally, Gagen-Spriggs (2020) found that students who had positive attitudes around reading read more for pleasure and they saw themselves as good readers. This high-reader identity correlates to Frankel (2016), because even though the two individuals were placed in an intervention class for “struggling readers,” both students studied had stronger reader identities that influenced how they read for pleasure.

To continue, examining the traits of resilient individuals could reveal a connection to more positive thinking. The traits of resilient individuals are cognitive flexibility (Arici-Ozcan et al., 2019), emotion regulation abilities (Artuch-Garde et al., 2017; Babb et al., 2022; Gómez-Molinero et al., 2017), being able to positively reinterpret stressful life situations (Fredrickson & Tugade, 2004; Gómez-Molinero et al., 2017), and having high self-efficacy (Gómez & Rivas, 2022; Gómez-Molinero et al., 2017). Resilient people are also more likely to have positive metacognitive beliefs, set goals, and learn from mistakes, which is especially helpful in academics (Artuch-Garde et al., 2017; Baniani & Davoodi, 2021). Could the reason why students who read for pleasure have better grade point averages be due to cognitive flexibility, providing them with the ability to switch stressful deadlines into positive challenges? (Labby et al., 2016). As Fredrickson and Tugade (2004) found when viewing something as a challenge rather than a threat, resilient individuals and non-resilient individuals look similar, proving that it is all about mindset. Could reading help students mimic resilient traits until they themselves become resilient?

Professional Applications

Based on the research reviewed and analyzed in this thesis, whether reading can contribute to resilience, it appears social-emotional learning should be the basis of instructional methods and learning strategies to adopt best practices to intentionally create caring learning communities in K-12 schools across the United States, especially post-pandemic (D’Emidio-Caston, 2019). Due to the current mental health crisis affecting secondary students in Minnesota (Minnesota Department of Health, 2022),

resilience should be encouraged as part of social-emotional development. As an English secondary school teacher and recent interventionist, 9-12 English and intervention classes for struggling readers and at-risk youths should adopt bibliotherapeutic communities centered around the transformative capabilities of literary fiction. To fully make the most of the benefits of literature, compulsory reading of classic literature and the freedom to choose books to read for pleasure should be promoted in English classrooms and intervention classes.

The main challenge posed with motivating students to read for pleasure at-will outside of school is that students are distracted by technology. In Labby et al. (2016), teachers blamed texting and social media as the reasons why students do not read for pleasure. When students were asked why they do not read for pleasure, they said it was due to “time restraint” (Savaşkan, 2022). However, Study 1 (Nell, 1988) proved that avid pleasure readers, or ludic readers, willingly made time for reading and were more frustrated at the prospect of being without books, which shows a dependency on books, hinting at its addictive quality. In other words, if students were to find reading enjoyable, they would make time for it like they do other technologies (e.g., TV, internet, social media, texting/emailing friends, video games) which was how students spend most of their leisure time (Chalari & Vryonides, 2022; Duthie et al., 2005; Gagen-Spriggs, 2020; Merga & Moon, 2016).

So, what role can teachers and schools play in motivating students to read? Based on this investigation, high school English teachers should continue to promote independent reading as part of class time. Students should also have access to the school library and school librarian with relevant texts, access to a class set of books, and the freedom to choose what they want to read (Alatalo et al., 2022; Gagen-Spriggs, 2020; Guthrie et al., 2006; Labby et al., 2016; Merga & Moon, 2016). Further, intervention reading classes and English classrooms more generally should adopt DLGs (Alvarez et al., 2018) for its bibliotherapeutic effects (Beck et al., 2017; Jiang et al., 2018). DLGs could create communities centered around books that help students build communication skills and raise their self-awareness of their own life trajectories (Alarcón et al., 2019; Alvarez et al., 2018; Beck et al., 2017; Jiang

et al., 2018). Reading intervention for at-risk youths and English classes (9-12) should include a mix of classic literature and choice literature based on the fact that classic literature has the best capacity to affect a reader in Theory of Mind, facilitate empathy, increase emotional intelligence, and improve reading competence. In contrast, choice literature is the most likely candidate to motivate students to engage in pleasure reading if they are reading what interests them best, especially for male students (Alarcón et al., 2019; Alatalo et al., 2022; Castano & Kidd, 2013; Djikic et al., 2009; Frankel, 2016; Guthrie et al., 2006; Merga & Moon, 2016).

Although females were found to read more in their spare time than males, during the COVID-19 lockdowns students were sparsely reading (Chalari & Vryonides, 2022). At that time, mental health plummeted, especially for females. In Minnesota in particular, nearly half (45%) of 11th-grade girls reported mental health issues (Minnesota Department of Health, 2022). Knowing the therapeutic effects of bibliotherapy in the management of trauma, depression, and possibly anxiety (Beck et al., 2017; Frantzana et al., 2018; Jiang et al., 2018), it is possible that English and intervention classes could help play a role in the promotion of mental health.

Limitations of the Research

One limitation of this research is that there seems to be no clear-cut answer whether reading actually promotes resilience, especially in secondary school students, since there has been no research to date that has studied this topic. The article that most closely connected resilience to reading was Armfield et al. (2021); however, that study examined students at the start of primary school, not secondary school. This research pool was limited in this respect because I had to find studies separately about resilience and the effects of reading in order to connect the two topics. Since resilience is a hot topic in education at this moment in history (post-Covid-19 pandemic) and reading is a fairly sturdy and broad topic in the educational research community, I expected more research that had investigated how reading can be used as a tool in social-emotional learning, which is also a hot topic post-pandemic. Other limitations of my

research include the variety of countries, age groups, and school systems from which I pulled studies. The gender dynamics across the studies also could have skewed results because when the gender breakdown was included in the studies, it was apparent that the majority of studies studied a majority female population. That is one possible explanation why gender was a prominent factor across studies.

As a side note, while there were a sparse number of articles showing causation between reading and resilience, much less a correlation between reading and resilience aside from one article (Armfield et al., 2021), similar themes emerged between reading and resilience, such as emotional intelligence (which includes empathy), sociability, emotion regulation, and stress/mental health management, which I will discuss in further detail in chapter III.

Also, as a disclaimer, I am an educator and not a mental health professional. Therefore, I am not suggesting the replacement of books in the treatment of serious mental health disorders (although bibliotherapy would be an interesting possibility into which the psychiatric/psychological field might look). Rather I am suggesting reading as a possible adjunct to a healthy lifestyle within the realm of positive psychology that is used by the education field. This is much like the suggestion of getting enough sleep, exercising, and eating healthy for the promotion of psychological and academic resilience.

Implications for Future Research

Future research to explore the topic of reading in the promotion of resilience in secondary school students should include an intervention reading class followed for one academic year. Students would be assigned to read classical literature and be encouraged to keep a reading log of books they read for pleasure (at least 20 pages per day). Demographic information would be collected to see whether White female students continued to fit the mold of expected reading and resilience levels as compared to their male and ethnic minority counterparts. Students would complete a resilience questionnaire, an empathy questionnaire, and a Big-Five Personality Inventory at the beginning, in the middle, and at the end of the intervention. I would also create a questionnaire designed specifically for this study that directly addresses the question how reading affects resilience.

One crucial question that arose based on what I have read is how reading for pleasure can be preserved as a leisure time activity for students in this technological age. It would be interesting to investigate the detrimental effects of technology on secondary school students in the area of resilience. Being able to compare paper reading to technology reading and/or viewing (e.g., video games, social media, TV) is also an area of interest.

Conclusion

How do you change cast iron into wrought iron? That is, as an educator, how do you change a non-resilient student into a resilient one? Through my investigation of 33 articles, it appears that reading could be used as a tool to help secondary-school students bounce back from the detrimental effects of the COVID-19 pandemic, life stressors, and serious trauma. Overall, my investigation explored protective factors that contribute to resilience, the powerful effects that reading has on emotions and psychology, reading habits and trends, reading interventions, and implications of using books as therapy. What I found is a stark contrast between genders, as females read more in general, and they read more fiction than males. In addition to gender, there is a difference between reading fiction and nonfiction that was unexpected. Fiction is better at cultivating empathy than nonfiction. Pleasure readers are not lonely bookworms, but rather social butterflies (at least with a trusted, close-knit social network). Positive emotions are traits of resilient individuals, which could be the link between resilience and reading, as reading is a pleasurable activity that promotes positive emotions. Resilient individuals also possess cognitive flexibility, high self-efficacy, and can regulate their emotions. Positive role models who encourage reading provide a social network for students to thrive academically and socially. Bibliotherapy could be the next big tool.

References

- Alarcón, R., Jiménez, E.P., & de Vicente-Yague, M-T. (2019). Reading intervention: Correlation between emotional intelligence and reading competence in high school students. *Revista de Psicodidáctica*, 24(1), 24-30. <https://doi.org/10.1016/j.psicod.2018.10.001>
- Alatalo, T., Tegmark, M., Vinterek, M., & Winberg, M. (2022). What motivates students to read at school? Student views on reading practices in middle and lower-secondary school. *Journal of Research in Reading*, 45(1), 100-118. <https://doi:10.1111/1467-9817.12386>
- Alvarez, P., García-Carrión, R., Puigvert, L., Pulido, C., & Schubert, T. (2016). Beyond the walls: The social reintegration of prisoners through the dialogic reading of classic universal literature in prison. *International Journal of Offender Therapy and Comparative Criminology*, 62(4), 1043-1061. <https://doi:10.1177/0306624XI6672864>
- Arici-Ozcan, N., Arslan, R., & Cekici, F. (2019). The relationship between resilience and distress tolerance in college students: The mediator role of cognitive flexibility and difficulties in emotion regulation. *International Journal of Educational Methodology*, 5(4), 525-533. <https://doi.org/10.12973/ijem.5.4.525>
- Armfield, J., Ey, L., Gnanmanickam, E., Segal, L., & Zufferey, C. (2021). Educational strengths and functional resilience at the start of primary school following child maltreatment. *Child Abuse & Neglect*, 122: 105301. <https://doi.org/10.1016/j.chiabu.2021.105301>
- Artuch-Garde, R., Fernández-Cabezas, M., de la Fuente, J., González-Torres, MdC., López-García, M., & vera, M. M. (2017). Relationship between resilience and self-regulation: A study of Spanish Youth at risk of social exclusion. *Frontiers in Psychology*, 8(612), 1-11. <https://doi:10.3389/fpsyg.2017.00612>
- Babb, S., Johnson, R., & Rufino, K. (2022). Moderating effects of emotion regulation difficulties and resilience on students' mental health and well-being during the COVID-19 pandemic. *Journal of*

- Adult and Continuing Education*, 28(2), 397–413.
<https://doi.org.ezproxy.bethel.edu/10.1177/14779714221099609>
- Baniani, P., & Davoodi, A. (2021). Predicting academic resilience based on metacognitive beliefs and academic achievement motivation in high school students in Shiraz, Iran. *Int J Pediatr*, 9(6), 13765-13774. <https://doi:10.22038/IJP.2020.53686.4257>
- Beck, T., Brennan, Z., De Vries, D., Lankin, M., Morse, R., & Rix, B. (2017). Healing with books: A literature review of bibliotherapy used with children and youth who have experienced trauma. *Therapeutic Recreation Journal*, LI(1), 48-74. <https://doi.org/10.18666/TRJ-2017-V51-I1-7652>
- Cappella, E., & Weinstein, R. (2001). Turning around reading achievement: Predictors of high school students' academic resilience. *Journal of Educational Psychology*, 93(4), 758–771.
<https://doi.org/10.1037/0022-0663.93.4.758>
- Castano, E., & Kidd, D. C. (2013). Reading literary fiction improves theory of mind. *Science*, 342, 377-380. <https://doi:10.1126/science.1239918>
- Chalari, M., & Vryonides, M. (2022). Adolescents' reading habits during Covid-19 protracted lockdown: To what extent do they still contribute to the perpetuation of cultural reproduction? *International Journal of Research*, 115(2022), 102012, 1-11. <https://doi.org/10.1016/j.ijer.2022.102012>
- Christman, D., Kilmer, L., & Wasonga, T. (2003). Ethnicity, gender, and age: Predicting resilience and academic achievement among urban high school students. *American Secondary Education*, 32(1), 62–74.
- Connell, A., & Dishion, T. J. (2006). Adolescents' resilience as a self-regulatory process: Promising themes for linking intervention with developmental science. *Ann NY Acad Sci.*, 1094, 125-38.
<https://doi.org/10.1196/annals.1376.012>. PMID: 17347346
- D'Emidio-Caston, M. (2019). Addressing social, emotional development, and resilience at the heart of teacher education. *Teacher Education Quarterly*, 46(4), 116–149.

- Djikic, M., Mar, R., & Oatley, K. (2012). The psychology of fiction: Present and future. In I. Jaen & J. Simon (Eds.), *Cognitive literary studies: Current themes and new directions* (pp. 235-249). University of Texas Press. <https://texashistory.unt.edu/ark:/67531/metaph654138/>
- Djikic, M., Oatley, K., Peterson, J.B., & Zoeterman, S. (2009). On being moved by art: How reading fiction transforms the self. *Creativity Research Journal*, 21(1), 24-29.
<https://doi.org/10.1080/110400410802633392>
- Dodell-Feder, D., & Tamir, D. I. (2018). Fiction reading has a small positive impact on social cognition: A meta-analysis. *Journal of Experimental Psychology: General*, 147(11), 1713-1727.
<https://dx.doi.org/10.1037/xge0000395>
- Duthie, J. K., Larsen, J., Nippold, M. A. (2005). Literacy as a leisure activity: Free-time preferences of older children and young adolescents. *Language, Speech, and Hearing Services in Schools*, 36(2), 93-102.
- Eisenberg N., & Spinrad T. L. (2004). Emotion-related regulation: sharpening the definition. *Child Dev.*, 75(2), 334-339. <https://doi.org/10.1111/j.1467-8624.2004.00674.x>
- Frankel, K. (2016). The intersection of reading and identity in high school literacy intervention classes. *Research in the Teaching of English*, 51(1), 37-59.
- Frantzana, A., Iliadis, C., Kourkouta, L., & Vakalopoulou, V. (2018). Reading and health benefits. *Journal of Healthcare Communications*, 3(4:39), 1-4. <https://doi.org/10.4172/2472-164.100149>
- Fredrickson, B., & Tugade, M. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333.
<https://doi.org/10.1037/0022-3514.86.2.320>
- Gagen-Spriggs, K. (2020). An investigation into the reasons why students read for pleasure. *School Libraries Worldwide*, 26(1), 110-123.

- Gómez-Molinero, R., Mestre, J., Núñez-Lozano, J., & Zayas, A. (2017). Emotion regulation ability and resilience in a sample of adolescents from a suburban area. *Frontiers in Psychology, 8*(1980), 1-13. <https://doi.org/10.3389/fpsyg.2017.01980>
- Gómez, G., & Rivas, M. (2022). Reading achievement, resilience, and motivation in contexts of vulnerability: A study of perceived self-efficacy, intrinsic motivation, and family support in Chile. *Reading Psychology, 43*(5-6), 357–379. <https://doi.org/10.1080/02702711.2022.2106333>
- Guthrie, J. T., Hoa, L. W., Perencevich, K. C., Tonks, S. M., Wigfield, A. (2006). From spark to fire: Can situational reading interest lead to long-term reading motivation? *Reading Research and Instruction, 45*(2), 91-116.
- Jiang, X., Liu, L., Pu, J., Xie, P., Yang, L., Yuan, S., Zhang, H., Zhang, Y., & Zhou, X. (2018). Comparative efficacy and acceptability of bibliotherapy for depression and acceptability of bibliotherapy for depression and anxiety disorders in children and adolescents: A meta-analysis of randomized clinical trials. *Neuropsychiatric Disease and Treatment, 2018*(14), 353-365. <http://dx.doi.org/10.2147/NDT.S152747>
- Kim, A., Kim, B., Lee, J. H., Lee, M. Y., Lee, S. M., Nam, S. K. (2013). Resilience: A meta-analytic approach. *Journal of Counseling & Development, 91*(3), 269-279. <https://doi.org/10.1002/j.1556-6676.2013.00095.x>
- Labby, S., Sullivan, S. L., & Whitten, C. (2016). The impact of pleasure reading on academic success. *The Journal of Multidisciplinary Graduate Research, 2*(4), 48-64.
- Liew, J., McTigue, E., & Washburn, E. (2009). Academic resilience and reading: Building successful readers. *The Reading Teacher, 62*(5), 422–432. <https://doi.org/10.1598/RT.62.5.5>
- Mar, R. A., Oatley, K., & Peterson, J. B. (2009). Exploring the link between Reading fiction and empathy: Ruling out individual differences and examining outcomes. *Communications, 34*, 407-428. <https://doi:10.1515/COMM.2009.025>

- Mar, R. A., Oatley, K., Hirsh, J., dela Paz, J., & Peterson, J. B. (2006). Bookworms versus nerds: Exposure to fiction versus non-fiction, divergent associations with social ability, and the simulation of fictional social worlds. *Journal of Research in Personality, 40*(5), 694–712. <https://doi.org/10.1016/j.jrp.2005.08.002>
- Merga, M. K., & Moon, B. (2016). The impact of social influences on high school students' recreational reading. *The High School Journal, 99*(2), 122-160. <https://doi.org/10.1353/hsj.2016.0004>
- Merriam-Webster. (n.d.-a). Bibliotherapy. In Merriam-Webster.com dictionary. Retrieved August 3, 2023, from <https://www.merriam-webster.com/dictionary/bibliotherapy>
- Merriam-Webster b. (n.d.-b). Resilience. In Merriam-Webster.com dictionary. Retrieved August 3, 2023, from <https://www.merriam-webster.com/dictionary/resilience>
- Minnesota Department of Health (2022, December 23). *2022 Minnesota student survey results released*. <https://www.health.state.mn.us>
- Nell, V. (1988). The psychology of reading for pleasure: Needs and gratification. *Reading Research Quarterly, 42*(1), 6-50.
- Nünning, V. (2017). The affective value of fiction: Presenting and evoking emotions. In I. Jandl, S. Knaller, S. Schönfellner, & G. Tockner (Eds.), *Writing Emotions: Theoretical Concepts and Selected Case Studies in Literature* (pp. 29–54). Transcript Verlag. <https://doi.org/10.2307/j.ctv1wxt3t.5>
- Savaşkan, V. (2022). The analysis of reading motivation of high school students based on certain variables. *The Asian Institute of Research, 5*(1), 343-352. <https://doi.org/10.31014/aior.1993.05.01.445>
- Walker, B. (2003). The cultivation of student self-efficacy in reading and writing. *Reading & Writing Quarterly, 19*(2), 173–187. <https://doi.org/10.1080/10573560308217>
- World Health Organization (2021, November 17). *Mental health of adolescents*. <https://www.who.int>