Gratitude and Resilience in Elementary School Students: A Review of the Look for the Good Project in Establishing Grateful and Resilient Youth

Laura Hall

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GRATITUDE AND RESILIENCE IN ELEMENTARY SCHOOL STUDENTS: A REVIEW OF THE LOOK FOR THE GOOD PROJECT IN ESTABLISHING GRATEFUL AND RESILIENT YOUTH

A Dissertation
Submitted to the School of Graduate Studies and Research
in Partial Fulfillment of the Requirements for the Degree
Doctor of Education

Laura Hall
Indiana University of Pennsylvania

August 2019
Indiana University of Pennsylvania
School of Graduate Studies and Research
Department of Educational and School Psychology

We hereby approve the dissertation of

Laura Hall

Candidate for the degree of Doctor of Education

___________________  __________________________________________
Courtney L. McLaughlin, Ph.D., NCSP
Associate Professor of Educational and School Psychology, Advisor

___________________  __________________________________________
Lynanne Black, Ph.D.
Professor of Educational and School Psychology

___________________  __________________________________________
Becky Knickelbein, Ed.D.
Professor of Communication Disorders, Special Education, and Disability Services

ACCEPTED

___________________  __________________________________________
Randy L. Martin, Ph.D.
Dean
School of Graduate Studies and Research
Social and emotional learning in education has become the preferred method of enhancing student mental health, as opposed to the “reactionary model” that focuses on amelioration of negative behaviors and emotions. This study is an investigation of a new social and emotional primary prevention program (The Look for the Good Project – LFTGP) for elementary schools that is aimed at increasing gratitude in students. Utilizing a convenience sample of schools, pre-test and post-test measures of gratitude were the dependent variables of the study. Additionally, students reported on levels of resilience to determine if there was a relationship between gratitude and resilience. Self-report ratings of gratitude yielded no significant difference before or following the intervention. Further, males and females showed no significant difference in their level of gratitude. Gratitude and resilience were found to be significantly correlated, and resilience and sex were found to be correlated, as well. This study adds to the universal social and emotional intervention literature by examining a new social and emotional curriculum for elementary school students. This study also adds to the literature on gratitude and resilience in children. Further research is recommended to determine if the LFTGP is an effective primary prevention program in the elementary school setting, as well as to further understand the relationship between gratitude and resilience, as well as resilience and sex.
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Gratitude is one of the least articulate of the emotions, especially when it is deep.

— Felix Frankfurter

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CHAPTER ONE

THE PROBLEM

In the world today, some of the most common questions surrounding schools and education are: How can we prevent bullying? How can we stop a student from bringing a weapon to school? How can we reduce the occurrence of mental illness in students? How can we better serve the social and emotional needs of students? These questions are not about academic achievement; rather, their focus is on the mental health and social and emotional stability of youth. While the disease model or “reactionary” model of health and well-being has been the preferred method of choice for many years, progress has been made towards a more preventative approach, where an individual’s strengths are recognized and built upon so to instill positive characteristics and promote social and emotional well-being in children and adolescents (Seligman, 2002). Interventions now focus on promoting virtuous character strengths rather than correcting weaknesses. This technique is grounded in positive psychology, which promotes enhancing a child’s mental health, strengths, and overall development (Roberts, Brown, Johnson, & Reinke, 2002). Strengths-based social and emotional interventions have gained momentum in education in recent years, and early research shows that these interventions promote optimism, gratitude, resilience, and a growth mindset in children and adolescents (Waters, 2014). This study uses a quantitative design to examine and add to the research base of how a social and emotional primary prevention program for elementary school students can promote positive emotions and build resilience.
Statement of the Problem

Throughout the years, schools have made numerous shifts in their method of educating the whole child. The idea of not only teaching to the rigorous academic standards, but also teaching to the social and emotional needs of the student is an approach that has been preferred for some time. However, the ways in which the social and emotional needs of students are addressed has been a highly debated topic. Research shows that educating to the social and emotional needs of students can have positive effects on social bonds, academic achievement, and satisfaction with oneself, family, school, and community (Froh, Bono, & Emmons, 2010). Further, incorporating emotional well-being into education is shown to lessen depressive symptoms, promote a positive learning environment, and increase academic achievement (Waters, 2014).

The methods of enhancing student well-being originate from the area of positive psychology, where the idea of preventing negative emotions and promoting positive emotions outweighs the old method of navigating and attempting to correct existing problem behaviors. In adults, interventions requiring individuals to identify personal strengths, document happiness in daily life, and express more gratitude show an increase in positive emotions and a decrease in negative emotions (Seligman, Steen, Park, & Peterson, 2005). By taking these principals and applying them to the educational environment, schools can enhance student well-being, as well. Further, schools will be promoting positive character traits in their students such as hope, gratitude, mindfulness, growth mindsets, resilience, and empathy (Waters, 2014). Schools that are able to promote student strengths, while working to remediate problem behaviors, as well as adhering to high academic standards, are the schools that will best educate the whole child (Huebner, 2010).
Resilience in education can be viewed as a student’s ability to navigate stressful or disadvantageous situations by utilizing coping skills and accessing personal resources in order to return to normal. In doing this, the student strengthens his or herself and builds upon their repertoire of skills to cope with adversity. Research shows that adolescents who are classified as resilient have better problem solving skills, are more satisfied with their lives, have a growth mindset, as well as high prosocial behaviors (Ahuja, 2018). Therefore, encouraging students to discuss well-being and incorporating it into a social and emotional curriculum has been shown to lessen depressive symptoms, increase students sense of purpose and social competence, as well as promote academic achievement and creativity (Waters, 2014).

Various social and emotional curriculums have been developed to help students identify personal strengths and virtuous characteristics. In recent years, numerous studies have looked into the characteristic of gratitude as the foundation of social and emotional learning. Research on these interventions has shown that gratitude helps in improving overall school climate, reduces bullying, and promotes positive emotional development in students. These outcomes can have positive and lasting effects on the students, their educational environment, and society as a whole (Bono, Krakauer, & Froh, 2015).

Recently, a program entitled The Look for The Good Project (LFTGP) has emerged, which is founded on the primary philosophy that gratitude changes mindsets, reduces violence, and increases positive school climate. This primary prevention program is targeted for children in Kindergarten through sixth grade and provides students with the tools to broaden their awareness to a wider range of positive thoughts and actions. The program is intended to make students more constructive and creative, while also building upon life’s resources to make them more resilient (Look for the Good Project, 2017).
While there is some research documenting the effectiveness of gratitude programs in schools, as well as research documenting the benefit of gratitude in bolstering resilience, there is scant research to show the effects of a gratitude program in promoting positive emotions and enhancing student resilience. The current study is being proposed because there is a need for empirical research on the efficacy of a social and emotional primary prevention program focused on promoting gratitude and resilience in school settings. This study will analyze student ratings of gratitude and resilience for identification and determination of program effectiveness and whether or not there is a correlation between gratitude and resilience.

**Statement of the Purpose**

The purpose of this quantitative study is to investigate whether the LFTGP increases students’ proneness to express gratitude as measured by self-report prior to and following implementation of the primary intervention. Further, this study will explore the differences in expressing gratitude between males and females. The analysis could provide support of the effectiveness of the LFTGP in increasing students’ ability to and frequency of expressing gratitude. This investigation fits into the larger context of evidence-based intervention research because it is expanding upon the research of the effectiveness of gratitude programs in education. This study will also investigate whether the presence of gratitude predicts resilient behavior in elementary school students as measured by student self-report of resilience factors in their daily lives. Another relevant feature of this study is that it will look at resilience from a strengths perspective, rather than from a problem-focused perspective.
Research Design, Questions, & Hypotheses

This study will utilize an archival, convenience sample of elementary school students’ ages 7-11 from schools that elected to use the LFTGP as a social and emotional primary prevention program and who chose to participate in the pre- and post-assessments offered by the LFTGP. The intervention consists of a two-week gratitude campaign where students attend an assembly to learn about gratitude, the different components of the campaign, and how to contribute to a “gratitude wall.” For the duration of the intervention, students are asked to write one thing for which they are grateful each day and add it to the communal wall in their school. The final part of the intervention are the “You Matter” letters, where each child is instructed to write a letter to an individual in their lives for whom they are grateful. Students will complete pre- and post- intervention self-report measures of gratitude to assess if there is a statistically significant difference in pre- versus post-test scores. Further, students will complete an initial self-report measure of resilience to assess if the presence of gratitude predicts resilience in students.

The research questions in this study are:

1. Is there a statistically significant difference in elementary students’ proneness to express gratitude between Gratitude Questionnaire - 6 pre-test scores and Gratitude Questionnaire - 6 post-test scores for students who participated in the LFTGP?

2. Is there a statistically significant difference in the overall level of gratitude between males and females as measured by the Gratitude Questionnaire - 6?

3. Using The Child and Youth Resilience Measure does the presence of gratitude predict resilience in elementary school students?
The research hypotheses pertaining to this study are:

1. Elementary students’ who participate in the LFTGP will demonstrate a significant increase in their proneness to express gratitude.

2. Elementary school females will report higher levels of gratitude following the intervention; however, elementary school males will show more growth in their levels of gratitude following the intervention.

3. The presence of gratitude will strongly predict resilience in elementary school students.

**Delimitations**

The delimitations highlight the boundaries of the present study. First, though the LFTGP is available to all elementary school students, only students in second through fifth grade were included in this study. In addition, many districts and schools have elected to use the LFTGP; however, only those schools running the program between November of 2018 and March of 2019 were asked to participate in the additional research study. While there are numerous positive character traits that are beneficial to students, this study only focuses on the characteristic of gratitude in determining its growth following the LFTGP. Further, this study only looked at the quantitative data from the pre- and post-tests self-reports from students. No qualitative data was taken to determine student perception of the LFTGP. Finally, this study is archival in nature, meaning that the primary researcher was unable to be the one to gather the data from students and schools.

**Definition of Terms**

The terms used in this study include:

*Positive psychology* is a branch of psychology that focuses on enhancing an individual’s skills and strengths and understanding how those strengths can be used to benefit oneself, family,
friends, and society (Chaudhary, Chaudhary, & Chaudhary, 2014). With regard to the past, positive psychology has to do with positive experiences and one’s own well-being. In the present, positive psychology’s focus is on feelings of happiness and contentment. For the future, positive psychology looks at one’s optimism, faith and, hope (Seligman, 2002).

*Emotions* are an individual’s reaction to a particular situation. First, one must understand that a significant situation has occurred, in order to respond to that situation in a particular way. Positive emotions occur when something is pleasant, fulfilling, or worthwhile. Negative emotions occur when there is danger, a threat to well-being, or a personal or environmental distress (Fredrickson, 2001).

*Well-being* (also referred to as *subjective well-being* or *positive psychological well-being*) is an individual’s appraisal of three important aspects of their life. First is the presence of positive affect, second is a lack of negative affect, and third is the judgment of one’s entirety of life (Diener, 1984, 1994).

*Gratitude* is a moral emotion that occurs following the experience of a positive outcome, such as receiving a gift or appreciating the beauty or fulfillment of nature or an experience. Gratitude acknowledges the cost of the gift and the intention behind the recipient who provided the gift (Emmons & McCullough, 2003; Emmons & Shelton, 2002; Wood, Froh, & Geraghty, 2010).

*Resilience* is the ability of an individual to overcome a negative situation, effectively adapt or cope with the associated negative stressors, and bounce back while transforming the negative experience into something positive (Ahuja, 2018; Kumar & Dixit, 2014; Masten, 2014).
Summary

It is of utmost importance to not only teach students the rigorous academic skills needed to be successful as adults, but to also teach the positive social and emotional skills of gratitude and resilience so that they are able to navigate the world with confidence, appropriate coping skills, and empathy for others. Positive emotions ultimately form lasting physical, intellectual, and social resources in children and adults (Fredrickson, 2000, 2001). Having academic, as well as social and emotional skills helps in making well-rounded youth who then become well-rounded and successful adults.

The National Association of School Psychologists has highlighted the importance of gratitude in education on multiple occasions, stating that gratitude is of the utmost importance for positive youth and adolescent development (Renshaw & Olinger Steeves, 2016). As it is determined how to educate the social and emotional needs of students, positive psychology may best advise the core values of gratitude and resilience in our nation’s youth.
CHAPTER TWO
LITERATURE REVIEW

There is an overwhelming need for universal mental health supports in the schools given the amount of time children spend in their educational environment each day. More specifically, schools need ways to support entire school populations in order to promote mental health and positive interpersonal characteristics. Schools have the opportunity to provide youth with mental health supports by way of multi-tiered systems of supports that address the social-emotional and behavioral needs of students. However, by focusing solely on the problem behaviors, educational staff are unable to provide necessary prevention and intervention techniques. Therefore, given the degree of impact that behavior has on education, it is crucial to look at population-based prevention and intervention strategies to generate the biggest impact for the widest number of students (Lewis, Mitchell, Bruntmeyer, & Sugai, 2016). In order to do this, schools should focus on implementing a whole-child approach, when it comes to the academic and behavioral well-being of students. Social-emotional and behavioral programming must shift from a problem-centered focus to one that promotes positive characteristics and emotions in order to better serve the mental health of the nation’s youth (Hinduja & Patchin, 2017).

Overview of Mental Health

Mental health was brought to public attention following the Community Mental Health Act of 1963, which began the deinstitutionalization process for thousands of people who had otherwise been cared for by the state. The shift from hospital to community care was part of the belief that prevention was a better method of helping than treating each individual specifically (Levine, 2015). The prevention and intervention model was addressed in the area of public health in three stages. The first step was to minimize a specific health concern by using widely
available supports to reduce the number of people infected. The second step was to immediately treat those who showed initial signs of disease or infection. Finally, the third step was to treat those who had been infected and prevent any further health complications (Lewis et al., 2016).

The mental health funding and initiatives were focused primarily on veterans, at the time of the Community Mental Health Act. Children and adolescent mental health was not a major concern at that time. In the years to follow, Congress created a Joint Commission on the Mental Health of Children with the hope of addressing the vast need of mental health services for children and adolescents. Unfortunately, funding was minimal and the services that were available were not able to reach those in greatest need (Levine, 2015).

**Mental Health in Children and Adolescents**

Four decades following the dawn of mental health initiatives, the gravity of failing to provide preventative mental health services to children and adolescents was evident. Around the turn of the century, multiple studies evidenced the dire need of mental health services within this population. The U.S. Department of Health and Human Services (1999) released a study stating that each year one in five children and adolescents shows symptoms of a disorder of mental health. However, 70% of those children and adolescents do not receive the mental health services they need (Kataoka, Zhang, & Wells, 2002). In 2003, the President’s New Freedom Commission report expanded on the need for early prevention and intervention with youth. The report stated that children and adolescents with mental health disorders who are not provided appropriate and timely treatment have a history of school failure, less employment opportunities, and poverty that can persist through adulthood (The Carter Center, 2003). Further research showed that undiagnosed mental health disorders can have deleterious effects on child behavior, which can cause low academic achievement, poor social development, truancy, difficulties
forming and maintaining peer relationships, as well as school dropout, and incarceration (Cook, Frye, Slemrod, Lyon, Renshaw, & Zhang, 2015; Lewis et al., 2016; McIntosh, Ty, & Miller, 2014). However, detecting and treating mental health problems early in life can prevent these severe, lifelong consequences to children and adolescents (The Carter Center, 2003).

**School-Based Mental Health Services**

Student behavior has become a top priority in schools, as it has an impact on student violence and school safety (Lewis et al., 2016). A study by Robers, Kemp, and Truman (2013) found that during the 2009-2010 school year, 85% of public schools reported at least one crime incident and 74% reported a violent crime incident. Further, of children and adolescents ages 12-18, more reported experiencing a crime on school property than off school property. Additionally, 39% of public schools reported serious disciplinary action against a student including, multiple day suspensions, transfer of students to a different school, and removal of student without access to services.

Children spend the majority of their waking hours in school, which is why the President’s New Freedom Commission report acknowledged that servicing mental health in the schools should be a national priority. It suggested building upon the Individuals with Disabilities Education Act (IDEA) by adding mental health services to the preexisting early intervention services for children and adolescents (The Carter Center, 2003). The IDEA was reauthorized in 2004, which prohibited states from solely using a discrepancy criterion between cognitive and achievement scores to determine if a student has a specific learning disability. The shift in methodology was brought about by the idea that student Response to Intervention (RTI) was a more scientific and research-based criteria to determine academic weakness and potential disability (Averill & Rinaldi, 2011). RTI delivers scientific and research-based multi-tiered
levels of instruction that are catered to students’ specific needs. It relies on frequent monitoring of student progress to determine if the instruction is adequate and promotes academic growth for each student. Researchers suggest that this tiered model of academic delivery supports academic engagement, with students placing a higher value on learning (Doll, Spies, & Champion, 2012).

The preliminary success of RTI provided the foundation for a behavioral system that paralleled the academic one. Positive Behavior Intervention and Supports (PBIS) was designed to address the whole school population by providing behavioral expectations to build upon students strengths and promote a positive school climate (Averill & Rinaldi, 2011; Cook et al., 2016; Lewis et al., 2016). PBIS follows the same tiered system as RTI, with Tier 1 providing a universal behavior curriculum for all students. Tier 2 is designed for students who need further behavioral interventions when they have not responded to the universal intervention. Finally, Tier 3 provides specific behavioral plans for individual students who have not responded to the first two tiers of intervention supports (Averill & Rinaldi, 2011). Data on PBIS shows that proper implementation of the framework can reduce overall problem behaviors, improve academic achievement, and improve classroom and out-of-classroom behavior (Lewis et al., 2016).

An alternative behavioral approach used in the schools is Social-Emotional Learning (SEL) curricula. SEL focuses on teaching students skills that will make them more socially competent, resilient, and goal driven, while also working to understand emotions, emotional regulation, and problem-solving skills. SEL is typically provided like a universal, Tier 1 intervention for all students, with the belief that these are necessary skills for all children and adolescents. Both PBIS and SEL show a variety of positive behavior changes in students. However, a research project examined the combined effect of PBIS and SEL on student mental
health and revealed that the combination of PBIS and SEL led to significantly greater positive mental health growth than students who received either PBIS or SEL. Further, comparing the integrated program to students who were not provided with any behavioral program showed an extremely significant difference, one that would be made aware to any observer of student behavior (Cook et al., 2015). Thus, it would seem that a behavioral curriculum in education is a critical component for child and adolescent mental health, specifically one that addresses behavior, in addition to social and emotional learning.

In order to provide a more streamlined model where both academics and behavior are simultaneously delivered to students, an integration model was created. Multi-Tier System of Supports (MTSS) encompasses social and emotional behavior, as well as academics into differentiated tiers of instruction (Averill & Rinaldi, 2011; Cook et al., 2015). Tier 1 is the universal curriculum provided to all students with the majority of students becoming proficient in the academic and behavioral expectations. Tier 2 provides additional intervention services for students who do not respond to the universal instruction. Tier 3 provides intensive intervention services to a select group of students who have not responded to both Tier 1 and Tier 2 curriculum. As students fluctuate throughout the tiers, a systematic problem-solving approach is utilized to determine the best scientific, research-based intervention for students. The core of MTSS is to focus on the type of instruction, rather than student inability, as a barrier to student success (Averill & Rinaldi, 2011).

Addressing mental health in the schools can significantly improve educational outcomes by increasing student attendance and positive behavior, as well as decreasing negative behavior referrals. Additionally, student achievement and academic test scores are reported to be higher when mental health is a priority in the schools (Waters, 2014). Mental health concerns must be
addressed early to ensure the appropriate services reach each student. Further, the way that mental health is addressed must follow a comprehensive and universal approach to reach the most students and generate the largest positive impact.

Positive Psychology as the Basis for Universal Support

The treatment of mental health has long been pathology based. Coming from the “disease model” of medical practice, the mental health of an individual was ultimately characterized by the lack or presence of pathological symptoms. Until the late 1950’s, strategies to assist in the mental health and well-being of children, adolescents, and adults were focused on the amelioration of distress or disorder (Park, 2004; Roberts et al., 2002). Marie Jahoda was one of the first psychologists to argue that the well-being of an individual did not only have to do with the absence of disorder, though it was an important feature; rather, the well-being of an individual depended on the balance of positive features in a person’s life (Jahoda, 1958). This notion that well-being was more than the absence of disease set in motion the ideas that became the foundation of positive psychology.

Since then, positive psychology has rapidly developed into an important and well-respected discipline within the field of psychology. There are many reasons for the profound advancement in this area. The pursuit of happiness, life satisfaction, and an overall feeling of contentment and well-being are standards that humans naturally strive towards. These standards form the pillars of positive psychology. Further, there has been significant research in the last few decades to demonstrate the positive effect that building upon one’s happiness has to overall well-being. Finally, positive psychology embodies a strengths perspective of problem solving, where utilizing personal strengths provides individuals with the tools to face negative situations and hardships in life (Chaudhary et al., 2014). Positive psychology puts emphasis on developing
and appreciating assets such as gratitude, creativity, resilience, and optimism as sources of human strength (Fredrickson, 1998, 2000; Seligman & Csikszentmihalyi, 2000).

In its simplest form, positive psychology uses scientific knowledge to provide interventions that promote an individual’s well-being, life satisfaction, as well as build character strengths and virtues (Chaudhary et al., 2014; Seligman, 2002). There are three essential building blocks of positive psychology: positive emotions, positive character traits, and positive associations. Positive emotions are feelings of satisfaction or contentment at any given time. Positive character traits are an individual’s virtues, such as optimism, gratitude, zest for life, and empathy. Positive associations are the people, places, and organizations in a person’s life that enhance life-satisfaction, happiness, and well-being (Chaudhary et al., 2014). Positive psychology encompasses all aspects of an individual’s life to work on preventing mental illness, while also promoting the positive resources, both internal and external, that a person possesses.

A key feature of positive psychology is positive psychological well-being, or more commonly referred to as subjective well-being. Subjective well-being refers to an individual’s happiness and belief that life is good (Park, 2004). There are three components that make up subjective well-being including: a high level of positive emotions, a low level of negative emotions, and an overall evaluation that life is good (Diener, 1994; Seligman et al., 2005). Along the same lines as positive psychology, subjective well-being not only looks at the absence of negative affect, but also the presence of positive affect, and the cognitive component of life satisfaction. Research shows that subjective well-being acts as a safeguard against negative life circumstances in order to promote the positive mental health of an individual (Bohem, 1955; Park, 2004).
Emotions are an important component of positive psychology and function in a primal and necessary way. Emotions draw attention to a situation and assist in providing an appropriate response to that situation. Typically, negative emotions are used when the situation involves threat, danger, or devastation, whereas positive emotions are used when opportunities arise or there is something pleasant or worthwhile (Algoe & Fredrickson, 2011; Fredrickson, 1998, 2001, 2004). As individuals mature, they are better able to coordinate their emotions appropriately given the situation and to use their emotional intelligence to monitor and guide their actions (Salovey & Mayer, 1990). Emotions can be categorized into basic and complex categories. Basic emotions, such as sadness, fear, happiness, and anger can be achieved at any age, and are not bound by cultural expectations or higher-level thinking. Comparatively, complex emotions, such as gratitude, shame, guilt, jealousy, and empathy are developed at a later age when individuals can understand cultural factors and the intentions or perspectives of others involved (Poelker & Kuebli, 2014).

The Broaden-and-Build Theory of Positive Emotions helps to conceptualize positive emotions and their potential benefits. Fredrickson (2001, 2004) claimed that positive emotions, when experienced frequently, build an individual’s emotional repertoire and broaden their cognitive processing. Whereas negative emotions can narrow an individual’s ability to problem solve and provide appropriate emotional responses, positive emotions build an individual’s social, cognitive, and physical resources (Froh et al., 2010; Poelker & Kuebli, 2014). Further, individuals who experience more positive emotions are more efficient, flexible in their thought processes, and more open-minded (Fredrickson, 2001). Research shows that positive emotions and a larger emotional repertoire not only make individuals feel good in the moment, but also makes it more likely that individuals will feel good in the future (Fredrickson, Tugade, Waugh,
Ultimately, when stressful or disadvantageous situations arise, individuals with large emotional repertoires are better able to navigate those situations, as well as provide positive emotional responses throughout them (Tugade & Fredrickson, 2004).

The advances of positive psychology have permeated throughout the adult and youth populations over the past few decades. While the focus of the adult population is on prevention and intervention, the focus of youth is on positive child development. These are critical years, where children can build upon their positive resources and learn to harness their strengths. The key factor of positive psychology in child development is the understanding that even though a child may possess behavioral difficulties, mental illness, or economic disadvantages, they still have the ability to employ their individual strengths (Brownlee et al., 2013). Developmentally, children can learn to utilize strengths to enhance their overall well-being more efficiently than adults, who require more time and effort in order to change behavior. This is one benefit of using positive psychological interventions with youth (Roberts et al., 2002). Interventions targeting adults, as well as youth have made rapid advancements since the dawn of positive psychology with the idea that helping children and adults understand and use their strengths will help them face potential adversities in the future (Chaudhary et al., 2014).

So often, individuals focus on changing circumstances in order to increase happiness and well-being. While this has the ability to work, it is often not practical or sustainable. Positive psychological interventions are meant to assist individuals in adding purposeful, straightforward, and unencumbering activities to their daily lives (Sheldon & Lyubomirsky, 2006). Numerous studies have looked into improving well-being in adults through strategies meant to elicit happiness. Fordyce (1983) had his collegiate level students practice 14 various “happiness-enhancing” activities (e.g., socialize with friends/family, practice positive thinking, and exercise)
over a six-week span of time. Results showed that student well-being improved following the intervention and for a subsequent two months when compared to students who were not asked to participate in such activities. A similar study focused on having adults complete two activities shown to increase happiness and well-being: writing letters of gratitude and practicing optimistic thinking by visualizing positive outcomes for oneself. The study found that immediately following the intervention and for six months succeeding it, adults reported increased happiness and well-being (Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011). An interesting finding among adults shows that those who intentionally opt into a happiness or well-being intervention report far better results than those who are selected to participate or who are not fully aware of the intervention’s true intention. Therefore, it would be important to note that motivation to become happier or increase one’s well-being is a critical component to an intervention with the intent on increasing happiness and well-being (Lyubomirsky et al., 2011; Seligman et al., 2005). Further, those who do elect to participate in positive psychological interventions have not only increased their happiness and well-being but have also shown a decrease in mild to moderate depressive symptoms, as well as other emotional disorders (Seligman, Rashid, & Parks, 2006).

With the success of numerous positive psychological interventions in the adult population, it would be appropriate to assume that similar types of interventions would benefit children and adolescents (Owens & Patterson, 2013). Through his research, Huebner (2010) found that schools, which not only work to remediate problems, but also work to enhance student strengths are the most successful at educating the whole child. These strengths-based interventions include daily expressions of gratitude, building self-esteem, practicing problem-solving skills, goal setting, prosocial behavior, optimistic thinking, and coping skills. Most importantly, these skills have been shown to increase student happiness (Diener & Biswas-
Diener, 2008; Lyubormirsky, 2007). Happiness is an important indicator for multiple areas of success in students’ lives. Students who report higher levels of happiness demonstrate higher levels of academic achievement, better classroom behavior, more beneficial relationships, better overall health, are more willing to participate in classroom discussions and extracurricular activities, and are more resilient when faced with negative situations (Frisch, 2000; Huebner, Suldo, & Gilman, 2006). Comparatively, students who have low levels of happiness tend to have worse grades, negative relationships with teachers and peers, report higher levels of mental health concerns, and demonstrate a variety of risk behaviors (e.g., drug and tobacco use, alcohol use, sexual promiscuity, and violent behaviors) (Huebner et al., 2006).

Student happiness is an important component of positive psychological interventions; however, student life satisfaction is equally as important. A student’s cognitive appraisal of his or her quality of life has many important outcomes. Youth life satisfaction is positively correlated with optimal physical health (Frisch, 2000), high self-esteem, internal locus of control, prosocial behaviors, goal-setting behaviors (Huebner, 1991), as well as engaging in volunteer and extracurricular activities (Gillman, 2001; McCullough, Huebner, & Laughlin, 2000). On the other end, youth life satisfaction is negatively correlated with unhealthy behaviors (e.g., drug and alcohol use) (Frisch, 2000), violent behaviors (e.g., carrying a weapon, physical altercations) (Valois, Zullig, Drane, & Huebner, 2001), anxiety, depression, school discipline referrals, negative relationships, and other areas of mental illness (Furr & Funder, 1998; McNight, Huebner, & Suldo, 2002). Youth who report high life satisfaction also appear to demonstrate more resilient behaviors; as they can better navigate common social dilemmas, peer pressure, or lack of social resources (Park, 2004). Given the benefit of positive psychological interventions
on adults and youth, it would be in a school’s best interest to work towards increasing happiness and well-being in all students.

**Gratitude**

The aim of positive psychology is to harness individual character strengths and promote happiness and life satisfaction. Character strengths are positive traits that are reflected in the thoughts, feelings, and behaviors of an individual (Park & Peterson, 2006). Gratitude has been highlighted as one of the most influential constructs in positive psychology and was listed as one of the 24 “character strengths” in Peterson and Seligman’s (2004) *Manual of Sanities*. Gratitude is related to heightened well-being, as well as a sense of purpose, and satisfaction with life (Froh & Bono, 2011; Froh, Yurkewicz, & Kashdan, 2009; McCullough, Emmons, & Tsang, 2002; Park & Peterson, 2006). While there is research highlighting the benefits of gratitude practices with adults, further empirical evidence is needed when looking at the child and adolescent populations.

**The History of Gratitude**

The concept of gratitude dates back to the Greek philosophers. It was Aristotle (350 B.C./1985, p. 1159) who stated that the truest form of human happiness or *eudaimonia* was about “loving rather than being loved.” He believed that happiness was the ultimate desire of humans and that once achieved; nothing else was left to be desired (Diener, 1994; Ryan & Deci, 2001). Across cultures, languages, and time, gratitude is valued as an important characteristic of the human personality and a necessity in a social world (Emmons & McCullough, 2003; Emmons & Shelton, 2002; McCullough, Kilpatrick, Emmons, & Larson, 2001). When looking at the historical evolution of gratitude, it is thought that gratitude evolved to aid in selfless reciprocity. Gratitude is a mechanism that influences how individuals respond to acts of kindness and
motivate them to extend similar acts onto others, especially onto third parties and not just from benefactor to beneficiary. This “upstream reciprocity” causes an indirect fueling of gratitude onto others, which drives its continued use (Nowak & Roch, 2007; Trivers, 1971).

**Defining Gratitude**

While the disciplines of philosophy, religion, literature, and even popular culture have explored gratitude over time, psychology is relatively new to the exploration of gratitude (Emmons, 2004). Though significant research has occurred in the past few decades on gratitude in the psychological discipline, gratitude eludes a simple definition. It has been defined as a moral virtue, emotion, personality trait, or even an attitude (Emmons & McCullough, 2003).

As an emotion, gratitude occurs following the experience of a positive outcome, such as receiving a gift or appreciating the beauty of nature or the fulfillment of an experience. Being grateful requires one to acknowledge the cost of the gift and the intention behind the recipient who provides the gift (Emmons & McCullough, 2003). The recognition that a gift was given and the understanding of the effort on the part of the benefactor strengthens the feeling of gratitude (Lazarus & Lazarus, 1994). Further, the idea of *undeserved merit* is an essential component to gratitude. A beneficiary must understand that the gift that was given was neither deserved nor necessary; rather, it was given in an intentional, voluntary act of the benefactor (Emmons, 2004; McCullough, Kimeldorf, & Cohen, 2008).

As a personality trait, gratitude is an individual’s ability to understand and respond towards the nature of a generous gift (McCullough et al., 2002). Whereas emotions are fleeting, traits are predisposed and inherent characteristics of an individual. Researchers have defined four areas of a grateful disposition (i.e., *intensity*, *frequency*, *span*, and *density*). Intensity refers to the strength with which an individual feels grateful. People who have a higher grateful
disposition will feel higher levels of gratitude than individuals who do not have high trait
gratitude. Frequency refers to how often an individual feels grateful. Someone high in trait
gratitude will report feeling grateful multiple times throughout the day, regardless of the
enormity of the bestowed benefit. Span refers to the number of things a person feels grateful for
at any given time. Those who have a higher disposition of gratitude will report numerous places
and things (e.g., school, work, religious organizations, and health) for which they are grateful.
Finally, density refers to the people for whom a person is grateful. An individual high in trait
gratitude will report numerous people (e.g., family members, friends, and colleagues) for whom
they are grateful (McCullough et al., 2002). When gratitude is viewed as a personality trait, it is
understandable that some individuals struggle to express gratitude and do so only on occasion.
Those predisposed with a grateful disposition express gratitude more freely and they also
frequently express appreciation for the people and things they have in their life (Reivich, 2009).

Finally, gratitude can be seen as a moral virtue. In this way, gratitude is meant to
enhance well-being. Researchers have identified three functions that gratitude serves as a moral
virtue (i.e., moral barometer, moral motive, and moral reinforcer). Gratitude acts as a moral
barometer when an individual is the recipient of a gift or benefit, when they understand the cost
and effort on the part of the beneficiary, when the gift or benefit seems intentional, and when the
gift was given out of gratuity. When gratitude is viewed as a barometer, it describes the essential
change from one state of being to another. The benefit bestowed upon a person enhances a
relationship and overall improves individual well-being. As a moral motive, those who receive a
gift or benefit are more likely to return that benefit to the benefactor or a third party in the future.
Therefore, gratitude acts as a catalyst for selfless and giving behavior. Finally, gratitude can also
be a moral reinforcer. When an individual expresses gratitude towards a benefactor for a gift, the
benefactor is more likely to repeat the action in the future (McCullough et al., 2001). Gratitude, as a moral virtue, highlights the idea that gratitude can be nurtured within each individual. By cultivating gratitude, individuals can benefit themselves, those around them, as well as society as a whole (Bono et al., 2015; Wang, Wang, & Tudge, 2015).

The Development of Gratitude

The development of gratitude spans the course of childhood. Whereas basic emotions develop almost immediately, complex emotions such as gratitude develop over time, which is why there is continued debate as to when gratitude emerges in children (Diebel, Wodcock, Cooper, & Brigness, 2016). The first step in the development of gratitude is a child’s understanding of itself. The concept of “I,” emerges around the age of two, when children begin to understand their own unique feelings, thoughts, and experiences. Around the age of three, children begin to develop a theory of mind, which is the understanding that people do things because they want to (McAdams & Bauer, 2004). This understanding of intentional behavior lays the groundwork for understanding and demonstrating gratitude (Leslie, 1987). Also at this age, children begin engaging in reciprocal social exchanges, which is the second component to gratitude (Froh et al., 2014). Finally, children begin to think less egocentrically and are able to understand the feelings of others. It is at this point when children can reciprocate the gift giving process with something the benefactor would desire. It is important to note, that while much of the developmental process of gratitude is biological in nature, gratitude is not an innate quality; rather, gratitude, like other virtuous characteristics, must be taught and modeled by parents, caregivers, and teachers and embedded throughout a child’s life. Therefore, children will demonstrate gratitude in different ways throughout the developmental span. For example, young children are taught to say “thank you” after receiving something. Though this polite statement is
not characterized as gratitude, it is the foundation for understanding reciprocity and overtime develops into the understanding that a benefactor should receive some type of repayment (Wang et al., 2015). There is a consensus among researchers that this understanding of reciprocity from beneficiary to benefactor is solidified between the ages of seven and 10 years (Emmons & Shelton, 2002; Froh, Kashdan, Ozimkowski, & Miller, 2009; McAdams & Bauer, 2004) with the younger population displaying gratitude for the desirability of an item, rather than the thought behind the gift, and the older population of children better able to understand the thoughtfulness of the beneficiary (Poelker & Kuebli, 2014).

As children transition into adolescence, their development of gratitude increases in concert with many other important processes. At this time, positive social interactions become the foundation for successful and mutually beneficial relationships (Wentzel, Barry, & Caldwell, 2004). Empathy also develops in adolescence. The ability to empathize with others has been regarded as the most important precursor to being a grateful person, as it involves understanding the needs of others and intentionally reciprocating. Empathy and gratitude help adolescents form lasting, positive, social relationships and provide a feeling of connection to others (Froh et al., 2010). Adults who possess the highest levels of gratitude are able to feel grateful not only for certain people or possessions, but also for more abstract concepts, such as certain organizations, nature, or spiritual entities (McAdams & Bauer, 2004).

**Gratitude in Children and Adolescents**

Research on gratitude in children and adolescents is in an infancy stage, with the first reported study published in 2006. Since then, researchers have begun the process of looking at gratitude in youth populations. A review of the available research indicates that gratitude studies
either report correlates of gratitude or gratitude intervention outcomes, and between these two methods, there is no consensus on measured correlates or intervention programs.

Researchers who examined gratitude correlations were the earliest to emerge among the youth population. The measured correlates of gratitude include subjective well-being, social integration, happiness, future expressions of gratitude, prosocial behavior, life satisfaction and positive affect (Froh et al., 2010; Froh, Fan et al., 2011; Park & Peterson, 2006; Tian, Du, & Huebner, 2015). Park and Peterson (2006) began the movement in the study of gratitude and children by examining parent-reported character strengths in children ages three through nine and their associations with happiness. Falling in line with research on adults, as well as the research on the developmental age in which gratitude emerges, the research shows that while gratitude is correlated with happiness in adolescents and adults, it was not found in this study of young children. The research emphasized that gratitude was a more commonly expressed character trait in children ages seven and older, and only at that point, was associated with happiness.

Froh, Fan et al.’s (2011) preliminary study examined middle school aged students (ages 11-13) self-report of multiple areas including, subjective well-being, positive affect, prosocial behavior, social support, and negative affect as correlates of grateful moods. The study found medium effect sizes for gratitude’s relation to life satisfaction and positive affect. Further, gratitude was also related to adolescent subjective well-being, prosocial behavior, and social support. Contrary to their hypothesis, as well as previous research, gratitude was not related to negative affect. It was assumed that while gratitude may play a role in increasing positive emotions and overall well-being, it may not remediate negative emotions.
In a similar study of adolescents, Froh et al. (2010) narrowed the focus to the concept of gratitude and its relation to social integration, specifically in the form of “upstream generativity,” where adolescents are inclined to give back to the community around them. This longitudinal study found that gratitude predicted social integration six months later. Further, it demonstrates that gratitude is predictive of helping behavior in adolescents. This was also the first study to demonstrate the presence of generativity in youth, as the adolescents showed a desire to contribute to the well-being of the world around them. Ultimately, this study was the first to demonstrate that gratitude causes an upward spiral of social well-being in adolescents on both a micro and macro level.

In further exploration of the correlates of gratitude, Tian et al. (2015) explored the relation of gratitude and subjective well-being, specific to school (i.e., school satisfaction, positive affect in school, and negative affect in school) in elementary school students ages eight through 14. They found that gratitude is significantly related to school satisfaction, as well as positive affect in school. Additionally, the researchers found that gratitude is significantly related to subjective well-being in elementary school students. This finding is consistent with previous research in adults that shows that displays of gratitude significantly increase subjective well-being (Emmons & McCullough, 2003). The study further demonstrates the positive impact of prosocial behavior on gratitude (Tian et al., 2015).

Studies examining gratitude intervention programs emerged soon after researchers began examining gratitude correlates. Though there is no standardized protocol for gratitude interventions with children or adults, three types of gratitude inducing methods have been identified: gratitude journals or lists, grateful writing or thinking, and behavioral expressions of gratitude (Wood et al., 2010).
The first intervention study done with a youth population was a replication study from an adult population. The previous study on adults found that counting one’s blessings lead to increased positive affect and prosocial behavior, more optimistic views of one’s life, less physical symptoms, and reduced negative affect, compared with those individuals who had to count daily hassles or were in the control group (Emmons & McCullough, 2003). Froh, Sefick, and Emmons (2008) examined this gratitude intervention with adolescents in sixth and seventh grade. Those in the “blessings” condition reported up to five things they were grateful for each day for two weeks. Those in the “hassles” condition wrote up to five things that they were irritated by for two weeks. Results show similarities between the study completed with adults and the study completed with adolescents. Specifically, those in the gratitude condition reported more optimistic views, higher life satisfaction, as well as higher satisfaction with school. Effect sizes were small to medium for all dependent variables. Additionally, students in the gratitude intervention group reported higher school satisfaction at the three-week follow-up than those in the hassles condition. This is important because students who find satisfaction with their school experience report higher academic achievement and positive relationships (Verkuyten & Thijs, 2002). It should be noted that students in the control group also reported decreased ratings of negative affect similar to students in the gratitude group. Finally, reports of well-being from students in the “blessings” group increased over time, immediately following the intervention to the three-week follow-up. This increase in well-being can be interpreted as students integrating the intervention so that it becomes a habit in their daily lives (Froh et al., 2008).

A similar study on younger children ages eight through 11 found that drawing a picture of something they are grateful for did not influence children’s positive affect, negative affect, self-esteem, or life satisfaction. At this age, children do not fully grasp the concept of gratitude,
without direct instruction of the concept, which would make it difficult to show increases in those variables without a true understanding. Though they were able to show appreciation for people, places, and things, the true reciprocal nature of gratitude was not understood and therefore had no effect on the dependent variables (Owens & Patterson, 2013).

More recently, Diebel et al. (2016) completed a gratitude diary intervention with primary school students to assess their sense of school belongingness. For this intervention, students were assigned to a gratitude diary intervention or a control group. Those in the gratitude diary intervention wrote two or three things they were grateful for at school each day for four weeks. Results showed that the students in the gratitude diary intervention increased their levels of gratitude towards school, as well as their sense of school belonging, whereas students in the control group showed decreases in both variables. This is consistent with the outcomes of Froh et al. (2008), who found that students who reported on their blessings had a higher satisfaction with school.

Froh, Kashdan et al. (2009) attempted a different type of gratitude intervention with youth ages nine through 18. In this study, the researchers wanted to understand if gratitude interventions are better than control conditions and if so, who may benefit from them. Therefore, they explored positive affect in individuals to determine if there was a ceiling effect for those high in positive affect and if those low in positive affect would benefit more from the intervention. The gratitude intervention asked students to write a letter to a person in their lives whom they had never properly thanked. Additionally, the students were instructed to read the letter to the person. It was the hope of the researchers that eliciting a hyperemotional situation would improve positive affect among participants. Results of the study showed that youth who reported low positive affect reported more feelings of gratitude and positive affect immediately
following the intervention, as well as two months post-intervention. However, there were no statistically significant effects for the gratitude intervention, especially when positive affect was a moderator. This is an important finding that highlights the possible ceiling effect of individuals already high in trait gratitude or positive emotionality.

Until this time, gratitude interventions had shown minimal to moderate effects for increasing gratitude or positive affect; however, Froh et al. (2014) created an intervention that focused on educating students about grateful thinking by teaching beneficial social exchanges. They conducted the study in two ways. First, they administered the intervention to students every day for a week. Second, they administered the intervention once a week for five weeks. Control groups were present for both studies. Each intervention group received the exact same material, but the idea for the second study was to let the material absorb and to let students practice the concepts throughout the week. Results from the first study showed that students wrote 80% more thank you cards to the Parent-Teacher Association than students in the control group, which is the first study with children to demonstrate an increase in grateful behavior. The second study showed growth in grateful thinking for as long as five months after the intervention, which shows the positive effects of the intervention. Students in the second condition showed growth in positive mood compared to the control condition.

While the information from the studies on gratitude in children and adolescents is not extensive, it does elicit some important information. First, gratitude is related to life satisfaction, school satisfaction, positive affect, positive affect towards school, helping behavior, subjective well-being, prosocial behavior, and social support (Froh et al., 2010; Froh, Kashdan et al., 2009; Tian, et al., 2015). Further, practicing gratitude has been shown to increase grateful thinking, grateful behavior, satisfaction with school, and overall well-being (Diebel et al., 2016; Froh et
al., 2014; Froh, Kashdan et al., 2009; Froh et al., 2008). The research shows that older students tend to show more significant results than younger students (Park & Peterson, 2006), and when the intervention is longer in length, it gives the students more of an opportunity to learn and practice the gratitude skills (Diebel et al., 2016). Additionally, the component of teaching gratitude to students has more profound results, than just asking students to list blessings or things in their lives for which they are grateful (Froh et al., 2014).

**Gratitude in Adults**

While the previously mentioned research highlights the nascent exploration of gratitude and children, the majority of research on gratitude has been done with the adult population. There is an abundance of research that evidences the positive effects of gratitude in adults. Gratitude has been linked to an increase in positive emotions, life satisfaction, and overall feelings of happiness (Emmons & McCullough, 2003; McCullough et al., 2002; Rash, Matsuba, & Prkachin, 2011; Watkins, Woodward, Stone, & Kolts, 2003). Gratitude has also been correlated with a decrease in negative emotions, such as feelings of anxiety, depression, and envy, as well as a decrease in physical symptoms (e.g., feelings of pain) (Emmons & McCullough, 2003; McCullough et al., 2002; Rash et al., 2011). Given the increase in positive emotions and the decrease in negative, it would be understandable that practicing gratitude leads individuals to spend more time exercising and have improved sleep patterns (Emmons & McCullough, 2003).

Adults who demonstrate more gratitude believe that they have a “full life.” They are able to appreciate simple pleasures and value help from others, which contributes to their overall well-being (Watkins et al., 2003). This focus on the abundance of life leads grateful individuals to focus less on materialistic items or self-indulgent behaviors and focus more on the quality and
meaning of their life (Froh, Emmons, Card, Bono, & Wilson, 2011; McCullough et al., 2002; Wood, Joseph, & Maltby, 2009).

Perhaps the most researched area of gratitude in adults is in the area of prosocial behavior. McCullough et al. (2002) found that individuals who express more gratitude perceive themselves as having higher prosocial characteristics. Further, others also perceive them as having high prosocial characteristics, including empathy and providing emotional support to those in need. This finding was further demonstrated in a study employing daily self-guided gratitude exercises. In this study, participants in the gratitude condition reported helping someone in need or offering emotional support more often than those who were not employing daily gratitude exercises (Emmons & McCullough, 2003). Additional experimental research has solidified the fact that individuals who practice gratitude further promote their prosocial behavior, not only between recipient and benefactor, but also between recipient and a broader group of beneficiaries (Bartlett & DeStano, 2006; Grant & Gino, 2010; Tsang, 2006). Gratitude not only reinforces pre-established relationships, it also fuels relationship formation by initiating a relationship building cycle (Algoe, Haidt, & Gable, 2008).

Gratitude research with the adult population has demonstrated the positive effect that gratitude has on individuals. Ultimately, people who are high in gratitude or who employ gratitude practices demonstrate more positive emotions. This idea falls in line with Barbara Frederickson’s (2001) Broaden and Build Theory, which highlights the idea that gratitude has the capability to broaden our thought processes and thus our actions, while also building upon our ability to provide emotional responses to a variety of situations (Diebel et. al., 2016). According to this theory, gratitude has the ability to increase an individual’s positive resources and promote resilience, as positive emotions can counteract the feelings following negative experiences (Froh,
et al., 2010). Further, researchers show that positive emotions and a larger emotional repertoire not only make individuals feel good in the moment, but also make it more likely that individuals will feel good in the future (Fredrickson et al., 2003). Along the same lines, the act of practicing gratitude helps to build positive resources and can assist in reversing negative thoughts when they arise. This coping mechanism is important in building a repertoire of positive thoughts to enable an individual to demonstrate resilience in times of distress (Watkins, 2004).

**Gender as a Moderating Variable**

Gratitude is a complex emotion that occurs after receiving a positive outcome either in the form of a gift from another person or a fulfilling experience. The ways in which individuals experience gratitude can vary based on gender. Gratitude may cause some to feel indebted to others following the receipt of a gift (Tsang, 2006). In some cases, men may view the expression of gratitude as a weakness and a potential threat to their masculinity, and therefore they may avoid the emotion of gratitude in order to protect their ego from potential social consequences (Levant & Kopecky, 1995). Women, on the other hand, are expected to express more emotions, including gratitude, as it is beneficial to the formation and maintenance of positive social relationships (Schwartz & Rubel, 2005). Kashdan, Mishra, Breen, and Froh (2009) closely examined gender differences in the expression of gratitude. They found that women tend to express more gratitude and also believe the expression of gratitude to be more beneficial to them, as it aids in feelings of connection with others. This was also found in a study of children, where females showed more gratitude not only for friends and family, but also for community workers and people other than those of immediate connection (Gordon, Musher-Eizenman, Holub, Dalrymple, 2004). Wang et al. (2015) furthered the research on females when they found that females have hopes of well-being towards larger entities such as families and the community,
which shows the emphasis that females place on social connections. Conversely, men feel the expression of gratitude to be challenging and provoke anxiety. Therefore, men prefer to avoid the emotion, even at the cost of strengthening social relationships (Kashdan et al., 2009).

A few studies have examined the differences in gratitude between males and females. Froh, Yurkewicz et al. (2009) found that while females experience more gratitude in their daily lives, males show greater benefit when they are the recipients of a gift and when they allow themselves to feel grateful. Researchers who have studied gratitude interventions also state that while females demonstrate slight benefits from these interventions, males demonstrate significantly more benefits from gratitude interventions, including increases in gratitude, higher school satisfaction, and heightened well-being (Diebel et al., 2016; Tian et al., 2015).

**Resilience**

Over the course of a child’s life, the ability to cope with adversity is a crucial process for developing a positive and successful adult life (Pearce, 2011). The key to coping with adverse and stressful times is resilience. The development of resilience occurs throughout childhood, but it can be strengthened within the contexts of education. Resilient students are those who can persevere in the face of challenging academic or social situations and are able to learn from those challenges to broaden their repertoire of competencies.

**The History of Resilience**

Resilience first originated in the field of medicine, where the ability and speed with which one recovered from medical or physical setbacks was analyzed (Zolkoski & Bullock, 2012). Following World War II, the concept of resilience emerged in the behavioral science field as a result of the children who were left orphaned, starving, and suffering from severe trauma. These perilous conditions were the main areas of focus, at the time, as researchers
demonstrated the link between these conditions and psychopathology (Masten, 2014). More recently, new wave of resilience research has emerged, which highlights the importance of prevention and intervention in helping individuals overcome adversity (Zolkoski & Bullock, 2012).

**Defining Resilience**

Resilience is the ability to face and cope with stressful or adverse situations in one’s life. Ultimately, resilience is an individual’s ability to successfully recover from an adverse situation and transform the negative emotions and associations from the situation into positive ones (Kumar & Dixit, 2014). Like gratitude, resilience is not an innate characteristic. Rather, it is developed as individuals come in contact with and navigate through stressful and disadvantageous situations. Resilience can be both strengthened and weakened by the factors in an individual’s environment (Hinduja & Patchin, 2017). Additionally, it can be evaluated based on the presence of protective factors, as well as risk factors present in an individual’s life.

Research in resilience often focuses on individuals who are already in distress, and how their level of resilience aids in problem or stress reduction. In contrast, resiliency theory is a strengths-based approach that focuses on building upon the positive factors already in place in a child’s life (Zimmerman, 2013). Fergus and Zimmerman (2005) identified *promotive factors*, as positive variables in a child’s life, which include individual, social, and contextual variables. They further classified two types of promotive factors: *assets* and *resources*. Assets are individual characteristics, such as self-esteem, optimism, and gratitude. Resources refer to external characteristics, such as a child’s support system, extracurricular activities, school, and other organizations that provide youth with a sense of purpose and a place to learn. The presence of these two factors enables healthy development in children and promotes a higher level of
resilience. Further, the absence of many promotive factors can hinder the development of resilience in children.

**The Development of Resilience**

The development of resilience begins in youth. Every individual is hardwired with the inherent ability to be resilient. The experiences that build resilience are not always significant; rather, resilience can be formed by the simple, day-to-day challenges youth face. However, if the inherent ability within an individual is compromised in any way (i.e., environmental disadvantages, disaster, victimization), than the ability to build resilience is compromised (Masten, 2001). The connection between youth and their environment is critical to building or compromising resilience and is an important component in positive youth development (Zolkoski & Bullock, 2012).

One of the biggest public health problems is child maltreatment and its effect on biological, mental, and emotional development. Child maltreatment encompasses any type of harm or neglect to individuals under the age of 18. The types of child maltreatment include physical abuse, sexual abuse, emotional abuse, and neglect. Children who are victims of maltreatment are at a higher risk for physical and mental health-related problems, as abuse can alter brain development in youth, as well as compromise the nervous and immune systems (Centers for Disease Control and Prevention, 2014). Child Protective Services released data from state agencies identifying that in 2010, 695,000 children were victims of abuse (Department of Health and Human Services, 2010). Another study found that one in five individuals is subject to maltreatment during childhood (Finkelhor, Turner, Ormond, & Hamby, 2009).

While children encounter many positive and negative experiences throughout their lives, negative experiences can have lifelong consequences such as risk-taking health behaviors,
chronic mental and physical health conditions, and decreased life expectancy. Adverse Childhood Experiences (ACEs) have been labeled by the Center for Disease Control as disruptive, harmful, and negative experiences that affect the mental, physical, and emotional well-being of children. As a child’s number of ACEs increases, so does their risk for lifelong consequences, such as mental and physical health related concerns (e.g., obesity, diabetes, depression, suicidal ideations, sexually transmitted diseases, and heart disease), behavioral consequences (e.g., tobacco use, alcoholism, drug use, violent relationships, and sexual promiscuity), and life potential concerns (e.g., low academic achievement, school drop out, and inability to secure and maintain a job) (Centers for Disease Control and Prevention, 2014).

An extensive ACE study completed between 1995 and 1997 gathered information from over 9,000 respondents who identified the number of ACEs they experienced during their childhood and compared those with measures of 10 adult risk behaviors, health conditions, and diseases. Results of the study indicate that the more ACEs adults identify, the higher risk they are for health concerns. For example, of the adults who identified zero ACEs, 56% had zero of the 10 adult health risk factors, whereas of the adults who identified four or more ACEs, only 14% had zero health related risks. Individuals who identified four or more ACEs had an increased risk for alcoholism, drug abuse, depression, suicidal attempts, tobacco use, >50 sexual partners, sexually transmitted diseases, and obesity (Felitti et al., 1998). Results from this report are similar to a more recent study that examined ACE exposures correlation with chronic disease and disability. A study of over 50,000 adults concluded that exposure to one or more ACEs put adults at a far higher risk for poor general health, poor mental health, and disability. In addition, those with four to nine ACEs are significantly less likely to graduate high school and will earn a substantially lower income than those with three or less ACEs (Gilbert et al., 2015).
While the physical and mental health consequences of ACEs are apparent in adulthood, research has also found these consequences to emerge as early as late childhood. Children who experience ACEs are at a heightened risk for aggressive behavior in early adolescence, with mental health problems emerging in early adulthood (Kaplow & Windom, 2007; Kotch et al., 2008). Research on abuse has found that children who experience ACEs during more than one developmental period in their lives (i.e., “early childhood:” ages birth through six, and “middle childhood:” ages seven through 12) have more profound physical and mental health consequences than those children who experience ACEs during just one developmental period. Additionally, these consequences emerge sooner and with greater intensity. Researchers examined health consequences in early adolescence with children who had been exposed to ACEs during early and middle childhood. Results show that children who experience five or more ACEs during childhood have a higher risk of poor health and somatic complaints (Flaherty et al., 2009).

The research on ACEs reveals the shocking amount of children who are exposed to maltreatment and abuse in their early lives. These experiences can manifest in the physical, mental, and emotional health of children early on, and can take the form of harmful behaviors (e.g., tobacco use, alcohol and drug use, and promiscuous sexual behavior) later in life, which are used to mask the pain from childhood trauma (Felitti, 2009). This research highlights the opportunity to provide early intervention and promotion of strengths, resilience, and positive emotions, in order to build a repertoire of skills that children can utilize in times of distress.

Researchers have identified five characteristics of resilient children. The first of these characteristics is social competence, which is the ability to form positive, successful relationships with peers and adults, as well as demonstrate the ability to be kind, empathetic, flexible, and
effectively communicate with others. The second characteristic is problem-solving skills. This is a child’s ability to think outside of the box and come up with solutions to various problems they encounter. Third is critical consciousness, which is a child’s ability understand harm and to find ways in overcoming it. The fourth characteristic is autonomy, which is a child’s understanding that they are an independent person and can act independently of their peers. The final characteristic is a sense of purpose. This characteristic involves a child’s ability to set goals, use education as a resource to reach those goals, and demonstrate optimistic thinking about their future (Zolkoski & Bullock, 2012). The characteristics of resilience work to protect children and also to repair them from previous disadvantages (Hinduha & Patchin, 2017). The framework of resiliency theory focuses on building upon the strengths of a child, rather than highlighting the disadvantages present in their life. The notion of nurturing strengths can set children up for a healthy and successful transition into adulthood (Ahuja, 2018).

**Resilience in Children and Adolescents**

While research in psychological resilience often focuses on individuals who are already in distress, resilience is not limited to children who have suffered enormous distress; rather, it is involved in the daily challenges that arise in the lives of every child. “No child is immune from pressure in our current, fast-paced, stress-filled environment, an environment we have created to prepare children to become functional adults” (Goldstein & Brooks, 2005, p. 3). Just like adults, the way children classify stressful situation differs immensely. Family arguments, peer pressures, and difficulty with schoolwork will all present different levels of stress for each child (Archdall & Kilderry, 2016).

Children and adolescents face a multitude of stressors within the school environment. Overwhelming academic and social pressures can make students feel compelled to be “perfect.”
Bullying and cyberbullying can make navigating social relationships detrimental to students. Within education and learning, resilience is a student’s ability to persevere even when presented with challenges and setbacks in and out of the classroom. For a resilient student, these challenges promote new opportunities to learn and grow and ultimately set and accomplish long-term goals (Wilson, 2016). Resilient behavior in learning fosters a more positive attitude towards education. Also, the ability to cope with adversity is a crucial process for developing a positive and successful adult life (Pearce, 2011).

A central issue facing education right now is the concern of bullying and cyberbullying. According to Centers for Disease Control and Prevention’s 2017 Youth Risk Behavior Surveillance Summaries, 42.8% of middle school students reported being bullied on school property within the past year, and 23% of middle school students reported being cyberbullied on Facebook, Instagram, texting, or other forms of social media in the past year (Kann et al., 2017). Researchers show that students who report being bullied or cyberbullied are more likely to have negative emotions (e.g., sadness, fear, anger, frustration), negative relationships with peers and family, delinquency, violent behaviors, low self-esteem, and poor academic achievement (Hinduja & Patchin, 2017). A research study examining the correlation of bullying victimization with resilience found that students who reported higher levels of resilience also reported lower levels of both bulling and cyberbullying. The researchers stated that resilience acts as a buffer, protecting students from many of the harmful effects of bullying. Many students will face bullying at some time throughout their life. However, students who have high resilience can thwart many of the negative consequences that come with victimization (Hinduja & Patchin, 2017).
Another issue surrounding education and students’ social and emotional well-being is the idea of perfectionism. Researchers indicate that children and adolescents who strive for high levels of perfectionism in the school environment have more mental health issues are more likely to develop anxiety, depression, and obsessive tendencies. Perfectionist tendencies can be fueled by the high demands in education and by peer and media pressures. Schools can work to counteract the feelings of perfectionism and build resilience by employing positive psychological curriculum focusing on positive self-image, positive relationships, and highlighting student strengths. It is also important to teach students that failures are pathways to future success. This growth mindset removes the blame that students with perfectionist tendencies often use and replaces it with the notion that learning can be challenging, but perseverance in difficult times allows growth to occur (Flett & Hewitt, 2014). Brownlee et al. (2013) found that a strengths-based approach to enhancing resilience is significantly beneficial to children’s mental health. Emerging themes in the strengths-based literature include, understanding personal strengths, coping skills, social skills, and prosocial behavior. The idea of a strengths-based approach requires a shift in mindset from viewing children as lacking skills, to viewing the strengths they already possess and using them to build a larger repertoire of positive skills.

Overall, researchers have found that highly resilient children and adolescents have a more productive transition into adulthood; demonstrate better social competence, problem solving skills, self-worth, and are better able to set goals for the future (Ahuja, 2018). According to Kumar and Dixit (2014), the top five strength-based characteristics associated with resilient people are gratitude, optimism, zest and energy, curiosity, and the ability to love and be loved. Similarly, research on adults shows that positive emotions such as gratitude, altruism, and optimism have the ability to build resilience in an individual. Additional research studies show
that resilient individuals have more supportive relationships, better social skills, higher life satisfaction, optimism, and a sense of peace. Further, resilient adults have less negative emotions and are able to find positive meaning within adversities. These factors are important in promoting individual resilience and are protective factors in the face of adversity (Ahuja, 2018; Fredrickson et al., 2003; Ong, Bergeman, Bisconti, & Wallace, 2006).

Using Gratitude to Build Resilience

The idea that gratitude can build resilience is a relatively new concept in the field of psychology. To date, only a few studies have look at the specific influence of gratitude and human resilience. The first study looked at the impact of gratitude practices in building college students’ resilience in learning. Students elected to take part in a gratitude practice as part of a college course. The intervention group received text messages twice one week, and once the following week with a “gratitude nudge,” reminding them to have a grateful attitude in class, reflect on those who are helping them learn, or reflect upon their week and remember three learning-specific blessings. The control group did not receive reminder text messages. Results from the study show that when students are grateful about their learning experience, they report a heightened ability to focus in class, a better ability to persevere on a challenging academic task, lower levels of stress, and a more positive and calm attitude towards education and learning (Wilson, 2016).

Most recently, Ahuja (2018) explored the relationship between gratitude and resilience and whether gratitude contributed to building resilience in young adults. Results of the study revealed that gratitude significantly predicted resilience. This finding supports the Broaden-and-Build Theory that states that positive emotions can act as a buffer in stressful situations (Fredrickson, 1998, 2001). Further, Tugade and Fredrickson (2004) found that highly resilient
individuals experience positive emotions even during disadvantageous or stressful times. While they still feel the negative emotions associated with a stressful situation they are able to experience positive emotions, as well. Therefore, the assumption can be made that positive emotions assist in the coping process during negative times in an individual’s life.

Conclusion

Gratitude is the tool that can broaden an individual’s mindset in a stressful situation. Furthermore, gratitude builds individual resources, such as positive emotions, positive relationships, and feelings of happiness. These protective factors allow individuals to recover from setbacks quicker, maintain a positive mindset, and turn negative circumstances into positive ones (Fredrickson, 2001, 2004). Given the research on the effects of gratitude in promoting youth and adolescent well-being, satisfaction with life, positive emotions, and furthering feelings of gratitude, it is important to examine if gratitude is linked to resilience, as well. Resilience is an important quality for children and adolescents in order to mature into successful adults who have the ability to face setbacks and stressful situations with the appropriate skills and attitude (Ahuja, 2018).

Rationale for Current Study

The purpose of this study is to examine the effectiveness of the LFTGP primary prevention program on increasing students’ proneness to expressing gratitude at the elementary level. The rationale for this study is that gratitude has been shown to have numerous benefits on children and adolescents and employing a primary prevention program related to gratitude will benefit the entire school population. Although other gratitude interventions have been implemented at elementary and secondary levels, the effectiveness of the LFTGP has not been studied, nor has primary prevention curriculum focused on gratitude been evaluated. Further,
this study will also explore the relationship between gratitude and resilience in elementary school students. This study would add to the research on gratitude in children and whether or not gratitude can be used to nurture youth resilience. Finally, this study would provide researchers and educators information regarding the application of a gratitude curriculum for elementary school students.
CHAPTER THREE

METHODS

The purpose of this study was to examine the effectiveness of the LFTGP as a primary prevention program in increasing students’ proneness to express gratitude. Additionally, this study was also done to examine the relationship between gratitude and resilience in elementary school students. Data for this convenience study was collected from two elementary schools, one located in the Pacific Northwest and the other located in the Midwest. Both schools elected to use the LFTGP as a primary social and emotional prevention program in their schools and had also independently elected to complete pre- and post-assessment measures. The independent variable in this study was the implementation of the LFTGP. The dependent variable of this study was the measure of gratitude expression, including raw scores on the Gratitude Questionnaire – Sixth Edition (GQ-6; McCullough et al., 2002). This research study also sought to investigate the hypothesis that gratitude predicted resilience, using raw scores from the Child and Youth Resilience Measure (CYRM; Ungar & Liebenberg, 2011).

Study Setting

The population of interest was elementary school students. The participants in the archival dataset were recruited from 2 elementary schools located within two separate districts. One school was located in the Pacific Northwest and the other school was located in the Midwest. The specific schools were chosen after the school leadership expressed interest in understanding and promoting their students’ social and emotional well-being and agreed to take part in the larger research project. The sample of students was thus considered to be a convenience sample.
**Rationale for Research Approach**

The design of this study was an experimental convenience analysis to determine the effectiveness of the LFTGP in increasing expressions of gratitude in elementary school students. Additionally, this study also looked at the correlation of gratitude and resilience in elementary school students. Archival data was used from the LFTGP.

**Research Design**

This convenience study was quantitative and used archival data previously collected by the founders of the LFTGP. It included the following procedures: selection of schools who expressed interest in further exploring their students’ mental health and resilience. Students (between the ages of 7-11) from the schools who elected to take part in the larger research study, were asked to complete two pre-test self-report measures (e.g., GQ-6 and CYRM); and one post-test self-report measure (e.g., GQ-6). The dependent variable was gratitude proneness raw scores on the GQ-6 and the resilience raw score on the CYRM. The independent variable was the implementation of the primary prevention LFTGP. The program was targeted specifically towards the elementary school population and is designed as a universal Tier 1 curriculum to promote positive emotions and resilience. The data collected was analyzed using the Statistical Package for the Social Sciences (SPSS; version 25). It was expected that the elementary school students participating in the LFTGP would demonstrate a significant increase in their proneness to express gratitude and that their gratitude scores would correlate with their level of resilience.

**Data Set**

Two elementary schools’ data were used in this study. The first school (School A) located in the Pacific Northwest, consisted of 331 students in grades Kindergarten through sixth. The ethnic breakdown of School A’s student population was as follows: 52.3% Caucasian, Non-
Hispanic; 10.1% Hispanic; 4.5% Asian; 1.8% African American; 0.3% Native Hawaiian/Other Pacific Islander; and 11.6% two or more races. 11.8% of the school population identified as low income. The second school (School B) located in the Midwest, consisted of 512 students in Kindergarten through fifth grade. The ethnic breakdown of School B’s student population was as follows: 90.7% Caucasian, Non-Hispanic; 4.2% Hispanic; 0.4% Asian; 0.2% African American; 0.1% American Indian/Alaskan Native; 0.1% Native Hawaiian/Other; and 4.3% two or more races. 60.2% of students were characterized as economically disadvantaged.

**Sex**

The sex distribution of the sample is presented in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Total Sample Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>118 (48.2)</td>
</tr>
<tr>
<td>Female</td>
<td>127 (51.8)</td>
</tr>
<tr>
<td>Total</td>
<td>245 (100.0)</td>
</tr>
</tbody>
</table>

**Age**

The age of participants in this study ranged from 7 to 11. The mean age for students was 9 years old. Frequency counts for participants by age is presented in Table 2.
Table 2

*Age Distribution of the Sample*

<table>
<thead>
<tr>
<th>Age</th>
<th>Total Sample Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>25 (10.2)</td>
</tr>
<tr>
<td>8</td>
<td>59 (24.1)</td>
</tr>
<tr>
<td>9</td>
<td>70 (28.5)</td>
</tr>
<tr>
<td>10</td>
<td>59 (24.1)</td>
</tr>
<tr>
<td>11</td>
<td>32 (13.1)</td>
</tr>
<tr>
<td>Total</td>
<td>245 (100.0)</td>
</tr>
</tbody>
</table>

**Measures**

The measures used in the study were the GQ-6 and the CYRM. The raw scores on these measures were the dependent variables and the data that was utilized to determine the level of gratitude in elementary school students, as well as the correlation between gratitude and resilience.

**Gratitude Questionnaire – Sixth Edition (GQ-6)**

The Gratitude Questionnaire – 6 (GQ-6; McCullough et al., 2002) is a six-item measure of gratitude that uses a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Two items in the measure are reversed scored. Higher scores are indicative higher levels of gratitude. The GQ-6 measures the four areas of a grateful disposition (i.e., intensity, frequency, density, and span).

In its original development, the GQ-6 was intended for use with adults. However, recent research shows its effectiveness for use with children and adolescents. Froh, Fan, et al. (2011), assessed the use of the GQ-6 on adolescents in sixth through twelfth grade. They found that the
GQ-6 demonstrated acceptable construct validity and psychometric properties. Cronbach’s alphas were all acceptable and ranged from .76 (ages 12-13) to .85 (age 14). The GQ-6 was positively correlated ($r = .42$ to $.61$) with the Gratitude Adjective Checklist, and the Gratitude, Resentment, and Appreciation Test – Short Form ($r = .35$), which are other measures of gratitude used with youth and adolescent populations (McCullough et al., 2002; Froh, Fan et al., 2011). Confirmatory factor analysis of the GQ-6 produced a one-factor structure for all age groups. Five of the six items on the GQ-6 had appropriate factor loadings, except for the sixth item, which had a factor loading score of 0.21. Youth have reported that this item (“Long amounts of time can go by before I feel grateful to someone or something”) can be difficult to comprehend. Researchers indicated that this item be removed or interpreted with caution (Froh, Fan et al., 2011).

**Child and Youth Resilience Measure (CYRM)**

The Child and Youth Resilience Measure (CYRM; Ungar & Liebenberg, 2011) is a measure of resilience. The Child version is intended for youth ages five to eight and is comprised of 26 items each with a three-point response scale (i.e., No, Sometimes, and Yes). The Youth version is intended for youth ages nine through 23, and is comprised of 28 items, each with a five-point response scale (i.e., Not at all, A little, Somewhat, Quite a bit, and A lot). The total score is a sum of the responses to all 26 or 28 questions. The CYRM assess modifiable factors (e.g., personal resources) in an individual’s life that contribute to resilience.

Initially developed in 2008, the CYRM was a 58-item measure designed to assess resilience in vulnerable and diverse youth populations. At that time, it used both qualitative and quantitative methods to evaluate resilience in children and adolescents. Initial analyses demonstrated a four-dimensional structure of resilience including, individual, relational,
community, and cultural dimensions. Following its initial analysis, the CYRM was reduced to 28 items. Development of the CYRM-28 occurred in 11 countries, making it a valuable tool for diverse populations (Sanders, Munford, Thimasarn-Anwar, & Liebenberg, 2017). Results from multiple studies suggest that the CYRM-28 has three subscales of resilience. Subscale one is the individual scale and reflects one’s personal and social skills, as well as their peer support. Subscale two represents caregiving and is comprised of both physical and psychological caregiving. Subscale three involves the contextual domain and is comprised of spirituality, culture, and education. Research on the CYRM highlights its potential use in both clinical practice and research, as it assesses the existing promotive factors available to youth and has the ability to promote change through appropriate interventions (Liebenberg, Ungar, & Van de Vijver, 2012).

According to multiple systematic reviews, the CYRM demonstrates strong internal reliability, adequate test-retest reliability, and does not demonstrate floor or ceiling effects (Liebenberg et al., 2012; Sanders et al., 2017). Additionally, the CYRM has good construct validity, and the studies completed with vulnerable youth from various nations demonstrate the CYRM’s cultural sensitivity (Daigneault, Dion, Hébert, McDuff, Collin-Vézina, 2013; Sanders et al., 2017; Ungar & Liebenberg, 2011).

**Intervention**

The focus of this study was on the primary prevention program, the LFTGP, which is a universal social and emotional learning curriculum for students in Kindergarten through sixth grade. The program was run as a two-week gratitude campaign with the intention of building positive emotions and compassionate leadership in students. Individual schools purchased the program and received a “Campaign Kit,” which included: Gratitude Spots (large floor decals that
say, “You’re on the spot! What makes you grateful?”), Kindness Cards (small cards that can be shared between students and staff when an act of kindness is observed), an instructional guide for teachers or advisors, and access to the online training platform. The online training platform provided staff with all necessary protocols and tools to independently run the LFTGP in their school. The intervention began with a “Kickoff Assembly” for the entire student body, where students watched an informational video that defined gratitude, taught students how to display gratitude, and helped them to understand how gratitude can benefit themselves, their peers, and their community (Look for the Good Project, 2017).

Each day for the two-week campaign period, students took a few minutes out of their day to write down something they were grateful for on a Post-it Note. Children were instructed to write something different each day. Those Post-it Notes were added to a community wall decided upon by the school (i.e., cafeteria, gymnasium, or main foyer) where all students and staff were able to view it. Each day, a morning announcement focused on furthering the instruction of gratitude was read to the student body via the morning announcements. Kindness Cards circulated throughout the two weeks between students and staff, and Kindness Spots were used throughout the building to prompt spontaneous moments of gratitude. At the end of the two-week campaign, students were instructed to write a letter to a person who has made their life better and read the letter to the person they chose. Students then had the opportunity to reflect with their classes on how the process of reading their letter went (Look for the Good Project, 2017). While the LFTGP was set up as a two-week prevention program, many of the program features remained in the schools past the two-week timeframe (e.g., Gratitude Spots, Kindness Cards, and Gratitude Wall) to further promote gratitude in students.
**Procedures**

As this study is archival in nature, individual districts opted to use the LFTGP in their schools and also elected to participate in the pre- and post-tests as offered by the founder of the LFTGP. Data from the pre- and post-tests were gathered, as part of this archival study.

**Data Collection**

The LFTGP founder collected pre- and post-test data. One to five days prior to beginning the LFTGP, schools were instructed to complete the pre-test form with students. One to three days following the completion of the LFTGP, schools were instructed to complete the post-test form with students. The data was collected via Google Forms. The principal investigator of this study was given access to the Google Forms drive by the LFTGP founder.

Pre- and post-test data were printed and both the GQ-6 and CYRM were hand-scored by the principal investigator of this study. All identifying information has been removed from any hard copies of completed self-report measures, and these documents have been stored in the principal investigator’s locked desk drawer. Students were assigned code numbers for use during data collection, in order to maintain participant confidentiality. Data were organized by code numbers and stored in electronic databases only accessible to the principal investigator of this study. Participants’ names are not attached to code numbers within the electronic file. A master copy of participants’ names and their corresponding code numbers (necessary to match data records from pre-test to post-test) is stored within a locked drawer located in the desk of the office of the principal investigator of this study. Only the principal investigator of this study has access to these records. Finally, participants’ individual responses to the pre- and post-tests were not shared with school staff. Data from the GQ-6 and the CYRM were coded and analyzed using the SPSS program (version 25).
Protection of Human Rights and Study Benefits

Approval by the IUP Institutional Review Board was obtained prior to the implementation of this project. This investigation was also approved by each of the school districts who elected to participate in the additional research component of the LFTGP (Appendix A). Additionally, the principal investigator participated in the Human Subjects Research Coursework administered by the Collaborative Institutional Training Initiative (Appendix B). This study has numerous anticipated benefits. Although other gratitude interventions have been implemented at elementary and secondary levels, the effectiveness of the LFTGP has not yet been studied, nor has a primary prevention curriculum focused on gratitude been evaluated. Further, this study will explore the relationship between gratitude and resilience in elementary school students. This study will also add to the research on gratitude in children and how gratitude can be used to build youth resilience. Finally, this study will provide researchers and educators with information regarding the application of a gratitude curriculum for elementary school students.
CHAPTER FOUR

RESULTS

The purpose of this study is to examine the effectiveness of the LFTGP in increasing proneness of expressing gratitude in elementary school students. Additionally, this study looks at the correlation between gratitude and resilience among students. This chapter explains the results of statistical data analyses used to answer the hypotheses presented at the beginning of this study. An overview of the participants, preliminary analyses, descriptive statistics of the sample, specific statistical analyses, and outcomes relating to the posed research questions, will be presented in this chapter.

Participants

Results are based upon data gathered from two individual schools; one located in the Pacific Northwest and the other located in the Midwest. Data indicated that 372 students between both schools completed the pre-test. Following the intervention, 351 students between both schools completed the post-test. After eliminating those students who had only completed either a pre-test or a post-test, the final population size was 245 students from the two schools. 48.2% of the students were male, while 51.8% of the students were female. Though students between seven and 14 were able to complete the pre- and post-test measures, the students’ ages in this study ranged between seven and 11 years old.

Statistical Analyses

Statistical analysis of the data was completed in order to answer the research questions of this study. Appropriate statistical analysis is critical in making overall assumptions about populations as they relate to this study. Data collection and examination is a complex process involving multiple steps. The preliminary step of data analysis is to determine if the data is
accurate and if there are any exceptions to the set (e.g., outliers, duplicates, errors) (de Smith, 2015). At this point, the basic characteristics of the sample should be explained, and basic descriptive statistics should be obtained to assess any variable violation (Pallant, 2011).

The second step of investigation involves analysis of the inferential statistics. Once the descriptive statistics have been explained, the appropriate statistical techniques must be chosen and applied to the data set, in order to answer each of the research questions. Two ways to analyze the statistics are to compare groups (i.e., parametric and nonparametric statistics) or to explore the relationship among variables (i.e., correlation) (Pallant, 2011). This study is a comparison of one group at two points in time, as well as an examination of the relationship between two variables. Therefore, both types of statistical analysis will be used to answer the research questions.

Parametric and nonparametric statistics analyze the differences between groups or conditions. Parametric statistics make broad assumptions about a population based on the given sample. Nonparametric statistics are generally used for smaller sample sizes and lack the strict assumptions of parametric statistics (Pallant, 2011). Researchers should be aware of the assumptions when using parametric and nonparametric statistics. The assumptions include level of measurement, random sampling, independence of observations, normal distribution, and homogeneity of variance. These assumptions are evaluated during the design of the study, as well as through the analysis of descriptive and inferential statistics. The level of measurement is conceived at the start of the research design and delineates how variables will be measured. Random sampling, though an ideal in statistical analysis, was not possible with this study as it was a convenience sample. The following three assumptions are examined during or following the analysis of the data. Independence of observations assumes that other individuals or
variables do not influence the data. Normality of the distribution assumes that the sample being used in the study is normally distributed. Finally, homogeneity of variance assumes that the variability between groups in the sample is similar (de Smith, 2015; Pallant, 2011).

In correlational studies, variables are not directly manipulated; rather the relationship between them is described. A standard correlation analysis identifies the strength of a relationship between two variables. When analyzing correlational data, the direction of the relationship, as well as the strength and significance of the relationship is assessed. A multiple regression analysis describes the relationship of a dependent variable against multiple independent variables. It identifies if the model is significantly different from chance and whether the variance of the predictors can be explained by the variation in the dependent variable. There are numerous assumptions about the data of multiple regression analysis. The first is sample size. In order to have appropriate generalizability, a significant sample size must be obtained. Second is multicollinearity and singularity, or when independent variables are significantly correlated or a combination of multiple independent variables. Multiple regression analysis does not support multicollinearity or singularity. Multiple regression is also sensitive to outliers within the data set. Finally, multiple regression is sensitive to the nature of the distribution of scores. Scores should be normally distributed, linear, and have similar variances (Pallant, 2011). The statistical processes and analyses are presented in the following section.

**Psychometric Properties of the GQ-6**

Previous researchers have indicated that the sixth item on the GQ-6 does not translate well with younger children and demonstrates a poor fit with the one-factor structure (Froh, Fan et al., 2011). The reversed language of the test item, along with the abstractness of its wording, makes it more difficult for young children to understand. Therefore, a Principal Components
Analysis (PCA) was conducted to analyze the one-factor solution. In PCA analysis, an item is
determined to load to the factor well, if the rating is greater than 0.4. Principal component
analysis for GQ-6 items is presented in Table 3. The component analysis shows that the sixth
item of the GQ-6 had a loading of 0.078, which is well below the 0.4 cutoff for weakly loaded
items. Therefore, item six was not used in subsequent analysis. Student’s gratitude scores were
calculated using a mean of the first five items on the GQ-6.

Table 3

Principal Component Analysis for GQ-6 Items (N=245)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have so much in life to be thankful for.</td>
<td>.798</td>
</tr>
<tr>
<td>2. If I had to list everything that I felt thankful for, it would be a very long list.</td>
<td>.677</td>
</tr>
<tr>
<td>3. When I look at the world, I don’t see much to be thankful for.</td>
<td>.512</td>
</tr>
<tr>
<td>4. I am thankful to a wide variety of people.</td>
<td>.783</td>
</tr>
<tr>
<td>5. As I get older, I find myself more able to appreciate the people, events, and situations that have been part of my life history.</td>
<td>.738</td>
</tr>
<tr>
<td>6. Long amounts of time can go by before I feel thankful to something or someone.</td>
<td>.078</td>
</tr>
</tbody>
</table>

Preliminary Analyses

The first step of preliminary analyses is to run descriptive statistics to describe and
summarize the characteristics of the sample. This process begins with an informal visual
analysis of the data in order to guarantee proper coding and entry, as well as evaluation of the
basic descriptive analyses to understand the characteristics of the data and make decisions for
inferential statistical analyses will be used for the sample. The data collected for this study were
age and sex of the participants, total raw scores on the five-item version of the GQ-6 pre- and
post-test, as well as mean scores on the CYRM. The descriptive statistics for the sample include size, mean, variance, frequency distribution, normality, and relationship among variables. The final sample included a total of 245 students (118 males and 127 females), ranging in age from 7 to 11 years. A detailed report of student characteristics is located in the Methods section of this report. The mean, or sample mean when referring to a group from a larger population, refers to the average of the values of the data set. The range is likened to the spread of scores, or the difference between the smallest and largest score in a data set. Variance refers to the average squared difference of data points to the mean. Frequency distribution is the frequency of each occurrence displayed in order to understand how often an observation was made. A normal distribution is a model for the observed frequency distribution for many naturally occurring events and is grouped symmetrically around a central value. When data is skewed, scores are often clustered to the right or left of the central value. Kurtosis refers to how peaked the data set is. Finally, when variables show relatedness, they are said to be correlated (de Smith, 2015). Correlations describe the extent to which variables are related.

**Informal Visual Analysis**

A preliminary analysis of data typically occurs as an informal visual analysis. Histograms are used to determine whether there is a normal or skewed distribution of the scores. A visual analysis of GQ-6 pre- and post-test data indicated a negative skew, reflecting a higher frequency of higher scores on both measures. The CYRM scores also reflected a negative skew, indicating a higher frequency of higher scores on that measure, as well.

Boxplots help to illustrate the distribution of data points on each variable. The distribution of scores is represented by a box, wherein fifty percent of data points lie. Two whiskers extend from the perimeter of the box indicating the highest and lowest values of each
variable. An informal visual analysis of box plots can identify outlier data. Outliers are extremely high or low data points that extend 1.5 standard deviations from the perimeter of the box. Extreme data points are those that extend 3 or more standard deviations from the perimeter of the box. Upon inspection of the individual boxplots, there were between five and nine outliers on the lower end of each of the three scales. When outliers are identified, the decision must be made as to how those data points influence the overall data and what should be done with the number of outliers. Given the large sample size of this study, it was determined that the outliers would not have a large effect on the overall data set.

**Descriptive Statistics**

The initial data analyses provided an overall depiction of the data for this study. The mean participant age was 9. Summaries of the gratitude and resilience self-reports are presented in Table 4. Based on this information, there appears to be a minimal difference between the GQ-6 pre-test scores and the GQ-6 post-test scores.

Normality, skewness and kurtosis were analyzed for each variable. Two of the three variables showed normal distribution (skewness and kurtosis values ranging from -1.0 to 1.0 when rounded to the nearest whole number), while one variable (pre-ratings of gratitude) demonstrated a kurtosis value outside of the normal limits. However, for this type of study, variables are appropriate for analysis as long as the absolute value of skew and kurtosis indexes do not exceed 3.0 and 10.0, respectively (Kline, 2005).
Table 4

*GQ-6 Pre-Test, Post-Test, and CYRM Scores*

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>GQ-6 Pre-Test</td>
<td>28.66</td>
<td>5.466</td>
<td>8.0-35.0</td>
<td>-1.375</td>
<td>1.833</td>
<td>245</td>
</tr>
<tr>
<td>GQ-6 Post-Test</td>
<td>28.87</td>
<td>5.478</td>
<td>10.0-35.0</td>
<td>-0.987</td>
<td>0.397</td>
<td>245</td>
</tr>
<tr>
<td>CYRM</td>
<td>4.11</td>
<td>0.525</td>
<td>2.23-5.00</td>
<td>-0.877</td>
<td>0.912</td>
<td>243</td>
</tr>
</tbody>
</table>

With regards to the assumptions study, all of the measures are considered independent; that is, individual’s data points are not influenced by any other variable. Data was collected prior to and following the intervention in order to avoid content influence. Further, students were aware that all information was confidential, in order to maintain anonymity and not influence student responses.

**Inferential Statistical Analyses**

Inferential statistical analysis is used to make inferences and predictions about a population. It was used as a method for testing the hypotheses of this study. The following is a discussion of the inferential statistical analyses used in this study. Initial data analysis was conducted to determine if there was a difference between gratitude means in pre- and post-test scores. A paired samples *t* test was calculated to compare the mean of the GQ-6 pre-test to the mean of the GQ-6 post-test. A summary of *t* test results is presented in Table 5. The mean of the GQ-6 pre-test was 28.657 (*sd* = 4.466), while the mean on the GQ-6 post-test was 28.874 (*sd* = 5.478). No significant difference from pre-test to post-test was found (*t*(244) = -.759, *p* > .05).
Table 5

*Results of t-test for Gratitude Gain*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pre-Test M</th>
<th>SD</th>
<th>Post-Test M</th>
<th>SD</th>
<th>n</th>
<th>95% CI for Mean Difference</th>
<th>p</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28.657</td>
<td>5.466</td>
<td>28.874</td>
<td>5.478</td>
<td>245</td>
<td>-.3450, .7776</td>
<td>.448</td>
<td>-.759</td>
<td>244</td>
</tr>
</tbody>
</table>

*p < .05

A one-way analysis of variance (ANOVA) can be used to compare the means of two groups of participants. For this study, an ANOVA was used to determine the difference in gratitude gain between males and females. A summary of the ANOVA results is presented in Table 6. No significant difference was found \((F(1,243) = .090, p > .05)\). Males and females did not differ significantly in their improvement in expressions of gratitude following the intervention. Males had a mean score difference of .305 \((sd = 4.853)\), while females had a mean score difference of .134 \((sd = 4.079)\). Homogeneity of variance suggests that for comparison purposes, groups are relatively equal and have equal variances in their scores. The Levene Homogeneity of variance test was used to test whether the variance in scores was the same for males and females. The test indicated that the variances between male and female gain in gratitude were significantly different \((p = 0.031)\). Therefore, while the improvement in male and female gratitude gain was similar, males had a wider variation of scores than females. The results of the ANOVA test imply that the null hypothesis would be maintained because of the low significance level, however verification was needed with the Brown-Forsythe test (Robust Test for Equality of Means) \((Brown & Forsythe, 1974)\). The Brown-Forsythe test value \((p = .766)\) confirmed no significance in the difference of the gain of gratitude between males and females.
Table 6

*One-Way Analysis of Variance of Gratitude Gain by Sex*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>1.793</td>
<td>1.793</td>
<td>.090</td>
<td>.765</td>
</tr>
<tr>
<td>Within Groups</td>
<td>243</td>
<td>4851.741</td>
<td>19.966</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>244</td>
<td>4853.535</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To assess the relationship between gratitude and resilience, a Pearson correlation coefficient was calculated. A moderate positive correlation was found ($r (241) = .572, p < .0005$), indicating a significant linear relationship between the two variables. Therefore, as gratitude increases, resilience is also very likely to increase.

Finally, a multiple linear regression was used, which allows for the prediction of one variable from numerous other variables. This type of analysis allows for a more detailed understanding of the interrelationship among variables (Pallant, 2011). A regression analysis yields information in determining whether or not a significant predictive equation exists and what direction the relationship is in (Cronk, 2016). Table 8 represents a summary of the multiple regression analysis. For this study, age, sex, and resilience scores were used as predictors, with gratitude gain as the dependent variable. The regression analysis was not significant ($F(3, 239) = .490, p > .05$) with an $R^2 = 0.06$. None of the variables including student’s age, sex, or resilience total score were significant in predicting gratitude gain. Therefore, the model’s accuracy is not significantly different from chance and the variance of the predictors explained almost none of the variation in the dependent variable.
Table 7

Summary of Multiple Regression Analysis for Variables Predicting Gratitude Gain

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.256</td>
<td>0.243</td>
<td>0.068</td>
<td>1.053</td>
<td>0.293</td>
</tr>
<tr>
<td>Sex</td>
<td>-0.122</td>
<td>0.587</td>
<td>-0.013</td>
<td>-0.191</td>
<td>0.849</td>
</tr>
<tr>
<td>Resilience Score</td>
<td>0.278</td>
<td>0.559</td>
<td>0.033</td>
<td>0.497</td>
<td>0.619</td>
</tr>
</tbody>
</table>

The regression analysis yielded an unexpected result, showing resilience and sex to be significantly correlated. A Pearson correlation was calculated and a positive correlation was found ($r(241) = 0.194, p = 0.002$) between resilience and sex. An independent-samples $t$ test was done to compare the mean scores of resilience between males and females. A significant difference between the two groups was found ($t(241) = 3.069, p = 0.003$). The mean of males was significantly lower ($M = 4.0, sd = 0.585$) than the mean of females ($M = 4.203, sd = 0.444$).

Research Question # 1

The first research question of this study was, “Is there a statistically significant difference in elementary students’ proneness to express gratitude between Gratitude Questionnaire - 6 pre-test scores and Gratitude Questionnaire - 6 post-test scores for students who participated in the LFTGP?” The null hypothesis of this study was that there was no difference in elementary school students’ proneness to express gratitude following the LFTGP intervention. The hypothesis of this study was that elementary students’ who participated in the LFTGP would demonstrate a significant increase in their proneness to express gratitude. The hypothesis was tested and reported for the GQ-6 pre-test dataset compared to the GQ-6 post-test dataset using a paired $t$ test.
Based on initial data checks, there were no violations of the required assumptions for the parametric statistical analysis. The paired samples \( t \) test yielded results that indicated there was no significant difference between the pre- and post-test scores \( t = -.759, p > .05 \). The self-rating scores provided by the participants at the culmination of the intervention were no different than the self-rating scores provided at the start of the intervention. Therefore, the null hypothesis was retained.

**Research Question # 2**

The second research question in this study was, “Is there a statistically significant difference in the overall level of gratitude between males and females as measured by the Gratitude Questionnaire - 6?” The null hypothesis was that there would be no significant difference in overall level of gratitude between males and females. The hypothesis proposed for this study was that elementary school females would report higher levels of gratitude following the intervention; however, elementary school males would show more growth in their levels of gratitude following the intervention. To evaluate this hypothesis, a one-way ANOVA was used.

The one-way ANOVA indicated that there was no difference in gratitude gain between males and females. Males had a mean score difference of .305 \( (sd = 4.853) \), while females had a mean score difference of .134 \( (sd = 4.079) \). However, the ANOVA indicated that the variances between male and female gain were significantly different, thus violating one of the basic assumptions of the ANOVA test. The Levene Homogeneity of variance test indicated \( p < .05 \). Nevertheless, the Brown-Forsythe test value \( (p = .766) \) confirmed no significance in the difference of the gain of gratitude between males and females. Thus, there was no difference in level of gratitude gain based on the variable of sex, and the null hypothesis was retained for this research question, as well.
Research Question # 3

The third research question in this study was, “Using The Child and Youth Resilience Measure, does the presence of gratitude predict resilience in elementary school students?” The null hypothesis was the assumption that gratitude would not predict resilience in elementary school children. The hypothesis of this study was that the presence of gratitude would strongly predict resilience in elementary school students. To evaluate this question, a Pearson’s R correlation and a multiple regression analysis were conducted.

Utilizing the GQ-6 pre-test score and the CYRM total score, a Pearson correlation coefficient was conducted. The parametric assumptions apply and were met with this data set. A moderate positive correlation was found $r = 0.572, p < .0005$ indicating a significant linear relationship between gratitude and resilience. Therefore, it can be assumed that as gratitude increases, resilience will likely increase, as well. The null hypothesis was rejected. However, a multiple regression analysis was completed to assess the relationship between gratitude gain and age, sex, and resilience scores. There was no significance, as none of the independent factors were significant in predicting students’ gratitude gain.
CHAPTER FIVE
DISCUSSION

For years, the primary focus of education has been on the academic instruction of children and adolescents. However, the mental health of youth has become a top priority within the discipline of education, given the dire mental health need and the amount of time children spend in their educational environment. Further, the ability of children and adolescents to cope with adversity and negative situations is a critical issue. Recently, the treatment of mental health in education has shifted from a “reactionary” model of health and well-being to a preventative approach that focuses on building strengths and positive emotions in youth (Roberts et al., 2002; Seligman, 2002; Zolkoski & Bullock, 2012). These interventions are grounded in the framework of positive psychology, which promotes learning and embracing positive emotions and virtuous character strengths to encourage positive mental health (Roberts et al., 2002). Schools must utilize a multi-tiered system of supports to address social-emotional and behavioral needs of students at a universal level, thus generating the biggest impact on the largest number of students (Lewis et al., 2016). Social-emotional universal interventions have gained popularity within education in recent years, as researchers indicate that these types of interventions promote optimistic thinking, gratitude, and resilience in students (Waters, 2014). Researchers emphasize that incorporating gratitude into education can enhance social and emotional learning, build character strengths, and improve school climate (Bono et al., 2015). Additionally, building positive character strengths in students can lead to more resilient behavior in the face of negative situations. For some time, the focus of student well-being has been on risk amelioration. However, schools are unable to alleviate all disadvantageous and stressful situations from the lives of students. Rather, the energy should be focused on a salutogenic approach of positive
mental health and well-being, so students are able to successfully manage their emotions and behaviors during disadvantageous times. By encompassing a “whole child” approach to education, schools develop students who are better able to succeed professionally, socially, and have qualities that make them better able to recover following a setback (Hinduja & Patchin, 2017; Zolkoski & Bullock, 2012). School psychologists are in a unique position to assess the mental health needs of the schools they serve and assist with evaluating and delivering an appropriate intervention to best address the mental health of their students.

The Look for the Good Program is a social-emotional primary prevention program for elementary school students. The focus of the program is on increasing gratitude to reduce violence and increase positive school climate. The LFTGP is a two-week program intended to make students more constructive and creative thinkers and to build upon their personal resources in order to make them more resilient learners. Seeking to add to the literature base of gratitude interventions and the relationship between gratitude and resilience, this study was designed to evaluate the program in elementary school settings, utilizing student self-report ratings to consider the efficacy of the LFTGP, as well as compare student ratings of gratitude and resilience to determine the relationship between these two variables.

As previously mentioned, this study was archival in nature and examined a universal gratitude program, incorporating student self-reports of gratitude proneness both before and after the intervention. This study used a convenience sample of two schools who expressed interest in understanding and promoting their students’ social and emotional well-being and who agreed to take part in the larger research project. An additional feature of this study was the investigation of the relationship between gratitude and resilience. Students completed a self-report measure of
resilience prior to beginning the program. The following section will provide an overview of the research questions, findings, limitations of the study, and future directions for research.

Research Questions, Hypotheses, and Findings

The present study was designed to investigate the effectiveness of a social and emotional primary prevention program for elementary school students in increasing expressions of gratitude. Additionally, the study also examined the relationship between gratitude and resilience. Effectiveness of the program was evaluated based on self-reports from students before and after the two-week intervention. The relationship between gratitude and resilience was assessed based upon student self-reported levels of gratitude compared with student self-reported ratings of resilience. The following discussion will include findings of the intervention data, as well as an overview of the relationship between gratitude and resilience.

Research Question #1

“Is there a statistically significant difference in elementary students’ proneness to express gratitude between Gratitude Questionnaire - 6 pre-test scores and Gratitude Questionnaire - 6 post-test scores for students who participated in the LFTGP?” The hypothesis proposed in this study was that there would be a significant increase in students’ proneness to express gratitude following the LFTGP intervention. The null hypothesis was that there was no significant difference in students’ proneness to express gratitude after the LFTGP.

The results of the study indicated that the LFTGP had no effect on students’ proneness to express gratitude. Students’ ratings of gratitude expression were the same prior to the intervention as they were upon culmination of the program. While this finding goes against some of the literature on gratitude in children and adolescents (Diebel et al., 2016; Froh et al., 2014; Froh, Yurkewicz et al., 2009; Froh et al., 2008), it is similar to that of Froh, Kashdan, and
colleagues (2009) who found that inducing the hyperemotional situation of having youth write a letter of gratitude to someone they had never properly thanked produced no noticeable benefits related to gratitude. Additionally, in the meta-analysis of gratitude interventions in youth, Renshaw and colleagues (2016) identified that gratitude in schools “has it has yet to establish a well-rounded empirical basis that places equal emphasis on experimental designs; spans developmental levels of youth, cuts across settings, clarifies measurement issues, and refines intervention protocols (p.299).”

Though students did not indicate an increase in gratitude following the LFTGP, this may be in part to the idea that youth, who are lower in positive affect and correspondingly, gratitude, benefit more from such interventions (Bono et al., 2015). Children and adolescents who report high levels of positive well-being may have reached an “emotional ceiling,” and therefore are not as receptive to gains in gratitude and well-being (Froh, Kashdan et al., 2009). As the students in this study reported an initial average gratitude score of 28 out of 35, they may have been less sensitive to the gratitude intervention than students who began with a lower threshold.

Although the LFTGP and the pre- and post-test measures were designed for students between the ages of 7 and 14, the age range for the study’s population was between the ages of 7 and 11. While researchers indicate that gratitude developmentally evolves between the ages of 7 and 10, children above the age of 9 are more likely than younger children to understand gratitude as it relates to interpersonal relationships and individual people (Emmons & Shelton, 2002; Froh, Yurkewicz et al., 2009; Gordon et al., 2004). Younger children are more likely to understand gratitude in terms of material items (Gordon et al., 2004). There have been inconsistent findings in gratitude use even between the ages of 10 and 13, which may be due to developmental differences, and the stability of trait gratitude at this age (Froh, Yurkewicz et al., 2009).
Similarly, Owens and Patterson (2013) found it challenging for students between the ages of eight and 11 to identify and draw something they were grateful for, while Park and Peterson (2006) found that gratitude was not related to happiness in children until beyond the age of seven. These findings highlight the struggle in using gratitude interventions with school-age children, as there is still an evident lack of understanding as to when the concept of gratitude can truly be understood, as more than a “politeness norm” (Baumeister & Ilko, 1995; Diebel et al., 2016).

The evidence does not support the hypothesis for this question, and thus, retention of the null hypothesis was warranted. However, further investigation is also necessary, as this is the first real world study of the LFTGP. Though the results indicated no significant differences in pre- and post-test self-report measures, the results obtained may be a reflection of the specific sample whose initial gratitude reports were already quite high. These results do not suggest that the LFTGP does not do what it purports; rather a combination of other factors may have influenced the results. Therefore, further research is necessary to determine if the LFTGP is beneficial to different populations and whether or not it benefits different positive characteristics (i.e., prosocial behavior, negative behaviors, school satisfaction, and life satisfaction).

**Research Question #2**

“Is there a statistically significant difference in the overall level of gratitude between males and females as measured by the Gratitude Questionnaire - 6?” The hypothesis proposed for this study was that elementary school females would report higher levels of gratitude following the intervention; however, elementary school males would show more growth in their levels of gratitude following the intervention. The null hypothesis was that there would be no significant difference in overall levels of gratitude between males and females.
No significant differences were found between males and females in their ratings of gratitude on the GQ-6; thus the null hypothesis was maintained. This finding is similar to that of Poelker and Kuebli (2014) who found no gender differences following their study of children and adolescents, as well. These results contradict much of the research that states that females report experiencing more gratitude, while males report more benefit and growth in gratitude following such interventions (Froh, Yurkewicz et al., 2009; Tian et al., 2015).

As stated above, one reason for the lack of growth in both males and females may be due to pre-saturated feelings of gratitude, in so much as the LFTGP did not significantly benefit either group. As this is the first real world study of the LFTGP, it is recommended that further research look into the difference of sex in gratitude with various populations of children and adolescents.

**Research Question #3**

“Using The Child and Youth Resilience Measure, does the presence of gratitude predict resilience in elementary school students?” The hypothesis of this study was that gratitude would strongly predict resilience in elementary school students. The null hypothesis was the assumption that there would be no relationship between gratitude and resilience.

Results from this study indicated that gratitude significantly predicts resilience. The null hypothesis was rejected. Gratitude and resilience were assessed at the start of the LFTGP with self-report measures for students. These results are consistent with previous studies regarding the relationship between gratitude and resilience. Globally, research states that individuals who demonstrate high levels of gratitude also demonstrate high positive well-being and life satisfaction (Froh, Yurkewicz et al., 2009; McCullough et al., 2002). More specifically, gratitude is a strong predictor of resilience in adults (Ahuja, 2018). This study is the first to
highlight the relationship between gratitude and resilience in children. Not only is there a correlation in adulthood, but gratitude and resilience also appear to be correlated throughout the majority of the lifespan.

Though it was not a specific research question in this study, an unexpected result of the data analysis was the significant correlation between resilience and gender. Previous researchers indicated that females report significantly higher resilience than males. This finding mirrors the study by Ahuja (2018) who found that women demonstrated higher resilience than men. Previous researchers state that women employ social support and collective resources during a difficult time, whereas men utilize coping strategies that are not social in nature (i.e., distraction, action). Since one of the most important components for healthy development of resilience is social skills and social support, women typically appear more resilient than men (Fergus & Zimmerman, 2005). This research study also adds to the burgeoning research in sex differences in resilience with children.

**Limitations**

Limitations in research are the variables that restrict the ability to draw significant conclusions and generalize findings to a larger population. Limitations have to do with the internal and external validity of a study. External validity refers to the generalizability of a study’s results across populations (Drost, 2011). This study used a convenience sample of elementary schools that elected to take part in additional research for the LFTGP. Only two schools elected to participate in the additional research measures for the LFTGP. In analyzing the demographics of the sample population, both schools demonstrated a low socio-economically disadvantaged population, as well as a low ethnically diverse population. Due to the fact that
these schools elected to participate in the additional research, the ability to generalize these results to a larger population may be limited because of selection bias.

Additionally, not all students participated in the pre- and post-test measures, though all students participated in the intervention. Therefore, a number of students were left out of the assessment portion of the intervention, due to various reasons (i.e., computer lab availability, enough class time to fill out measures). As this study was archival in nature, the primary researcher was unable to collect data from students to ensure a higher percentage of students completed the pre- and post-test measures.

An additional limitation has to do with the length of the LFTGP intervention. Researchers have found that positive social and emotional interventions that are longer in length, give students more of an opportunity to learn and practice their gratitude or positive character skills (Diebel et al., 2016). The LFTGP is only a two-week program, and therefore, the ability to incorporate gratitude skills is very limited. Further, there was no assessment of gratitude at a later point in time, rather than immediately following the intervention. Researchers have identified that gratitude grows over time, as opposed to immediately following an intervention (Froh et al., 2008). Therefore, both the length of the intervention and the timing of the assessment of gratitude serve as limitations of this study.

Finally, this study did not have a control group to compare to the sample population of interest. As this study was one of convenience and the entire school population participates in the LFTGP, there was no assessment of a group that did not receive the LFTGP. This limitation impacts the ability to ascertain measured growth on the part of the students.

The remaining limitations of the study refer to internal validity. Internal validity refers to how valid the research project was and whether the intervention or condition had an effect on the
measured variables (Drost, 2011). Threats to internal validity of this study would make it challenging to determine if the LFTGP intervention was valid based solely on the intervention rather than unforeseen variables or lack of intervention fidelity.

One of the biggest limitations of this study is the lack of intervention fidelity. First, as this study was archival in nature, the primary researcher was not able to implement or assist in implementing the intervention within the various schools. Second, each school that elects to use the program runs the LFTGP independently. While there is an instructional guide and online training platform for staff, there is no fidelity check to ensure the program runs as intended. Therefore, lack of student growth could be due to the intervention not being administered according to plan. Lack of fidelity with the intervention can include not having all students present for the opening assembly, not utilizing all components of the LFTGP for each student (i.e., kindness cards, gratitude letter, daily gratitude note, daily gratitude announcements), and not having buy-in from all staff. As the LFTGP is already a brief intervention, students missing components could drastically impact their benefit from the intervention.

An additional threat to internal validity is the use of self-report measures as the primary form of data collection. While the use of self-reports is important in assessing the variable of proneness to express gratitude, self-report measures may be subject to the effects of social desirability, which is an individual’s desire to present oneself in positive way that may not reflect one’s actual ratings. An over-inflation of scores would lead to a lack of perceived growth in gratitude scores over the course of the intervention.

**Implications for Future Research**

Though the results of this study do not indicate that the LFTGP increases students’ proneness to express gratitude, other findings are promising. It is recommended that further
research on primary prevention programs be completed within elementary schools, specifically those that focus on teaching positive emotions and skills. Research highlights the clear impact that positive psychological interventions have in educational settings to build resilience, mindfulness, character strengths, growth mindsets, optimism, and empathy (Waters, 2014). Further, researchers indicate that the teaching of gratitude can compliment SEL programs and benefit the students, as well as the climate of the school (Bono et al., 2015). Since mental health and positive well-being are important components for education, research on other SEL and PBIS curriculum in elementary schools should be done to identify the best possible positive mental health option for students.

Further, as this is the first real world study of the LFTGP, it is recommended that future studies of the program examine student subjective well-being, prosocial behaviors, and/or school satisfaction as other variables that may be positively impacted by the program. While gratitude may not be a trait that is positively impacted by use of the LFTGP, other positive character traits, especially those that are better measured with an elementary population, should be investigated. Additionally, future researchers may want to have multiple sources of ratings for students’ levels of gratitude or positive behavior. While self-report measures are advantageous, it would be beneficial to look at other measures to get the best view of program effectiveness. These could include, teacher ratings, academic information, and numbers of discipline referrals before and following the intervention. It would be extremely beneficial to seek out different populations of students for future research. As one limitation of this study was the narrow sample of the population, future research should examine various student populations to determine if the LFTGP has an impact on students of greater need or students from various locations (i.e., inner city, suburban, and rural communities). Finally, the LFTGP runs as a two-week intervention.
However, researchers indicate that gratitude grows over time, rather than immediately following an intervention (Froh et al., 2008). Therefore, students should be given a chance to integrate the LFTGP components throughout their time at school rather than just during the two-week intervention phase. Future studies should look at data following the LFTGP intervention, as well as in the weeks and months to come to observe if gratitude growth has a linear relationship with time.

Finally, this study adds to the research literature regarding the relationship between gratitude and resilience. Gratitude not only builds coping resources, but it broadens one’s thinking in order to find solutions in times of stress (Ahuja, 2018; Fredrickson, 2001). An additional finding was the significant relationship between resilience and sex. Future researchers should look further into the relationship between gratitude and resilience and how those traits can build upon each other for successful youth development, as well as delve further into the significance in resilience between males and females.

**Implications for the Practice of School Psychology**

This study adds to the literature on social-emotional primary prevention programs at the elementary level. While the LFTGP did not increases in students’ overall expressions of gratitude, it added to the body of work on social-emotional curriculum for this age range with a new intervention. What the literature review and results from this study indicate is the need for mental health to be a top priority in schools. School psychologists are in extraordinary positions to identify their schools needs and prioritize the delivery of mental health services through systematic multi-tiered instruction, in order to benefit the most students.
Summary

The results of this study are mixed. Though researchers have looked into other types of gratitude programs in the schools, this is the first study done with the LFTGP as a primary intervention in elementary schools. Within the contexts of this study, the LFTGP did not show growth in students’ proneness of expressing gratitude following the intervention. Additionally, there was no significant difference in gratitude expressions between males and females. Finally, age and sex were not appropriate predictors of gratitude. The narrow convenience sample, which lacked in diversity, is believed to have played a role in such results. The most beneficial research conclusion was the significant correlation between gratitude and resilience in elementary school students. Furthermore, though not a research question of this study, it was found that females have a higher level of resilience than males. These findings add to the research highlighting that resilient individuals have a high emotionality and utilize positive emotions to navigate stressful and disadvantageous times (Tugade & Fredrickson, 2004).

This research study advances the applied research literature by providing evidence of the correlation between gratitude and resilience in the school-age population. Though the LFTGP did not provide evidence for its effectiveness with this sample population, it does not detract from the incredible need to prioritize student mental health and well-being. The advent of a more preventative approach to student mental health has taken priority over the disease or “reactionary” model of health and well-being. These interventions focus on promoting virtuous characteristics and enhancing strengths to promote positive mental development (Roberts et al., 2002; Seligman, 2002). Within education, strengths-based social and emotional interventions have the potential to promote optimism, gratitude, resilience, and a growth mindset (Waters,
2014). By enhancing positive character strengths, schools can prepare students both academically and emotionally, and in doing so; educate the “whole child.”
References


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Appendix A

District 1 Approval Letter

February 26, 2019

To Whom It May Concern:

Hollywood Hill Elementary in Northshore School District agrees to allow Laura Hall, doctoral student from the Indiana University of Pennsylvania, to use our Hollywood Hill Elementary data from the pre- and post-assessments from The Look for the Good Project for her dissertation research.

Sincerely,

[Signature]

Denise Waters
Principal
Hollywood Hill Elementary
Appendix B

District 2 Approval Letter

February 25, 2019

To Whom It May Concern:

Emerson Elementary/Owosso Public School, agrees to allow Laura Hall, doctoral student from the Indiana University of Pennsylvania, to use our, Emerson Elementary, data from the pre- and post-assessments from The Look for the Good Project for her dissertation research.

Sincerely,

Ms. Jessica Anderson
Principal
Emerson Elementary/Owosso Public School
Appendix C

CITI Completion Letter

This is to certify that:

Laura Hall

Has completed the following CITI Program course:

Human Subjects Research
Researchers working with data or laboratory specimens ONLY
1 - Basic Course

Under requirements set by:

Indiana University of Pennsylvania

Completion Date 01-Nov-2015
Expiration Date N/A
Record ID 17585668

Verify at www.citiprogram.org/verify/?w882e3bce-ce9e-42c1-8333-1560867e6118-17585668