2019

Understanding and Developing Motivation within an Academic Setting

Katarina Marie Klem
Bethel University

Understanding and Developing Motivation within an Academic Setting

Katarina Klem

January 2019

Abstract

Developing, supporting, and encouraging academic motivation within the classroom through a wide variety of internal and external forces that develop and support academic motivation is essential in providing all students with a successful learning opportunity. This study seeks to uncover the fundamental principles that drive academic motivation, and how these drivers can continually be developed in order for students to achieve academic success. By examining the impacts of amotivation, self-efficacy, intrinsic and extrinsic reward systems, as well as the impact of relational social constructs, readers will better understand the foundations of academic motivation. Additionally, ways to enhance and develop academic success will be identified based on the core tenants of what drives academic motivation.

Table of Contents

Chapter I: Introduction

A student's self-perception is a key predictor of performance and motivation in the classroom. Their perspective on who they are as an individual is strongly rooted in not only their natural talents and preferences, but also a result of the relational constructs that they have been surrounded with since birth. Understanding these components and how they relate to a student's self-perception within the classroom is essential to successfully educating and motivating high-school students. High-school students make up the future of this country and finding ways to increase their motivation and engagement in the classroom is vital. Additionally, educators must understand what motivates and drives their students to not only increase learning that occurs in their classroom, but also support students' ability to succeed. Only with this support will some students be able to reach their full potential and learn how to develop their motivation, determination, and drive within a classroom environment sot they can be successful after leaving that environment.

Three key subtopics comprise this review of the literature on a student's self-perception and its direct impact on their levels of academic motivation. Amotivation and it's oppositional stance of self-efficacy, which is supported by self-confidence, will be reviewed first with the intention of framing the development of a student's self-perception as a learner. Next, whether a classroom utilizes mostly intrinsic or extrinsic motivational structures and the impact on a student's overall motivation and academic performance leads to understanding situational motivation. These subtopics will be examined in order to explore the extent to which student self-perception and teacher pedagogy create the conditions for positive motivational beliefs to be internalized by students.

The literature clearly suggests that a student's relationships with family, friends, and teachers have a direct impact on a student's self-perception and their desire to succeed, indicating to some extent that motivation for academic activities is a socially constructed disposition, the final subtopic. These relational-social constructs within a student's life not only provide opportunity for the initial development of motivation, but also maintain and provide opportunities for motivation to be continually increased to achieve academic success. More specifically, the professional responsibilities of a school and teacher in developing academic motivation will be addressed. Research clearly indicates that relational social constructs, those experienced both inside and outside an educational setting, are crucial to the development and maintenance of student motivation. Each of these three subtopics will support the primary goal of identifying and developing motivation, determination, and drive within a student.

In today's educational environment, it is clear that there is a divide between students that have strong motivation and students that struggle within a school context. The intention of this research is to identify why some students struggle with motivation as a result of their perceptions of themselves and identify ways to counteract this to aid all students in their development of academic motivation. Additionally, this research explores the differences that exist between two types of students, students with high internal drive and students with low to no internal drive, and how to facilitate academic achievement in all students regardless of their perceptions. It is the ultimate goal of educators to inspire curiosity, engagement, and interest in our students, and by better understanding how our students are motivated and how to effectively motivate them educators are able to move students towards this goal.

Definition of Terms

For the purposes of this literature review, "motivation" refers to a student's desire to engage in academic tasks and expend effort with regard to their academics. Jackson and McNamara (2013) write, "motivation influences the learning process in which students engage... motivation is a multidimensional construct that subsumes a number of competent factors, such as interest, enjoyment, expectancies, and values" (p. 1037). All students have differing levels of motivation regarding academics, with amotivation being the most detrimental. Amotivation, lacking the ability or desire to engage in something, is key in examining motivation as amotivated students are unable to foresee behavioral consequences, or understand the motivation behind their engagement. Amotivation is linked to learned helplessness in students, which negatively impacts academic motivation, and students' intrinsic desire to pursue their education (Legault, Green-Demers, & Pelletier, 2006). When teaching students who are amotivated, teachers should understand that they are difficult to motivate and struggle in a formal academic setting whereas their peers who are not amotivated are able to identify behavioral consequences and pursue their academics with a significantly higher level of intrinsic motivation (Wiesman, 2012). This lack of engagement in education further reinforces the mindset of already amotivated students and makes classroom success less and less likely.

Self-efficacy is an essential component to students self-perception when it comes to academic motivation. According to Bandura (1977), self-efficacy relates to one's belief in their ability to meet specific performance measures through their own behavior. This concept reflects an individual's confidence in having control over their own motivation, behavior, and social environment whereas low levels of self-efficacy leads students to believe that failure is an

automatic outcome (Legault, Green-Demers, & Pelletier, 2006). As a result, self-efficacy directly impacts students' self-perception and their ability to motivate themselves in academic pursuits. Additionally, self-efficacy can be further supported by one's perception of their own characteristics, self-confidence (Dinesh & Kiran, 2018; Usta, 2017). The goals that students pursue, the intensity by which they pursue those goals, and the likelihood of actually achieving their goals are all rooted in the concept of self-efficacy.

Differentiating between intrinsic and extrinsic motivation in an academic context is essential because in order for students to have a high level of intrinsic motivation, they must demonstrate high levels of self-determination which leads to success. Students with intrinsic motivation have a natural curiosity and desire to learn and absorb information, they are also determined to learn which aids in their academic pursuit (Wiesman, 2012). On the other hand, extrinsic motivation occurs when students receive either positive or negative external reactions which is intended to motivate them in their pursuit of academic learning however, the intended result of academic motivation is not always achieved (Legault, Green-Demers, & Pelletier, 2006).

The relationships found within a student's life are key in their ability to develop and maintain sustained motivation within an educational environment and can be defined as the relationships that exist surrounding and involving a student. The relational social constructs examined in this research will focus on three groups of individuals: parents, teachers, and peers. Each of these groups provide students with varying levels of modeling, support, and development of behaviors that will enhance student motivation. More specifically, two parenting approaches will be addressed, authoritative and authoritarian. For the purposes of this review,

these terms will be defined based on Baumrind's (1967, 1971) research which categorizes psychological autonomy as authoritative parenting and psychological control as authoritarian parenting (as cited in Grolnick & Ryan 1989). Research indicates the importance of social constructs on motivation, and as a result it is a fundamental area to address in order to fully understand why a student either lacks in or has an abundance of motivation (Wiesman, 2012; Legault, Green-Demers, & Pelletier, 2006).

Two pedagogical concepts that support the development of academic motivation are autonomy development and mastery orientation. Autonomy development encourages students' ability and desire to choose their own behaviors and actions. By developing autonomy in a classroom, a teacher not only develops students' overall level of self-sufficiency but also promotes their ability to learn independently. The second educational concept is mastery orientation. This is an approach where students develop complete mastery of a concept and skills. With mastery orientation, students' interest in continually increasing their own level of competency and abilities develops (Nayir, 2017). Utilization of these pedagogical approaches within a classroom directly impacts students' level of academic motivation by increasing their level of intrinsic motivation and self-efficacy.

Research Questions

A review of the literature will answer the questions: What causes or catalysts exist to create amotivation and what impact does amotivation have on academic outcomes? What is the impact of a student's self-perception in academic motivation? What is the importance of relationships to a student's success? In what ways can the educational environment develop academic motivation in students? Finally, the overall question that will guide the research is:

What creates and underscores motivation and internal drive in students, and how do teachers support its development in the classroom?

The following literature review will provide teachers with an understanding of the factors which impact academic motivation, and what can be done within a classroom to encourage higher levels of motivation. By addressing first and foremost the causes of academic motivation, teachers will be able to ascertain why a student is lacking or excelling in motivation from a broad perspective, which will then impact their approach with the student. Additionally, methods that increase student motivation will be provided to support a teacher in their instruction.

Chapter II: Literature Review

Initially, the research in this literature review focused on all components of motivation for students in a classroom setting. This search was narrowed to examine the impact of amotivation and self-efficacy as they relate to motivation, intrinsic versus extrinsic motivation, others' perspective on self and impact on motivation, developing motivation in students, and educational strategies shown to improve student engagement and sustained motivation. Research was gathered using the following databases: EBSCO MegaFILE, JSTOR, Academic Search Premier, ERIC, Teacher Reference Center, and PsychINFO to examine a variety of studies ranging from 1977 – 2018 and includes students and educators from a large variety of backgrounds and regions.

Amotivation and Self-Efficacy

Amotivation

The continued development of motivation in an academic setting is a necessary component of developing a successful student. Motivation can be defined as academic participation that has the strongest influence on student performance, or in its simplest form, motivation is an action for a corresponding action (Francis, Goheer, Haver-Dieter, Kaplan, Kerstetter, & Kirk et al., 2004; Usta, 2017). Motivation encompases everything that moves an individual or in this case, a student, and it includes the initial drive toward an activity or behavior as well as sustained effort to the completion of that activity or behavior (Thorkildsen, Nicholls, Bates, Brankis, & DeBolt, 2002; Usta, 2017). More extensive development and research on motivation, specifically with relation to academics, began to develop in the early 19th century and has developed into a main concern of educational research.

When a student finds value in an activity or behavior, they are likely to persist even if they may not enjoy it, they are motivated. It is the value a student perceives from a learning task that solidifies the meaning behind difficult or demanding activities and encourages the student to persist. This persistence then increases their ability beliefs and further supports the development of their academic motivation. The student's level of perceived value associated with a task at hand can be solely personal, impacted by their social surroundings, or even situational. Regardless of its source, the perceived value a student has toward academic activities is central to their ability to persist rather than develop the belief academic activities are unappealing and a waste of time (Cheon & Jang, 2012; Shen, McCaughtry, & Martin, 2008; Pelletier, Legault, & Green-Demers, 2006; Murdock, 1999). Inversely, a lack of motivation can begin to develop from the act of devaluing academic work by students, educators, peers, and families, which will lead to motivational problems, and ultimately, a complete lack of motivation, or amotivation.

If motivation can be characterized as an action, amotivation can be defined as inaction (Pelletier, Legault, & Green-Demers, 2006). According to studies by Alivernini and Lucidi as well as Legault, Green-Demers, and Pelletier (2011, 2006), an amotivated student is a student with little or no desire to perform academic tasks and who often feels as though they cannot control or change their academic future. These students are unable to predict not only the consequences of their behavior, but they also fail to understand the motivation behind why they are behaving in such a way. Since amotivated students cannot see the relationship between their behavior and the outcome of their behavior, they view their own behavior as something out of their power to control. Therefore, the concept of amotivation has been linked to the idea of learned helplessness (Deci & Ryan, 1985, 2002; Legault, Green-Demers, & Pelletier, 2006).

Amotivation most often develops when students perceive a lack of value placed on an academic task.

Amotivation is a strong predictor of whether a student will graduate highschool, which is concerning due to the widely held belief that when high-school students drop out it is detrimental for both the student and society. High-school dropouts will have educational deficiencies that will limit their economic and social wellbeing for the rest of their lives, and the most impactful challenge on high-school dropouts is difficulty finding steady and adequate-paying employment over the course of their entire lifetime because they are lacking in academic skills. In fact, research done by Alexander, Entwisle, and Horsey (1997) found that employment rates are almost twice as high for high-school graduates than non-graduates. Additionally, for high-school dropouts who do find employment, they earn an average of 12% - 18% less than their high-school graduate counterparts. These disadvantages then continue to develop as high-school dropouts have less opportunity to pursue additional education and remain competitive within the job market, resulting in a decrease of expected lifetime earnings by approximately $250,000. Additionally, research indicates that high-school dropouts are more likely to develop mental and physical health problems, engage in illegal activities, and are dependent on welfare and public assistance (Brenner, 1976; Alexander, Entwisle & Horsey, 1997; Rumberger, 1987; Fan & Wolters, 2014, p. 22-23). Dropping out of high-school presents not only individual challenges to the student, but also costs society at large as these individuals often grow increasingly dependent on social services (Brenner, 1976). As amotivation directly predicts high-school dropout rates, it must be addressed in a classroom setting in order to increase academic achievement and prevent high-school dropout.

Self-Determination Theory. Regardless of students' awareness of the requirements in an academic setting, amotivated students believe that they cannot maintain or initiate the effort to complete an academic task and that they cannot control or predict the outcome. Without an internal belief in one's abilities, these students will not succeed in an educational environment (Legault, Green-Demers, & Pelletier, 2006). Self-Determination Theory, rooted in Bandura's theory of self-efficacy, was developed by Deci and Ryan (1985) to explain the internal beliefs formed by students pertaining to the relationship between their effort and outcomes. Within this theory, students are believed to have three basic psychological needs: autonomy, competence, and relatedness. Autonomy is rooted in one's ability to feel in control of their surroundings, competence relates to their belief in their own abilities, and relatedness is defined by one's sense of social belonging (Ryan & Deci, 2000). A student develops self-determination as they experience increased autonomy, competency, beliefs, and relatedness or belonging which helps them to understand the behaviors they are engaging in and the relationship between effort and learning outcomes.

According to SDT, one component of self-determination is the extent to which they are motivated intrinsically or extrinsically. Intrinsic motivation represents the highest form of self-determination because it represents behaviors taken freely and without external pressure, whereas extrinsic motivation represents the lowest form of self-determination as it is rooted in action due to external factors or reasons. Amotivation could theoretically fall anywhere on the spectrum depending on the extent of a student's belief in their ability, however amotivated students are rarely intrinsically motivated (Pelletier, Legault, & Green-Demers, 2006 & Deci & Ryan, 1985). An amotivated student is a student who believes that there are external factors at

play that control the end result, even their destiny. As a result, they feel a lack of control and helplessness which prohibits their ability to remain motivated and persistent in the classroom (Janosz, 2000; Deci & Ryan, 1985, 2002; Pelletier, Legault, & Green-Demers, 2006). Regardless of a student's existing level of motivation, the development of self-determined behavior through intrinsic motivation is critical in combating amotivation.

Characteristics of an Amotivated Student. The four key components of amotivation identified include a lack of belief in their own effort, lack of belief in their own ability, the unappealing nature of academics in their view, and finally a lack of value that they see on the academic task (Legault, Green-Demers, & Pelletier, 2006). These components translate into an amotivated student who fails to act entirely, or they act without intentionality or reason. For example, they don't see the reason for why they need to go to school or even participate in class. This internal lack of belief in one's own ability drives amotivation and most importantly, academic disengagement (Cheon & Reeve, 2015, p. 100; Pelletier, Legault, & Green-Demers, 2006, p. 568). A lack of engagement in an academic setting leads directly to discontentment and will hinder the student's ability to be productive.

Amotivation is an internal state that has powerful external signs and consequences. Students who are amotivated detach from their academics due to a lack of desire, or even ability to exert effort. These students view academics as unimportant in life and find the educational setting boring. As a result, it cannot be a surprise that an amotivated student feels as though they cannot invest effort, or it is fruitless to do so, and will frequently be late for class or skip all together. If they do show up for class, this student will passively go through the motions rather than actively engaging with the content or they will simply sleep (Cheon & Reeve, 2015, p. 99;

Vallerand, Pelletier, Blais, Briere, Seenecal, & Vallieres, 1993; Ntoumanis, Pensgaard, Martin, & Pipe, 2004). In its most severe forms, an amotivated student has great psychosocial challenges adjusting to college, a substantially higher level of stress surrounding academic activities and in some cases, they drop out of high-school all together (Baker, 2004; Vallerand & Bissonnette, 1992; Vallerand, Fortier, & Guay, 1997). These behaviors associated with amotivation lead directly to detachment, avoidance behaviors, and poor performance in an academic setting (Pelletier, Legault, & Green-Demers, 2006, p. 569).

Self-Efficacy

Students' level of self-efficacy is a key indicator of whether or not they will be motivated to pursue success in their academic education. According to Bandura's (1977, 1982) notion of self-efficacy and Skinner, Wellborn and Connell's (1990) theory that students have pre-existing expectations about their ability to apply strategies and behaviors to execute a task, students who have a higher level of self-efficacy have been proven to demonstrate more ambition and a belief in themselves to accomplish tasks regardless of their skill level (Bandura, 1991). Students who demonstrate low levels of self-efficacy believe failure to be their automatic outcome regardless of their skill level or support put in place in an academic setting. Furthermore, when they do experience failure they attribute this failure to their level of competence which further harms their self-efficacy (Patrick, Skinner, & Connell, 1993; Wigfield, 1988; Legault, Green-Demers, & Pelletier, 2006). In a school setting when learning new concepts, high self-efficacy distinguishes students with strong levels of perseverance from students who truly believe they are incapable.

Self-efficacy represents students' judgement of their own capabilities to start and execute actions or attain goals, and influences the amount of effort and persistence students place on academic tasks. Self-confidence focuses on one's perception regarding their thoughts, actions, and feelings, going beyond self-confidence as it focuses on their perception of their own potential or innate ability to succeed regardless of the skills they may possess (Bandura, 1986; Bong & Skaalvik, 2003; Farmer, 2018). High levels of self-efficacy lead to the pursuit of greater challenges as these students have an innate belief that they are able to perform at a high level and acquire new skills regardless of their current skill set. On the other hand, students with low-self-efficacy believe that they are incapable of performing at anything but a low level academically, leading to even greater amounts of academic detachment (Schunk, 1991; Legault, Green-Demers, & Pelletier, 2006). It is important to note that self-efficacy goes beyond self-concept which is simply one's point of view on the characteristics they possess. Self-efficacy centers around the belief in one's ability, regardless of their characteristics or the effort put forth. Without sufficient self-efficacy students will be unmotivated to perform academically (Byrne, 1984; Usta, 2017).

Identifying students with high self-efficacy requires an educator to look beyond a students' performance and actions but at their rationale and pursuit for success within the classroom. The primary difference that sets students with high self-efficacy apart is the belief that they possess the potential to succeed, and that belief is not based on the skills that they have but simply who they are as a person and student (Usta, 2017). This means that students who have higher self-efficacy are also willing to exert more effort without the stress and anxiety felt by students with low self-efficacy because they do not fear failure, they believe they are innately

capable (Farmer, 2018). These students don't shy away from a challenge and do not view failure as a defining characteristic even when they experience it.

Students with a poor belief in their ability, a low self-efficacy, are often referred to as having low academic self-esteem. This mindset leads to poor academic performance which is further reinforced by negative academic behaviors and amotivation. These behaviors include avoiding academic tasks both inside and outside the classroom, skipping or sleeping through class, and frequent tardiness, regardless of the external interventions used. As a result, research conducted by Alivernini and Lucidi (2011) as well as Legault, Green-Demers, and Pelletier (2006) clearly conclude that low self-efficacy is a driving force to academic disengagement and academic failure. Additionally, it was found that when students demonstrate poor academic performance as well as lower self-efficacy at the beginning of the year it is a strong predictor of continued poor performance throughout the entire school year (Legault, Green-Demers, & Pelletier, 2006). This is further reinforced by the findings that students with low-self efficacy believe their poor academic performance is permanent and regardless of the effort they put forth, they cannot change it (Boggiano et al., 1992; Chouinard, 2001; Alivernini & Lucidi, 2011; Legault, Green-Demers, & Pelletier, 2006). When students doubt their own self-efficacy, they visualize failure occurring in their academic pursuits and are found to dwell on any number of things that could go wrong should they engage (Bandura, 1994; Pelletier, Dion, Tuson, & Green-Demers 1999). As a result, when these students encounter obstacles within the classroom, they have pre-existing self-doubt in their own ability and therefore reduce effort and eventually give up which leads directly to amotivation.

According to Dinesh and Kiran (2018) behavioral scientists have concluded that some individuals have a strong desire for achievement whereas others do not. When students have a strong self-efficacy, they are confident in their ability to succeed and therefore demonstrate stronger levels of achievement. This leads directly to an increase in motivation which has a direct impact on student success (Legault, Green-Demers, & Pelletier, 2006; Usta, 2017). Ultimately, students who feel good about themselves and their own abilities are most likely to succeed within an academic setting, which in turn further develops and increases their level of self-efficacy (Dandy & Nettelbeck, 2002; Eshel & Kohavi, 2003; Dinesh & Kiran, 2018). By experiencing the development, encouragement towards, modeling of, and support of self-efficacy inside and outside the classroom, students will better comprehend how to succeed in their academics (Hodis, Johnston, Meyer, McClure, Hodis, & Starkey, 2015). Therefore, students who are supported in their interpersonal relationships have greater levels of self-efficacy not only because research shows these students feel better about themselves and their abilities but also because it has been encouraged and modeled to them.

Students' belief in their own ability is directly linked to their own academic expectations (Fan & Wolters, 2014). This innate belief in oneself is strongly impacted by experiences and interpersonal relationships both inside and outside of the school. According to Bandura's Social Cognitive Theory (1997), students observe, imitate, and model individuals around them. When they are not able to witness individuals with high levels of self-efficacy outside of school, they are much more likely to exhibit poor self-efficacy within school. This is especially true if individuals around students attribute luck to someone's success. Students who view luck to be a strong predictor of their academic ability, have low levels of self-efficacy and a lack of belief in

their own ability (Hodis, Johnston, Meyer, McClure, Hodis,, & Starkey, 2015; Zhou & Urhahne, 2013). Students' belief in their own academic capabilities as well as having others who have belief in their own capabilities increases the likelihood of students believing in their own ability to affect outcomes.

Fixed and Growth Mindset. The foundation of self-efficacy is rooted in the student's perception of their ability, and how it can or cannot be impacted by the effort they put forth. Psychologist Carol Dweck (2006) first labeled fixed and growth mindsets in order to describe the beliefs people have surrounding their learning and intelligence and whether or not they have the ability to impact these things. Students who possess a fixed mindset believe that they are born with certain abilities and that they cannot be changed. On the other hand, students who possess a growth mindset believe that their abilities have the potential to develop and change with time and practice. Fixed mindsets lead to a confidence crisis and deeply rooted doubts about one's abilities as it is assumed that people cannot change or improve in order to achieve success, which leads directly to low student achievement. Additionally, students with a fixed mindset believe failure to be a source of shame whereas students with a growth mindset view failure as a challenge to be overcome (Brown, 2015; Buckingham, 1999; Dweck, 2008). This fixed mindset then negatively impacts a student's level of self-efficacy by demonstrating to the student that regardless of how much effort put forth, their abilities cannot be changed. On the other hand, when their self-efficacy is high, they have a strong belief in their abilities, believing that effort equals success, and a growth mindset develops.

A student's mindset within a classroom setting directly influences their learning behaviors as it either supports or hinders self-efficacy. For example, a student with a fixed

mindset, believing their intelligence and ability is predetermined, will be less likely to apply effort toward their learning (Dweck, 2006). As a result, it is essential that teachers build a classroom culture that centers around developing growth mindsets and most importantly, self-efficacy in students (Robinson, 2017). Often, students are told how smart and intelligent they are in order to encourage motivation; however, this only encourages a fixed mindset as it reinforces the idea that you must be smart, gifted, or possess natural skill in order to succeed. It is students who learn to value growth and not fear failure who have a growth mindset, they recognize that ability can be changed and what they are capable of is not only because they are smart and intelligent. A growth mindset can be achieved by experiencing high expectations, flexibility, strong relationships, independence, and constructive feedback within the classroom (Brock and Hundley, 2018; Hochanadel & Finamore, 2015, p. 48; Dweck, 2006; Murphy & Dweck, 2010; Dweck, 2008). In order to positively influence self-efficacy, students must learn to view themselves as unfinished, so they are encouraged to remain persistent in their learning which supports self-efficacy development and will improve academic performance.

Intrinsic Versus Extrinsic Motivation

Alongside amotivation, intrinsic and extrinsic motivation are driving forces that guide student behavior within the classroom. Intrinsic motivation can be defined as behavior that is performed out of enjoyment or self-gratification. On the other hand, extrinsic motivation is behavior that is performed based on an external factor, or in order to gain something (Ryan & Deci, 2000). Within an academic setting, the goal is to create an environment that not only fosters, but also creates intrinsic motivation in order to develop students with sustained academic motivation.

Intrinsic Motivation. Intrinsic motivation is a crucial component of students' continued academic success. Intrinsic motivation requires high levels of self-determination which is demonstrated through their self-esteem, emotional approaches to stress, persistence, and overall performance (Lam, Wing-yi Cheng, Ma, 2009). According to Wiesman (2012) students who possess strong intrinsic motivation have a natural curiosity for learning, an interest in a particular topic, and are eager to learn and absorb new information due to their enjoyment of the academic task as well as interest in what they are doing. This is further supported by a strong sense of self-efficacy which provides a positive relationship between academic persistence and effort to achievement and leads to higher levels of intrinsic motivation (Fan & Wolters, 2014).

When students have confidence in their learning abilities, they develop an intrinsic interest in learning activities, hold higher academic expectations for themselves, and are more motivated to pursue positive academic outcomes. Students who place intrinsic value on their academics prefer challenging work, will independently attempt to attain mastery, and have the internal skills and desire to pursue a successful academic outcome. These types of behaviors are seen most often in successful students who have higher levels of self-efficacy and have had intrinsic motivation modeled for them (Learner & Kruger, 1999; Fan & Wolters, 2014). In a study of 631 students, Lam, Wing-yi Cheng, and Ma (2009) found that students who had the opportunity to witness teachers who had high levels of intrinsic motivation, also developed higher levels of intrinsic motivation with regard to the assigned academic task. Ultimately, high-school students' grades, which are usually a reflection of student effort, are strongly correlated with their level of intrinsic motivation.

Extrinsic Motivation. Extrinsic motivation is defined as the performance or engagement in an activity for external reasons or pressures. This is different from intrinsic motivation which corresponds with strong levels of self-determination, external motivation often corresponds with a lack of or reduced amount of self-determination in students (Legault, Green-Demers, & Pelletier, 2006). Extrinsic motivation can be divided into the following concepts: external regulation, introjected regulation, identified regulation, and integrated regulation. These concepts can be further divided by their relationship with self-determined behavior. The less self-determined forms of extrinsic motivation include external regulation, action taken solely to gain a reward or reward a punishment, and introjected regulation, where a student would do something in order to avoid negative feelings or feel high self-esteem. On the other hand, the most self-determined forms of extrinsic motivation include identified regulation, acting because there is personal value attributed to the action; and integrated regulation, where the behavior is internalized and defines who they are. External and introjected regulation have been more strongly linked with negative student outcomes, however all forms of extrinsic regulation have links to reduced academic performance in students and negative behaviors such as narcissism, physical symptoms, and depression (Katartzi, Kontou, & Vlachopoulos, 2013; Pelletier, Legault, & Green-Demers, 2006)

As students progress through school, it has been found that their preference for extrinsic over intrinsic motivation increases. From tenth grade to twelfth grade, the overall level of intrinsic motivation in students decreases and students require more extrinsic motivation in order to successfully complete academic activities. This can be attributed to high-school seniors' fear of failure and lower levels of self-expectations. With extrinsic motivation, students receive

external influence that comes in the form of rewards or punishment and the impending reality of what comes after high-school can increase a fear of failure and lower levels of self-efficacy (Navir, 2017). Additionally, this increasing preference toward extrinsic motivation can be attributed to the traditional academic setting focusing primarily on using extrinsic motivation, reducing the continued development and fostering of intrinsic motivation. Deci, Koestner, and Ryan (2001) conducted a meta-analysis of 128 studies examining the impact of extrinsic motivation on intrinsic motivation. This meta-analysis found that the large majority of extrinsic rewards such as tangible, engagement-contingent, and performance-contingent reward systems had a negative impact on students' levels of intrinsic motivation (as cited in Pelletier, Legault, & Green-Demers, 2006). As a result, the use of less self-determined, extrinsic, forms of motivation has direct links to negative academic behaviors that impede long-term learning.

The continued use of extrinsic motivation in a school setting can lead to students who are solely dependent on extrinsic rewards regardless of whether or not they have an interest in completing the task initially. Students who have stronger extrinsic motivational factors typically demonstrate ritual engagement, engagement without meaning to the student other than a desire to gain extrinsic rewards. On the other hand, students with intrinsic motivation demonstrate authentic engagement where they understand the meaning and implications of their academics which leads to greater and more sustainable levels of motivation. Ritual engagement can be dangerous because it doesn't support or develop students' intrinsic desire to take an active interest in their own learning yet, it is the most common form of engagement utilized in an academic setting (Nayir, 2017; Wiesman, 2012). Yet active, intrinsic interest is what leads to successful academic pursuits and the long-term success of students.

Impact of Social Constructs on Self-Efficacy and Motivation

The relational social constructs within students' life directly impact their motivation and desire to pursue academics. When teachers, parents, and friends support students' competence, there is a positive impact on students' motivation as it enhances ability and effort beliefs. For many students, by the time they reach high-school they are bored of school and therefore put forth minimal effort and view academic activities as being less significant. However, when significant figures in the life of a student, specifically adults, openly value success in academics, the student has a greater likelihood to succeed in their own academics (Wiesman, 2012; Legault, Green-Demers, & Pelletier, 2006). In order to develop academically, students must maintain nurturing, close, and stable relationships with authority figures (Shahar, Henrich, Blatt, Ryan, & Little, 2003). According to Fan and Wolters (2014), research demonstrates that students develop stronger self-efficacy, reduced amotivation, and increased intrinsic value in learning when surrounded by teachers who are relational and supportive, peers who place value on academics, and parents with involvement in their learning.

Parent and Student Relationship

Parents are crucial in the academic development of their children and have the greatest influence on their likelihood to graduate from high-school and development of self-efficacy. In fact, parents have the strongest influence out of all social constructs in a student's life in increasing the value placed on academics (Legault, Green-Demers, & Pelletier, 2006). According to Rahimi and Fazel (2018), while "friends, teachers, and child partners throughout life may change, parents keep in touch with their child throughout their lives, and they play the role of a permanent and sustainable entity" (p. 362). Family, school, community, country, and

the surrounding world all have an impact on a student's development, however, the role of the family and parents is the most critical as it is the vehicle for establishing values, ideals, student habits, autonomy, and ethics (Rahimi & Fazel, 2018; Grolnick & Ryan, 1989). These principles and enriching the cultural environment of a family is the foundation for increasing children's educational motivation.

A wide variety of research indicates that when a student's parent focuses on developing autonomy and self-efficacy, their student is encouraged to develop self-regulation, resulting in students with greater levels of intrinsic motivation which leads to an improvement in student grades (Alivernini & Lucidi, 2011, p. 242-243; Deci, Vallerand, Pelletier, & Ryan 1991; Grolnick & Ryan 1989). Baumrind (1967, 1971) has identified two relevant dimensions of parental control, psychological autonomy versus psychological control, that characterizeparenting approaches. In this research, parents who were classified as being high in psychological control were given the label authoritarian whereas parents who focused on psychological autonomy were classified as authoritative. It was found that children raised in an authoritative environment were more self-reliant and independent whereas those raised in an authoritarian environment were found to be more withdrawn and discontented (as cited in Grolnick & Ryan, 1989). Additionally, a study conducted by Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh (1987) using Baumrind's typology found that the use of authoritarian parenting styles predicted lower student grades than that of authoritative parenting styles. When a parent focuses on the development of autonomy in their children, their children develop self-reliance which leads to an increase in self-efficacy and ultimately, academic achievement.

Parental support that focuses on the development of autonomy and self-regulation is essential in academic motivation as it has been linked to positive performance outcomes (Grolick & Ryan, 1989). According to Grolick and Ryan (1989), autonomy support is defined as the extent parents utilize approaches that encourage "independent problem solving, choice, and participation in decisions versus externally dictating outcomes" (p. 151). These students develop a repertoire of responses when they encounter a problem or challenge in their academics which increases their self-efficacy, an innate belief in their ability to pursue difficult tasks. As a direct result, a problem-solving, independent mindset has a positive impact on academic performance. Too much parental dependence and control, as is the cause with an authoritarian approach, reduces a student's focus and ability to achieve academically and has an impact on their long-term self-efficacy and academic motivation (Grolick & Ryan, 1989). In conclusion, when parents develop autonomy and self-regulation via authoritative parenting, their children are more likely to have strong self-efficacy and academic success.

Academic Support. Direct support from parents in their student's academics is imperative to developing motivation. Students who have parents that encourage academic motivation are more successful in their academics as they develop self-efficacy and self-regulation in their own learning. On the other hand, it was found that when parents are not supportive of their student's academic pursuits, the student had less confidence in their academic ability. This resulted in a decrease in self-determination and motivation in students' academic pursuits (Alivernini & Lucidi, 2011). According to Legault, Green-Demers, and Pelletier "parents … play a large part in students' feelings of affiliation, fostering academic engagement and well-being when relations in the scholastic context are warm, supportive, and constructive"

(2006, p. 570). Usta (2017) found that as a parent's level of education increases, their child's self-efficacy levels increase, which results in higher levels of success for their students. Therefore, it has been theorized that parents with higher levels of education are more likely to support their child in academic pursuits (Rahimi & Fazel, 2018). In summary, the involvement in academic support of both mother and father is imperative in developing student academic motivation.

Emotional & Relational Support. Rahimi and Fazel (2018) reviewed studies which showed a positive correlation between emotionally supportive parenting and academic performance of students. When parents are emotionally involved in their student's lives, they raise and develop students with higher levels of intrinsic motivation and self-efficacy. This motivation directly translates into the completion of their academic studies. In order to develop healthy, motivated students they must feel as though key social figures in their life truly care for them. Students require stable, close, and nurturing relationships with the significant adults in their lives (Alivernini & Lucidi, 2011; Legault, Green-Demers, & Pelletier, 2006). When students demonstrated low motivation, changing small beliefs about themselves had the most potential for impact. With this in mind, parents are able to provide support that caters to the emotional needs of their children and develops a student's incremental beliefs about themselves (Farmer, 2018). It is especially important that parents communicate on an emotional level that their children are not only capable, but also able to learn and master new academic concepts.

Additionally, parental involvement and emotional support plays a critical role in their child's development and socialization. This has long-standing implications on the child's value system, specifically in academics. It has been found that insufficient socialization regarding

school values is associated most strongly with a student's desire to drop out of high-school (Legault, Green-Demers, & Pelletier, 2006). Students with secure relational attachments were statistically more resilient, had less anxiety, and overall presented less hostility in their relationships with self and others which directly increased their ability to succeed academically (Learner & Kruger, 1999, p. 485). Parents are the first social agents of their children. They play a critical role in satisfying the psychological needs of their children which supports their child's academic pursuits. If parents maintain a secure relationship with their children versus an indifferent, critical relationship there will be a positive impact on their socialization which impacts various forms of motivation for their child, the primary being with regard to education (Rahimi & Fazel, 2018).

Teacher and Student Relationship

Teachers, secondary to parental relationships, have the ability to directly and profoundly impact their student's desire and ability to succeed in their academics (Alivernini & Lucidi, 2011). A teacher is responsible for the large scope of what students experience in their academics including grades, feedback, curriculum, and assessments. It is the teacher's judgments on students that "have a decisive influence on students' motivation to learn and their willingness to put effort into tasks. They enable students to make better estimations of their abilities, which in turn affect their motivation level" (Zhou & Urhahne, 2013, p. 275-276). When teacher support increases in all elements of a student's education, students perform better in their academics and have higher levels of motivation (Learner & Kruger, 1999).

Wiesman (2012) found positive, trusting, affirming, and empathetic student and teacher relationships are essential to the development of motivated students. When a student perceives a

teacher to truly care about them and other students, the student will work harder to achieve success and display appropriate behavior within an academic setting. On the other hand, teachers who teach with an impersonal perspective hinder their students' academic motivation (Farmer, 2018). Unfortunately, middle and high-school students report lower levels of personal and positive relationships with their teachers due to the amount of time that is required to maintain order versus provide individualized instruction. Maintaining positive relationships in the classroom is key as it leads to fewer absences, higher performance, and greater levels of self-efficacy in students (Learner & Kruger, 1999). By developing positive, trusting, affirming, and empathetic relationships in the classroom, negative classroom behavior is reduced, and students are more apt to learn.

Perceived Teacher Judgement on Academics. Teacher judgement on a student's academics is central to a student's success in the classroom. "Each student perceives teacher judgement differently, and student's explanations vary for why a teacher has judged a performance in a certain way" (Zhou & Urhahne, 2013, p. 276). Students who are judged as being less capable by their teachers may display higher levels of anxiety, a lower expectancy for achieving success, and lower self-efficacy. The most impactful element of teacher judgement of a student's capabilities is rooted in their casual assertions. If a teacher is encouraging of a student, despite their own personal judgments, the student will have a high level of motivation; whereas, if a teacher is discouraging to a student, casually or formally, the student will experience lesser levels of motivation (Zhou & Urhahne, 2013). On the surface, most teachers appear or intend to be fair and objective, but differential treatment of students is often implicit or

unintentional. This treatment is picked up on by students and has an impact on their self-efficacy and academic motivation.

Peer and Student Relationship

Raufelder (2016) found that the relationship between students and their peers is a key indicator of academic motivation as peers have been found to have a positive motivator towards academic achievement. Peer relationships aid in determining a student's academic attitudes as high-school students are at an age where typically, they spend more time with their peers than their teachers and parents combined. As a result, close relationships are developed that serve as a support source, or lack of, for student academics (Legault, Green-Demers, & Pelletier, 2006). Bakadorova and Raufelder (2016) concluded while peer relationships predicted achievement drive, they did not clearly predict the level of perseverance and effort a student exhibits in a classroom. This disconnect has been attributed to students' innate competitive achievement drive, the will to win. While students' peers provide a direct impact on academic motivation, there is an element of perseverance and effort that is fed from competition with peers as well, which in some cases reduces the long-term impact of a peer on a student's motivational levels.

Students are far more likely to develop goals that fall in line with their peers' standards than adults are. While adults are more internally driven, students are more focused on external factors. Additionally, adolescents are less influenced by their peers actions and words, but more so how they foresee a peer or group of peers will react to an action they are considering (Wiesman, 2012). Students greatly value their peers' perceptions regarding belongingness, motivation with regard to academics, the value of education, and the level of effort put forth. As a result, from the student's perspective a good learning outcome can only be achieved with

supportive behavior and solidarity amongst their peers (Goodenow & Grady, 1993; Arguedas, Daradoumis, & Zhafa, 2016). In conclusion, peers play an important role in a student's levels of motivation and academic achievement, but this role primarily focuses on the perceived perception of a student and their goals rather than their actual perception.

Developing Motivation in Students

Schools and the Development of Self-Efficacy

In order to develop successful students, schools must place an intentional effort not only on academic learning, but on the development of self-efficacy in students to facilitate academic learning. Self-efficacy is defined as a student's beliefs that are held about themselves and the expectant outcome of their effort (Bakadorova & Raufelder, 2016; Bandura, 1977). Developing strong self-efficacy and achievement motivation plays a critical role in the school's educational environment. When a student has a high level of self-efficacy, a more positive and productive achievement motivation results. Likewise, when a student has a higher level of achievement motivation their levels of self-efficacy are further enhanced. Both of these elements, achievement motivation and self-efficacy, lead to successful academic performance and higher levels of confidence in students within an educational environment (Dinesh & Kiran, 2018).

Bandura's (1977, 1982) theory of self-efficacy concludes that when an individual has a perception of failure, the action they take will reflect that perception and that expected outcome of failure will follow, also known as outcome expectancy. Cognitive representation of future outcomes, outcome expectancy, entices an individual to adopt certain behaviors which support the notion that "academic success or failure appears to be as deeply rooted in the concept of self as it is in measured mental ability" (Dinesh & Kiran, 2018, p. 199). Dweck's (2002) research

further emphasizes that a student's perception of their own academic ability and personal aptitude are central to achievement motivation. In summary, it is clear that one's belief about their ability and capacity for effort are linked to withdrawal from or success in academics (Pelletier, Legault, & Green-Demers, 2006). As a result, schools must focus on enhancing student's belief in their ability to deter the idea of negative outcome expectancy (Usta, 2017). This is most effectively done by presenting students with opportunities and environments where they are able to experience success.

Additionally, there is a direct relationship between developing strong, positive self-efficacy with positive student engagement behaviors while in a school environment (Bakadorova & Raufelder, 2016). There are three different dimensions to student engagement in the school; emotional, behavioral, and cognitive (Fredricks, Blumenfeld & Paris, 2004). Students with strong behavioral engagement partake in activities, follow school rules, and maintain good attendance. Students with strong emotional engagement show interest in what they are learning, feel as though they belong socially, and are able to develop both positive and negative emotions towards the school and academics. Finally, students with cognitive engagement seek out challenging tasks, have an awareness of their own goals and achievements, have a sense of self-control, and are enthusiastic about their own learning (Nayir, 2017). The role of self-efficacy is key in developing confidence, achievement orientation, emotional regulation, behavior control, and self-efficacy within the school setting so that students may have the most effective opportunity for academic success and be positively engaged to pursue success.

Finally, schools must make an intentional effort to create value around academic learning. According to Legault, Green-Demmers, and Pelletier (2006), "The act of devaluing

school may lead to serious motivational deficit" (p. 569). Motivation is a mental state that leads to action, and therefore it impacts a student's self-efficacy as well as their initial motivation (Usta, 2017). In today's environment, teachers are teaching students who frequently come to school uninterested in their own learning and unmotivated to engage in academic tasks. These students avoid difficult work because they see it as a threat to who they are, it is these students who often don't exert effort and tend to give up on things quickly (Bandura, 1994). In order to counteract this, educators must focus on increasing engagement and self-efficacy to encourage stronger academic achievement motivation (Hidi & Harackieqica, 2000; Wiesman, 2012). The most effective way to combat this is by placing value on education. Students who are engaged in a school setting complete their academic studies with enthusiasm and care because they attribute value to it. This occurs even when there are challenges with learning (Schlecty, 2002). If the school focuses on placing value on what is taught and provides proper academic support to students with low levels of self-efficacy, motivation and engagement will result.

Problematic Behaviors. Students may engage in a variety of problematic behaviors in the school environment, and the most concerning when it comes to motivation is a student's perseverance to complete high-school. Researchers have clearly found that students with a strong sense of self-efficacy and achievement motivation are more likely to stay in school (Hardre & Reeve, 2003; Vallerand et al., 1997). Legault, Green-Demers, & Pelletier (2006) clarified this research to indicate that the primary force for a decrease in academic motivation resulting in high-school dropout is the devaluing of academics. Beliefs and perceptions about academics are strongly correlated with poor behavior in the classroom, and negative student

outcomes. These behaviors include disengagement, superficial learning strategies, a lack of learning and performance, and ultimately culminate in school drop-out (Baker, 2004).

Teenager's brains have not completely developed when they are in a high-school academic setting. Specifically, the frontal lobe which impacts a teenager's ability to process their emotions, plan ahead, learn from previous experiences, and solve problems has not fully developed. As a result, teenagers "have a greater difficulty resisting impulses, regulating emotions, and making good decisions…teenagers can experience extreme emotional highs and lows with incredibly exciting highs and very distressing lows" (Wiesman, 2012, p. 104). Students often feel strong emotions such as shame, guilt, and anxiety during their educational years. These emotions then link failure with a negative mood and negative emotions (Zhou & Urhahne, 2013, p. 291). All of these feelings have the potential to lead to frustration and discontentment which hinders a student's productivity as well as their well-being, lowering academic performance. Low-ability, self-efficacy, beliefs and emotions are a direct link to a student's intention to drop out of high-school and engage in other problematic behaviors throughout their time in school (Legault, Green-Demers, & Pelletier, 2006).

Research has determined that problematic behaviors in school can be predicted by amotivation and low self-efficacy. This prediction is based on behaviors such as a low personal belief in one's ability to expend effort, lack of ability to identify appealing characteristics in a task, and an overall lack of value placed on tasks that are frequently seen in amotivated students (Legault, Green-Demers, & Pelletier, 2006). Additionally, it has been found that when a student has strong self-efficacy, this leads to a positive correlation with cognitive engagement and self-regulatory behavior in a school environment (Bandura, 1993). Ultimately, a lack of

self-efficacy and determination leads to a significantly higher likelihood of a student dropping out of high-school or even making plans to leave early (Alivernini & Lucidi, 2011; Fan & Wolters, 2012, p. 26). Signs of amotivation in students should be a red flag to educators that a student has a higher likelihood of not completing high-school, and they should respond with strategies to increase motivation and self-efficacy in the student. A student's expectations of their own ability to achieve will directly impact the likelihood that they will earn a high-school diploma, and this can often be identified and potentially resolved prior to a student dropping out of high-school.

Teaching Strategies to Enhance Motivation

In an educational setting, teachers are the primary source of classroom climate and access to educational content. They also assess their students which has a direct impact on students' self-efficacy. In fact, the number one indicator of students with higher levels of self-efficacy in the classroom is that they have better relationships with their teachers. This relationship was a clear predictor of students' perseverance and effort (Jennings & Greenberg, 2009). Intentionally or unintentionally, teachers tend to treat high self-efficacy students differently than low-self-efficacy students. This is often demonstrated in the greater level of attention and feedback that is given toward high self-efficacy students which then further motivates them to do their work (Bakadorova & Raufelder, 2016). In order to ensure all students have ample learning and growth opportunities, equitable relationships based on attention and feedback must be built throughout the classroom.

It is crucial that teachers work to provide constructive feedback to all students equally and create assignments that are challenging but not overly frustrating. Feedback given should

address the progress of students' learning and be presented in such a way that aligns with their current level of competence. A teacher's strongest academic impact is demonstrated primarily through supporting and developing the competence of their students. This support provides students with the information and feedback to further fuel their levels of self-efficacy and academic motivation (Legault, Green-Demers, & Pelletier, 2006). In order to provide the opportunity for constructive feedback, teachers must be intentional with their assignments. By designing assignments that are too difficult or frustrating, they decrease student's self-efficacy and regardless of the feedback given, the student feels incompetent. However, by assigning work that is challenging but possible, teachers are able to strengthen the level of self-efficacy seen in students and encourage persistence (Wiesman, 2012). This is further supported by the concept of scaffolding, should a teacher assign a difficult task, the teacher scaffolds the learning of their students by modeling, coaching, and providing feedback (Lam, Wing-yi Cheng, Ma, 2009). By assigning work that challenges students academically and providing feedback and support in all areas of their education, self-efficacy is heightened, and academic motivation is developed in students.

In order to increase motivation in the classroom, teachers must promote situational interest in their educational content. This is done by using innovative approaches and re-teaching content as well as providing real-world application for content (Linnenbrink & Pintrich, 2002). These innovative approaches include allowing for student choice, incorporating a variety of activities, and allowing students to work cooperatively. When working cooperatively, students are encouraged to help one another and ensure that each individual understands the material. It allows for students to become engaged, be accountable for their own

academics, and develop self-regulation. By promoting a collaborative learning environment students learn how to work collectively and achieve independent learning over a period of time. They achieve this by asking questions, debating various ideas, predicting, collecting previous data, analyzing findings and research, drawing independent conclusions, and communicating findings within their group to reach a consensus (DiDonato, 2013; Lam, Wing-yi Cheng, Ma, 2009; Arguedas, Daradoumis, & Zhafa, 2016; Hidi & Harackiewicz, 2000). This strategy effectively establishes an environment of respect and cooperation while maximizing student interaction with content. These approaches in the classroom will culminate in an increase in situational interest which positively impacts a student's level of intrinsic motivation.

Project-based learning is another source of motivation in a student's academic pursuit. Project-based learning provides hands-on activities that give students the opportunity to construct their own knowledge and, in some cases, allows students to work with their peers (Wiesman, 2012). This approach to learning encourages students to engage in work that is self-directed, allowing students to investigate a problem in depth and find a solution. In this format, the teacher's role is not as a knowledge provider, but instead a facilitator to ensure students are learning the necessary objectives. When academic course work lacks interesting or stimulating elements, amotivation often results. A project-based approach to learning mitigates the impact of boring, routine, irrelevant, and tedious educational activities that are frequently abandoned or neglected (Lam, Wing-yi Cheng, Ma, 2009; Pelletier, Legault, & Green-Demers, 2006). In conclusion, "project-based learning is described as a teaching strategy that will 'enable students to connect knowledge, skills, values, and attitudes and to construct knowledge through a

variety of learning experiences" (Lam, Wing-yi Cheng, & Ma, 2009, p. 566). This approach helps teachers to increase student motivation in the classroom which leads to increased learning.

Teacher Credibility & Content Relevance. In the classroom, the highest predictor of motivation is the teacher's level of content knowledge; this is largely because it allows the teacher to make their content personally relevant based on their extensive subject knowledge. According to Hattie's (2008) meta-analysis of 80,000 studies involving 30 million students, while teaching ability is a vital element to success in the classroom, teachers with vast content knowledge and credibility provide an imperative source of motivation for their students. The demonstration of extensive content knowledge proves to the students that their teacher has a unique level of credibility on the subject and that the teacher is worthy of their attention (Farmer, 2018). When teachers focus on increasing their knowledge of the content they teach alongside developing strong student-teacher relationships, the self-efficacy of their students has the potential to improve dramatically, which will in turn increase success in the classroom.

Relevant content and instruction renders direct relation and application to students' lives and allows them to engage in a much more practical way with course content, heightening motivation (Wiesman, 2012). When the majority of students reach high-school, they are bored with the process of education and they put forth minimal work (Nayir, 2017; Wiesman, 2012). This leads students to view academic tasks with far less significance than they once did, and therefore are unconcerned and unmotivated with completing academic work. Teachers must communicate the significance of an educational task not only with effective teaching methodologies, but more importantly by incorporating content that is relevant and will engage

students and spark their interest (Nayir, 2017; Wigfield, Eccles, & Rodriguez 1998; Wiesman, 2012).

Game-Based Learning. Gee (2003) and Jackson and McNamara (2013) found evidence that utilizing games, such as virtual simulations and content-related activities, in a classroom setting is a strong motivating factor for students. Additionally, game-based learning environments have been demonstrated to increase self-efficacy (Gee, 2003; Jackson & McNamara, 2013). Not only do game-based environments increase motivation and learning potential for students, it also helps to counteract boredom and apathy in students. When students become bored with the academic process, a vicious cycle is triggered that often prevents students from actively re-engaging in constructive learning activities. This type of environment is especially helpful when developing long-term educational environments that require sustained motivation from students (Jackson & McNamara, 2013). Interactive game-based environments involve learners in the learning process by giving them opportunities to demonstrate learning objectives, experience outcomes, and reflect on prior learning all within a context that they find personally relevant and meaningful (Barab, Dodge, Ingram-Goble, Peppler, Pettyjohn, Volk, & Solomou, 2010). This heightened level of engagement is attributed to game-based learning's ability to provide adaptive and personalized interactive components to students.

The utilization of a game in a classroom can promote higher levels of motivation over an extended period of time. Gamified content does not require specific features, only the ability to meet learning targets and promote interest, enjoyment, and engagement. Some critics have concerns with game elements that detract from learning, however research indicates that while there may be elements of a game-based learning environment that are unnecessary, ineffective,

or distracting from learning in the short term, the long-term benefits make up for this initial deficit. Since game-based learning environments lead to additional self-efficacy and more motivation in the long-term, the short-term losses are mitigated, and this learning approach allows students to surpass students who did not learn in a game-based environment. Despite the initial time spent on non-educational activities within a game-based learning environment, students demonstrated higher levels of participation and enjoyment even when facing challenging learning objectives, which lead to greater improvements in self-efficacy and motivation (Jackson & McNamara, 2013).

Self-Regulated Learning and Autonomy Development. People have an innate need to be autonomous when learning. Additionally, in an autonomous environment, students are able to choose their own educational behaviors, which has a direct impact on their motivation, specifically intrinsic motivation (Learner & Kruger, 1999; Nayir, 2012). Achievement motivation is characterized by high levels of energy, drive, ambition, and a strong desire for independence. It is also defined as being both intentional and volitional. Students with strong levels of autonomy fully accept the outcome of their own academic engagement and they take ownership for their learning (Katartzi, Kontou, & Vlachopoulos, 2013; Dinesh & Kiran, 2018, p. 199). When educational environments hinder autonomy, motivation declines (Pelletier, Legault, & Green-Demers, 2006). As a result, it is essential that teachers focus on developing autonomy in their students to facilitate achievement motivation and enhance academic performance.

Self-regulated learning is a key component of the development of autonomy in students as well as their continued motivation. Learner and Kruger (1999) define self related learning as "a metacognitive process by which the learner plans, organizes, self-instructs, and self-evaluates

at several points in the learning process" (p. 486). These students are able to set and pursue goals, keep track of their own records, review, rehearse, and memorize notes, and seek out additional information in their education. The learning strategies associated with self-regulation are developed in students over the course of several years and primarily are found in students with an intense desire for achievement. The development of self-regulated learning strategies is highly influenced by one's parents in their expectations, modeling, and reinforcement (Learner & Kruger, 1999; Legault, Green-Demers, & Pelletier, 2006). Students with a strong sense of self-regulated learning feel competent in their learning and a stronger sense of self-efficacy. For students with lower levels of self-efficacy, self-regulated learning is a strategy that must be taught, but is critical as it has a direct impact on academic motivation.

Since many students do not have the opportunity to develop and witness self-regulated learning strategies outside the classroom, a teacher must focus on their development within the classroom. Being competent in the essential educational skills of self-regulation helps students to achieve autonomy and achievement motivation in their education. By teaching self-regulatory strategies, teachers will not only be developing autonomy in their students but also supporting them as a person and with their academics. This additional support from teachers allows students to feel respected and valued which further supports their intrinsic motivation and determination in pursuing academics (Pelletier, Legault, & Green-Demers, 2006; Alivernini & Lucidi, 2011). When students perceive their environment as supportive and conducive to their own autonomy, most specifically from teachers, a higher degree of competence results which leads to stronger academic performance.

Students with autonomy-supportive teachers are more likely to stay engaged and show up for class when compared to that of controlling-teachers. When teachers exhibit controlling behavior in the classroom, the development of autonomy is thwarted. This type of controlling, harmful behavior includes the giving of rigid orders, close supervision and monitoring, and not allowing students to have choices and opinions that may differ from an adult or authority figures. To effectively develop autonomy, teachers must let students choose from a variety of options, listen to and embrace their input and perspectives, offer interesting educational activities with a rationale for why they are being used, as well as actively ask for their points of view, which will result in more engaged and present students (Reeve, 2009; Cheon & Reeve, 2013; Vallerand, Fortier, Guay 1997; Alivernini & Lucidi, 2011).

When a teacher listens carefully and empathizes with their students' perspectives, it allows for an opportunity for the students to have a voice in choosing academic work. Giving time and patience for learning, providing a meaningful rationale for the learning activities conducted in class, using non-controlling language, and welcoming students' thoughts, goals, and behaviors supports students' need for autonomy (Niemec & Ryan, 2009; Radel, Sarrazin, Wild, & Legrain, 2010). On the other hand, teachers thwart autonomy by using direct commands, providing solutions without allowing for students to reflect and come to their own conclusions, yelling, asserting power, or even attempting to provide motivation by putting external pressure on them such as threats, deadlines, or even criticism in order to coerce compliance (Reeve, 2009; Cheon & Reeve, 2013; Radel, Sarrazin, Wild, & Legrain, 2010). It is clear from the research that teachers who develop autonomy in their students have students who are far more successful and motivated.

Positive self-determination is exercised when a student is given the opportunity to be autonomous and these conditions are vital to the development of high self-efficacy. According to the self-determination theory, the three psychological needs that must be addressed are autonomy, competence, and relatedness. Autonomy development provides direct support to allowing students to support their own autonomy, leading to a stronger sense of self-determination and ultimately self- efficacy (Ryan & Deci, 2000). In an autonomous learning environment self-determination is increased because students feel as though they can act based on free choice. They have the opportunity to take initiative for their own learning within the guidelines set by a teacher and are able to experience freedom, choice, and personal responsibility in their learning (Hamm & Reeve, 2002; Reeve, 2002; Reeve, Bolt, & Cali, 1999). The primary reason a student experiences amotivation according to self-determination theory is because their psychological needs for autonomy and competence are stifled (Ryan & Deci, 2000).

Mastery Orientation. Mastery-oriented learning is a strong predictor of engagement and motivation in students. Mastery-oriented learning is an educational mindset that encourages students to obtain complete mastery of a specific topic (Navir, 2017). This approach is taught not only by teachers, but also can be an innate approach that students with high levels of achievement motivation possess. Students with an innate desire for this type of learning are interested in increasing their competency as well as their own abilities. Typically, students who approach their academics with mastery as a goal, are aware of their abilities, have a strong focus on their own development, and are interested in gaining new knowledge and skills. Interestingly

enough, female students are more likely to have a mastery orientation towards learning than male students (Elliot & Dweck, 1998; Navir, 2017).

According to the goal-oriented theory, when students are focused on success, specifically the goal of mastery, in any realm of their life, they naturally develop a higher level of intrinsic motivation. This mindset has been further confirmed by students who attribute their academic motivation directly to intrinsic motivation (Pintrich & Schunk, 1996; Wiesman, 2012). Mastery-oriented learning is a result of increased intrinsic motivation which further supports the goal-oriented theory. If teachers maintain a classroom environment with many extrinsically motivating factors, mastery-orientation will be difficult to develop because students will not be required to formulate educational goals (Navir, 2017). Since mastery-oriented learning predicts student engagement, the utilization of goal-oriented tasks that focus on intrinsic motivation must be incorporated within a classroom to promote the long-term academic success of students and their desire to pursue the goal of mastery.

Chapter III: Discussion & Conclusion

Summary

Research suggests a student's self-perception has a direct impact on their academic motivation and success in an academic environment. This is primarily rooted in a student's level of self-efficacy. Self-efficacy can be defined as a student's ability to judge their own capabilities within the school setting (Bandura, 1986). Students with high levels of self-efficacy demonstrate higher levels of ambition, motivation, and success in an academic context regardless of their level of skill. On the other hand, students with low levels of self-efficacy perceive failure to be their automatic outcome, regardless of the skill or effort they expend (Legault, Green-Demers, & Pelletier, 2006). As a result, understanding and developing a student's self-efficacy level is a fundamental role of educators in order to increase academic motivation within a school setting.

Students with low levels of self-efficacy exhibit amotivation within an educational setting. An amotivated student is a student with little to no desire to engage in academic tasks and feels as though they have no control over their academic future (Alivernini & Lucidi, 2011). It has often been found that amotivated students have developed an attitude of learned helplessness. Amotivation in students leads to a variety of problematic behaviors including showing up late for class, skipping class entirely, avoiding homework, and in extreme cases dropping out of school entirely (Legault, Green-Demers, & Pelletier, 2006). In order to address student motivation, understanding amotivation and knowing how to combat it is an imperative skill for an educator.

Intrinsic and extrinsic motivation are also key factors when examining the role of motivation within an academic setting. Intrinsic motivation refers to students with a natural

curiosity and interest in learning information. Extrinsic motivation on the other hand refers to engaging in activities or learning due to outside forces (Wiesman, 2012). Intrinsic motivation requires that students have higher levels of self-determination in order to effectively manage stress, remain persistent, and pursue higher levels of performance in the long-run. Students who have high levels of intrinsic motivation often have high levels of self-efficacy which results in positive academic behavior (Lam, Wing-vi-Cheng, MA, 2009; Fan & Wolters, 2014). On the other hand, students with lower levels of self-efficacy have had external motivation modeled to them and now, without realizing it, continue to encourage teachers to use external motivators to motivate them. Research suggests that this is not the most effective way to develop self-efficacy, let alone intrinsic motivation in students. Extrinsic motivation can increase a student's fear of failure and has the potential to impede learning and undermine intrinsic motivation, which discourages self-efficacy (Wiesman, 2012; Nayir, 2017).

The social constructs within a life of a student have a significant impact on a student's self-efficacy and academic motivation. The three most prominent figures in a student's life are their parents, teachers, and peers with the parents being the most influential due to their long-standing and vested relationship with their children (Rahimi & Fazel, 2018). A parent's role in modeling behavior, discipline, and support is a key component in developing motivation and self-efficacy within a student. Students who were unable to witness individuals with high levels of self-efficacy outside of school, are more likely to exhibit low levels of self-efficacy within a school setting. Students who have had beneficial behaviors expected, modeled, and reinforced by their parents develop stronger levels of self-efficacy and academic motivation (Hodis, Hodis, Johnston, McClure, Meyer, & Starkey, 2015; Learner & Kruger, 1999). Finally,

a parent's approach is fundamental in developing academic motivation. Academically motivated students exhibit autonomy in their learning. A key indicator of a student with autonomy is if their parents' parenting style has encouraged it through the development of self-regulation and intrinsic motivation through an authoritative parenting style. On the other hand, students with authoritarian parents struggle to develop autonomy which ultimately leads to a reduced level of academic motivation (Grolnick, Ryan & Deci 1991; Rahimi & Fazel, 2018). Of course, neither discipline nor modeling is effective in developing motivation without an emotionally supportive home environment.

Students are significantly impacted by teachers and when developing academic motivation. Teachers spend significant time with students and have a direct impact on their motivation. A teacher is responsible for a majority of what is experienced in an academic setting including grades, feedback, curriculum and assessments (Zhour & Urhahne, 2013). As a result, when students have a positive, trusting, affirming, and empathetic relationship with their teacher they are more likely to develop self-efficacy which leads to academic motivation (Wiesman, 2012). This relationship with a teacher has the potential to support or undermine the motivational development of any student within a classroom.

Peers also have the potential to be positive motivators when it comes to academics due to the extended periods of time a student spends with them (Raufelder, 2016). However, it is important to note that it is not what a peer does or says that influences student motivation, but rather the peer's perceived reaction to a student. Ultimately, a student is likely to create academic goals that fit the perceived standards of their peers (Wiesman, 2012). The role of

social constructs in a student's life is key when it comes to increased levels of self-efficacy and the development of academic motivation.

Finally, there are specific strategies that increase academic motivation in the classroom. First and foremost, it is imperative that schools make an intentional effort in order to place value on school itself (Legault, Green-Demers, & Pelletier, 2006). Only after this value has been communicated will other strategies to increase self-efficacy and intrinsic motivation be effective in increasing academic motivation. In order to create academic motivation within the classroom a teacher must promote situational interest in their content by making it relevant and applicable, demonstrate a high level of content knowledge, and encourage mastery of content knowledge (Linnenbrink & Pintrich, 2002; Wiesman, 2012; Farmer, 2018; Nayir, 2017). These overarching themes can be supported by a variety of more tangible strategies within the classroom. These strategies include using innovative techniques that allow for student choice and cooperative learning, encourage self-regulated learning and autonomy, provide students with feedback and competency support, assigning challenging coursework with the necessary scaffolding for students to experience success strengthens self-efficacy and encourages persistence (DiDonato, 2013; Nayir, 2012; Wiesman, 2012; Learner & Kruger, 1999; Lam, Wing-yi Cheng, Ma, 2009). By creating an encouraging classroom that facilitates the development of self-efficacy, students will learn how to develop higher levels of academic motivation both consciously and subconsciously.

Professional Application

In order to develop academic motivation in a classroom it is crucial that teachers start by developing high levels of self-efficacy in students through the modeling of their own

self-efficacy and communication of implicit and explicit messages that all students are capable of success. A teacher is responsible for the large scope of what a student experiences in their academic journey, the way in which assignments are graded, feedback is given, curriculum is developed, and assessments are conducted is essential to creating an environment for increasing levels of self-efficacy and academic motivation. First and foremost, a teacher's judgement on a student has a direct influence on their motivation and willingness to learn. Therefore, students must perceive that their teachers are supportive, personable, and care about their students. When a student experiences a positive, trusting, affirming, and empathetic relationship with their teacher they will work harder and display behaviors that will lead to increased academic motivation (Wiesman, 2012). Additionally, supportive feedback that addresses their learning progress from teachers allows students to make better estimations of their abilities which will enhance their self-efficacy (Zhou & Urhahne, 2013). In conclusion, teachers with impersonal perspectives hinder their student's motivation levels (Farmer, 2018).

Second, a teacher must ensure that in their classroom, school is perceived as valuable and relevant. Devaluing school leads to a motivational deficit and in today's environment, teachers are encountering a significant number of students who come to school uninterested in learning (Hidi & Harackieqica, 2000). In order to tangibly demonstrate the value of school, promoting interest and relevance of educational content is imperative (Linnenbrink & Pintrich, 2002). Additionally, by providing students with content that sparks their interest, they will be more likely to engage within a classroom setting. By promoting personal relevance to students, they will be able to understand the direct impact it has on themselves which allows them to engage in a much more practical way with higher levels of intrinsic motivation (Wiesman, 2012). This

relevance is further supported by a teacher's level of content knowledge. When a teacher has a high level of content knowledge, they are more successful at creating relevant curriculum due to their extensive knowledge. High levels of content knowledge also communicate credibility to students which increases academic motivation in students (Hattie, 2008; Farmer, 2018).

The use of innovative techniques in the classroom will also promote engagement, leading to academic motivation. The first technique that has a direct impact on motivation is allowing for student choice and cooperative, project-based learning. By providing students with a variety of activities and opportunities within the classroom they will be able to pursue academically relevant activities that interest them and will lead to increased learning. When working cooperatively, students are able to help one another and ensure that each individual student understands the material to a more complete extent. They are also able to explore problems by questioning ideas with their peers, debating varying ideas, making predictions of outcomes, collecting and analyzing data, drawing conclusions, and discussing findings (Lam, Wing-yi Cheng, Ma, 2009). Not only do these techniques promote increased content knowledge, they also encourage engagement, self-regulation, and student accountability to their own learning (DiDonato, 2013; Lam, Wing-yi Cheng, & Ma, 2009). Second, game-based learning is a valuable tool for teachers to engage their students in active academic learning. This type of learning allows students to demonstrate, experience, and reflect on their learning in ways that they find personally relevant and meaningful (Barab, Dodge, Ingram-Goble, Peppler, Pettyjohn, Volk, & Solomou, 2010; Gee, 2003; Jackson & McNamara, 2013). In these learning formats, the teacher does not exist solely as the knowledge provider but as the facilitator to ensure that the required objectives are met.

Additionally, teachers must be mindful of the work they are assigning in a classroom environment to ensure that it promotes mastery in learning. Assigning assignments that are too difficult for students leads to frustration and in its most damaging form, a decrease in self-efficacy which goes against the development of academic motivation. When students are assigned work that is challenging yet possible, a student's level of self-efficacy is strengthened, and motivation develops (Wiesman, 2012). It is important to note that when assigning challenging work, a teacher should scaffold their learning by modeling the steps, providing direct instruction and coaching, and providing students with the opportunity to work collaboratively and push the boundaries of what they think they are capable of. When a teacher effectively supports the learning process of challenging concepts, students learn and construct knowledge more effectively (Lam, Wing-yi Cheng, & Ma, 2009). This approach also leads to a desire for mastery-oriented learning which promotes complete mastery of a specific topic. Research indicates that when students approach their academics with mastery as a goal, they have increased levels of intrinsic motivation and more success within the classroom (Nayir, 2017; Elliot & Dweck, 1998).

Finally, teachers must encourage the use of self-regulated learning strategies in the classroom. These strategies include individual goal setting, record keeping, reviewing and memorizing notes, rehearsing academic concepts, and seeking out additional content information (Learner & Kruger, 1999). In order for these strategies to be implemented successfully, students need to have a certain level of autonomy within the classroom. Students have an innate need to be autonomous and competent in pursuing their own learning. By engaging in self-regulated learning strategies, they are able to choose their own behaviors, and actively engage in the

learning process (Nayir, 2012). On the other hand, when teachers exhibit controlling behavior within the classroom, they actively hinder the development of autonomy and motivation of their students. Controlling behaviors include the giving of precise and rigid directions, ordering students, over-monitoring student behavior and performance, or not allowing students to share differing opinions and perspectives (Alivernini & Lucidi, 2011, p. 242). Teachers who allow students to share their own perspectives, give sound rationale for what students are learning and why, and allow students to choose educational opportunities supports a student's innate need for autonomy and increases their levels of academic motivation (Radel, Sarrazin, Wild, & Legrain, 2010). In conclusion, the more students are engaging in academic activities by their own choice, the more success they will have (Harboura, Lauren, Chris & Lindsay, 2015). The way in which students are encouraged to engage in activities may vary but engagement leads to motivation.

Limitations of Research

Student motivation is an expansive topic with many different facets in the educational community. In order to reduce the scope of this research, this study was limited to explorations of self-efficacy with regard to student's academic motivation, and teaching strategies that encourage the development of self-efficacy. Additionally, the information in this literature review was largely limited by the research that existed with regard to discipline as the majority of research was multidisciplinary or focused on core educational content areas such as math, social studies, and English. It can be inferred that depending upon a subject or content area, there are variations in academic motivation both from the student and teacher's perspective which may impact other non-core content areas differently. Finally, the research in this literature review focused on students in middle and high-school who had progressed through a traditional

educational model with other peers. For example, research was not examined that focused on students who were home-schooled or engaged in private education. By limiting this research to motivation in a traditional high-school setting, more specific conclusions could be drawn.

Implications for Future Research

Based on the research gathered in this literature review, there is great opportunity for content-specific research with regard to motivation. This is especially true for non-core content areas such as business, career and technical education, world languages, and many more. The rationale for why a student takes these courses is different than core, required courses which made up most of the research available. Therefore, it is likely that the motivational techniques required in a content area that was chosen by the student will differ as they most likely have a higher level of interest in learning the content.

It is worth exploring how the development of academic motivation at lower educational levels, specifically kindergarten through fifth grade, impacts the motivation of students in grades six through twelfth. As this literature review addresses, by the time students reach high-school they are often bored with the academic cycle and motivation is even more difficult to foster. While research exists on motivation at all levels, very little research exists on the impact of motivation development over an extended period of time. In summary, there are a variety of opportunities for additional research that center around content specific and grade specific strategies with a long-term approach in mind.

Conclusion

In conclusion, this literature review addressed the impact of self-efficacy on academic motivation and ways in which a teacher can develop self-efficacy and motivation within the

classroom. The following questions were addressed in this literature review: What is the impact of self-perception in student academic motivation? What impact does amotivation have on academic pursuits and what is the cause? What is the importance of social constructs and relationships to a student's success? In what ways can the educational environment develop academic motivation in students? What creates motivation and internal drive in students, and how do you support its development in the classroom? Based on the conclusions drawn from this study, self-efficacy is a vital component for students in their academic success. Additionally, the role of social constructs within a student's life are key predictors of a student's self-efficacy. Strong parent, teacher, and peer relationships will all impact a student's motivation and provides great opportunity for a student's success academically. Finally, the strategies used within a school have direct, immediate impact on a student's ability to find motivation in the classroom, and their belief in their own success, also known as self-efficacy. The development of academic motivation is critical in a school system in order to foster an environment that creates and prepares students for a successful future.

References

Alexander, K. L., Entwisle, D. R., & Horsey, C.S. (1997). From first grade forward: Early foundations of high-school dropout. *Sociology of Education 70*, 97-107, doi: 10.2307/2673158

Alivernini, F. & Lucidi, F. (2011). Relationship between social context, self-efficacy, motivation, academic achievement and intention to drop out of high-school: A longitudinal study. *The Journal of Educational Research 104*, 241-252. doi: 10.1080/0022-0671003728062

Arguedas, M, Daradoumis, T., & Xhafa, F. (2016). Analyzing how emotion awareness influences students' motivation, engagement, self-regulation and learning outcome. *Educational Technology & Society 19*(2), 87-103.

Bakadorova, O. & Raufelder, D. (2016). Do socio-motivational relationships predict achievement motivation in adolescents with high and low school self-concepts? *The Journal of Educational Research 109*(3), 219-231. doi: 10.1080/00220671.2014.942031

Baker, S. R. (2004). Intrinsic, extrinsic, and amotivational orientations: Their role in university adjustment, stress, well-being, and subsequent academic performance. *Current Psychology: Developmental, Learning, Personality, Social, 23*, 189-202.

Bandura A. (1994). *Self-efficacy. Encyclopedia of Human Behavior,* cilt 4, V.S. Ramachandran (Ed), New York. Academic Press, 71-81.

Bandura, A. (1977). *Self-efficacy: Toward a unifying theory of behavioral change*. Psychological Review, 84(2), 191-215.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1991). Social cognitive theory on self-regulation. *Organizational Behavior and Human Decision Processes, 50*, 248-287.

Barab, S. A., Dodge, T., Ingram-Goble, A., Peppler, K., Pettyjohn, P., Volk, C., & Solomou, M. (2010). Pedagogical dramas and transformational play: Narratively rich games for learning. *Mind, Culture, and Activity 17*, 235-264. doi: 10.1080/10749030903437228

Boggiano, A. K., Shields, A., Barrett, M., Kellen, T., Thompson, E., Simons, J., & Katz, P. (1992). Helplessness deficits in students: The role of motivational orientation. *Motivation and Emotion, 16*, 271-296.

Bong, M. & Skaalvik, E. M., (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review, 15*(1), 1-40

Brenner, M. H. (1976). *Estimating the costs of national economic policy.* Study prepared for the Joint Economic Committee, U.S. Congress, 94th Congress, 2nd Session. Washington, DC: U.S. Government Printing Office.

Brock, A., Hundley, H., (2018). *Phrases for Growth Mindset: A Teacher's Guide to Empowering Students Through Effective Feedback and Praise.* Ulysses Press, Berkley, CA.

Brown, B., (2015). *Daring Greatly: How the Courage to Be Vulnerable Transforms the Way We Live, Love, Parent, and Lead*. Avery, New York, NY.

Buckingham, M., (1999). *First, Break All the Rules: What the World's Greatest Managers Do Differently.* Gallup Press, London.

Byrne, B. M. (1984). The general/academic self-concept nomological network: A review of construct validation research. *Rev. Educ. Res. 54*, 427-456.

Cheon, S. H. & Reeve, J. (2015). A classroom-based intervention to help teachers decrease students' amotivation. *Contemporary Educational Psychology 40*, 99-111. doi: http://dx.doi.org/10.1016/j.cedpsych.2014.06.004

Cheon, S. H., & Jang, H. (2012). Development and validation of student amotivation scale in high-school physical education. *The Korean Journal of Physical Education, 51*, 473-485.

Cheon, S. H., & Reeve, J. (2013). Do the benefits from autonomy-supportive training program endure? A one-year follow up investigation. *Psychology of Sport and Exercise, 14*, 508-518.

Chouinard, R. (2001). Annual changes in motivation for mathematics in high-school according to age and gender. *Canadian Journal of Behavioral Science, 33*, 25-37.

Dandy, J., & Nettelbeck, T. (2002) The relationship between IQ, homework, aspirations and academic achievement for Chinese, Vietnamese, and Anglo-celtic Australian school children. *Educational Psychology 22*(3), 267-275.

Deci, E., R. Koestner, and R. Ryan. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research 7,* 1-27.

Deci, E. ., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* New York: Plenum Press.

Deci, E. L. & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55,* 68-78.

Deci, E. L., & Ryan, R. M. (2002). *Overview of self-determination theory: An organismic dialectical perspective.* In E. L. Deci & R. M. Ryan (Eds.). Handbook of self-determination research (pp. 3-33). Rochester, NY: University of Rochester Press.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The Self-determination perspective. *Educational Psychologist 26*, 325-346.

DiDonato, N. (2013). Effective self- and co-regulation in collaborative learning groups: An analysis of how students regulate problem solving of authentic interdisciplinary tasks. *Instructional Science 41*(1), 25-47.

Dinesh, N. P. & Kiran A. D. (2018). Comparative study of achievement motivation and self-concept of secondary school students. *Indian Journal of Positive Psychology 9*(1), 199-201. doi: 10.15614/jpp.v9i01.11773

Dorabusch, S. M, Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Child Development, 58,* 1244-1257.

Dweck, C. S. (2002). *Development of achievement motivation.* San Diego, CA: Academic Press.

Dweck, C., (2008). *Mindset: The New Psychology of Success.* Ballantine Books, New York, NY.

Dweck, C.S. (2006). *Mindset: The New Psychology of Success*. New York: Random House.

Elliot, A. J. & Dweck, C.S. (1989). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology 54,* 5-12.

Eschel, Y., & Kohavi, R. (2003). Perceived classroom control, self-regulated learning strategies, and academic achievement. *Educational Psychology, 23*(3) 249-260.

Fan, W. & Wolters, C. A. (2014). School motivation and high-school dropout: The mediating role of educational expectation. *British Journal of Educational Psychology 84*, 22-39. doi: 10.1111/bjep.12002

Farmer, A. (2018). The impact of student-teacher relationships, content knowledge, and teaching ability on students with diverse motivation levels. *Language Teaching and Educational Research 1*(1), 13-24.

Fazel, A. & Rahimi, A. (2018). Forecast of academic motivation based on parenting and self-referencing in secondary school students. *Indian Journal of Positive Psychology 9*(3), 360-363. Retrieved from: http://www.ishrw.com/index.php/home/journal_detail/19/list

Francis, A., Goheer, A., Haver-Dieter, R., Kaplan, A. D., Kerstetter, K., Kirk, A. L., Liu, S., Thomas, A. M., & Yeh, T. (2004). *Promoting academic achievement and motivation: a discussion & contemporary issues based approach*. November 9, 2009, Retrieved from: https://www.wepapers.com/Papers/57793/Promoting_Academic_Achievement_and_Motivation_A_Discussion_%26_Contemporary_Issues_Based_Approach

Fredricks, A., Blumenfeld, P.C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence, *Review of Educational Research 74*, 59-109.

Gee, J. P. (2003) *What video games are good for your soul: Pleasure and learning*. Melbourne, Victoria, Australia: Common Ground Press.

Goodenow, C. & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education 62,* 60-71.

Green-Demers, I., Legault, L., & Pelletier, L. (2006). Why do high-school students lack motivation in the classroom? Toward and understanding of academic amotivation and the role of social support. *Journal of Educational Psychology 98*(3), 567-582. doi: 10.1037/0022-0663.98.3.567

Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology 81*, 143-154.

Grolnick, W. S., & Ryan, R. M., & Deci, E. L. (1991). The inner resources for school achievement: Motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology 83*, 508-517.

Hamm, D., & Reeve, J. (2002). *Teachers as resources and obstacles to students' intrinsic motivation*. Unpublished manuscript, Michigan State University.

Harboura K. E., Lauren L. E., Chris A. S., & Lindsay E. H. (2015). A brief review of effective teaching practices that maximize student engagement, preventing school failure. *Alternative Education for Children and Youth 59*(1), 5-13.

Hardre, P. L., & Reeve., J. (2003). A motivational model of rural students' intentions to persist in, versus drop out of high-school. *Journal of Educational Psychology, 95*, 347-356.

Hattie, J. (2008). *Visible Learning*. Abingdon, Oxon: Routledge.

Hidi, S. & Harackiewicz, J. M. (2000). Motivating the academically unmotivated: A critical issue for the 21st century. *Review of Educational Research 70*, 151-179.

Hochanadel, A. & Finamore, D., (2015). Fixed and growth mindset in education and how grit helps students persist in the face of adversity. *Journal of International Education Research 11*(1), 47-50.

Hodis, F. A., Hodis, G. M, Johnston, M., McClure, J., Meyer, L. H., & Starkey, L. (2015). Maximal levels of aspiration, minimal boundary goals, and their relationships with academic achievement: The case of secondary-school students. *British Educational Research Journal 41*(6), 1125-1141. doi: 10.1002/berj.3189

Jackson, T. G. & McNamara, D. S. (2013). Motivation and performance in a game-based intelligent tutoring system. *Journal of Educational Psychology 105*(4), 1036 - 1049. doi: 10.1037/a0032680

Janosz, M. (2000). *School dropout among adolescents: A North American perspective.* VE Enjeux, 122, 105-127.

Jennings, P. A. & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research 79*, 491-626. doi: 10.3102/00346543 08325693

Katartzi, E. S., Kontou, M. G., & Vlachopoulos, S. P. (2013). Fitting multidimensional amotivation into the self-determination theory nomological network: Application in school physical education. *Measurement in Physical Education and Exercise Science 17*, 40-61. doi: 10.1080/1091367X.2013.741366

Lam, S., Wing-yi Cheng, R., & Y. K. Ma, W. (November, 2009). Teacher and student intrinsic motivation in project-based learning. *Instructional Science 37*(6), 565-578. Retrieved from: https://www.jstor.org/stable/23372502

Learner, D. G & Kruger, L. J. (1997). Attachment, self-concept, and academic motivation in high-school students. *American Journal of Orthopsychiatry 67*(3), 485-492.

Legault, L., Green-Demers, I., & Pelletier, L. (2006). Why do high-school students lack motivation in the classroom? Toward an understanding of academic amotivation and the role of social support. *Journal of Educational Psychology 98*(3), 567-582. doi: 10.1037/0022-0663.98.3.567

Legrain, P., Radel, R., Sarrazin, P., & Wild, C. (2010). Social cognition of motivation between Teacher and Student: Analyzing underlying processes. *Journal of Educational Psychology 102*(3)*, 577-587. doi: 10.1037/a0019051*

Linnenbrink, E. & Pintrich P. (2000). Motivation as an enabler for academic success. *School Psychological Review 31*, 313-327.

Murdock, T. B. (1999). The social context of risk status and motivation predictors of alienation in middle school. *Journal of Educational Psychology, 91*, 62-75.

Murphy, M., Dweck, C., (2010). A culture of genius: how an organization's lay theory shapes people's cognition, affect, and behavior. *Personal Social Psychology Bulletin 36*, 283–296.

Nayir, F. (2017). The relationship between student motivation and class engagement levels. *Eurasian Journal of Educational Research 71*, 59-78. doi: 10.14689/ejer.2017.71.4

Niemec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education, 7*, 133-144.

Ntoumanis, N., Pensgaard, A., Martin, C., & Pipe, K. (2004). An idiographic analysis of amotivation in compulsory school physical education. *Journal of Sport and Exercise Psychology, 26*, 197-214.

Patrick, B. C., Skinner, E. A., & Connell, J. P. (1993). What motivates children's behavior and emotion? Joint effects on perceived control and autonomy in the academic domain. *Journal of Personality and Social Psychology, 65*, 781-791.

Pelletier, L. G., Dion, S., Tuson, K., & Green-Demers, I. (1999). Why do people fail to adopt environmental protective behaviors? Toward a taxonomy of environmental amotivation. *Journal of Applied Social Psychology, 29*(12), 2481-2504.

Pintrich, P. R. & Schunk, D. H. (1996). *Motivation in education: Theory, research, and applications.* Englewood Cliffs, NH: Prentice Hall Merril.

Reeve, J. (2002). *Self-determination theory applied to educational settings.* In E. L. Deci & R. M. Ryan (Eds.). Handbook of self-determination research (pp. 183-203). Rochester, NY: University of Rochester Press.

Reeve, J. (2009). Why teachers adopt a controlling motivating style towards students and how they can become more autonomy supportive. *Educational Psychologist, 44*(3), 159-175.

Reeve, J., Bolt, E., & Cali, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology 91*, 537-548.

Robinson, C. (2017). Growth mindset in the classroom. *Science Scope 41*(2), 18-21. Retrieved from: https://www.jstor.org/stable/26387192

Rumberer, R. W. (1987). high-school dropouts: A review of issues and evidence. *Review of Educational Research 57*, 101-121.

Schlechty, P. C. (2002). *Working on the work*. San Francisco, CA: Jossey-Bass.

Schunk, D. H. (1991). Self-efficacy and academic motivation. Educational Psychologist, 26, 207-231.

Shahar, G., Henrich, C. C., Blatt, S. J., Ryan, R., & Little, T. D. (2003). Interpersonal relatedness, self-definition, and their motivational orientation during adolescence: A theoretical and empirical integration. *Developmental Psychology, 39*, 470-483.

Shen, B., McCaughtry, N., & Martin, J. (2008). The influence of domain specificity of motivation physical education: Between and within domain relations. *Research Quarterly for Exercise and Sport, 79*, 333-343.

Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: The role of perceived control in children's engagement and school achievement. J*ournal of Educational Psychology, 82*, 22-32.

Thorkildsen, T. A., Nicholls, J. G., Bates, A., Brankis, N., & DeBolt, T. (2002). *Motivation and the struggle to learn: Responding to fractured experiences.* Boston, Massachusetts: Allyn and Bacon.

Usta, H.G. (2017). Examination of the relationship between TEGO score transition from base to secondary education, self-confidence, self-efficacy and motivation level. *Journal of Education and Practice 8*(6), 36-47.

Vallerand, R. J., & Bissonnette, R. (1992). Intrinsic, extrinsic and amotivational styles as predictors of behavior: A prospective study. *Journal of Personality, 60*, 599-620.

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high-school dropout. *Journal of Personality and Social Psychology, 72*, 1161-1176.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Seenecal, C., & Vallieres, E. F. (1993). On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. *Educational and Psychological Measurement, 53,* 150- 172.

Wiesman, J. (2012). Student motivation and the alignment of teacher beliefs. *The Clearing House 85*(3), 102-108. doi: 10.1080/00098655.2011.653016

Wigfield, A. (1988). Children's attributions for success and failure: Effects of age and attentional focus. *Journal of Educational Psychology, 80*, 76-81.

Wigfield, A., Eccles, J., & Rodriquez D. (1998). The development of children's motivation in school contexts. *Review of Research in Education*, ed P.D. Pearson and A. Iran- Nejad, 73-118. Washington DC: American Educational Research Association.

Zhou, J. & Urhahne, D. (2013). Teacher judgment, student motivation, and the mediating effect of attributions. *European Journal of Psychological Education 8*(2), 275-295. doi: 10.1007/s10212-012-0114-9