



# “Motivation's Impact On Learning: A Comprehensive Review Of The Systematic Literature”

<sup>1</sup>Chandrasekhar Bhoi

Assistant Professor(TE) in Botany, M.P.C. Autonomous College, Baripada, India

<sup>2</sup>Anita Pattnaik

Lecturer in Education, B.J.B. Autonomous College, Bhubaneswar, India

## Abstract:

This comprehensive review explores the intricate relationship between motivation and learning by synthesizing findings from the systematic literature. Grounded in theoretical frameworks such as the Self-Determination Theory and Achievement Goal Theory, the analysis categorizes motivation into intrinsic, extrinsic, and motivation, unveiling their distinct impacts on the learning process. Teacher-student relationships, classroom environments, cultural variations, and individual differences emerge as significant determinants shaping motivation in educational settings. The review emphasizes the direct correlation between motivation and academic achievement, demonstrating that high motivation levels contribute to improved grades and overall success. Strategies to enhance motivation, including fostering a growth mindset and providing autonomy in learning choices, are discussed. Recognizing the dynamic nature of motivation, this review serves as a valuable resource for educators, policymakers, and researchers aiming to optimize learning environments and outcomes.

**Key Words:** Motivation, Academic achievement, Class room Environment , Educational outcomes , Self Determination Theory.

## Introduction:

In the dynamic landscape of education, understanding the intricate interplay between motivation and learning is paramount for educators, researchers, and policymakers alike. Motivation serves as the driving force behind an individual's engagement, persistence, and overall success in the learning process (Shen et al. 2009). As a multifaceted construct, motivation encompasses a spectrum of factors, including intrinsic and extrinsic elements, that significantly influence the acquisition of knowledge and skills. This article embarks on a comprehensive exploration, delving into the systematic literature that illuminates the profound impact of motivation on the learning journey. The intricate relationship between motivation and learning has been a subject of sustained scholarly inquiry, with researchers across disciplines seeking to unravel the nuanced mechanisms that underpin this connection. As we navigate through an era characterized by diverse educational methodologies and rapidly evolving technological landscapes, a closer examination of motivational factors

becomes increasingly pertinent. This review aims to synthesize and analyze existing literature systematically, offering a nuanced understanding of how motivation shapes the learning experience across various educational settings. Within the educational psychology framework, the study of motivation extends beyond mere behavioral observations, delving into cognitive, emotional, and social dimensions (Dornyei & Ushioda 2021). By critically examining empirical studies, theoretical frameworks, and practical applications, this article seeks to uncover the factors that contribute to fostering a motivated learning environment. From the role of intrinsic motivation in promoting deep understanding to the impact of external incentives on surface-level engagement, each facet of motivation's influence on learning will be explored, providing educators with valuable insights to enhance their instructional practices. Moreover, as educational institutions continue to adapt to diverse student populations, varying learning styles, and evolving pedagogical approaches, understanding motivation becomes a linchpin for creating inclusive and effective learning environments (Ryan & Patric 2001). By synthesizing evidence-based insights, this review aims to provide educators, researchers, and policymakers with a comprehensive resource that not only highlights the significance of motivation in learning but also offers practical implications for optimizing instructional strategies and educational policies. In the ensuing sections, we will traverse the intricate landscape of motivation in learning, examining its impact on cognitive processes, academic achievement, and the cultivation of lifelong learning habits. Through this exploration, we hope to contribute to a deeper comprehension of the motivational dynamics that drive successful learning outcomes and foster a constructive dialogue on how educators can harness the power of motivation to propel education into the future

### **Theoretical Frameworks:**

Before delving into the empirical evidence, it is imperative to lay a robust theoretical foundation for comprehending the intricate relationship between motivation and learning. Two key frameworks that have significantly shaped research in this domain are the Self-Determination Theory (SDT) and the Achievement Goal Theory (AGT). The Self-Determination Theory posits that motivation thrives when individuals experience autonomy, competence, and intrinsic motivation.

In the context of learning, this theory highlights the pivotal role played by a student's sense of autonomy, the mastery of skills, and the inherent joy derived from the learning process (Lunenburg 2011). SDT provides a lens through which educators can cultivate environments that nurture self-motivated and engaged learners, fostering a deep and enduring connection to the subject matter. Complementing SDT, the Achievement Goal Theory categorizes learners based on their goal orientations—whether they are driven by mastery goals, seeking to understand and master content, or performance goals, striving for external validation and success (Ames & Archer 1988). This theory unveils the diverse motivations that learners bring to the educational setting, allowing educators to tailor instructional methods to address individual needs and optimize the learning experience.

As we embark on this exploration of the systematic literature, the insights derived from these foundational theories will serve as beacons, guiding our understanding of how motivation intricately shapes the learning landscape. Through this theoretical lens, we will navigate the empirical terrain to unravel the multifaceted impact of motivation on learning outcomes

### **Motivation Types and Learning:**

Motivation plays a crucial role in learning and can significantly impact an individual's willingness to engage in educational activities (Schunk & Zimmerman 2012). There are various types of motivation, and they can be broadly categorized into intrinsic and extrinsic motivation.

**Intrinsic Motivation:** Definition: Intrinsic motivation refers to the drive that comes from within an individual. It involves pursuing an activity for its own sake, driven by personal interest, curiosity, or enjoyment. Example: A student who loves mathematics and solves complex problems for the sheer joy of intellectual challenge exhibits intrinsic motivation (Abesekera & Dawson 2015).

**Extrinsic Motivation: Definition:** Extrinsic motivation involves engaging in an activity for external rewards or to avoid punishment. The motivation comes from outside factors rather than personal interest. Example: A student who studies hard to get good grades and praise from teachers or parents is driven by extrinsic motivation.

**Achievement Motivation: Definition:** This type of motivation is centered around the desire to achieve success and demonstrate competence. Individuals with high achievement motivation often set challenging goals for themselves. Example: A student who strives to excel in exams and competitions to prove their academic abilities demonstrates achievement motivation.

**Social Motivation: Definition:** Social motivation involves the desire to connect with others, gain social approval, or avoid social rejection. It is influenced by the need for social belonging and acceptance (Courtney et al. 1996). Example: A student who participates in group projects and collaborative activities because they enjoy working with classmates and want to be part of a team displays social motivation.

**Mastery Motivation: Definition:** Mastery motivation is driven by the desire to master a skill, improve, and become proficient in a particular area (Greene et al. 2004). The focus is on personal growth and development. Example: A musician who practices diligently to master a challenging piece of music demonstrates mastery motivation.

**Fear-Avoidance Motivation: Definition:** This type of motivation is driven by the desire to avoid failure, criticism, or negative outcomes. Fear of failure can be a powerful motivator, pushing individuals to work hard to prevent undesirable consequences (Gu 2009). Example: A student who studies diligently to avoid the embarrassment of performing poorly in exams exhibits fear-avoidance motivation.

**Task-Interest Motivation: Definition:** Task-interest motivation involves finding an activity inherently interesting or enjoyable, which stimulates engagement and sustained effort. Example: A student who is fascinated by a science experiment and eagerly participates in it because of genuine interest demonstrates task-interest motivation.

Effective educators and learning environments often recognize the importance of tapping into various types of motivation to enhance the learning experience for individuals with diverse preferences and needs. Balancing intrinsic and extrinsic motivators, fostering a positive and supportive environment, and providing opportunities for mastery (Rose 2011) and personal growth contribute to a more comprehensive approach to motivation in learning.

### **The Role of Teachers and Classroom Environment:**

The role of teachers and the classroom environment is crucial in shaping the learning experience for students (Martin et al. 2009). Both factors significantly influence students' academic performance, motivation, and overall well-being. Here are key aspects related to the role of teachers and the classroom environment:

#### **Role of Teachers:**

**Instruction and Facilitation:** Teachers are responsible for delivering content in a clear and engaging manner, ensuring that students understand the material. They facilitate learning by providing explanations, examples, and opportunities for students to apply their knowledge.

**Motivation and Inspiration:** Effective teachers inspire and motivate students by creating a positive and supportive atmosphere in the classroom (Dorneyi 2000). They help students find relevance in the material, connect it to their lives, and understand the importance of learning.

**Differentiated Instruction:** Teachers recognize and accommodate diverse learning styles and abilities among students through differentiated instruction. They adapt teaching methods, materials, and assessments to meet the individual needs of students.

**Assessment and Feedback:** Teachers assess students' progress through various means, such as exams, projects, and presentations. Constructive feedback is provided to help students understand their strengths and areas for improvement.

**Classroom Management:** Establishing clear expectations and maintaining a positive classroom environment is vital for effective teaching (Reeve 2018). Teachers implement fair and consistent discipline, fostering a space where students feel safe and respected.

**Building Relationships:** Teachers build positive relationships with students, creating a sense of trust and rapport. A supportive teacher-student relationship enhances communication and contributes to a positive learning environment.

**Facilitating Critical Thinking:** Teachers encourage critical thinking skills by posing thought-provoking questions and promoting discussions. They guide students in analyzing information, forming opinions, and making informed decisions.

**Classroom Environment:**

**Physical Environment:** The physical layout of the classroom affects students' comfort and engagement. An organized and well-designed space supports effective teaching and learning.

**Cultural and Inclusive Environment:** Creating a culturally inclusive environment promotes diversity and ensures that all students feel valued and respected. Teachers incorporate diverse perspectives into the curriculum to enhance cultural competence.

**Technological Integration:** Integrating technology into the classroom enhances learning opportunities and prepares students for the digital age. Teachers use tools and resources to support instruction and provide interactive learning experiences.

**Resource Accessibility:** Ensuring access to necessary resources, including textbooks, materials, and technology, is essential for a well-functioning classroom.

**Emotional Environment:** A positive emotional climate fosters a sense of belonging and emotional well-being among students (Schiefele 1991). Teachers create an atmosphere where students feel comfortable expressing themselves and taking risks in their learning.

**Flexibility and Adaptability:** Teachers adapt to changes and unexpected situations, creating a flexible learning environment. Flexibility allows for personalized learning experiences and accommodates diverse student needs.

In summary, teachers play a multifaceted role in guiding students' learning experiences, and the classroom environment significantly influences their academic and emotional development. A well managed, positive, and inclusive classroom, coupled with effective teaching strategies, contributes to a successful and enriching educational journey for students

### **Cultural and Individual Differences:**

Motivation's influence on learning is intricately tied to cultural and individual differences, adding layers of complexity to the educational landscape. Cultural variations play a significant role in shaping motivational beliefs and values, thereby influencing how students approach and engage with learning tasks.

#### **Cultural Differences:**

**Motivational Beliefs: Collectivism vs. Individualism:** Cultures that emphasize collectivism may prioritize group achievement and social harmony, impacting how individuals approach learning for communal success (Reeve 2018). In contrast, individualistic cultures may emphasize personal achievement and autonomy in learning.

**Values and Expectations: Educational Values:** Cultural attitudes toward education and the perceived value of certain subjects or skills can strongly influence motivation. For example, some cultures may emphasize the importance of academic success, while others may prioritize practical skills or vocational training.



**Goal Orientation:**

Performance vs. Mastery Orientation: Cultural backgrounds can shape students' goal orientations (Derya et al. 2022). Some cultures may emphasize performance goals, where success is measured against others, while others may focus on mastery goals, emphasizing personal growth and improvement.

Communication Styles: Teacher-Student Interaction: Cultural norms regarding communication styles may affect how students interact with teachers. Some cultures encourage open dialogue, while others may emphasize a more hierarchical approach, impacting the expression of motivation and engagement.

**Individual Differences:**

Personality: Extraversion vs. Introversion: Extroverted individuals may be more motivated in social learning environments, while introverts may thrive in quieter, more reflective settings.

Conscientiousness: Highly conscientious individuals may be intrinsically motivated by a desire for achievement and responsibility.

**Cognitive Styles:**

Analytical vs. Holistic Thinking: Cultural backgrounds can influence cognitive styles. Analytical thinkers may excel in tasks requiring detailed analysis, while holistic thinkers may focus on the broader context, impacting motivation in various learning scenarios.

**Prior Experiences:**

Educational Background: Varied educational experiences and backgrounds can influence motivation. Individuals with positive prior experiences may approach learning with enthusiasm, while those with negative experiences may require additional support.

**Learning Preferences:**

Visual vs. Auditory Learners: Individual preferences for learning modalities can impact motivation. Visual learners may thrive in visually stimulating environments, while auditory learners may benefit from lectures and discussions.

Motivational Regulation: Self-Regulation: Individual differences in self-regulation skills can influence how students set goals, manage their time (Carroll & Leander 2001), and persist in the face of challenges, impacting overall motivation and learning outcomes.

**Moderating the Relationship:**

Cultural Sensitivity in Teaching: Teachers must be culturally sensitive, recognizing and valuing diverse perspectives. Understanding the cultural context can help in tailoring instructional methods to align with students' motivational orientations.

Differentiated Instruction: Recognizing individual differences in learning styles and preferences, teachers can employ differentiated instruction to accommodate various needs, fostering a more inclusive and motivating learning environment (Martin & Dawson 2009).

Building a Positive Classroom Climate: Creating a positive and inclusive classroom culture can enhance motivation across diverse cultural and individual backgrounds. Teachers can foster a sense of belonging, encouraging students to share their perspectives and experiences.

Encouraging Autonomy: Providing opportunities for autonomy and choice in learning tasks allows individuals to align their learning experiences with their personal motivations, fostering a sense of ownership and engagement.

In conclusion, understanding and embracing cultural and individual differences is essential for educators seeking to motivate students effectively.

By acknowledging the diverse ways in which motivation is shaped by cultural backgrounds and individual characteristics, teachers can create learning environments that cater to the unique needs of each student, ultimately enhancing the overall learning experience

### **Motivation and Academic Achievement:**

Numerous studies have explored the direct correlation between motivation and academic achievement. High levels of motivation have been consistently associated with improved grades, standardized test scores, and overall academic success. Conversely, low motivation can lead to disengagement, reduced effort, and poorer academic performance (Zimmerman 2008).

**Improved Grades:** Motivated students are more likely to invest time and effort into their studies, resulting in a better understanding of the material (Sun 2016). This deeper comprehension often translates into improved grades on assignments, exams, and overall coursework.

**Standardized Test Scores:** Motivation can positively impact performance on standardized tests. Students who are motivated tend to approach test preparation with focus and dedication, leading to better outcomes in assessments that are designed to measure academic proficiency.

**Overall Academic Success:** High motivation contributes to a positive academic attitude, strong work ethic, and an eagerness to learn (Di Serio et al. 2013). These factors collectively contribute to a student's overall academic success, encompassing various aspects such as class participation, completion of assignments, and the ability to apply knowledge.

**Disengagement and Reduced Effort:** On the flip side, low motivation can result in disengagement from academic activities. Students who lack motivation may not fully participate in class, neglect assignments, and demonstrate reduced effort in their studies. This can have a detrimental impact on academic performance.

**Impact on Psychological Factors:** Motivation is closely linked to psychological factors such as self-esteem and self-efficacy (Cole et al. 2004). Students with high motivation often have greater confidence in their abilities, leading to a positive cycle where belief in oneself contributes to academic success.

**Long-term Educational Attainment:** Beyond immediate academic outcomes, motivation can influence a student's pursuit of higher education (Tuckman 2003). Motivated individuals are more likely to set and achieve long-term educational goals, which can shape their career paths and overall life success.

**Influence of External Factors:** While internal motivation is crucial, external factors such as supportive environments, inspiring teachers, and a positive school culture can also contribute to and reinforce students' motivation (Dornyei 2003). A combination of internal and external motivators creates a more robust foundation for academic achievement.

Understanding the interplay between motivation and academic achievement is vital for educators, parents, and students alike. Fostering a supportive and motivating environment can contribute significantly to the holistic development of students and their academic success (Seli 2019)

**Strategies to Enhance Motivation in Learning:** Understanding the critical role of motivation in learning, educators and policymakers can implement evidence-based strategies to enhance motivation and subsequently improve educational outcomes (Christophel 1990). Implementing effective strategies to enhance motivation in learning is crucial for fostering a positive and engaging educational experience. Here are key strategies to consider:

#### **Set Clear Goals:**

Define specific, achievable, and measurable learning goals to provide students with a sense of direction.

Break down larger objectives into smaller milestones to create a roadmap for success.

Encourage students to reflect on their personal and academic aspirations, linking these goals to their learning journey.

### **Make Learning Relevant:**

Connect lessons to real-life scenarios to demonstrate the practical applications of knowledge.

Highlight the relevance of the curriculum to students' interests, career goals, and everyday experiences.

Incorporate diverse perspectives and examples to make the content relatable and inclusive.

### **Foster a Positive Learning Environment:**

Cultivate a classroom or learning environment that is supportive, inclusive, and encourages collaboration. Acknowledge and celebrate individual achievements, creating a positive atmosphere that reinforces effort and progress.

Provide constructive feedback that emphasizes improvement rather than focusing solely on outcomes.

### **Offer Choices and Autonomy:**

Allow students to have a degree of control over their learning by offering choices in assignments, projects, or topics.

Incorporate student interests into the curriculum, allowing them to explore subjects that resonate with their passions.

Encourage autonomy to build a sense of ownership over the learning process.

### **Utilize Varied Teaching Methods:**

Employ a mix of teaching strategies, including hands-on activities, discussions, multimedia resources, and technology.

Cater to diverse learning styles, ensuring that each student has opportunities to engage with the material in ways that suit their preferences.

Integrate real-world examples, case studies, and interactive elements to make lessons dynamic and interesting.

### **Create a Growth Mindset Culture:**

Encourage a growth mindset by emphasizing the value of effort, perseverance, and learning from mistakes (Elton 1996).

Teach students that intelligence and abilities can be developed through dedication and hard work.

Celebrate the process of learning, framing challenges as opportunities for growth rather than obstacles.

### **Build Positive Teacher-Student Relationships:**

Foster strong connections between teachers and students through open communication and approachability.

Show genuine interest in students' well-being, aspirations, and academic progress. Provide mentor-ship and guidance to help students navigate challenges and set realistic expectations.

### **Incorporate Gamification and Rewards:**

Introduce elements of gamification, such as educational games, challenges, or competitions, to make learning more engaging (Papastergiou 2009).

Offer rewards and recognition for accomplishments, creating a positive reinforcement system that motivates students to excel.

### **Promote Collaborative Learning:**

Encourage group projects, discussions, and peer-to-peer learning activities.

Collaboration fosters a sense of community and shared responsibility, enhancing motivation through social interaction and mutual support.

### **Continuous Assessment and Feedback:**

Implement ongoing assessment methods that provide regular feedback on student progress.

Use constructive feedback to highlight strengths and suggest areas for improvement, promoting a growth-oriented mindset.

Involve students in the assessment process, allowing them to take an active role in monitoring their own learning journey.

By combining these strategies, educators can create an environment that not only supports academic achievement but also nurtures a lifelong love for learning.

### **Conclusion:**

In conclusion, the comprehensive review of systematic literature on motivation's impact on learning underscores its pivotal role in shaping educational outcomes. The findings across various studies consistently highlight the profound influence motivation exerts on students' academic performance, engagement, and overall learning experience. High levels of motivation are associated with improved grades, standardized test scores, and a positive attitude toward learning. Conversely, low motivation can lead to disengagement, reduced effort, and poorer academic outcomes. The multifaceted nature of motivation reveals its dynamic interaction with factors such as goal setting, intrinsic drive, positive mindset, and the learning environment. As education continues to evolve, acknowledging and harnessing the power of motivation becomes increasingly essential. This review underscores the need for educators, policymakers, and stakeholders to prioritize the cultivation of motivation within the educational landscape. By implementing evidence-based strategies, institutions can create environments that inspire and empower students, leading to not only immediate academic success but also instilling a lifelong passion for learning. The synthesis of systematic literature provides a valuable foundation for shaping educational practices that prioritize motivation as a cornerstone for effective and meaningful learning experiences.

### **References:**

- [1]. Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher education research & development*, 34(1), 1-14.
- [2]. Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of educational psychology*, 80(3), 260.
- [3]. Carroll, L., & Leander, S. (2001). Improving Student Motivation through the Use of Active Learning Strategies.
- [4]. Christophel, D. M. (1990). The relationships among teacher immediacy behaviors, student motivation, and learning. *Communication education*, 39(4), 323-340.
- [5]. Cole, M. S., Feild, H. S., & Harris, S. G. (2004). Student learning motivation and psychological hardiness: Interactive effects on students' reactions to a management class. *Academy of Management Learning & Education*, 3(1), 64-85.
- [6]. Courtney, S., Speck, S., & Holtorf, P. (1996). The impact of motivation, volition, and classroom context on adult learning. In *Proceedings of the Fifteenth Annual Midwest Research-to-Practice Conference in Adult, Continuing, & Community Education* (pp. 35-39). Lincoln, NE: University of Nebraska, Department of Vocational and Adult Education.



- [7]. Derya, Y. A., Akça, E. İ., Özşahin, Z., & Kapidere, M. (2022). Integration of technology to clinical teaching: The impact of mobile and web-based software automation designed for midwifery students on motivation, time management and anxiety levels. *Midwifery*, 106, 103248.
- [8]. Di Serio, Á., Ibáñez, M. B., & Kloos, C. D. (2013). Impact of an augmented reality system on students' motivation for a visual art course. *Computers & Education*, 68, 586-596.
- [9]. Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. *Language learning*, 53(S1), 3-32.
- [10]. Dörnyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualisation of student motivation. *British journal of educational psychology*, 70(4), 519-538.
- [11]. Dörnyei, Z., & Ushioda, E. (2021). Teaching and researching motivation.
- [12]. Elton, L. (1996). Strategies to enhance student motivation: A conceptual analysis. *Studies in Higher Education*, 21(1), 57-68.
- [13]. Greene, B. A., Miller, R. B., Crowson, H. M., Duke, B. L., & Akey, K. L. (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation. *Contemporary educational psychology*, 29(4), 462-482.
- [14]. Gu, M. (2009). *The discursive construction of second language learners' motivation: a multi-level perspective*. Peter Lang.
- [15]. Lunenburg, F. C. (2011). Goal-setting theory of motivation. *International journal of management, business, and administration*, 15(1), 1-6.
- [16]. Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of educational research*, 79(1), 327-365.
- [17]. Papastergiou, M. (2009). Digital game-based learning in high school computer science education: Impact on educational effectiveness and student motivation. *Computers & education*, 52(1), 1-12.
- [18]. Reeve, J. (2018). *Understanding motivation and emotion*. John Wiley & Sons.
- [19]. Rose, S. (2011). Academic success of nursing students: Does motivation matter?. *Teaching and Learning in Nursing*, 6(4), 181-184.
- [20]. Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American educational research journal*, 38(2), 437-460.
- [21]. Schiefele, U. (1991). Interest, learning, and motivation. *Educational psychologist*, 26(3-4), 299-323.
- [22]. Schunk, D. H., & Zimmerman, B. J. (Eds.). (2012). *Motivation and self-regulated learning: Theory, research, and applications*. Routledge.
- [23]. Seli, H. (2019). *Motivation and learning strategies for college success: A focus on self-regulated learning*. Routledge.
- [24]. Shen, B., McCaughtry, N., Martin, J., & Fahlman, M. (2009). Effects of teacher autonomy support and students' autonomous motivation on learning in physical education *Research*.
- [25]. Sun, H. (2016). Motivation as a learning strategy. In *Routledge handbook of physical education pedagogies* (pp. 631-645). Routledge.
- [26]. Tuckman, B. W. (2003). The effect of learning and motivation strategies training on college students' achievement. *Journal of college student development*, 44(3), 430-437.

- [27]. Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and psychological measurement*, 52(4), 1003-1017.
- [28]. Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American educational research journal*, 45(1), 166-183.
- [29]. Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American educational research journal*, 29(3), 663-676.

