THE RELATIONSHIP BETWEEN SELF-REGULATION AND PERCEIVED AUTONOMY OF PSYCHOLOGICAL WELL-BEING AMONG FIFTH GRADE CHRISTIAN PRIVATE SCHOOL STUDENTS

by

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A Dissertation Presented in Partial Fulfillment Of the Requirements for the Degree Doctor of Education

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ABSTRACT

Increased anxiety, depression, and maladaptive ways of coping among children are evidence of an increase in poor psychological well-being. The purpose of this predictive correlational study was to examine the theory of self-determination that relates natural and intrinsic tendencies of students to behave in an effective and healthy autonomy-supportive way, by examining the predictive relationship of perceived autonomy-support, self-regulation, and psychological well-being of fifth grade Christian private school students. The criterion variable was defined as psychological well-being in this study. The predictor variables were perceived autonomy-support and self-regulation. Data were collected to facilitate this study from 124 fifth grade students using three Likert-type survey instruments. Surveys were distributed and conducted near the end of a school quarter. The results of the research were analyzed using multiple regression. Results indicated that the multiple regression model statistically significantly predicted well-being; however, only perceived autonomy added significantly to the prediction.

Keywords: Perceived autonomy-support, self-regulation, psychological well-being, multidimensional life satisfaction scale for children
Acknowledgments

The reward of my journey is to not have made it alone. In reflection, I see how my steps were ordered of my Lord. Through the excitement, the discouragement, the frustration, the enlightenment, the humility, and finally; the accomplishment, I believe God must be crazy about me to have blessed me through it all. I have learned to trust in Jesus. I have been favored and blessed to have the greatest partner of all time, my beautiful wife, Lisa. She has supported and maintained our ship as I labored to complete task elsewhere. I believe pleasing God must have something to do with you. I thank my two children, Stephen and Alyssa, for always making me feel greater than I will ever be. You will always be my precious cargo that God has entrusted to me. I also want to honor Gary Johnson for encouraging me to embark upon the mission to serve at a greater level. Those who can should.

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Academic Self-Regulation Questionnaire (SRQ-A)
Multidimensional Students' Life Satisfaction Scale (MSLSS)
Organismic Integration Theory (OIT)
Perceived Autonomy-Support Learning Climate Questionnaire (PAS-LCQ)
Self-Determination Theory (SDT)
Socioeconomic Status (SES)
CHAPTER ONE: INTRODUCTION

Overview

Psychological well-being in children is essential for emotional stability and healthy student development. Children with low psychological well-being perform and adapt poorly in educational settings (Gilman & Huebner, 2002). This study contains information particular to the concerns found with maladaptive behavior among children, and theoretical based findings that support the need for this research. This study identified and measured variables that predict psychological well-being among fifth grade students.

Background

Instructors are constantly attempting to discern what causes or enables students to excel in their courses. The primary communication by an educator is to speak with his or her students; however, recent studies (Assor & Kaplan, 2012) have shown that students do not feel their teachers listen to them. The dialogue between teachers and their students does have academic relevance to the students. According to the psychological perspective and research outcomes from the SDT, students perceive conversations with teachers as meaningful dialogues, and students feel that these conversations support their sense of autonomy and their ability to act and develop autonomously (Assor & Kaplan, 2012). This study measured perceived autonomy-support because of its importance to children and the influence it promotes with child behavior and well-being.

Elementary students’ interpersonal expectations affect their perceptions of new people, relationship quality with others, and their interactions with adults (Friendly, Grolnick, & Gurland, 2012). Deci and Ryan (2000) measured interpersonal expectations along with autonomy support to control within the self-determination theory, finding that children expect
adults to support their sense of volition by providing opportunities for input and choice (Deci & Ryan, 2000). A lack of input and choice lowers children’s perception of adults, which may be directly associated with maladaptive coping skills, increased anxiety, and health-threatening behaviors among children. Therefore, there is a need for more studies that utilize self-determination theory’s perceived autonomy and self-regulation constructs to improve psychological well-being. The data from the participants identifies inherent growth tendencies, innate psychological needs, the natural propensities for growth and integration, as well as constructive social development to determine psychological well-being.

Research has shown an increase in poor well-being as evidenced by increased anxiety, depression, maladaptive ways of coping, inability to self-govern, and health threatening behaviors in children (Brown & Ryan, 2003; Gilman & Huebner, 2002; Assor & Kaplan, 2012; Deci & Ryan, 2000). Well-being and happiness in children coexist in environments that are autonomously supportive, which maintain bonding, cohesion, emotional stability, and external social support (Assor & Kaplan, 2012; Barch, Carrell, Jang, Jeon, & Reeve, 2004b; Black & Deci, 2000).

This study integrates the self-determination Theory (SDT), which is a theory of motivation. Deci and Ryan (1985) originated the SDT, and it was appropriated in the study of natural or intrinsic tendencies of effective and healthy behavior. The SDT identifies the change with intrinsic motivation in early childhood, which research has identified social pressures as relevant to developing self-regulation with children across their life span (Deci & Ryan, 2000). The most dominant influences of intrinsic motivation among children within the SDT are autonomy and competence whereas, research has shown high levels of intrinsic motivation when children are supported autonomously (Deci & Ryan, 2000). The self-determination theory
provides a foundational understanding for motivating children and identifying healthy behavior for psychological well-being.

The theory presents and defines competence, relatedness, and autonomy as universal necessities that are natural, unlearned, and experienced throughout humanity and cultural diversity. Within the self-determination theory, competence is a pursuit to control the outcome and to experience mastery. Relatedness is the universal desire to interact, to connect, and to experience caring for others. Autonomy is the right or condition of self-government of one's own life, and the ability to respond or perform as one may choose (Deci & Ryan, 1985).

The self-determination theory has shown that individual happiness equates the basic need of autonomy support and personal satisfaction; however, a lack of autonomy support enables students’ frustration, anger, and other negative feelings (Deci & Ryan, 2000). With respect to clinical applications, the assessment of an individual's positive subjective well-being perception is fundamental to a positive, preventative approach to mental health (Huebner, 1994).

The general notion of autonomy support refers to an individual in a position of authority who validates his or her subordinate’s perspective by considering their feelings and then providing the subordinate with relevant information and opportunities for choice, while minimizing the use of controls and demands (Black & Deci, 2000). Autonomous behavior will manifest from a student’s unabridged sense of self; whereas, controlled behaviors have an external perceived perspective of causality and are experienced as being coerced by interpersonal insistence (Black & Deci, 2000). When children experience autonomy-need satisfaction from nurturing environmental conditions, they function more positively and experience greater psychological well-being (Deci & Ryan, 2008; Reeve et al., 2004b; Williams, Gagne, Ryan, & Deci, 2002). Therefore, students benefit when instructors support them autonomously, and it is
important to their lives and mental health. Understanding the role of perceived autonomy-support and self-regulation, and how these variables influence the lives of children, informs the purpose of this study and the predictor variable psychological well-being.

Research confirms that children from religious schools outperform students from non-religious schools (Jeynes, 2002). Earlier SDT research has addressed the conditions of social environments (Deci & Ryan, 1985; Deci & Ryan, 1991; Ryan, 1995) regarding positive human potential. The self-determination theory has been concerned with defined social environments, found in religious schools, which may optimize student development, performance, and psychological well-being (Ryan & Deci, 2000). According to research (Jeynes, 2004), sociological and economic factors have not changed Christian school advantages, and defined social environments may foster this advantage. The advantage may be the constant sense of feeling toward mindfulness practiced within religious environments. Because of the sustained advantages of Christian schools, this study contrasted the impact of perceived autonomy and self-regulation on Christian private schools to predict psychological well-being.

Field studies in schools (Deci & Ryan, 2000) have shown that providing autonomy support, relative to control, is associated with more positive outcomes, including greater intrinsic motivation, increased satisfaction, and enhanced well-being. New course development is a common challenge faced by educators everywhere. Offering course material in a way that is stimulating and pedagogically sound is a balancing act at every level of instruction. Research using self-determination theory indicates that when students in a course feel a level of competence, autonomy and relatedness, their ratings of the course (and the instructor) are higher (McKinney, & Cotronea, 2011). These findings support the impact of a student’s perceived experience concerning autonomy, which may influence their self-regulation and enhanced well-
being. Thus, measuring perceived autonomy and self-regulation are mutually necessary when determining psychological well-being.

**Problem Statement**

The decline of student well-being among upper-elementary students identified as a moderate concern in the 1980’s, has become a primary concern in student development. Today, increased anxiety, depression, a loss of motivation, and an inability to self-regulate threatens student performance. To address this problem, previous studies in education literature have examined student motivation and performance by analyzing differences in student values (Simmons & Page, 2010); however, recent advances in psychology and neurosciences demonstrate that emotions are crucial contributors to students’ motivation, interpersonal resources, memory, and learning (Valiente, Swanson, & Eisenberg, 2011). An examination of perceived autonomy-support may provide insight into how students’ self-regulation may influence psychological well-being.

Research shows that across the preschool to high school years, children's intrinsic motivation decreases, and they feel increasingly alienated from learning (Harter, 1981; Skinner & Belmont, 1993). Conversely, students prone to positive emotions may experience high levels of achievement partly because such emotions are associated with high-quality peer and teacher relationships (Valiente et. al., 2011). As such, autonomy-supportive conversations between a teacher and student would enhance the student’s positive feelings and reduce negative feelings when students are in the teacher’s classroom (Assor & Kaplan, 2012).

Studies utilizing self-determination theory (SDT) have shown that intrinsic motivation is associated with better performance and greater well-being (Deci & Ryan, 2000). The goal to feel that one can conduct and organize one’s behavior directs the desire for autonomy-support. This
feeling of autonomy-support can help students develop goals, values that feel authentic, and give them a sense of direction (Deci & Ryan, 2000). The problem is that when students do not feel supported by teachers their emotions and ability to self-regulate determines their low psychological well-being.

**Purpose Statement**

The purpose of this predictive correlational study was to examine the predictive relationship between perceived autonomy-support (predictive variable), self-regulation (predictive value), and psychological well-being (criterion variable) of fifth grade students in Christian private schools.

The self-determination theory is a motivational theory that researchers have referenced to identify natural behavior to govern intrinsically one’s outcomes (Deci & Ryan, 1985). This study identifies perceived autonomy-support and self-regulation, which are measurable tenets of the self-determination theory. Perceived autonomy support is the variable of the student’s perception of his or her instructor (Deci & Ryan, 2000). The student identifies the methods of motivation and then the perspective is either controlling or autonomously supportive (Williams, Grow, Freedman, Ryan, & Deci, 1996). Self-regulation is when the student has personal or endorsed intrinsic value in a task or goal (Black & Deci, 2000).

**Significance of the Study**

Individuals need to feel both autonomous and competent with respect to a behavior or behavioral domain to display optimal motivation, performance, and well-being (Huebner & Gilman, 2002). Like perceived autonomy-support, students’ social learning environment influences self-regulation; however, the focus in identifying this variable is to consider the students’ type of motivational regulation versus their perception from their instructor (Ryan &
Connell, 1989). This study identified fifth grade students’ perceived autonomy support and self-regulation to predict student psychological well-being.

Within the context of perceived autonomy and self-regulation, there are few studies that measure the psychological well-being of pre-adolescent students (Reeve & Yu-Lan, 2010). This study included a multidimensional measure of well-being to address several life satisfaction domains of young children while identifying the impact of measures within the self-determination Theory (Huebner & Gilman, 2002; Ryan & Deci, 2000).

Data from the validated instruments in this study identified variables of well-being that may be addressed or controlled to affect a student’s beneficial outcomes and performance. Environment influences the self-determination theory; however, the instruments in this research measures theoretical perspective as to what may be phenomena regarding the benefits of a Christian environment (Ryan & Deci, 2000). The study did not consider such phenomena as a basis of research; instead, attendance in a Christian private school is a defined social environment, as described by self-determination theory. This study only measured quantitative data to identify psychological well-being; therefore, removing a bias of phenomena or religious beliefs.

General education practices standardize the overall expectancy in learning at a given level (Black & Deci, 2000). These standards outline the capabilities that a student achieves during a class learning session, assigned exercise, or reading assignment. Most schools emphasize clean or professional learning environments; however, these standards do not identify the well-being of students (Gillman & Laughlin, 2000). Practices of psychological well-being and life satisfaction are not relative considerations until a student is found with failing grades, depression, or exploitation of an unhealthy behavior that may disrupt learning for themselves or
other students; thus, preventative classroom practices are needed to establish relative awareness and predictability of student psychological well-being (Huebner, 1994; Reeve & Yu-Lan, 2010). This study contributes a model to predict well-being that identifies the propensity of unhealthy or disruptive behavior. Previous research studies (2004) with upper elementary students have already found a positive relationship between autonomy support and academic math achievement. Positive attitudes link to on-task behavior (DiCintio, Perencevich, Stefanou, & Turner, 2004). Research with psychological well-being has expanded this database.

**Research Question**

This study is proposed on the belief that there is a predictive relationship with students’ perceived autonomy support and self-regulation that determines a students’ psychological well-being. The research question for this study is:

**RQ1**: How accurately can psychological well-being be predicted from fifth grade Christian private school students’ perceived autonomy-support and self-regulation?

**Definitions**

1. *Eudaimonic Well-Being* – A psychological well-being approach that focuses on meaning and self-realization to identify a person’s functionality (Deci & Ryan, 2001; Ryff, 1989; Seligman, 2002).

2. *External Regulation* – An extrinsic motivation activity controlled with a reward or demand, and found to be the least autonomous (Azevedo, Greene, & Moos, 2007; Ryan &Deci, 2000).

3. *Hedonic Well-Being* – A psychological well-being approach that focuses on happiness in terms of pain avoidance and pleasure attainment (Diener, Lucas, & Scollon, 2006; Deci & Ryan, 2001)
4. **Identified Regulation** – An intrinsic motivation where the individual regulates or accepts an action because the goal is personally valuable (Cokley, 2000; Deci & Ryan, 2000).

5. **Integrated Regulation** – An intrinsic motivation where the individual regulates activity within their own beliefs and personal evaluations (Deci & Ryan, 2001; Duncan, Hall, Jenny, & Wilson, 2010).

6. **Introjected Regulation** – An extrinsic motivation activity controlled with assumed behavior without accepting self-regulation individually (Ryan & Deci, 1995).

7. **Life Satisfaction Construct** – A one-dimensional practice of measuring well-being primarily used for adults. Life satisfaction construct identified satisfaction with oneself and one’s existence (Huebner & Gilman, 2002).

8. **Multidimensional Assessment** – A differentiated assessment that considers a multidimensional or multiple area of a given domain to assess an overall profile of psychological well-being (Huebner & Gilman, 2002).

9. **Perceived Autonomy-Support** – Perceived autonomy-support is the support perceived by the subordinate or student in moment-to-moment expressions (Ryan & Connell, 1989).

10. **Psychological Well-Being** – A basic satisfaction with oneself and one’s existence or life satisfaction (Huebner, 1994).

11. **Self-Regulation** – When an individual has personal or endorsed value intrinsically in a task or goal (Deci & Ryan, 2000).

12. **Social Environment** - The immediate physical surroundings, social relationships, and cultural milieus within which defined groups of people function and interact (Barnett & Casper, 2001).
CHAPTER TWO: LITERATURE REVIEW

Overview

The importance of psychological well-being with children has become an area of concern because of the differentiated constructs that are associated with well-being, such as, self-esteem, depression, self-congruence, vitality, and intrinsic motivation. Because of recent studies (Assor, Kanat-Maymon, Kaplan, & Roth, 2007; Assor & Kaplan, 2012; Butz, Collins, & Usher, 2013; Chatzisarantis & Hagger, 2009; Chenault, Darby, Haglund, & Longmire-Avital, 2013; Deci & Ryan, 2000; Valiente, et al., 2011) regarding autonomy support and academic self-regulation, an increased interest in psychological well-being has been fostered. Although several psychological studies have involved psychological well-being, there is not a universal research process for predictive variables to identify well-being (Huebner, 1994; Ryan & Deci, 2000; Ryan & Deci, 2001; Ryff, 1989).

Research shows an increase in poor well-being will entail increased anxiety, depression, maladaptive ways of coping, inability to self-govern, and health threatening behaviors in children (Brown & Ryan, 2003; Huebner & Gilman, 2002; Ryan & Deci, 2000). Studies utilizing self-determination theory (SDT) have shown that intrinsic motivation is associated with better performance and greater well-being (Deci & Ryan, 2000). Child psychological studies that do not use the self-determination theory may not represent the impact of autonomy support and self-regulation as defined within the SDT, and variables that influence psychological well-being among children may be without quantitative relativity or accountability. The self-determination theory addresses human motivation through competence, autonomy, and relatedness. When these innate psychological needs are satisfied, self-motivation, social development, and psychological well-being enhance (Ryan & Deci, 2000).
Previous research (Heubner, 1994; Deci & Ryan, 2000) has identified well-being while encouraging further study to identify healthy social environments that may influence well-being. Well-being and happiness in children coexist in environments that are autonomously supportive, which maintain bonding, cohesion, emotional stability, and external social support (Reeve & Yu-Lan, 2010). This research theorizes that students found with higher perceived autonomy support and self-regulation, have higher psychological well-being, and student attendance in a private Christian school is the defined social environment. The purpose of this model is to recognize practices to improve student psychological well-being, and to establish awareness and reference for professionals that are working with children or conducting research.

**Theoretical Framework**

The self-determination theory is motivational theory that examines the reasons why someone may do a task or pursue a specific goal. Research has identified relatedness, autonomy, and competence as universally necessary for self-determination. From the theoretical perspective of the self-determination theory, competence is an individual’s ability to attain mastery through the ability to perform successfully and efficiently (Brown & Ryan, 2003; Deci & Ryan, 1985). Students may acquire these skills through knowledge or developing skills with a capacity to improve. Relatedness and autonomy have importance because of innate psychological needs (Deci & Ryan, 2000).

Student and teacher conflict, within autonomous environments, are handled in an open and respectful expression characterized by dialogue that attempts to find a mutual solution. Research has shown that (Grolnick & Ryan, 1989) that greater autonomy-support is associated with lower instances of students acting-out or student negative behavior in the classroom. Additional research has also shown (Assor et al., 2007) that an autonomy supportive classroom
climate is associated with less aggression or disruptive behavior. Autonomy-supportive classrooms are affiliated by positive student outcomes; whereas, autonomy suppressing or controlling teaching techniques are associated with negative student outcomes. In these studies, relatedness attributes a feeling of closeness and a connection with others, which further enhance psychological well-being (DiCintio et al., 2004).

Additional research regarding intrinsic motivation, identified a feeling of responsibility to enhance intrinsic motivation. The feeling of responsibility is perceived competence or competence from performance, which is enhanced by positive feedback (Deci & Ryan, 1991). For children, learning with achievement measures have a positive relation of autonomous motivation, intrinsic motivation, and competence (Deci & Ryan, 2000). Therefore, students may engage in a variety of achievement activities to attain competence, direct intrinsic and autonomous motivation, and feel relatedness. For example, a student may work very hard to improve his or her competence. The hard work to achieve greater competence would be intrinsically motivated to receive autonomous support to feel related to a specific group, social norm, or relationship. Research describes such behavior as self-determined where competence intrinsically drives achievement for students to have long-term psychological well-being (Deci & Ryan, 2000; Simmons & Page, 2010).

Sustainment of intrinsic motivation does not support competence without autonomy-support. Students have higher competence only when experiencing autonomy-support (Deci & Ryan, 2000). Therefore, competence without autonomy support are not enough for student achievement and psychological well-being. Research has found a correlation between competence and autonomy regarding students having higher psychological well-being (Sheldon & Gunz, 2009). This measure was expressed when both autonomy and competence were found.
Research finds competence within measures of achievement and achievement motivation for students. In these studies, intrinsic motivation enhances achievement; additionally, competence and intrinsic motivation is either identified or coded as evidence of achievement motives. Overall, competence outlines a substantial need to motivate achievement (Assor & Kaplan, 2012; Deci & Ryan, 2000).

Researchers base the need of competence on cognitive and social growth. This intrinsically motivated activity manifest through growth. Individuals that adapt better to changes or new challenges are found to have greater interest, openness, and learning, which are characteristics of competence with intrinsic motivation (Sheldon & Gunz, 2009; Simmons & Page, 2010; Zhou, Ma, & Deci, 2009). Competence tendency exist in the early child development of motor skills. As children begin to manipulate objects and explore their surroundings, they demonstrate competence through activities and practices that are necessary to effectively interact socially and physically. Many early developments are based on survival instincts and reproductive skills. If children did not experience satisfaction of need or experience from learning, it is unlikely that they would develop skills or capacities they may inherit. These experiences are intrinsically motivated to adapt to potential demands of interaction and new situations experienced in early development. The social and physical development of competence is an internally focused motivation without the need for an external reinforcement or control (Deci & Ryan, 2000).

The propensity of competence facilitates student achievement adaptive capacities, which aid coordination, elaboration, and application. Within this open and broad perspective, research has further defined competence as the adaptive structured motivation of human nature (Assor & Kaplan, 2012). Competence is less domain specific, which is why researchers have referred to
the adaptive and interactive nature of competence as broad and open. Children share competence development and motivation with other mammals because of significant postnatal brain development and protracted dependency periods. In other words, competence motivation directs experience-dependent and expectant development activity (Deci & Ryan, 2000; Assor et al., 2007).

Within groups, competence aids niche relevant development among children, which may improve outcomes for all members of the group. The advantage fosters the unique talents of the group. Among groups of children, the improvement of competence is a general propensity to further develop specific adaptive competencies. These groups are more adaptive in demands from changing environmental (Assor & Kaplan, 2012; Black & Deci, 2000; Zhou et al., 2009). Although the advantages of competence are identified, competence motivation is considered a nonspecific tendency. This is because the focus of competence is founded on the pleasure of effectiveness, whereas the psychological need that energizes active students must be fulfilled for long-term psychological well-being (Deci & Ryan, 2000).

This study measured self-regulation and perceived autonomy support to determine psychological well-being with the expectations and perceptions of fifth grade Christian private school students that are between the ages of ten and eleven. Around eight years of age children undergo a conspicuous shift in their ability to use trait information to predict behavior and to infer traits from behavior (Liu, Gelman, & Wellman, 2007). These children are firmly in the concrete operational stage of Piaget’s theory of cognitive development. According to Piaget (1970), 8-year-old children can make logical inferences about traits or future behavior from specific information, evidence from past behavior, or available descriptions. These inferences become abstract when children enter formal operations years or fifth grade (Piaget, 1970).
Related Literature

The self-determination theory annotates behavior within two domains: autonomous and controlled functioning (Deci & Ryan, 1985). Autonomous functioning is identified by intrinsic motivation, or motivation that is regulated by the individual; or extrinsic motivation, which is motivation that is regulated by an external source. Self-regulation is identified as a predictor variable for this research. Self-regulation is when an individual has personal or endorsed value intrinsically in a task or goal. Students with more intrinsic motivation are found to internalize self-regulation for academic challenges (Deci & Ryan, 2000). Further research (Ryan & Deci, 2001) sought to understand why students engaged in their homework, and additional forms of autonomous self-regulation were outlined. An overall relative autonomy index (RAI) was developed to measure self-regulation outcomes. The RAI are a combination of subscales within the self-regulation questionnaire, which is used to identify the predictor variable, self-regulation. The four subscales are external motivation, introjected motivation, identified motivation, and intrinsic motivation.

Desirable social relationships contribute to student well-being. Supportive autonomy is found to enhance cohesion and improve competence with students (Reeve & Jang, 2006). This study used the characteristics found within these theoretical constructs to develop a model, which defined the problem of lowering well-being with students, by identifying the selected predictor variables as significant correlation to improve psychological well-being.
Self-Determination Theory

Research to develop the self-determination theory began with the study of intrinsic motivation (Deci, 1975). The original goal was to identify the primary intrinsic motivation that determines social behavior. The early studies of intrinsic motivation focused on “why” someone made a decision. By focusing on “why” questions, the research has been based on the field of motivation. In 1985, the first official work and introduction was established to formally define the self-determination theory or SDT (Deci & Ryan, 1985). At the basis of the theory was intrinsic motivation; however, the SDT also focused on extrinsic motivation. With this change, Deci and Ryan developed three main intrinsic needs for well-being and psychological health of an individual, which are autonomy, relatedness, and competence. According to research, the needs are universal and instinctive, which are found to be self-motivated and integrated within one’s personality. The applications of the self-determination theory have addressed education, environment, health, and well-being, which align with the purpose of this study (Deci & Ryan, 1985).

Competence. Competence refers to a person's capacity to interact effectively and successfully with the environment. Competence involves the utilization and implementation of knowledge and skills relevant to adaptation and assimilation within an educational environment domain. Competence develops from achievement outcomes that are measured through both standardized tests and academic achievement. Academic outcomes and standardized achievement test scores are one type of competence assessment (Grolnick & Ryan, 1989). Classroom assessments of teachers provide another index of the student's school related performance and competence.
Competence plays more of a developmental role in the self-determination theory. Competence is enhanced when students feel responsible for their successfully performance. Within the self-determination theory, competence is developed with complex activities that foster sustained effort. According to research, competence is less concerned with the mechanics required to achieve a goal, but well-being and performance outcomes during the process of development (Roth, 2008). This study used validated instruments to measure the student’s ability to attain mastery through successful and efficient performance. Research has shown that the highest quality personal relationships include relatedness, autonomy, and competence (Deci & Ryan, 2000; Friendly et al., 2012).

Researchers have defined competence as an energy source found within humans that is a manifestation of structure and effective focused motivation. This motivating energy source has been found to have the propensity to develop a structured environment that enables focus and the ability attain desirable outcomes (Ryan, 1995). Competence shares this definition with effectiveness, whereas the psychological need that energizes active students must be fulfilled for long-term psychological well-being (Deci & Ryan, 2000).

Students that are found to experience competence by engagement of an activity through means of self-regulation are also found to have intrinsic motivation (Black & Deci, 2000). Students who feel a motivational need to ascertain ownership for their own actions. Congruently, the self-determination theory identifies intrinsically motivated behaviors as feelings of competence and self-determination (Ryan, 1995). Competence and autonomy are essential components of intrinsic motivation and motivational interest; however, definitions of competence and autonomy do not identify with intrinsic motivation. A satisfaction of need is a not a predictor of activities which are perceived as intrinsically motivated behavior, and the same
perspective has also been found within directed behaviors regarding satisfaction of need (Sheldon & Gunz, 2009). Research has supported that needs that are satisfied through autonomy and competence will direct freely engaged behaviors, which are driven by interest that enables intrinsically motivated behavior (Deci & Ryan, 2000; Gable et al., 2000).

The need for competence within psychological well-being has been supported by the ground research that positive feedback enhances intrinsic motivation, whereas, negative feedback decreases intrinsic motivation (Deci & Ryan, 1985). This outcome further supported that competence correlated with a satisfaction of need found within competence. In other words, the significance of a positive effectiveness of feedback suggest an effect of the satisfaction of need for competence. Furthermore, intrinsic motivation is enhanced with positive feedback, and negative feedback showed ineffective results for intrinsic motivation, meaning there is a need for competence within intrinsic motivation to achieve psychological well-being (Assor & Kaplan, 2012; Deci & Ryan, 2000; Simmons & Page, 2010).

**Autonomy.** Autonomy refers to volition, which is a desire to self-organize experience and self-organize behavior while maintaining awareness and development with a sense of self (Ryan & Connell, 1989). Autonomy also refers to the intrinsic nature that a student experiences which motivates their internalized control, persistence, adaptive behavior, and well-being. Autonomy is an alternate method of motivation to controlled or extrinsic motivation. Autonomy is concerned with internalization processes, such as self-regulation, contingent self-esteem. Research that is more recent has reviewed autonomy support as a prosocial helping alternative for parental practices and classroom motivation alternatives (Roth, 2008).

Organizing and directing behavior is a student’s need for autonomy. Autonomy is further described in a student’s ability to feel that he or she is striving for goals and values that they feel
they can control and develop, which give them a sense of meaning and direction (Assor & Kaplan, 2012). Autonomy-supportive behaviors include actions that are based on an acknowledgement of the reference or framework of others, presentation of providing choices, encouragement of self-initiation, and a minimization of external control (Deci & Ryan, 2000). Further research (Simmons & Page, 2010) involving autonomy-supportive behaviors, introduced a clarification of student’s expected behaviors, and an acceptance of encouragement through expressions of criticism and student opinions. Autonomy-supportive conversation fosters encouragement; however, students with greater autonomy where shown to have conversations that minimized suppression of criticism and they were not ingratiating or overly encouraging. These conversations were based on authentic dialogue that included criticism and opinion.

According to research (Skinner & Belmont, 1993), autonomy in relationships refers to the authenticity of the relationship, which integrates mutual autonomy between the student and the instructor. These relationships imply that educators should accept or seek understanding from their students’ perspectives or desires. The instructors would also ignore their own personal needs when interacting with students to mitigate frustrations that may occur if the educator is serving their own needs. A probable example may be a teacher’s reaction to an experienced perception of disrespectful behavior. The educator would not accept the disrespectful behavior but express an appropriate dialogue that would integrate an opportunity to share the feeling of being disappointed, hurt or frustrated. Research within the self-determination theory has expressed the importance of authentic autonomy-supportive dialogue to share disagreements and negative feelings (Buber, 2011; Deci & Ryan, 2000). Autonomy between students and teachers are also based on authenticity in situations that do not involve conflict or disrespect. Autonomy is found to improve when instructors carefully listen to children, while integrating their own
feelings or needs within the conversation. Research has shown that ignoring or failing to involve awareness or reference within a student interaction elicits alienation and reduces authenticity; therefore, lowering autonomy-support (Assor & Kaplan, 2012).

Studies involving autonomy within the self-determination theory assume that a detached professional interaction can undermine the quality of autonomy. Autonomy-supportive dialogue is when the teacher develops understanding of the student’s perspectives. In other words, offering a choice to support a student without an autonomy-supportive dialogue may undermine the opportunity for the child and the teacher to understand each other’s perspective; therefore, failing to match choices to the student’s authentic interest. Students that govern through autonomy are found to have dialogue where they feel the teacher respects and tries to understand their supportive needs (Assor & Kaplan, 2012).

**Relatedness.** Relatedness is the students need to feel connected to others. Relatedness also deals with the desire to feel connected and share feelings such as love or being cared for. Relatedness is informed by the development of close relationships, and the maintenance in committing and keeping close relationships. Groups may include best friends, romantic partners, and groups that establish a sense of belonging. The interactions regarding relatedness are desirable and essential for psychological well-being (Brown & Ryan, 2003; Deci & Ryan, 1985; Deci & Ryan, 2000). Furthermore, students engage not only when they feel they can relate, but also when they are understood or have supported relatedness.

Relatedness views a participant’s experiences by the extent to which they feel related to others as an objective description of their social activity. Additional reviews of related research models, identified several types of social activity that may contribute to a general sense of relatedness. Among these social activities is a student’s ability to communicate personal relevant
matters. As noted previously, students value the interactions with their instructors, which also leads to greater autonomy support (Gable, Reis, Roscoe, Ryan, & Sheldon, 2000). Students that participate in shared activities have greater relatedness. This activity is closely associated with maintaining a group of friends that share informal social activity, or time spent in social gathering.

Relatedness fosters the ability to be understood, which is better defined as the social activity of feeling understood and appreciated (Deci & Ryan, 1985). For autonomy support to be effectively implemented, students need feel as if their views are acknowledged and not dismissed. Showing interest in student interaction improves intrinsic motivation, which also complements higher participation. Additionally, research has shown that students with increased relatedness are found to participate in pleasant or enjoyable activities (Gable et al., 2000; Assor, Kanat-Maymon, & Kaplan, & Roth, 2007).

Related social activities improve behavior while lowering disruptive behavior, which leads to students avoiding arguments and conflict that create distance and feelings of disengagement with others. Relatedness also associates mindfulness of self which improves social activity interactions. Within relatedness research, students are found to avoid self-conscious or insecure feelings that direct attention toward themselves and away from other students (Brown & Ryan, 2003; Gable et al., 2000). These social activities within research models have been associated with daily feelings of relatedness.

Relatedness is influenced by student interaction and activity; therefore, it is necessary to address fluctuations that are common with mood variation. Research has shown that moods tend to fluctuate in a weekly cycle regarding relatedness (Deci & Ryan, 2000; Gable et al., 2000; Grolnick & Ryan, 1989). Student home life variations are influenced by the time students spend
away from school activity, versus the activity experienced throughout the week. In general, positive mood tends to be higher, and negative mood lower, on weekends versus weekdays.

The social activities listed earlier help to identify these variations. For instance, a student is likely to experience more autonomy in their activities and more closeness with social family members on weekends, while activities are more likely to be chosen freely, versus a structured classroom throughout the week (Roth, 2008). However, feelings of relatedness are not the only means by which interpersonal relations may influence emotional or psychological well-being. Research has shown that feelings of self-consciousness or insecurity are negatively linked to relatedness; furthermore, relatedness is primarily linked to positive outcomes and not to negative outcomes (Deci & Ryan, 2000; Deci & Ryan, 2008; Gable et al., 2000). Therefore, experiencing conflictual interactions on a given day does not imply a lesser feeling of relatedness.

Spending time with others, doing pleasant or fun things, and avoiding self-consciousness also identifies relatedness. A greater feeling of relatedness is closely associated with a student’s satisfaction of needs (Valiente, Swanson, & Eisenberg, 2011). More generally, psychological well-being is higher among students who participate in more intrinsically motivated activity, often defined as activities enacted purely for a student’s interest and enjoyment in the activity itself (Assor, Kanat-Maymon, Kaplan, & Roth, 2007). Research has shown that higher satisfaction of needs is associated with greater emotional well-being. Furthermore, fulfilling important personal needs, such as social driven activities, class activities, and exercise are also associated with greater psychological well-being (Black & Deci, 2000; Assor & Kaplan, 2012).

**Psychological Well-Being**

Psychological well-being constructs emphasize excellence in experience and functionality. Psychological well-being, within research, has two definitive approaches or
perspectives: hedonic and eudaimonic. The hedonic perspective focuses on pleasure or pain avoidance to attain happiness. The eudaimonic perspective focuses on self-realization or meaning to attain happiness (Deci & Ryan, 2001). Because of the complexity of these constructs, methodological development has emphasized multilevel modeling to identify a level or degree on which a person is fully functioning.

As psychological well-being continued to develop, researchers combined the perspectives of hedonic and eudaimonic views as a pursuit for perfection that represents the realization of one’s true potential (Ryff & Singer, 2000). This perspective was the first distinction from subjective well-being (SWB) to psychological well-being (PWB). By combining both perspectives, the multidimensional construct and approach was established to initially address six aspects of human actualization: personal growth, autonomy, self-acceptance, environmental mastery, life purpose, and positive relatedness. The clinical perspectives on personal growth is the need to actualize oneself and the realization of one’s full potential. As one continues to grow, expand, or develop his or her potential, optimal psychological functioning can be achieved. A key characteristic of personal growth is openness, which must be experienced to become a fully functioning person (Ryff, 1989). Through this process of continued development, problems are solved versus an achievement of a fixed state.

Autonomy within psychological well-being assessment maintains a high emphasis of prior literature from the self-determination theory, independence, and self-regulation (Brown & Ryan, 2003). Someone that is fully functional is described as having an internal locus of evaluation. This characteristic is further described as someone that does not look to others for approval, because their self-evaluation is based on personal values or standards (Ryff, 1989; Ryff & Singer, 2000). Individuation is found to involve a deliverance from convention, whereas the
individual no longer clings to the collective fears, beliefs, and laws of societal norms that govern everyday life.

According to research perspectives, the most recurrent criterion of well-being is the individual's sense of self-acceptance (Collins, Usher, & Butz, 2013; Brown & Ryan, 2003; Ryff, 1989; Sheldon & Gunz, 2009). This aspect of human actualization is considered an essential characteristic concerning mental health, self-actualization, optimal functioning, and maturity. The multidimensional construct identifies self-acceptance as the central variable that enables positive psychological functioning.

Environmental mastery is an individual's ability to choose or create environments suitable to his or her mental conditions. Environmental mastery is further described as a central component of mental health within psychological well-being perspectives. Maturity and mental development are seen to require participation in a significant or construct of activity outside of what any person can devise. Maturity in PWB is described as the ability to manipulate and control complex environments (Ryff, 1989).

Life purpose in psychological well-being is the feeling and belief that there is a purpose and meaning to life. This area of the PWB also addresses maturity as a clear comprehension of life's purpose, a sense of directedness, and intentionality (Brown & Ryan, 2003; Ryff, 1989). The feeling that life is meaningful is fostered by positive functionality in the pursuit of determined goals, intentions, and a sense of direction. The aspect of positive relations with human actualization emphasizes the importance of warm, trusting interpersonal relations. Psychological well-being views the ability to love as a central component of functional mental health and self-actualization. A capability to experience greater love, deeper friendship, and complete identification with others. The importance of positive relations with others is repeatedly
emphasized as having strong feelings of empathy and affection for all human beings and as being in conceptions of psychological well-being (Ryff, 1989; Ryff & Singer, 1998).

By addressing operational and theoretical variables within the multidimensional construct of psychological well-being, the construct specifically identified variances that promoted physical and emotional health. Among researchers, the multidimensional construct has also addressed concerns with cause, dynamics, and consequences of well-being that were previously found fallible (Huebner, 1994; Ryff & Singer, 2000).

Focus on psychological well-being has been primarily examined for adults; however, rational reasoning and competence found with adults are also present with late-elementary students, whom are also faced with lowering psychological well-being (Huebner & Gilman, 2002). Research has previously found that students with increased well-being are found with increased academic and behavioral performance (Ryan & Deci, 2001). Multidimensional constructs are the most valid assessments to measure psychological well-being. The development of the multidimensional students’ life satisfaction scale was based on the principles of earlier research findings from the subjective well-being tool, and the need to establish an assessment that addressed the human actualization aspects of preadolescent children (Ash, Gilman, Huebner, & Laughlin, 1998; Huebner, 1994; Ryff, 1989). As prescribed by the PWB, psychological well-being in this study was measured in a multidimensional manner; meaning that the measurements are assessments of satisfaction that are organized in domains specific to preadolescents to include: school, self, family, friends, and living environments (Huebner, 1994; Huebner & Gilman, 2002).

As previously stated, the psychological well-being assessment has been validated with post adolescent students and adults. Researchers have found that awareness and model
development for psychological well-being for children has been limited because of a lack of validated instruments for preadolescents (Huebner & Gilman, 2002). This study helped grow the limited database of preadolescent students by adding to the limited availability quantitative psychological well-being studies.

This research supports and utilizes Huebner’s Multidimensional Students ‘Life Satisfaction Scale (Huebner, 1994). The MSLSS (Huebner, 1994) was specifically designed and validated for use with late elementary and adolescent students. The results found in this study, using the MSLSS instrument, has further developed a research model that empirically supports the importance of researching psychological well-being and the use of a multidimensional assessment for children, while providing a practical knowledge of SDT’s perceived autonomy-support and self-regulation as predictor variables based on the outcomes of the data.

Research (Brown & Ryan, 2003; Huebner & Gilman, 2002) has shown an increase in poor well-being as evidenced by increased anxiety, depression, maladaptive ways of coping, inability to self-govern, and health threatening behaviors in children. According to the self-determination theory, competence, autonomy, and relatedness, when satisfied, yield enhanced self-motivation, mental health, and well-being (Ryan & Deci, 2000). Focus on psychological well-being has been primarily examined for adults; however, rational reasoning and competence found with adults are also present with late-elementary students, whom are also faced with lowering psychological well-being. Research shows that across the preschool to high school years, children's intrinsic motivation decreases, and they feel increasingly alienated from learning (Harter, 1981; Skinner & Belmont, 1993). An autonomy support study found that children expect adults to support their sense of volition by providing opportunities for input and
choice (Deci & Ryan, 2000). Professional educators need awareness of the concerns of student psychological well-being.

Studies utilizing self-determination theory (SDT) have shown that intrinsic motivation is associated with better performance and greater well-being (Deci & Ryan, 2000). Unfortunately, the lack of a valid instrument to test psychological well-being for elementary students has hampered systematic research for children and adolescents (Huebner & Gilman, 2002). The multidimensional students’ life satisfaction scale (MSLSS) was developed to create a profile for children’s satisfaction (Huebner, 1994).

Around eight years of age children undergo a conspicuous shift in their ability to use trait information to predict behavior and to infer traits from behavior (Liu et al., 2007). These children are firmly in the concrete operational stage. According to Piaget (1970), 8-year-old children can make logical inferences about traits or future behavior from specific information, evidence from past behavior, or available descriptions. These inferences become abstract when children enter formal operations years or fifth grade (Piaget, 1970).

This research hypothesizes that students with higher perceived autonomy support and self-regulation, are found to have higher psychological well-being. The self-determination theory advises the identification of a defined social environment when measuring outcomes because of regnant cause; therefore, the defined social environments are Christian private schools (Deci & Ryan, 2011). The purpose of this model within this research is to recognize practices to improve student psychological well-being, and to establish awareness and reference for professionals that are working with children or conducting research.

**Hedonic.** The hedonic perspective is found in fourth century Greek philosophy as a goal to experience large amounts of pleasure to achieve happiness. Researchers have identified this
description as a totality of hedonic moments (Brown & Ryan, 2003; Deci & Ryan, 2001; Sheldon & Gunz, 2009). The hedonic perspective of psychological well-being is centered on philosophy’s ethical theory principal of hedonism. Hedonism is the pursuit of pleasure or desire as the focus of human life. According to psychological research, the hedonic view has been broadly described as self-interests, self-indulgence, self-gratifying, extravagance, and pleasure-seeking pursuits. The psychological hedonic view is summarized by the reduction of unpleasant life experiences while attaining goals or desirable outcomes not solely associated with physical experiences.

Hedonic psychology uses subjective well-being (SWB) assessments that review life satisfaction, the presence of positive mood, and the absence of negative mood to achieve happiness; however, psychologist have argued that hedonic perspectives do not define the degree of psychological wellness (Ryff & Singer, 1998). Concerns included the social activities, achievements, and goals considered to promote well-being. Therefore, the SWB has been accepted as an operational definition of well-being, while endorsing a eudaimonic view as to what cultivates subjective well-being. Hedonic well-being is both promoted and maintained throughout the development of the self-determination theory. The SDT supports that U.S. macro systems influence the effects of human behavior and subjective well-being (Brown & Ryan, 2003; Deci & Ryan, 2011).

**Eudaimonic.** Eudaimonic views are found in fourth century Greek philosophy. Early Aristotelian views defined eudaimonic perspectives as true happiness that is found in the expression of virtue or doing what is worth doing (Deci & Ryan, 2001). The basis of the eudaimonic comes from the term daemon or true self, which is further defined as an inspiring or
inner force that derives happiness. Eudaimonic perspectives focus on a life that is found in congruence with one’s values or holistic beliefs.

Eudaimonic views are associated with personal expressiveness (PE) or someone who is happy because of an authentic existence of who they really are (Waterman, 1990). Eudaimonic assessments include self-actualization, personal identity, principled moral reasoning, and an internal locus of control. Research has shown that hedonic enjoyment and personal expressiveness are strongly correlated; however, the experiences were distinctly differentiated. Eudaimonic views posed fulfillment in personal growth and development through activity; whereas, hedonic fulfillment was closely related to being relaxed in the absence of problems (Deci & Ryan, 2001; Waterman, 1990). The self-determination theory has emphasized great support on eudaimonic views by defining such needs as universally essential nutriments for healthy development and psychological well-being (Deci & Ryan, 2011).

Self-regulation. Self-regulation assesses the extent to which a student is autonomous versus controlled in performing specific behaviors. Identification and intrinsic motivation are autonomous forms of self-regulation (Ryan & Connell, 1989). Black and Deci (2000) posit that students with low autonomous self-regulation perform beneficially when perceived autonomy-support is high. This is mainly because a teacher that is faced with such students may be inclined to become more controlling to motivate them, and research (Black & Deci, 2000) has proven the opposite for students whom score high in autonomous self-regulation.

Four subscales representing less to more autonomy in children’s self-regulation identify self-regulation: external, introjected, identified, and intrinsic. External self-regulating characteristics are based on the student’s avoidance to negative consequences or externally imposed rules. An introjected nature is the process of a student who tries to gain adult approval
or avoid negative affect or consequences. Identified self-regulation is the process of a student who strives or pursues a self-valued goal. An overall inherent enjoyment of an activity or task is considered intrinsic self-regulation (Grolnick & Ryan, 1989; Ryan & Connell, 1989). Outcomes from competence and self-regulation can be measured by examining performance outcomes such as academic achievement or standardized test scores, or by obtaining ratings of classroom behavior and improvement.

Self-regulation is an individual’s ability or inability to elicit and maintain healthy productive behaviors. Most importantly the degree to which behaviors are externally initiated and controlled, opposed to the ability to self-initiate and manage. Whether a student is autonomous or less autonomous can be presented as self-regulation perpetuity. According to research, this perspective comes from students that autonomously initiate achievement-related behaviors and learning (Grolnick & Ryan, 1989). Such students are more self-regulated than those who are motivated by internal feelings of pressure and anxiety, and individuals that are dependent on direct interpersonal controls or rewards.

Behavior is directly correlated with self-regulation. Children, who have behavioral problems or demonstrate tendencies to "act out" in the classroom, are less capable of self-regulation. Furthermore, shy-anxious children are found to have difficulty with self-initiation and confidence (Deci & Ryan, 2000; Grolnick & Ryan, 1989)

Self-regulation with elementary children has been identified as a precursor for improved adjustment and behavior (Grolnick & Ryan, 1989). Children that maintain disciplinary issues are less capable of self-regulation; however, research (Grolnick & Ryan, 1998) has shown that behavior can be adjusted through controlled or autonomy supported environments. Autonomy supportive environments encourage choice and problem solving, whereas, controlling
environments maintain structure and control students’ behavior. These children are identified in Piaget’s cognitive development theory (1970); particularly, in the third stage of cognitive development which is referred to as the concrete operational stage. Children within the concrete operational stage fall between the ages of 7 to 12 years old.

Although the operational stage includes upper-elementary students, their thought process is more rational and similar to an adults’ ability to operate and reason. This is the earliest stage and development that could be administered the self-regulation, perceived autonomy support, and psychological well-being instruments with valid outcomes. According to Piaget’s theory, these students would be able to use logic to answer the questions on the instruments appropriately (Piaget, 1970).

Research (Assor & Kaplan, 2012) has shown that students who experience meaningful conversations with teachers, may gain self-governing support from these conversations; additionally, meaning conversations may foster their ability to act autonomously. This perspective originated from the psychological perspective of self-determination theory (Deci & Ryan, 1985). Within educational settings, teachers that show autonomy support toward their students are found with educational and developmental benefits, to include greater engagement, higher quality learning, a preference for optimal challenge, enhanced intrinsic motivation, enhanced well-being, and higher academic achievement (Guay, Ratelle, & Chanel, 2008; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Su & Reeve, 2011).

Black and Ryan concluded that the perception from students of their instructors’ autonomy-support predicted increases in autonomous self-regulation, perceived competence, and interest/enjoyment, and decreased anxiety over the semester (Black & Deci, 2000). This study identified perceived autonomy-support to measure the students’ perceptions of their leader or
instructor. Understanding the benefits and known findings from perceived autonomy-support and self-regulation strongly identify with the predictive criterion of psychological well-being.

**Perceived Autonomy-Support**

Perceived autonomy support is found within the self-determination theory. Perceived autonomy is a social variable that identifies the influence upon well-being, performance, and motivation (Deci & Ryan, 1985; Jang, Reeve, Ryan, & Kim, 2009). Perceived autonomy is within the intrinsic domain versus controlled; however, the concepts of perceived autonomy-support are grounded on the understanding of both intrinsic (inner) and extrinsic (outer) motivation. Autonomy-support is fostered support from a teacher, supervisor, or higher authority that utilizes the student’s or subordinate’s perspective to enact instruction to establish heightened value and an appreciative perspective to build the students’ or subordinates’ intrinsic motivation (Kaplan & Assor, 2012).

**Intrinsic Motivation.** Perceived autonomy-support is the support perceived by the subordinate or student in moment-to-moment expressions (Kaplan & Assor, 2012; Ryan & Connell, 1989; Williams et al., 1996). Research (Black & Deci, 2000; Reeve, et al., 2004b; Valiente, et al., 2011) has found that greater perceived autonomy is conjoined with greater classroom engagement, greater psychological need satisfaction, higher mastery motivation, greater intrinsic motivation, higher creativity, higher academic achievement, and enhanced psychological well-being. Researchers have identified four instructional behaviors with teachers that instruct in an “autonomy-supportive style” (Ryan & Deci, 2000; Assor, 1997; Reeve & Jang, 2006). The four core features of autonomy supportive instructing include: Nurtures inner motivational resources, relying on non-controlling techniques and informational language,
promote valuing, and acknowledging and accepting expressions of negative affect (Ryan & Deci, 2000).

The importance in identifying this variable is that perceived autonomy supportive environments are found to nurture students’ intrinsic motivational resources. Intrinsic motivational resources are characterized as such: supporting students’ needs, competence-affirming and acknowledging, accepting students’ expressions, and treating students’ complaints and points of resistance as valid reaction (Ryan & Deci, 2000; Davis-Langston, 2012; Reeve & Yu-Lan, 2010). Because these students experience high psychological need satisfaction and positive functioning (Ryan & Deci, 2000), these students may also experience higher psychological well-being.

**Extrinsic Motivation.** The basis of extrinsic motivation comes from external resources or environments. The development of extrinsic motivation within the SDT is oriented around a sub-theory called Organismic Integration Theory. Because the impact on the environment is found within external resources, extrinsic motivation has a direct relation to relative autonomy. There are four types of extrinsic motivation described within the Organismic Integration Theory (OIT), which are externally regulated behavior, integrated regulation, introjected regulation of behavior, and regulation through identification (Deci & Ryan, 1985).

Externally regulated behavior is based on the attainment of a reward. Behaviors regulated in this way are least likely autonomous or intrinsically motivated. Behaviors are also perceived as causal motivation. Integrated regulation is founded on personal self-evaluations; whereas, the characteristics are based on personal needs and beliefs. Integrated regulation is like intrinsic motivations because it can be integrated into one’s beliefs or self. Introjected regulation of behavior is when the assimilation of external regulations demonstrates a behavior. In other
words, the behavior is contingent upon the external regulator. Self-worth motivates introjected behavior while demonstrating the adherence from the regulation; however, the behavior is no self-regulated or self-determined (Deci & Ryan, 1985).

Regulation through identification is personally motivated because of its perceived importance. The regulated behavior is driven by one’s value upon the regulation or goal that he or she may identify as important. Within extrinsic motivation, social environments can negatively influence satisfaction of need and foster controlled motivation. This occurs when the needs are not met causing competence and relatedness to lower, while autonomous orientations diminish; furthermore, extrinsic effect negatively effects performance and psychological well-being (Deci & Ryan, 2000).

In contrast to extrinsic motivation, the SDT takes the position that children will respond naturally to their environments, and absence of an environment that permits the satisfaction of needs will have a negative effect on how children display vitality or psychological well-being (Deci & Ryan, 2011). Additionally, research has shown adverse conditions present specific behavior, goals, regulations, and outcomes that negatively present well-being and development that occur in unsupportive environments (Brown & Ryan, 2003; Deci & Ryan, 2000). Extrinsic motivation incorporates a valuable influence through external context that may allow a student to integrate regulation. Defined social environment addresses the external influence of organizations, people, and cultures of where the students interact.

**Defined Social Environment**

Perceived autonomy support identifies whether students perceive their social learning environment as autonomy-supportive or controlling. These perceptions also include the quality of the students’ social learning environment to infuse healthy development, self-regulation, and
improved functionality (Williams, Grow, Freedman, Ryan, & Deci, 1996). Fifth grade students are in the concrete operational stage of development and they have the rational to identify these social environmental differences, while developing their own opinions regarding their individual circumstances (Piaget, 1970).

Social environments have a wide range of scientific reactions on both motivational and personal growth development (Brown & Ryan, 2003; Deci & Ryan, 2000; Gunz & Sheldon, 2009). Results have shown that students become more self-motivated, more energized, and more integrated in some situations within environments that foster positive student potential (Deci & Ryan, 2000). Research strongly supports greater internalization which stimulates more behavioral effectiveness, enhanced well-being, greater volitional persistence, and better assimilation of the individual within a social group (Assor, 1997; Deci & Ryan, 2000).

According to research, the identified social groups with greater internalization include religion, physical exercise, political activity, environmental activism, and intimate relationships (Brown & Ryan, 2003; Deci & Ryan, 2000). The model for this study could be utilized on all the previously mentioned groups, and further testing may reveal differences between each group. Because of the importance regarding defined social environments and internalization within the self-determination theory among social environments, testing among these groups should be identified to support further research. This study was conducted within Christian private schools as a defined social environment as described by self-determination theory.

Previous research has shown that Christian private schools have maintained and sustained higher student performance outcomes in many areas; additionally, key psychological variables are broadly addressed quantitatively (Jeynes, 2002). Differences in performance have favored Christian private schools academically and in areas of discipline. Furthermore, Christian schools
address environmental influences that may affect student development socially, academically, and behaviorally (Jeynes, 2009).

Environment or specific organizational environments have previously been identified as an influential factor regarding student performance and behavior. More recent research has examined and identified significant variables that influence educational environments. According to the research (Ryan & Deci, 2000; Sheldon & Gunz, 2009) regarding self-regulation within the SDT, intrinsic motivation is highly influenced by social pressures through internalization and integration; therefore, this study predicts that a social environment correlates with perceived autonomy-support and self-regulation to predict psychological well-being. Educational and behavioral outcomes have been greater among Christian private school environments versus public school environments; therefore, measuring the influence of self-regulation and autonomy-support within Christian schools may provide a necessary benchmark to aid in the improvement of public schools.

A meta-analysis (Jeynes, 2004), that included 56 studies, was conducted to determine whether the influence of Christian private schools versus public schools on student academic achievement had changed in 30 years. Findings showed that the influence of Christian schools versus public schools remained consistent (Jeynes, 2002). Research consistently shows that for various reasons, religious school students are less likely to engage in problem behavior in comparison to public school students (Jeynes, 2002). The self-determination theory has specifically addressed this concern by identifying formal knowledge and defined social environment as conditions that foster and optimize development, performance, and psychological well-being (Ryan & Deci, 2000).
Theoretical research has identified religion as a group with greater internalization, which entails higher volition or autonomy, behavioral effectiveness, enhanced well-being, and better assimilation (Assor, 1997; Ryan & Connell, 1989; Ryan & Deci, 2000). Research consistently shows that for various reasons, religious school students are less likely to engage in problem behavior in comparison to public school students (Jeynes, 2002; Jeynes, 2009). Informed and self-endorsed behavioral regulation has long been associated with well-being enhancement (Deci & Ryan, 2000; Reeve & Yu-Lan, 2010; Assor et al., 2007). The alignment of theoretical outcomes may be considered in future studies with students from different environments then attendance in a private Christian school.

Informed and self-endorsed behavioral regulation has long been associated with well-being enhancement within the self-determination theory (Deci & Ryan, 2000). Philosophical, spiritual, and psychological traditions emphasize the importance of the quality of consciousness for the maintenance and enhancement of well-being (Wilber, 2000). This research examines these variables to predict and identify the importance of psychological well-being when working with children. The results of this study will help educators, administrators, and parents identify how self-determination theory’s autonomy-support and self-regulation may predict student’s psychological well-being of fifth grade students.

**Summary**

Psychological well-being is defined as a basic satisfaction with oneself and one’s existence or life satisfaction (Huebner, 1994). Well-being has been identified from two common concepts: hedonic and eudaimonic well-being. Hedonic well-being is happiness found in the experience of desirable pleasure; whereas, eudaimonic well-being is happiness found in the expression of virtue of one’s values. Controversially, these definitions have been divided on the
principal that not all experiences that produce pleasure produce psychological well-being. Differences within the definition of psychological well-being has induced the concept that well-being should be defined with multi-dimensional variables.

The self-determination theory (SDT; Ryan & Deci, 2000) identifies well-being by using the eudaimonic definition to further define self-realization as a central aspect to support psychological needs with autonomy, competence, and relatedness identifiers. The initial study (Deci & Ryan, 2000) also included the importance of a nurturing social environment versus the negative consequences that may be influenced during social developmental periods. Previous research (Heubner, 1994; Deci & Ryan, 2000) has been conducted to identify well-being while encouraging further study to identify healthy social environments that may influence well-being. Within the eudaimonic view of psychological well-being, many religious masters, visionaries, and philosophers have identified that true happiness; as described by eudaimonic perspectives, is based on happiness that is conductive through virtue or value within one’s beliefs (Ryan & Deci, 2001).

According to the self-determination theory, the fulfillment of relatedness, autonomy, and competence are essential in the promotion and maintenance of eudaimonic and hedonic well-being (Deci & Ryan, 2001). The self-determination theory further explains that achieving hedonic or the experience of happiness and pleasure, and eudaimonic well-being or achieving an integrated sense of self and realizing one’s human potential, optimal psychological development and growth is attained.

A broadly supported multidimensional instrument was published by Ryff and Singer (1998, 2000). The instrument was based on six aspects of human actualization: personal growth, autonomy, life purpose, self-acceptance, mastery, and positive relatedness. This instrument was
based on Aristotle’s eudaimonic view of well-being, which is described as striving for perfection that represents the realization of one’s true potential (Ryff & Singer, 1998). The goal of the model was to define psychological well-being theoretically and operationally, and to include emotional and physical health. Although this instrument is well-known, commonly used, and reliable; it is not intended for research with students below college level.

In contrast, few studies have been conducted with children regarding psychological well-being, and even fewer instruments have been established to measure the well-being of children (Huebner, 1994). For this reason, the criterion for this research was based on the Multidimensional Students’ Life Satisfaction Scale (MSLSS) which was develop by Dr. Scott Huebner for use with preadolescent students from the third to the fifth grade. The Multidimensional Students’ Life Satisfaction Scale (MSLSS; Huebner, 1994) is an instrument that is designed to assess life satisfaction as both a general overall construct and within specific life domains important to children/youth.

Private Christian school are identified as a defined social environment group, as defined by self-determination theory. Religious researcher, Dr. William Jeynes, identified moral scaffolding as an environmental factor of spiritual benefits with Christian schools that improve behavior over public schools and equate to higher academic performance (Jeynes, 2009). Christian school environments stimulate moral behavior through Christian practices, such as, prayer, biblical literacy, and expectancy in moral application; thus, a decline in these practices would presume a decline in moral behavior. There may be several environmental factors that improve psychological well-being; however, several research studies (Jeynes, 2002) have indicated Christian school environments have outperformed public schools both academically
and behaviorally. The students from Christian schools’ experience perceived autonomy support, which fosters self-regulation and mindfulness to achieve psychological well-being.

Self-regulation is a competency that is identified when children display mindful and thoughtful behaviors; whereas, mindfulness is also an attribute that promotes well-being (Brown & Ryan, 2003). Theorist of personality and psychotherapy emphasize the importance of self-regulation or well-being to optimize attention and awareness with students. The need to delineate the variables that a social environment must attain to culminate well-being may be vast; however, reviewing the previous research findings within SDT’s perceived autonomy support and self-regulation identifies the variables used in this research study to establish a measurable model to predict psychological well-being for students. The benefits of this study further utilized the validity of the theory of self-determination and establish a behavioral health model that may be used by education professionals to benefit their students and educational environmental practices.
CHAPTER THREE: METHODS

Overview

The purpose of this predictive correlational study was to examine the theory of self-determination that relates natural and intrinsic tendencies of students to behave in an effective and healthy autonomy-supportive way, by examining the predictive relationship of: perceived autonomy-support, self-regulation, and psychological well-being of Christian private school fifth grade students. This chapter contains the research question, hypothesis, and experimental design. Participants, settings, and instrumentation were addressed. The chapter concludes with the experimental procedures and data analyses.

Design

This correlational design examined the predictive nature of the relationships between variables with this quantitative study to examine the predictive relationship between fifth grade private Christian school students’ self-regulation and perceived autonomy support to determine students’ psychological well-being. Correlational research examines the extent to which two or more variables relate to one another. According to Tabachnick and Fidell (2007), this research design is appropriate for non-experimental research where variables exist naturally and are not deliberately controlled or manipulated (Gall, Gall, & Borg, 2010; Warner, 2012). Predictive, correlational design has been used in similar studies (Baard, Deci, & Ryan, 2004; Grolnick & Ryan, 1989; Levesque, Williams, Elliot, Pickering, Bodenhamer, & Finley, 2007; Ryan & Connell, 1989).
**Research Question**

This study is proposed on the belief that there is a predictive relationship between psychological well-being and students’ perceived autonomy support and self-regulation. The research question for this study is:

**RQ:** How accurately can psychological well-being be predicted from fifth grade Christian private school students’ perceived autonomy-support and self-regulation?

**Hypothesis**

The null hypothesis for this study is:

**H₀:** There is no statistically significant predictive relationship between fifth grade Christian private school students’ psychological well-being and perceived autonomy-support and self-regulation.

**Participants and Setting**

The participants in this study consisted of a minimum convenience sample of 124 fifth grade students in private Christian schools from the same county in Florida. The sample exceeded the minimal number of 108 students required for a medium effect size with statistical power of 0.7 at the 0.05 alpha level (Gall et al., 2010; Warner, 2012). The average class size for fifth grade classes within this county is 17 students. The only excluded participants from the study were low cognitive functioning students as determined by the county school board. These students may not possess the skills and capacity to participate in the survey. Special contract students, such as IEP students, were excluded because of limitations and guidelines outlined within learning contracts. The entire county student population is diverse, with 49% White/non-Hispanic, 22% African American, 26% Hispanic, 1% Asian, and 3% two or more races.
The study was conducted in 10 different elementary classes from Christian private schools within the same county school district. Each fifth grade class has approximately seventeen students attending in each class. Private Christian schools within the county have elementary students with one to four classrooms. Christian private schools in the county do not have Title I status and the curriculum have variances. Most of the Christian schools use the same Christian curriculum for their students throughout the year.

The study was conducted at the end of the quarter. The purposed plan is to take the survey during a class period in a traditional classroom. Because the study is conducted with fifth grade students and teachers, the instruments were given to the teachers to administer during class. Class periods over two days were used to collect all data for the research. Two test days were used because the length of all three questionnaires may fatigue the students or limit their attention to answer the questions effectively. The county has 28 elementary private Christian schools that serves 4,464 students according to the county school census. The fifth grade population is approximately ten percent or 450 students. A procedural script was provided and read to instruct all of the students at all test locations to foster process duplication.

**Instrumentation**

**Perceived Autonomy Support – Learning Climate Questionnaire (PAS-LCQ)**

The Perceived Autonomy Support - LCQ (Williams, Grow, Freedman, Ryan, & Deci, 1996) was used to measure the student’s perception of autonomy support from their instructor, a predictor variable (see Appendix A). The PAS-climate questionnaire yields a score on a 7-point Likert-type scale that indicates the degree to which the student perceives the autonomy support from the instructor. The study used the 15-question version of the survey. The Learning Climate Questionnaire (LCQ) was adapted by Williams and Deci (1996).
The PAS-LCQ (Williams et al., 1996) is used in studies (Black & Deci, 2000; Collins et al., 2013; Zhou, Ma, & Deci, 2009) with children to assess a general learning climate in which each student has instruction, and the questions are stated with respect to the autonomy support of the faculty member. The LCQ version of the instrument is specifically designed for classroom settings. The use and purpose of the PAS-LCQ (Williams et al., 1996) scale in this study, was used in an educational setting in which it was intended.

The PAS-LCQ yields a score on a 7-point Likert-type scale that indicates the degree to which health care providers, instructors, managers, or coaches are perceived to be autonomy supportive. The range is from 1 to 7. In other words, a maximum score of 15 questions would be 105 divided by the total number of questions, and a minimum score would be 15 divided by the total number of questions. Higher scores indicate greater perceived autonomy support. The PAS-LCQ (Williams et al., 1996) had been validated in a previous study (Williams & Deci, 1996) with second-year medical students. The PAS-LCQ (Williams et al., 1996) showed significant correlating results in a study to predict changes in the effects of autonomy support for low autonomous self-regulating students. The LCQ had alphas of 0.93 and 0.94 at T1 and T2, respectively (Black & Deci, 2000).

According to the instructions on the questionnaire, the questions can be adapted so that the wording pertains to a specific audience. In this study, the word “teacher” would be used to identify the students’ instructor. Previous research (Zhou, Ma, & Deci, 2009) used this instrument with the prescribed adaptive wording for fourth, fifth, and sixth grade students from four rural elementary schools to survey 195 students. Cronbach’s alpha coefficients were between 0.78 and 0.87. Collins et al. (2013) conducted a study using the PAS-LCQ to survey
1,820 sixth grade to eighth grade math students. Cronbach’s alpha coefficients were 0.86, concluding high reliability for a similar population.

The PAS-LCQ (Williams et al., 1996) was developed for research on self-determination theory and it is copyrighted; however, researchers are welcome to use the instruments for academic (non-commercial) research projects without written permission. The internal reliability of the instrument for the data set used Cronbach’s alpha. The PAS-LCQ is a 7-point scale ranging from Strongly Agree (7) to Strongly Disagree (1) for each adjective pairing describing the variables and thus is a good Perceived Autonomy Support Scale (Williams et al).

**Academic Self-Regulation Questionnaire (SRQ-A)**

The Academic Self-Regulation Questionnaire (SRQ-A) (Connell & Ryan, 1989) assesses domain-specific individual differences in the types of motivation or regulation (see Appendix B). This questionnaire concerns the reasons why children do their school work. The SRQ-A questionnaire yields a score on a 4-point scale. The SRQ-A questionnaire and format was developed for late-elementary and middle school children for concerns with school work by Ryan and Connell (1989).

The Academic Self-Regulation Questionnaire (Connell & Ryan, 1989) assesses children's styles of self-regulation in the academic domain. The SRQ-A (Connell & Ryan, 1989) is developed for late-elementary and middle school children. The use and purpose of the SRQ-A (Connell & Ryan, 1989) scale was used in an educational setting in which it was intended. SRQ-A (Connell & Ryan, 1989) is a 32 question 4-point scale survey ranging from Very true (4) to Not at all true (1). The SRQ-A scale differentiates SDT types of behavioral regulation in terms of the degree to which they represent autonomous or self-determined (versus controlled) functioning. A higher score indicates a higher level of endorsement of a regulatory style. The
SRQ-A uses four subscales: external regulation (nine questions), introjected regulation (nine questions), identified regulation (seven questions), and intrinsic motivation (seven questions). The questionnaire is validated when used with all four sub-scales to measure academic self-regulation for upper-elementary students.

A study by Ryan & Connell (1989) showed variability for all items and ranged from 0.67 to 1.17. Internal consistency indicated moderate to high levels of internal consistency 0.67 to 0.82 with all samples. Alpha reliabilities for SRQ-A (Connell & Ryan, 1989) subscales range from 0.75 to 0.88 (Grolnick & Ryan, 1989).

**Multidimensional Students’ Life Satisfaction Scale (MSLSS)**

The Multidimensional Students’ Life Satisfaction Scale (MSLSS) found in Appendix C assesses life satisfaction as both a general overall construct and within specific life domains important to children/youth (e.g., school, family, friends) (Huebner, 1994). Huebner developed the MSLSS (1994) for children and youth by to measure psychological well-being. The motivation for the construction of the Multidimensional Students Life Satisfaction Scale (MSLSS) was the heightened interest in the support of positive psychological well-being in children and adolescents (Huebner & Gilman, 2002).

The MSLSS is a 40-item questionnaire designed to measure both positive and negative subjective well-being, the MSLSS may operate as a global and domain-specific “affectometer” allowing sensitivity to change across the spectrum of well-being (Gilman & Huebner, 2002). A maximum score of 40 questions would be 240 and a minimum score would be 40. Multiple studies have provided evidence that the MSLSS (Huebner, 1994) is internally stable with alpha scores ranging from the 0.70s to the low 0.90s (Greenspoon & Saklofske, 1997; Huebner, 1994; Huebner et al., 1998). Temporal stability for the MSLSS has also been reported for 2- and 4-
week time periods and falling between 0.70 and 0.90 (Huebner et al., 1997; Huebner & Terry, 1995).

There are five domains in the MSLSS: family, friends, school, living environment, and self. Each subscale in the MSLSS (Huebner, 1994) uses a 6-point Likert-type scale (6 = strongly agree, 5 = moderately agree, 4 = mildly agree, 3 = mildly disagree, 2 = moderately disagree, and 1 = strongly disagree) for rating.

The MSLSS (Huebner, 1994) is designed to be used effectively with children across a wide range of ages (grades 3–12). The MSLSS (Huebner, 1994) was specifically designed to provide a profile of children’s satisfaction with important specific domains (family, school, and friends) in their lives; assess their general or overall life satisfaction; demonstrate acceptable psychometric properties (e.g., subscale reliability); reveal a replicable factor structure demonstrating the meaningfulness of the five dimensions (Huebner & Gilman, 2002).

Multiple studies demonstrated convergent and discriminant validity through predicted correlations with other self-reported well-being indexes (Gillman & Laughlin, 2000; Greenspoon & Saklofske, 1997; Huebner, 1994; Huebner, Laughlin, Ash, & Gilman, 1998), parent reports (Gilligan & Huebner, 2007), teacher reports (Huebner & Alderman, 1993), and social desirability scales (Huebner et al., 1998). In addition, two studies using confirmatory factor analyses identified the predicted five-factor solution (Gillman & Laughlin, 2000; Huebner et al.).

The MSLSS has five specific domains to measure psychological well-being for children (see Table 3.1).
Table 3.1
*Multidimensional Students’ Life Satisfaction Scale*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>Family background measures</td>
</tr>
<tr>
<td>Friends</td>
<td>Feelings related to satisfaction with friends</td>
</tr>
<tr>
<td>School</td>
<td>School life satisfaction</td>
</tr>
<tr>
<td>Living Environment</td>
<td>Satisfaction in their living environment</td>
</tr>
<tr>
<td>Self</td>
<td>General self-satisfaction assessment</td>
</tr>
</tbody>
</table>

The MSLSS (Huebner, 1998) school domain correlated 0.68 with the Quality of School Life Scale (Epstein and McPartland, 1977; Huebner & Gilman, 2002), the MSLSS friends domain correlated 0.56 with the Loneliness and Social Dissatisfaction Scale using Cronbach’s alpha (Asher, Hymel, & Renshaw, 1984), the family domain correlated 0.61 with the Parent scale from the Behavioral Assessment Scale for Children (Huebner & Gilman, 2002; Reynolds and Kamphaus, 1992), and the MSLSS self domain correlated 0.62 with the General Self-Esteem scale of the Self-Description Questionnaire-I (Huebner & Gilman, 2002; Marsh, 1990). The MSLSS is in the public domain. Researchers may use it without permission. The author welcomes any feedback regarding its usefulness.

**Procedures**

The researcher obtained approval from the Liberty University Institutional Review Board (IRB) before any data was collected (see Appendix D). Permission was requested to conduct the study with Liberty University once the proposal has been approved. Once permission is granted to conduct the study, a letter requesting assistance, explanation and expectation of the participants, and informed consent was presented to the school board, administration, teachers,
and principals of each school respectively (see Appendix E & F). The researcher sent home parental consent letters to all fifth grade students in the elementary private Christian schools via the grade-level teacher (see Appendix G). One week later, the researcher had teachers send home another round with any students who have not already returned a form. The parental consent letters were mailed to the parents. The letters requested the parent/guardian’s consent for the student to participate in the anonymous study and the student’s verbal assent should the parent agree (see Appendix H).

The advantage of using fifth grade classes for this study was that the students had one primary teacher to consider while answering the questions in the survey. The teacher collects written assent forms from students when they return the consent forms. Students who do not have assent and consent were excused from completing the questionnaire. They were allowed to read a book during this time. Each fifth grade teacher was provided a packet that contains an outlined process to collect the data within one week of each other (see Appendix I). All student names were anonymous for this study. Teachers were trained a couple of days before administering the instruments. Teachers were trained on how to administer the surveys. Teachers were instructed to have students return the surveys in a sealed envelope. Teachers did not have access to the answers given by the students. Training was completed within fifteen minutes by the researcher. In May, the teachers administered the autonomy and self-regulation questionnaires. Both questionnaires can be completed within five minutes each. The last questionnaire was completed the very next day if possible, but at minimum, within a week’s time. The teachers administered the psychological well-being questionnaire, which may take as long as ten minutes for participants to complete. The outline included the scripted instructions
provided by the authors of the instruments before the questionnaires are taken. The scripts are duplicated from the actual script on each questionnaire.

The study was conducted near the end of a school quarter. This way the fifth grade students had time to experience perceived autonomy-support, self-regulation, and the environment of a private Christian school. The researcher considered input from school personnel to ensure the most appropriate time is selected because of the familiar environments and behaviors from the staff and faculty perspectives. The purposed plan was to conduct the surveys in the morning on the same day with all fifth grade students before the students’ course work begins; however, the time was dictated by what was fundamentally beneficial to the school. All general education (N=170) fifth grade students from Christian private schools were used for this research.

Each student was assigned a number by the teacher given by the researcher before they begin the test. The researcher pre-printed the identification codes and paper-clipped the surveys together. The teacher was given a document with each of the codes for him/her to write down the students’ last names on the forms for the purpose of making sure the same student has all three surveys with the same number. Once the questionnaires are completed, the data was collected by the teachers and secured into the identified school envelope provided by the researcher. The envelope was then sealed and turned into the school office by the end of the day for the researcher to collect from each school. Students that are not present were excluded during the data entry process. Only collected surveys were accounted for and nonparticipants were excluded. SPSS was used to analyze the data.
Data Analysis

Multiple regression was used to analyze the null hypothesis. This approach allows researcher to determine predictive association between a single criterion variable which is psychological well-being and multiple predictor variables which are and perceived autonomy-support and self-regulation (Gall, Gall, & Borg, 2007). This method is routinely used in the fields of education and social sciences to examine predictive models; therefore, the examination of the strength of the relationship between the variables of interest were attained by conducting a multiple regression analysis (Gall et al., 2007). Multiple regression is also used in similar studies when the predictor variables are correlated with one another and to a criterion variable. The multiple regression equation for the analysis is

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon \]

Where \( \beta_0 \) is a constant (y-intercept), \( \beta_1 \) is the slope for \( X_1 \) and \( \beta_2 \) is the slope for \( X_2 \), and \( \epsilon \) represents the errors. \( X \) is the value of the predictor variable, where \( X_1 \) is perceived autonomy-support and \( X_2 \) is self-regulation. \( Y \) is the value of the criterion variable, psychological well-being.

Prior to conducting the procedure, data was screened for inconsistencies and outliers. There are six assumptions that must be met when conducting a multiple regression: normality, homoscedasticity, linearity, non-multicollinearity, independence of observations, and bivariate outliers. Homoscedasticity, bivariate outliers, and linearity was examined using scatterplots to ensure there is a linear relationship with the criterion and predictor variables (Gall et al., 2007). Normality was tested using a histogram to evaluate data distribution. Multicollinearity was assessed by examining the tolerance and variance inflation factors (VIF). Within the multiple
regression analysis, the predictor variables were grouped into blocks, to show the relationship with the criterion variable.

Effect size was measured and discussed in terms of the Eta squared statistics and interpreted according to Cohen’s r (Warner, 2012). To identify the correlation coefficient, or the measure of the degree that perceived-autonomy predicts psychological well-being in tandem with self-regulation, a post-hoc test was performed to determine if a variable has a stronger predictor impact on the criterion. An alpha of $\alpha = 0.05$ was used to determine statistical significance, a standard which is typical of educational research (Gall et al., 2007).
CHAPTER FOUR: FINDINGS

Overview

This chapter outlines the statistical procedures and findings from the study. The purpose of this study was to examine how fifth grade students’ perceived autonomy-support and self-regulation predict psychological well-being. A report of the descriptive statistics and results are presented below and followed by the analysis of the research question.

Research Question

This study is proposed on the belief that there is a predictive relationship with students’ perceived autonomy support and self-regulation that determines a students’ psychological well-being. The research question for this study is:

RQ1: How accurately can psychological well-being be predicted from fifth grade Christian private school students’ perceived autonomy-support and self-regulation?

Null Hypothesis

The null hypothesis for this study is:

H01: There is not a statistically significant predictive relationship with fifth grade Christian private school students’ psychological well-being when measuring perceived autonomy-support and self-regulation.

Descriptive Statistics

The mean, standard deviation, skewness, and kurtosis of the sample (N = 124) for (a) perceived autonomy-support, and (b) self-regulation are M = 5.63, SD = .98, with skewness of -0.57 (SE = 0.22) and kurtosis of -0.4 (SE = 0.43); and M = 2.89, SD = .37, with skewness of -0.417 (SE = 0.22) and kurtosis of 0.09 (SE = 0.43) respectively. The mean and standard deviation of the sample (N = 124) for the criterion variable psychological well-being
(transformed) is M = 42.00, SD = 20.07, with skewness of -0.01 (SE = 0.22) and kurtosis of -0.82 (SE = 0.43). The descriptive statistics for all variables are reported on Table 4.1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Skewness Statistic</th>
<th>Kurtosis Statistic</th>
<th>SE</th>
<th>Statistic</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Autonomy-Support</td>
<td>124</td>
<td>5.63</td>
<td>0.98</td>
<td>-0.566</td>
<td>0.217</td>
<td>-0.397</td>
<td>0.431</td>
<td></td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>124</td>
<td>2.89</td>
<td>0.37</td>
<td>-0.417</td>
<td>0.217</td>
<td>0.093</td>
<td>0.431</td>
<td></td>
</tr>
<tr>
<td>Psyc Well-Being (transformed)</td>
<td>124</td>
<td>42.00</td>
<td>20.07</td>
<td>-0.008</td>
<td>0.217</td>
<td>-0.821</td>
<td>0.431</td>
<td></td>
</tr>
</tbody>
</table>

**Results**

A multiple regression was run to predict well-being from self-regulation and perceived autonomy support. The dependent variable was psychological well-being and the independent variables were autonomy and self-regulation. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.240. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1, no leverage values greater than 0.2, and values for Cook's distance above 1.

Perceived autonomy-support added statistically significantly to the prediction, p < .05, but self-regulation did not. Regression coefficients and standard errors can be found in Table 4.2. Normality was tested using a histogram to evaluate data distribution for perceived autonomy-support (Figure 4.1) and self-regulation (Figure 4.2).
Table 4.2

*Multiple regression analysis predicting Psychological Well-Being (N = 124)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SE</th>
<th>Beta</th>
<th>$t$</th>
<th>$p$-value</th>
<th>$R$-squared change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>0.24</td>
<td>0.05</td>
<td>0.39</td>
<td>4.67</td>
<td>&lt;0.001</td>
<td>0.15</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>0.16</td>
<td>0.13</td>
<td>0.10</td>
<td>1.22</td>
<td>0.23</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*Figure 4.1. Histogram and Boxplot for Perceived Autonomy-Support*

*Figure 4.2 Histogram and Boxplot for Self-Regulation*

Normality was tested using a histogram to evaluate data distribution for self-regulation (Figure 4.2) and perceived autonomy-support (Figure 4.3) as well. A histogram chart and
distribution lines were used to assess tenability for normality and to review any skewness and kurtosis for perceived autonomy (Figure 4.4) and self-regulation (Figure 4.5) associated with the data (Gall et al., 2010). Additionally, the dependent variable, psychological well-being was transformed according to Box-Cox procedure to assess skewness and kurtosis statistics to verify normality (Figure 4.6).

**Figure 4.3** Histogram and Boxplot for Psychological Well-Being (transformed)

![Histogram and Boxplot for Psychological Well-Being](image)

*Note:* The following equation was used to transform the dependent variable: 
ΜSLSS16\_transform = ((\text{var}^{**3.8} - 1)/3.8).

**Figure 4.4** Histogram and Distribution Line for Perceived Autonomy-Support

![Histogram and Distribution Line for Perceived Autonomy-Support](image)
Homoscedasticity, bivariate outliers, and linearity were examined using scatterplots to ensure there is a linear relationship with the criterion and predictor variables (Gall et al., 2007). Figure 4.7 is a visual of standardized residuals against the predicted values. A visual examination of a plot for the standardized residuals by the regression standardized predicted value was assessed to determine that the assumption of homoscedasticity was found tenable. Additional scatterplots were used to examine linearity and bivariate outliers for psychological well-being and perceived autonomy-support (see Figure 4.8) and psychological well-being and self-
regulation (see Figure 4.9). These inspections revealed that the assumption of a linear relationship with the predictor variables and criterion was tenable. Normality was also confirmed by the rectangular shaped distributed residuals in the scatter plot, suggesting that there are no major deviations from normality.

*Figure 4.7 Scatterplot of Standardized Residuals Against Predicted Values*

![Scatterplot of Standardized Residuals Against Predicted Values](image)

*Figure 4.8 Scatterplot: Psychological Well-Being v. Perceived Autonomy-Support*

![Scatterplot: Psychological Well-Being v. Perceived Autonomy-Support](image)
Multicollinearity was examined by the analysis of tolerance and Variance Inflation Factor (VIF) values. The correlation between the predictor variables were assessed on Table 4.9. The correlation matrix demonstrates that the predictor variables are not highly correlated (e.g., $r < 1.025$). Perceived autonomy-support and self-regulation values were greater than 0.10, and the VIF values were under 10, suggesting that the assumption of no multicollinearity is tenable (Tabachnick & Fidell, 2007).

![Figure 4.9 Scatterplot: Psychological Well-Being v. Self-Regulation](image)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Autonomy-Support</td>
<td>0.975</td>
<td>1.025</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>0.975</td>
<td>1.025</td>
</tr>
</tbody>
</table>

Autonomy is a significant predictor of psychological well-being. For every unit of change with $X_1$ or perceived autonomy-support, there is an increase of 0.24 on the Y or criterion variable, psychological well-being. There was not a significant relation between self-regulation
and psychological well-being. For every unit of change with $X_2$ or self-regulation, there is an increase of 0.16 on the Y or criterion variable, psychological well-being; however, the p-value of 0.23 is outside of the alpha of $\alpha = 0.05$ used to determine statistical significance; therefore, the $H_0$ null hypothesis was partially found to be true.
CHAPTER FIVE: CONCLUSIONS

Overview

Psychological well-being is an essential need for emotional stability and healthy student development. Low performance and adaptation within educational environments are directly associated with low psychological well-being among children (Assor & Kaplan, 2012; Brown & Ryan, 2003; Deci & Ryan, 2000; Gilman & Huebner, 2002). Unfortunately, there are few studies that measure the psychological well-being of pre-adolescent students (Reeve & Yu-Lan, 2010). Students’ psychological well-being is found to be a multidimensional characteristic which is influenced by different variables. A better understanding of specific variables is necessary to help influence and guide educational programs that seek to improve student psychological well-being, which improves student performance and adaptation within learning environments. This study sought to identify and measure specific variables that may predict psychological well-being among fifth grade students. Perceived autonomy-support and self-regulation research within the self-determination theory align with similar outcomes in regard psychological well-being among children; however, there may be implications and limitations that influence the degree in which these variables influence predictability of psychological well-being (Assor & Kaplan, 2012; Valiente et. al., 2011). The findings from this study may serve as a model for future research in psychological well-being among upper elementary students.

Discussion

The purpose of this predictive correlational study was to examine the predictive relationship between perceived autonomy-support (predictive variable), self-regulation (predictive value), and psychological well-being (criterion variable) of fifth grade students in Christian private schools. The research question was poised on how accurately psychological
well-being can be predicted from fifth grade Christian private school students’ perceived autonomy-support and self-regulation. Results indicated that perceived autonomy-support is a significant predictor of psychological well-being with fifth grade Christian private school students ($B = 0.24$, $SE = 0.05$, $p < 0.001$). Perceived autonomy is a social variable that identifies the influence upon well-being, performance, and motivation (Deci & Ryan, 1985; Jang, Reeve, Ryan, & Kim, 2009). Perceived autonomy-support within psychological well-being assessment supports a high emphasis of prior literature from the self-determination theory and self-regulation (Brown & Ryan, 2003); however, self-regulation was not found to be a statistically significant predictor of psychological well-being with fifth grade Christian private school students ($B = 0.16$, $SE = 0.13$, $p = 0.23$). Therefore, the regression model statistically significantly predicted well-being; however, only perceived autonomy support significantly added to the model.

Previous research found that greater perceived autonomy-support is conjoined with greater classroom engagement, greater psychological need satisfaction, higher mastery motivation, greater intrinsic motivation, higher creativity, higher academic achievement, and enhanced psychological well-being (Assor & Kaplan, 2012; Connell & Ryan, 1989; Williams et al., 1996). This study further supported these findings among a fifth grade population. Black and Deci (2000) found that students with low self-regulation perform successfully when perceived autonomy-support is high (Black and Deci, 2000). According to SDT, this is because a teacher that is faced with students that do not self-regulate, will tend to become more controlling to motivate them. The previous finding supports why self-regulation was not statistically significant predictor of psychological well-being among fifth grade Christian school students. This population was found to have high perceived autonomy-support. Therefore, the experience to
self-regulate did not correlate as a predictor for psychological well-being, which would support earlier findings with this instrument, controlled populations, and high perceived autonomy-support.

Although self-regulation with elementary children has been identified as a precursor for improved adjustment and behavior, children that maintain disciplinary issues are less capable of self-regulation. Furthermore, research has shown that behavior can be adjusted through controlled or autonomy-supported environments (Grolnick & Ryan, 1998). The results of this study show that high perceived autonomy-support among elementary children may also indicate a lesser capability of self-regulation. Therefore, self-regulation as a predictor variable, should not be included in psychological well-being models for fifth grade students.

Controlled or autonomy-supported environments are found by measuring perceived autonomy-support. Although the environment was not considered as a variable within this study, the self-determination theory emphasizes the importance to define social environments when perceived autonomy-support is measured. Students attending a private Christian school is a defined social environment as described by the self-determination theory (Brown & Ryan, 2003; Deci & Ryan, 2000). Previous research has identified well-being, while encouraging further study to name healthy social environments that may influence well-being (Heubner, 1994; Deci & Ryan, 2000). Well-being and happiness in children coexist in environments that are autonomously supportive (Reeve & Yu-Lan, 2010). The results of this study support the previous findings and the emphasis to identify a defined social environment, that perceived autonomy-support predicts psychological well-being among fifth grade private Christian school students (Deci & Ryan, 2011).
Implications

The research for this study explores variables that are normally analyzed and measured through qualitative perspectives. Qualitative research has identified moral scaffolding as an environmental factor of spiritual benefits with Christian schools that improve behavior over public schools and equate to higher academic performance (Jeynes, 2009). However, measurable variables that influence these outcomes are needed to help all schools improve overall student performance while defining the social environment. This study used quantitative findings and research from the self-determination theory to better understand how psychological well-being influences behavior and academic performance, while identifying variables that may predict psychological well-being.

As stated previously, social environments have a wide range of scientific reactions on both motivational and personal growth development (Brown & Ryan, 2003; Deci & Ryan, 2000; Gunz & Sheldon, 2009). This research will serve as a model that improving perceived autonomy-support, which is a significant predictor of psychological well-being ($B = 0.24, SE = .05, p < 0.001$), increases psychological well-being which influences student behavior and performance. Research has shown that an autonomy supportive classroom climate is associated with less aggression, less disruptive behavior, and more positive student outcomes (Assor et al., 2007). This model may further support the need to avoid autonomy-suppressing teaching techniques, while improving autonomy-supportive techniques that are associated with positive student outcomes (Assor et al., 2007). Furthermore, the model establishes awareness and reference for professionals that are working with children or conducting research.
Limitations

Participant self-reporting may have been a limitation of this study. According to the instruments used for this study, it was recommended that all questionnaires were administrated on paper to ensure higher participation and test results (Deci & Ryan, 2000; Huebner, 1994). All questionnaires were conducted using the same instruction narratives from the Appendix I to mitigate limitations to the data collection process. Participant self-reporting is a limitation due to subjectivity and an increase in responder bias (Gall et al., 2010). Even though the sample size was adequate, a larger sample may have affected the results of the study. Larger sample size ensures a representative distribution of the population. Generalizations of the findings may be limited since the population was small. Generalizations across institutions may be limited since the study focused on students attending a fifth grade private Christian school. The study institution may not be representative of institutions in other parts of the United States. Fortunately, all findings were within in normal guidelines of the instruments used for the study.

Socioeconomic status (SES) bias may exist within the environment and the behavior of these students. Participants in this data set all attend very strict or standard driven Christian educational institutions. Because of the high cost to enroll students in such schools, many of the participants are from professional or affluent families. Socioeconomic status cultures contain pervasive influences that shape the dynamics of proximal environments, resulting in practices that tend to enhance or diminish mutual perspectives (Deci & Ryan, 2017). The self-determination theory emphasizes empirical study and understanding regarding the chain of influence of such bias. This information should be considered when comparing data to similar studies.
This study used a correlational research design to determine psychological well-being, assessing perceived autonomy-support and self-regulation. This design is not indicative of a cause and effect relationship (Tabachnick and Fidell, 2007). This means that it cannot prove that one variable causes a change in another variable. Other variables may have an impact on the outcome such as environment, socioeconomic status, or cognitive abilities. There is always a limitation in cultural bias and interpretation depending on the perspectives of the participant. The questions may be stated in a way that may be challenging for some cultures.

**Recommendations for Future Research**

Psychological well-being in children is essential for emotional stability and healthy student development, and children with low psychological well-being perform and adapt poorly in educational settings (Gilman & Huebner, 2002). This study was conducted in private Christian schools and perceived autonomy-support was found to be a significant predictor of psychological well-being. There is a need for further research with this model to be conducted in other defined social environments, such as a public school. Conducting this study in different defined educational environments would establish a measurable comparison as to why one type of school may outperform another type of school. Comparisons may include charter schools, secular private schools, gifted schools, or general education public schools.

Further research is needed to identify and improve psychological well-being. Increased anxiety, depression, maladaptive ways of coping, inability to self-govern, and threatening behavior health in children are all reasons why additional research is needed for student’s psychological well-being (Brown & Ryan, 2003; Gilman & Huebner, 2002; Assor & Kaplan, 2012; Deci & Ryan, 2000). With growing concerns of psychological well-being in regard to security and safety in school norms, further research is needed to understand the psychological
well-being of students before an event may occur. This model could also be conducted as a standard practice of measuring students’ perceived autonomy-support and psychological well-being to improve interaction processes at the beginning of a school year, and then conducted if an event should take place in the school. Using this research model in this way, would serve as a necessary aid to assess and assist student psychological well-being.

Although there are several studies on psychological well-being, there is not a universal research process of predictive variables to identify psychological well-being (Huebner, 1994; Ryan & Deci, 2000; Ryan & Deci, 2001; Ryff, 1989). Educational institutions could use this research model to identify students’ perceived autonomy-support and psychological well-being, and implement processes based on the awareness and impact of establishing a more autonomy-supportive environment to improve student’s psychological well-being. Fulfilling important personal needs, such as social driven activities, class activities, and exercise, are also associated with greater psychological well-being (Black & Deci, 2000; Assor & Kaplan, 2012). Further research with this model could be conducted in many areas of a student’s education to include, testing academic groups, sport teams, and school intermural groups or clubs, while reviewing outcomes of student perceived autonomy-support. Although the hypothesis is partially true, conducting this research has established a new model that significantly predicts psychological well-being among upper elementary students, while providing awareness and data for professionals that are working with children or conducting research.
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Appendix A

PERCEIVED AUTONOMY SUPPORT: LEARNING CLIMATE QUESTIONNAIRE

(PAS-LCQ)

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Removed for copyright purposes.

Survey may legally be accessed on line:

http://selfdeterminationtheory.org/perceived-autonomy-support/
Appendix B

ACADEMIC SELF-REGULATION QUESTIONNAIRE (SRQ-A)

* * * * * * * * * * * *

Removed for copyright purposes

Survey may legally be accessed on line:

http://selfdeterminationtheory.org/self-regulation-questionnaires/
Appendix C

MULTIDIMENSIONAL STUDENTS’ LIFE SATISFACTION SCALE (MSLSS)

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Removed for copyright purposes

Survey may legally be accessed on line:

http://www.statisticssolutions.com/the-multidimensional-students-life-satisfaction-scale-mslss/
Appendix D

May 9, 2018

Benedetto Mongiovi
IRB Approval 3274.050918: The Relationship between Self-Regulation, Perceived Autonomy and Psychological Well-Being among Fifth Grade Christian Private School Students

Dear Benedetto Mongiovi,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

[Redacted]
Appendix E

CONSENT FORM (5TH Grade Teacher)
THE RELATIONSHIP BETWEEN SELF-REGULATION, PERCEIVED AUTONOMY AND PSYCHOLOGICAL WELL-BEING AMONG FIFTH GRADE CHRISTIAN PRIVATE SCHOOL STUDENTS
Mr. Benedetto Mongiovi, Ed.S.
Liberty University
School of Education

Your class is invited to be in a research study of psychological well-being. This is a predictive study of self-regulation and perceived autonomy. Your class was selected as a possible participant because the study is with fifth grade students in Christian private schools. Please read this form and ask any questions you may have before agreeing to be in the study.

Mr. Benedetto Mongiovi, Ed.S., a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to examine how fifth grade students’ perceived autonomy-support and self-regulation predict psychological well-being. Perceived autonomy-support is how the student feels he/she is supported and how much his/her opinions count. Self-regulation is a person’s ability to manage his/her emotions and behavior in accord with the demands of the situation. Well-being is looking at how content and satisfied a person feels; a feeling of having achieved something in one’s life.

Procedures: If you agree to let your class participate in this study, I would ask the participants to do the following things:

1. Read and complete three anonymous surveys that may take 5-10 minutes over two days.

Risks: The risks involved in this study are minimal, which means they are equal to the risks your child/ward would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participants will be anonymous; however, they will be assigned a number which will be on each survey to ensure they have taken all three surveys.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Participants are not at risk of breach of confidentiality.
Voluntary Nature of the Study: Participation in this study is voluntary. It is your decision whether or not to allow your class to participate. If you allow your class to participate, the students still have to give written assent to participate (on a separate form). Whether or not you allow your class to participate will not affect your current or future relations with Liberty University or educational institutions.

How to Withdraw from the Study:
If you or the students choose to withdraw from the study, please inform the researcher that you wish to stop participating prior to submitting the study materials. The responses will not be recorded or included in the study. After questions are submitted, you cannot get them back as the researcher will not know whose papers are whose.

Contacts and Questions: The researcher conducting this study is Mr. Benedetto Mongiovi, Ed.S., HS-BCP. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at (352) 638-7286 and/or bmongiovi@liberty.edu. You may also contact the researcher’s faculty chair, Dr. Lisa Foster, at lafoster@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers if needed. I consent to allow my School to participate in the study.

5th Grade Teacher Name (Printed)  Date

Signature of 5th Grade Teacher  Date

Signature of Investigator
Appendix F

CONSENT FORM (Principal)

THE RELATIONSHIP BETWEEN SELF-REGULATION, PERCEIVED AUTONOMY AND PSYCHOLOGICAL WELL-BEING AMONG FIFTH GRADE CHRISTIAN PRIVATE SCHOOL STUDENTS

Mr. Benedetto Mongiovi, Ed.S.
Liberty University
School of Education

Your institution is invited to be in a research study of psychological well-being. This is a predictive study of self-regulation and perceived autonomy. The school was selected as a possible participant because the study is with fifth grade students in Christian private schools. Please read this form and ask any questions you may have before agreeing to be in the study.

Mr. Benedetto Mongiovi, Ed.S., a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to examine how fifth grade students’ perceived autonomy-support and self-regulation predict psychological well-being. Perceived autonomy-support is how the student feels he/she is supported and how much his/her opinions count. Self-regulation is a person’s ability to manage his/her emotions and behavior in accord with the demands of the situation. Well-being is looking at how content and satisfied a person feels; a feeling of having achieved something in one’s life.

Procedures: If you agree to let your school participate in this study, I would ask the participants to do the following things:

2. Read and complete three anonymous surveys that may take 5-10 minutes over two days.

Risks: The risks involved in this study are minimal, which means they are equal to the risks your child/ward would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participants will be anonymous; however, they will be assigned a number which will be on each survey to ensure they have taken all three surveys.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Participants are not at risk of breach of confidentiality.
Voluntary Nature of the Study: Participation in this study is voluntary. It is your decision whether or not to allow your school to participate. If you allow your school to participate, the students still have to give written assent to participate (on a separate form). Whether or not you allow your school to participate will not affect your current or future relations with Liberty University or educational institutions.

How to Withdraw from the Study: If you or the students choose to withdraw from the study, please inform the researcher that you wish to stop participating prior to submitting the study materials. The responses will not be recorded or included in the study. After questions are submitted, you cannot get them back as the researcher will not know whose papers are whose.

Contacts and Questions: The researcher conducting this study is Mr. Benedetto Mongiovì, Ed.S., HS-BCP. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at (352) 638-7286 and/or bmongiovi@liberty.edu. You may also contact the researcher’s faculty chair, Dr. Lisa Foster, at lafoster@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers if needed. I consent to allow my School to participate in the study.

____________________________________________________________________________
Principal Name (Printed) Date

____________________________________________________________________________
Signature of Principal Date

____________________________________________________________________________
Signature of Researcher Date
Appendix G

CONSENT FORM

THE RELATIONSHIP BETWEEN SELF-REGULATION, PERCEIVED AUTONOMY AND PSYCHOLOGICAL WELL-BEING AMONG FIFTH GRADE CHRISTIAN PRIVATE SCHOOL STUDENTS

Mr. Benedetto Mongiovi, Ed.S.
Liberty University
School of Education

You are invited to be in a research study of psychological well-being. This is a predictive study of self-regulation and perceived autonomy. You were selected as a possible participant because the study is with fifth grade students in Christian private schools. Please read this form and ask any questions you may have before agreeing to be in the study.

Mr. Benedetto Mongiovi, Ed.S., a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to examine how fifth grade students’ perceived autonomy-support and self-regulation predict psychological well-being. Perceived autonomy-support is how the student feels he/she is supported and how much his/her opinions count. Self-regulation is a person’s ability to manage his/her emotions and behavior in accord with the demands of the situation. Well-being is looking at how content and satisfied a person feels; a feeling of having achieved something in one’s life.

**Procedures:** If you agree to let your child/ward be in this study, I would ask him/her to do the following things:

3. Read and complete three anonymous surveys that may take 5-10 minutes over two days.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks your child/ward would encounter in everyday life.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participants will be anonymous; however, they will be assigned a number which will be on each survey to ensure they have taken all three surveys.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Participants are not at risk of breach of confidentiality.
Voluntary Nature of the Study: Participation in this study is voluntary. It is your decision whether or not to allow your child/ward to participate. If you allow your child/ward to participate, they still have to give written assent to participate (on a separate form). Whether or not you allow your child/ward to participate will not affect your current or future relations with Liberty University or educational institutions.

How to Withdraw from the Study: If you or your child/ward choose to withdraw from the study, please inform the researcher that you wish to stop participating prior to submitting your study materials. Your responses will not be recorded or included in the study. After you have submitted your questions, you cannot get them back as the researcher will not know whose papers are whose.

Contacts and Questions: The researcher conducting this study is Mr. Benedetto Mongivoi, Ed.S., HS-BCP. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at (352) 638-7286 and/or bmongiovi@liberty.edu. You may also contact the researcher’s faculty chair, Dr. Lisa Foster, at lafoster@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers if needed. I consent to allow my child/ward to participate in the study.

Parent Name (Printed) ___________________________ Date ____________

Signature of Parent/Guardian ___________________________ Date ____________

Signature of Researcher ___________________________ Date ____________
Appendix H

ASSENT OF CHILD TO PARTICIPATE IN A RESEARCH STUDY

What is the name of the study and who is doing the study?
Title: The Relationship between Self-Regulation, Perceived Autonomy, and Psychological Well-Being among Fifth Grade Christian Private School Students.
Research: Benedetto Mongiovi, a doctoral student at Liberty University

Why are we doing this study?
We are interested in understanding if 5th grade students feel they are getting support and are able to make decisions themselves (like whether to do homework and at what time; staying on a schedule; controlling temper). We want to find out if these abilities influence a student’s feelings of well-being.

Why are we asking you to be in this study?
You are being asked to be in this research study because the study is looking at how fifth grade students in Christian private schools feel about these characteristics.

If you agree, what will happen?
If you are in this study, you will take three short surveys to find out about your feelings and perceptions. Your survey responses will be used to help educators make better choices in school and lesson planning. You will never be identified in the study. No one will know your choices.

Do you have to be in this study?
No, you do not have to be in this study. If you want to be in this study, then tell the researcher. If you don’t want to, it’s OK to say no. The researcher will not be angry. You can say yes now and change your mind later. It’s up to you.

Do you have any questions?
You can ask questions any time. You can ask now. You can ask later. You can talk to the researcher also. If you do not understand something, please ask the researcher to explain it to you again.

Signing your name below means that you want to be in the study.

______________________________________________________________________________
Signature of Child

Date

Mr. Benedetto Mongiovì, Ed.S., HS-BCP (Researcher)
(352) 638-7286
bmongiovì@liberty.edu
Dr. Lisa Foster, Ph.D. (Researchers Advisor)
lafoster@liberty.edu.
Liberty University Institutional Review Board,
1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515
or email at irb@liberty.edu.
Appendix I

PROCESS TO COLLECT DATA

Day 1

Step 1: Assign provided numbers to each student.

Step 2: Handout first survey (Perceived Autonomy) to student with corresponding number.

Step 3: Read the following questionnaire instruction for PERCEIVED AUTONOMY SUPPORT

This questionnaire contains items that are related to your experience with your instructor or teacher in this class. Instructors and teachers have different styles in dealing with students, and we would like to know more about how you have felt about your encounters with your instructor or teacher. Your responses are confidential. Please be honest and candid. *Circle the answer that is most like your response.*

Step 4: Collect questionnaires and place into the provided secure envelope.

Step 5: Handout second survey (Academic Self-Regulation) to student with corresponding number.

Step 6: Read the following questionnaire instruction for the SELF-REGULATION QUESTIONNAIRE

These questions are about the reasons you do your school work. Different students have different reasons. We want to know how true each of these reasons is for you. *Circle the answer that is most like your response.*

Step 7: Collect questionnaires and place into the provided secure envelope.

Day 2

Step 1: Assign provided numbers to each student.

Step 2: Handout final survey (MSLSS) to student with corresponding number.

Step 3: Read the following questionnaire instruction:

**MULTIDIMENSIONAL STUDENTS’ LIFESATISFACTION SCALE (MSLSS)**

We would like to know what thoughts about life you have had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with life. Circle the number (from 1 to 6) next to each statement that indicates the extent to which you agree or disagree with each statement. It is important to know what you REALLY think, so please answer the question the way you really feel, not how you think you should. This is NOT a test. There are NO right or wrong answers. Your answers will NOT affect your grades, and no one will be told your answers.

Step 4: Collect questionnaires and place into the provided secure envelope.