

Research Paper

The Interplay between Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation among College Students

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ABSTRACT

Academic self-efficacy pertains to a person's confidence in their capacity to effectively accomplish academic duties, stemming from Bandura's self-efficacy theory. Conversely, academic self-concept entails an individual's perception of their academic prowess, including their assessments and beliefs regarding their abilities and achievements. Academic motivation is intricately linked with the broader notion of "motivation for learning," which encompasses the mental processes driving learning endeavors and their results. The present study aimed to investigate how academic self-concept, academic self-efficacy, and academic motivation are interrelated in college students. A sample of 105 students were taken aged between 18-26 years. It was hypothesized that there is a significant relationship between Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation. Tools such as the College Academic Self-Efficacy Scale (CASES) by S.V. Owen and R.D. Froman in 1988, the Academic Self-Concept Scale by Liu, W.L., and Wang, C. K. J. in 2005, and the Academic Motivation Scale (AMS-28) by Vallerand, R.J., Blais, M.R., Brière, V.M., and Pelletier, L.G. in 1989 were used. Results showed that there is a statistically significant negative correlation between Academic Self-Efficacy and Academic Self-Concept at the 0.05 significance level among college students. It was also evident there is a statistically significant positive correlation between Academic Self-Concept and Academic Motivation among college students. The correlation between Academic Self-Efficacy and Academic Motivation is not statistically significant.

Keywords: *Academic Self-Efficacy, Academic Self-Concept, Academic Motivation, College Students*

ACADEMIC SELF-EFFICACY

Researchers in the fields of personality and social psychology have long held a keen interest in understanding the significance of self-related perceptions. Individuals who share similar characteristics can exhibit distinct feelings about themselves and make different choices based on how they perceive their attributes, anticipated roles, capabilities, comparative standing with others, and the perceived judgments of others. Undoubtedly, these self-beliefs and perceptions are deeply rooted in one's past achievements and the principles of reinforcement theory. It is only logical that these self-perceptions have garnered considerable attention in educational research. Children possessing varied self-beliefs demonstrate

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disparate levels of cognitive, social, and emotional engagement within educational settings. Given that experiences in school constitute a significant part of children's lives and significantly shape their trajectory toward crucial life outcomes, educational researchers strive to comprehend the intricacies of self-perception in students' minds. Confidence serves as a pivotal factor for success, whether on a personal or professional level. The belief in one's own strengths and self-assurance plays a crucial role in attaining established goals, providing vital support during challenging situations to successfully accomplish tasks. The achievement of success hinges on consistent performance, contingent upon an individual's ability to navigate and adapt to life's evolving situations. In behavioral sciences, this confidence and self-belief are encapsulated by the term "self-efficacy." Bandura, in 1977, said that Self-efficacy encompasses self-confidence, self-reliance, and trust in one's abilities. Importantly, it is not about how much an individual likes themselves or the task at hand; rather, self-efficacy is centered around the individual's conviction in their capability to achieve desired outcomes in specific domains. Confidence plays a central role in achieving success, both personally and professionally, as it empowers individuals to believe in their strengths and capabilities, enabling them to navigate challenges and accomplish tasks even in unfavorable circumstances. Success, marked by consistent performance, relies heavily on an individual's adaptive responses to life's dynamics and changes. In the realm of behavioral sciences, this confidence and self-belief are encapsulated by the term "self-efficacy." Self-efficacy, a concept coined by Albert Bandura approximately 50 years ago, encompasses self-confidence, self-reliance, and trust in one's abilities. Distinguished from mere liking of oneself or a specific task, self-efficacy focuses on an individual's belief in their ability to achieve desired outcomes in a designated area. This psychological construct is considered one of the most valuable concepts in modern psychology, influencing thought, emotion, and action. Bandura's perspective emphasizes that self-efficacy is not synonymous with ability or motivation but is strongly interconnected with them. Individuals' behavior, according to Bandura, can be better predicted by their beliefs about their capabilities than by their actual capabilities. In this framework, self-efficacy serves as a mechanism for explaining and predicting an individual's thoughts, emotions, and actions, guiding the pursuit of designated goals. It prioritizes individuals' beliefs in what they can achieve with their existing skills and abilities. Bandura identifies four key features of human agency within his theory: intentionality, forethought, self-reactiveness, and self-reflectiveness. Grounded in social cognitive theory, Bandura posits that individuals are proactive agents in their development, capable of influencing their circumstances through their actions. This theory rejects the notion that individuals are solely driven by inner forces or passively shaped by external stimuli. Instead, it proposes a model of triadic reciprocity, where behavior, cognitive factors, and environmental events interact as mutually influencing determinants of each other in explaining human functioning.

In the realm of education, self-efficacy emerges as a critical determinant of learners' success, profoundly influencing the decisions they make and the paths they choose to pursue. Academic self-efficacy specifically pertains to an individual's conviction in their ability to successfully achieve specific academic tasks or goals, rooted in Bandura's self-efficacy theory (1977). This theory posits that self-efficacy is the confidence an individual has in organizing and executing actions to solve problems or accomplish tasks, and it is considered situational rather than a stable trait. Distinguishing itself from self-esteem or self-concept, self-efficacy is task-specific, representing an evaluation of one's ability to perform in a particular domain. Academic self-efficacy encompasses various dimensions, forming a loose hierarchical structure across different academic domains. Two categories of academic expectancy beliefs play a role: academic outcome expectations (beliefs about specific behaviors leading to

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outcomes) and academic efficacy expectations (beliefs in one's ability to perform necessary behaviors for a desired outcome).

Research by Linenbrink and Pintrich (2003) underscores the significant association between academic self-efficacy and various aspects of students' learning, engagement, critical thinking, commitment, strategy use, persistence, susceptibility to negative emotions, and achievement. In the academic context, children's beliefs in their ability to control educational processes and excel in challenging subjects profoundly impact their motivation, interest, and performance. High academic self-efficacy is linked to specific behaviors and motivations outlined by Bandura in 1993. Students with high academic self-efficacy view problems as challenges to be mastered, set goals to meet these challenges, commit to academic goals, adopt a task-diagnostic orientation for feedback, attribute failures to insufficient effort or knowledge rather than aptitude deficiencies, and increase efforts in the face of failure to achieve set goals. This highlights the cyclical relationships among the environment, self, and behaviors according to Bandura's social cognitive theory, suggesting that interventions targeting the environment can enhance self-efficacy, leading to improved outcomes through increased challenge selection and constructive feedback.

SOURCES OF ACADEMIC SELF-EFFICACY

Academic Self-efficacy plays a crucial role in determining learners' success, as it shapes the decisions they make and the actions they undertake. Academic Self-efficacy is generally influenced by four primary sources: enactive mastery experience (hands-on experience), vicarious experiences (observing others' experiences), verbal persuasion (appraisal or feedback from others), and physiological and affective states (stress, emotion, mood, pain, and fatigue). Among these, mastery experiences are deemed the most impactful in shaping academic self-efficacy. Once established, academic self-efficacy can be applied to similar learning situations, with the strength of its impact increasing as the resemblance between situations grows. These sources of academic self-efficacy are not merely passive; individuals actively select, interpret, and integrate them into an overall assessment of self-efficacy. This, in turn, influences subsequent cognitive, motivational, emotional, and selective processes in learners.

- **Enactive Mastery Experience:** Enactive mastery experience refers to hands-on experiences or direct encounters with a task or situation where an individual successfully accomplishes a specific academic goal or overcomes a challenge. Example: A student who consistently performs well on math assignments or exams develops a sense of academic self-efficacy through enactive mastery experience in mathematics.
- **Vicarious Experiences:** Vicarious experiences involve observing others' experiences and outcomes in similar academic tasks. This source relies on modeling and social learning, where individuals gain confidence by witnessing others' success or failure in comparable situations. Example: A student observes a peer successfully giving a presentation in class, leading to increased confidence in their ability to do the same based on the observed success.
- **Verbal Persuasion:** Verbal persuasion involves receiving encouragement, feedback, or appraisal from others, such as teachers, peers, or family members. Positive reinforcement and supportive messages can significantly impact one's belief in their academic capabilities. Example: A teacher praising a student's writing skills and providing constructive feedback can boost the student's academic self-efficacy in writing assignments.

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- **Physiological and Affective States:** This source encompasses the influence of physiological and emotional states, including stress, mood, emotion, pain, and fatigue, on academic self-efficacy. Emotional experiences and physical conditions can affect one's perception of their ability to handle academic challenges. Example: A student experiencing high levels of stress before an exam may perceive lower academic self-efficacy, while a positive mood and low stress levels may enhance confidence.

The Impact of Academic Self-Efficacy on Educational Performances Manifested in Various Ways:

Aligned with the theory, academic self-efficacy beliefs exert an impact on students' educational performance by influencing four distinct psychological processes: selection processes, motivational, cognitive, and affective.

In the cognitive domain, students' beliefs regarding their abilities in a particular task shape their perceptions of potential academic outcomes. Those with confidence in their abilities envision positive success, whereas individuals lacking trust in their capacities may experience cognitive negativity, characterized by excessive self-doubt and skepticism about their potential to succeed in challenging learning situations, as outlined by Bandura.

On the motivational front, a heightened sense of academic self-efficacy enhances students' willingness to invest effort in their learning endeavors. It facilitates persistence in the face of difficulties and expedites recovery after encountering setbacks. Conversely, a perceived lack of efficacy diminishes interest in learning, weakens resilience against obstacles, and undermines commitment to achieving academic goals.

At the affective level, a robust sense of competence diminishes the stress students may encounter during learning, while low self-estimation of capacity may result in heightened levels of anxiety and agitation. These emotional states often lead to irrational thinking, ultimately impairing cognitive and intellectual effectiveness.

In terms of selection processes, students' conceptualizations of their academic abilities influence the decisions they make, the environments they choose, and the activities they engage in. Typically, students gravitate towards activities where they feel efficacious and tend to avoid those where they perceive lower competence.

ROLE OF TEACHERS IN CULTIVATING ACADEMIC SELF-EFFICACY

Teachers play a pivotal role in cultivating positive self-perceptions of efficacy in students by instructing them in the utilization of diverse learning strategies, including goal-setting, strategy training, modeling, and feedback.

- **Goal Setting:**
 - Teachers are instrumental in acquainting students with the objectives they need to achieve in their courses, offering feedback on goal progression. Encouraging students to set proximal goals can heighten commitment and deter procrastination.
 - Psychological Insight: Establishing clear goals and receiving feedback on progress enhances motivation and commitment, fostering a sense of achievement.

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- **Strategy Training:**
 - Teachers should design instructional programs that train students in employing specific strategies to enhance performance. Techniques like strategy verbalization or think-aloud procedures can heighten task awareness, activate cognitive processes, promote systematic work, and bolster control over learning.
 - Psychological Insight: Guiding students in strategic thinking and self-regulation improves learning and motivation by addressing cognitive deficiencies and providing effective models.
- **Modeling:**
 - Teachers can address students' learning and motivational shortcomings by demonstrating cognitive strategies and self-regulatory techniques. Presenting a model that employs a particular cognitive strategy for problem-solving positively impacts student motivation and learning.
 - Psychological Insight: Observing effective cognitive strategies in action serves as a powerful motivator and learning enhancer for students.
- **Feedback:**
 - Description: Regular and immediate feedback from teachers allows students to evaluate their learning progress, contributing to their overall academic achievement.
 - Psychological Insight: Timely feedback creates opportunities for self-assessment, fostering a continuous cycle of improvement and positively influencing academic outcomes.

ACADEMIC SELF-CONCEPT

The term academic self-concept holds significant importance in both educational and psychological contexts, having been a prominent construct in educational settings for many years. In essence, academic self-concept serves as a psychological framework used to characterize a student's belief in their proficiency within a specific academic domain, such as biology. According to Wigfield and Karpathian (1991), academic self-concept encompasses an individual's understanding and perceptions of themselves in situations related to academic achievement. Expanding on this perspective, Valentine and colleagues (2004) posit that academic self-concept is cultivated through a student's self-perception of their abilities, shaped by their experiences and interactions within the academic realm. Academic self-concept pertains to an individual's self-perception concerning their academic accomplishments, encompassing aspects like achievement, grade averages, motivation, creativity, and proficiency in challenging subjects. In the contemporary context, the significance placed on academic achievement can be disproportionately high, with some highly accomplished individuals not having pursued college education and certain college graduates engaged in routine occupations. Cultivating a positive academic self-concept is crucial for the development of cognitive functioning and the capacity to learn, emphasizing its profound impact on the psychological well-being of students. Academic self-concept is an evaluative self-perception shaped by a student's interactions and interpretations of the school environment. The self-enhancement model posits that self-concept influences academic achievement, while the skill development model suggests that academic self-concept is an outcome of academic achievement. The formation of academic self-concept involves both descriptive aspects, as illustrated by statements like "I love micro teaching lessons" or "I can learn easily," and evaluative aspects, such as statements like "I am maximal in physical education" or "I'm good in all subjects." These examples align with Strein's argument (1993)

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that academic self-concepts predominantly center around scholastic competence, emphasizing logical systems over attitudes. Strein contends that students engage in tasks and responsibilities for learning due to a well-developed logical system (Tlonaen & Blegur, 2017).

Further support for the significance of academic self-concept comes from Noriasih's (2013) examination, revealing that students with high academic self-concept outperform their counterparts with low academic self-concept in reciprocal and conventional teaching models. This implies that external interventions alone may not induce significant changes in students' learning behavior unless accompanied by a robust academic self-concept. Consequently, academic self-concept emerges as a crucial element in enhancing the quality of learning development. The development of academic self-concept is intricately linked to interpersonal interactions, involving educators, peers, and/or parents (Rossen, 2010). The depth of these interactions encourages students to engage actively in thinking and actions, utilizing their learning time effectively through personal presentations. These presentations not only discourage students from avoiding "ideas and skills competitions" but also provide an opportunity for them to articulate their work, learning experiences, and shared materials, which are open to critique (Blegur, 2017). Viewing presentations as a form of influencing others, students are encouraged to influence each other using their unique ideas and skills, fostering a dynamic and collaborative learning environment. The emphasis is on appreciating the individual learning styles of each student to achieve meaningful learning outcomes, promoting a consensus-driven approach between educators and students for dynamic and meaningful learning experiences (Juliani & Meliana, 2014).

Academic self-concept encompasses students' self-evaluation of their educational abilities and potential, reflecting their feelings about themselves as learners within academic settings (Trautwein, Ludtke, Koller & Baumert, 2006). An alternative definition posits it as an individual's subjective perception of themselves in their role as learners (Guay, Marsh & Boivin, 2003). Skaalvik & Skaalvik (2002) conceptualize academic self-concept as pupils' awareness and perception of their academic capacities. Jacob, Lanza, Osgood, Eccles & Wigfield (2002) identify influencing variables such as students' academic routines, teaching innovations, and practices that are prioritized to modify students' self-concept. The level of academic self-concept is indicative of the degree of performance in the educational domain and typically varies across grades. A modest elevation in academic self-concept is often observed alongside improved academic achievements. Academic self-concept encompasses diverse aspects closely tied to pupils' academic accomplishments, and students' concern about examination results is intertwined with their awareness of the potentials and talents they possess (Liu & Wang, 2005).

Baran & Maskan (2011) propose that environmental factors play a crucial role in shaping academic self-concept. They argue that academic self-concept has a significant impact on the learning process and, consequently, on the learner's achievement. This suggests that students' self-concept not only influences their academic achievement but specifically impacts their performance in Literary subjects. Marsh (1993) supports this perspective, contending that students with elevated academic self-concept tend to exert greater effort in their learning, display resilience in the face of challenges, and engage in academic activities driven by intrinsic motivation and personal choice.

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In the realm of Educational Psychology, the examination of academic self-concepts, such as one's perception of their proficiency in mathematics, has become a focal point of research. This focus arises from robust evidence indicating a strong and positive correlation between academic self-concepts and various academic outcomes, as evidenced by studies like those conducted by Huang (2011), Marsh and colleagues (2019), and Trautwein & Möller's comprehensive review in 2016.

These studies demonstrate the consistency of findings not only at the individual level but also across diverse groups and even different countries, as highlighted by Marsh et al. in 2020. The literature underscores the constructive influence of academic self-concept on educational achievements, a point emphasized by researchers such as Marsh and Scalas (2010), Quílez-Robres et al. (2021), and Valentine et al. (2004).

The Expectancy-Value Theory, an influential framework in this field, proposes that a person's expectations of success in a particular task, coupled with their valuation of that task (known as task value), are crucial predictors of academic success, effort, engagement, and career choices. This theory often operationalizes expectancy as academic self-concept in educational research. When both expectancy and task value are considered as predictors of academic achievement, expectancy consistently emerges as the dominant predictor across various school domains.

Furthermore, academic self-concept's positive impact on academic achievement extends beyond the influence of other pertinent variables in the educational context, such as interest as well as mastery and performance goals. This body of research underscores the significance of academic self-concept in shaping educational outcomes and highlights its unique contribution to students' achievements.

MODELS OF ACADEMIC SELF-CONCEPT

- **The internal/external frame-of-reference (I/E) model:** The Internal/External Frame-of-Reference (I/E) model, introduced by Marsh in 1986, proposes that an individual's self-concept in a specific school subject is influenced by both internal and external references. External reference involves comparing one's performance in a particular school subject with the performance of other students, while internal reference entails comparing one's performance in a specific school subject with one's own performance in other school subjects. According to this model, both these processes contribute to the formation of academic self-concept. Consequently, the simultaneous operation of external and internal processes, determined by the emphasis placed on external versus internal comparisons, is expected to result in correlations between math and verbal self-concepts that are considerably lower than the typical correlations observed between math and verbal achievements.

Moreover, as per this theory, academic achievement serves as a positive predictor of academic self-concept when it pertains to the same (matching) domain. Conversely, it acts as a negative predictor of academic self-concept when referring to a different (non-matching) domain. In essence, the I/E model proposes a nuanced understanding of how internal and external comparison processes contribute to the development of academic self-concept and how academic achievement in a specific domain influences one's self-concept in that same domain versus other domains.

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- **Reciprocal Effect Model (REM):** The Reciprocal Effects Model of Academic Self-Concept is a theoretical framework that posits a dynamic and bidirectional relationship between academic achievement and academic self-concept. Unlike some earlier models that emphasized a unidirectional influence (e.g., academic achievement affecting self-concept), the reciprocal effects model acknowledges that academic self-concept can also influence subsequent academic achievement. This model suggests that the relationship between these two factors is not only about the impact of achievement on self-concept but also about how self-concept, in turn, can shape future achievement.

This aspect of the model acknowledges that students' actual academic performance influences their self-concept in a particular subject. Success or failure in a subject can contribute to the development or modification of one's self-concept in that domain.

In addition to the one-way influence from achievement to self-concept, the model proposes that self-concept can also have a reciprocal effect on subsequent achievement. If a student perceives themselves as capable in a particular subject, they may approach learning tasks with more confidence and persistence, potentially leading to improved performance.

The model emphasizes the existence of feedback loops between academic achievement and self-concept. Positive experiences, such as success in a subject, can enhance self-concept, which, in turn, may contribute to further success. Conversely, negative experiences can lead to a decrease in self-concept, potentially affecting future achievement.

The reciprocal effects model recognizes that these processes are domain-specific. That is, the relationship between academic achievement and self-concept operates within specific academic domains (e.g., math, language arts) rather than being a general, cross-domain phenomenon.

ACADEMIC MOTIVATION

Motivation, viewed through a psychological lens, is an internal process that can be described as a drive or a need. It represents a condition within individuals that seeks a change, whether in oneself or the surrounding environment. Activation of this internal energy source imbues individuals with the impetus and guidance necessary to interact with the environment in an adaptive, flexible, and problem-solving manner (Reeve, 2015).

Fundamentally, motivation manifests as energized and persistent goal-directed behavior. In a state of motivation, individuals exhibit movement and take purposeful actions. This motivational drive is intricately linked to the satisfaction of needs, which can be categorized as vital for sustaining life or crucial for personal well-being and growth. Physiological needs, such as those for food, water, and sex, serve the organism's vital functions and provide satisfaction through their fulfillment. Similarly, psychological needs for autonomy, mastery, and belonging direct behavior in a manner akin to basic survival needs. Additionally, needs for achievement, power, closure, meaning, and self-esteem are influential motivators. Some of these needs transform into motives, as do intrinsic activities individuals engage in. The external environment and social context significantly contribute to extrinsic motivation, and individuals are also motivated by goals, values, and desires to elicit specific emotions associated with particular end-states (Reeve, 2015).

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EXPRESSIONS OF MOTIVATION

- **Behavior:** In the realm of psychology, the visibility of motivation is characterized by its presence, intensity, and quality, evident in observable cues such as gestures, facial expressions, and the exertion of intense effort. Psychologists also refer to the immediacy of these expressions as short latency. Moreover, the existence of motivation can be deduced from the extent of persistence and decisiveness when selecting one goal over another. This combination contributes to a heightened likelihood of occurrence, providing insights into the psychological aspects of motivation.
- **Engagement:** In a psychological context, one can gauge motivation by examining the degree of engagement. Consider a coaching session or a motivational interview where a skilled practitioner demonstrates psychological engagement on multiple levels. This includes actively and generously contributing to the conversation with agentic engagement, expressing genuine interest and enjoyment for emotional engagement, engaging in deep cognitive processing and attentiveness for cognitive engagement, and persisting in these efforts with a focus as if time and external distractions were irrelevant for behavioral engagement.
- **Psychophysiology:** Psychophysiological Expressions refer to observable bodily responses that provide insights into an individual's psychological states:
 - **Hormonal activity:** Examining chemicals in saliva or blood, such as cortisol (indicative of stress) or catecholamines (associated with the fight-or-flight reaction).
 - **Cardiovascular activity:** Observing the contraction and relaxation of the heart and blood vessels, which can be influenced by factors like an attractive incentive or the difficulty of a task.
 - **Ocular activity:** Analyzing eye behavior, including pupil size (indicative of mental activity), eye blinks (reflecting changing cognitive states), and eye movements (indicating reflective thought).
 - **Electrodermal activity:** Monitoring electrical changes on the skin's surface, which may occur in response to significant or threatening events.
 - **Skeletal activity:** Assessing musculature activity, such as facial expressions (reflecting specific emotions), bodily gestures, or shifting weight from side to side during mundane conversations (indicating a desire to leave).
- **Brain Activations:** Similar to shifts in behavior, engagement, and psychophysiological responses, alterations in brain activations signify the emergence, decline, and sustenance of motivational states. Distinct patterns of neural activity accompany each unique motivation and emotion. For instance, the hypothalamus becomes active during states of thirst, and experiences of disgust correspond with increased activity in the insula. Researchers employ advanced tools like electroencephalography (EEG) and functional magnetic resonance imaging (fMRI) to scrutinize, identify, track, and quantify neural activity within the brain.

MOTIVATION CYCLE

Motivation is a dynamic psychological process, characterized by fluctuations in strength and variation in motives over time. These motives rise and fall in response to changing circumstances, contributing to the continuous flow of behavior. Adding complexity, individuals are simultaneously driven by multiple motives at any given moment. One motive, typically the most situationally relevant, emerges as the strongest, capturing attention, while others remain subordinate and relatively inactive. The dominance of a particular motive can shift as circumstances change, with each subordinate motive having the potential to become

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predominant. Illustrating this, consider a student's motivation to read, which fluctuates in strength over time, initially robust before diminishing compared to the desires to socialize with friends or indulge in a snack. Recognizing the temporal variability of motivation is crucial for effective goal setting. Distinguishing between motivational and performance-based advantages and disadvantages of adopting short-term versus long-term goals is vital. Short-term goals are more effective for mundane tasks, enhancing commitment by providing frequent feedback on progress and reinforcing sustained effort. However, for interesting tasks, termed autotelic activities, long-term goals are more suitable. These activities inherently provide greater flexibility and autonomy in pursuit, and short-term milestones may feel intrusive. Autotelic activities are intrinsically engaging and pursued for the inherent enjoyment they bring, often without external rewards. It's important to note that motivation to act on goals tends to be higher when the goal is imminent, as distant goals lack the immediacy that drives immediate action.

SOURCES OF MOTIVATION

In the realm of psychological dynamics influencing learning motivation, various factors play pivotal roles. One such determinant is curiosity, a potent motivator that necessitates sustained cultivation for perpetual impact. Given the human tendency to acclimate swiftly to novel stimuli, instructors must employ strategies like modulating their tone and infusing relevant humor to consistently arouse and maintain curiosity, thereby ensuring a continuous wellspring of motivation.

Another influential element is the relevance of learning tasks to individual interests. Students exhibit heightened motivation when engaging with content that directly aligns with their personal interests, underscoring the significance of tailoring educational experiences to individual inclinations.

Goal setting emerges as a crucial motivational force, wherein individuals establish external benchmarks against which they internally evaluate their current performance. This practice not only enhances self-motivation but also fosters improved performance. The act of setting goals compels learners to seek favorable evaluations of their competence or strive to avert negative judgments, challenging prevailing educational norms that predominantly emphasize instilling learner confidence within a performance-oriented framework.

Motive matching, gauged by the extent to which learning tasks align with specific student needs or values, assumes significance in motivating learners. Defined as any deficiency in the human organism or the absence of elements perceived as essential for overall well-being, needs encompass various facets. Instructors are advised to be attuned to individual requirements for achievement and affiliation, acknowledging the nuanced nature of these motivational triggers.

Within the psychological context, motivation also emanates from learners' beliefs about their own capabilities. According to Bandura, self-efficacy hinges on the belief that one can execute a behavior, irrespective of actual capability. Learners develop expectations about the outcomes of certain activities, known as outcome expectations, contributing to their overall motivational framework.

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TYPES OF MOTIVATION

There are two types of motivation i.e., Intrinsic and Extrinsic Motivation. Motivation, the driving force behind human behavior, is shaped by a myriad of psychological elements. These include drives, needs, incentives, fears, goals, social pressure, self-confidence, interest, curiosity, beliefs, values, and expectations, collectively serving as energizers that direct our actions. Psychologists have offered diverse perspectives on the nature of motivation, with some emphasizing personal traits or individual characteristics, while others view motivation as a transient state contingent on situational factors.

Certain explanations of motivation delve into internal factors such as needs, interests, and curiosity, highlighting the role of intrinsic motivators. Intrinsic motivation reflects the innate inclination to seek and overcome challenges, driven by personal interests and the desire to exercise one's capabilities. In intrinsically motivated scenarios, external incentives or punishments become unnecessary, as the inherent satisfaction derived from the activity itself serves as the primary reward.

Conversely, extrinsic motivation comes into play when an individual engages in an activity primarily to earn a grade, avoid punishment, or for reasons unrelated to the intrinsic appeal of the task. External factors, such as rewards or punishments, play a pivotal role in extrinsic motivation.

Recent challenges to the traditional intrinsic-extrinsic motivation continuum propose an alternative viewpoint. Rather than viewing these motivations as mutually exclusive endpoints, it is suggested that motivation comprises both trait and state factors, as well as intrinsic and extrinsic elements. In this revised perspective, intrinsic and extrinsic tendencies are regarded as independent possibilities, coexisting within an individual. At any given moment, an individual may draw motivation from both intrinsic and extrinsic sources, acknowledging the multifaceted nature of human motivational dynamics.

Amotivation is characterized by a notable absence or deficiency in the deliberate inclination to participate in any activity. This state arises from a lack of self-determined motivation, as described by Markland and Tobin in 2004. In the academic realm, the behaviors exhibited by adolescents are influenced by either intrinsic motivations stemming from personal interest or extrinsic drives.

TYPES OF EXTRINSIC MOTIVATION

- External regulation represents the lowest level of autonomy in understanding the origins of behavior, where individuals predominantly attribute their actions to external influences. Motivation at this level is primarily driven by the anticipation of external rewards or the avoidance of punishments, indicating a limited sense of personal control.
- Introjection regulation involves a partial shift towards internalization, with individuals acknowledging some external factors influencing their behavior. This level of motivation reflects a degree of ego-involvement, where the outcome of the behavior can impact self-esteem. There is an element of seeking validation, either from oneself or others, contributing to a more internalized perspective compared to external regulation.
- Moving further along the autonomy spectrum, identification represents a higher level of internalization. Individuals at this stage consciously evaluate tasks or goals, recognizing personal value in their pursuit. While external factors may still play a role, a sense of

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autonomy and volition emerges as individuals actively engage in behaviors aligned with their personal assessment of value.

- Integration signifies the highest level of autonomy in understanding the causes of behavior. At this stage, individuals view the origins of their actions as predominantly internal. They consciously identify and internalize the inherent value of tasks or goals, perceiving them as consistent with their personal values and interests. This level of motivation reflects a strong sense of autonomy and intrinsic alignment between one's actions and their deeply held beliefs and values.

TYPES OF INTRINSIC MOTIVATION

- Autonomy, within the realm of psychological needs, represents the fundamental human drive to exert control over one's life and surroundings. In practical terms, this autonomy is evident when individuals, such as employees, find greater intrinsic motivation when they are involved in setting their own goals, like achieving a sales target. In the psychological context of the workplace, autonomy takes on significance in relation to the extent of control individuals have over their work processes and schedules. In the evolving landscape of hybrid work arrangements and flexible schedules, the importance of autonomy has risen, particularly among knowledge workers who seek greater control over how and when they engage in their tasks.
- Mastery, or competence, is another psychological facet encompassing the desire to enhance one's skills and fulfill their potential. In a work setting, the pursuit of mastery reflects the intrinsic drive to excel in one's job purely for the satisfaction of knowing that the work is executed proficiently. The enhancement of mastery not only contributes to professional growth but also elevates an individual's sense of self-esteem. An example would be an employee willingly taking on a challenging project to advance their professional skills.
- Purpose, within the psychological context, pertains to the profound sense of working toward a meaningful goal or vision. An employee's motivation to excel at work may stem from a connection to a larger purpose, as exemplified by someone working for an ethical clothing company striving to improve the fashion industry. Fostering a sense of purpose can be achieved by aligning individual objectives with broader organizational goals, creating a psychological link between personal contributions and the overarching mission.

APPROACHES TO MOTIVATION

- Behaviorist Approaches to Motivation: In the behaviorist viewpoint, motivation is contingent upon the presence of incentives and rewards in the environment. Rewards, defined as appealing objects or events following a specific behavior, and incentives, which either encourage or discourage behavior, play a pivotal role. Consistent reinforcement for certain behaviors can lead to the development of habits or tendencies. In educational contexts, using extrinsic means such as grades, stars, stickers, and punishments aims to motivate students through the manipulation of incentives and rewards.
- Humanistic Approaches to Motivation: Humanistic psychology, championed by Carl Rogers in the early 1940s, places intrinsic sources of motivation at the core, considering them as a person's fundamental needs. From a humanistic perspective, motivating individuals involves nurturing their inner resources, fostering a sense of competence, self-esteem, autonomy, and self-actualization. Abraham Maslow's influential theory on motivation, encapsulated in his Hierarchy of Needs, delineates the hierarchical

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progression from basic survival needs to higher-level aspirations for intellectual achievement and self-actualization. Unlike deficiency needs, being needs for improvement and fulfillment persist continuously.

- **Cognitive Approaches to Motivation:** Cognitive theorists posit that an individual's behavior is shaped by cognitive processes rather than mere responses to rewards and punishments. Behavior is believed to be initiated and regulated by cognitive elements such as plans, goals, schemas, expectations, and attributions. The emphasis in cognitive approaches is on intrinsic motivation.
- **Attribution Theory of Motivation:** Attribution theory, formulated by Bernard Weiner, offers a cognitive explanation of how individual explanations, justifications, and excuses about oneself and others influence motivation. Weiner identifies three dimensions of attributed causes for success and failure: locus (internal or external), stability (whether the cause remains constant or can change), and controllability (whether the person can control the cause). These dimensions have significant implications for motivation as they impact expectancy and value, influencing feelings of self-esteem, responsibility, and emotional responses to success or failure.
- **Socio-cultural Views on Motivation:** The socio-cultural perspective underscores the importance of participation, identities, and interpersonal relations within communities of practice. Motivation, from this viewpoint, arises from individuals engaging in activities to maintain their identities and interpersonal connections within their respective communities.

Academic motivation closely aligns with the concept of "motivation to learn," as articulated by Krapp (1993, p. 188). This motivation to learn encompasses the psychological processes that elucidate the emergence and development of learning activities, along with their consequential effects. While traditional research fields in this domain often center on classroom settings and instructional contexts, academic learning is undeniably an integral component. The motivation to study is influenced by both the learning experience and the pursuit of academic achievements, making it an essential facet of academic motivation. Within the realm of university education, learning processes are inherent, contributing to the broader construct of academic motivation. Extensive literature from school and educational psychology is dedicated to studying motivation with a specific focus on learning and instruction. Numerous studies delve into students' motivation concerning their learning aspirations and the psychological intricacies of the learning process (e.g., Murton et al., 2008; Paulsen & Feldman, 2005; Valle et al., 2003; Salili et al., 2001; Bures et al., 2000).

However, it's crucial to distinguish learning motivation from academic motivation. While learning motivation encompasses various facets related to the pursuit of knowledge and skill acquisition, academic motivation exclusively concentrates on the reasons why individuals opt for and persist in their university studies. This nuanced perspective emphasizes the specific factors that drive individuals to engage in and sustain their commitment to higher education. In a psychological context, academic motivation is conceptualized as a composite of individual personality traits, goals, and fluctuating states of arousal. This perspective delves into the nature and development of each of these components, with a particular focus on their implications for educators in the classroom.

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The assertion is made that when a student's motivation is lacking, intervention strategies may involve:

- Enhancing the intensity of motivational dispositions.
- Elevating the perceived value of academic achievement.
- Optimizing intrinsic motivation while eliminating factors that dampen enthusiasm.

While classroom teachers may have the capacity to positively influence the strength of motivational dispositions and values to some extent, their primary impact in fostering motivation likely lies in their ability to stimulate and awaken these inherent dispositions and values within their students.

In a psychological context, academic motivation encompasses a spectrum of factors and processes that shape an individual's initiation, direction, intensity, and persistence of academic behaviors.

This construct is influenced by a combination of intrinsic and extrinsic elements, both internal and external forces that propel individuals toward learning, pursuing academic goals, and persevering in the face of obstacles.

- Intrinsic Motivation, arising from within the individual, involves a genuine and inherent interest in and enjoyment of the learning process. High intrinsic motivation is characterized by factors such as curiosity, a sense of accomplishment, and a genuine love for acquiring knowledge and skills.
- Extrinsic Motivation, on the other hand, is driven by external sources and involves engaging in academic activities to attain rewards or avoid punishments. Examples include striving for grades, seeking praise from teachers or parents, or aiming for social approval. While extrinsic motivation can yield short-term effectiveness, a sustainable, long-term motivation often benefits from a harmonious interplay of intrinsic and extrinsic factors.
- Achievement Motivation is specifically tied to the desire for success and competence in academic tasks. Individuals with high achievement motivation set challenging goals, take pride in their accomplishments, and are motivated to enhance their skills continually.
- Social Motivation encompasses the impact of social interactions on academic motivation. Peer relationships, teacher-student interactions, and the overall social climate within the learning environment can significantly influence an individual's motivation. Positive social interactions and a supportive environment contribute to the enhancement of academic motivation.
- Goal Orientation reflects the diverse ways individuals approach their academic objectives. This may involve a mastery orientation, emphasizing the acquisition of knowledge and skills, or a performance orientation, focusing on demonstrating competence in comparison to others. The chosen goal orientation can shape the strategies individuals employ and their resilience in the face of academic challenges.

Interplay of Academic Self-Efficacy, Academic Self-Concept and Academic Motivation

The enduring connection between self-efficacy and academic motivation has been widely acknowledged within the psychological domain. Academic motivation revolves around students' beliefs concerning their academic capabilities, forming a critical component in their drive to achieve. Being motivated implies being propelled to act (Brewer & Burgess, 2005), and this motivation has been empirically shown to enhance individuals' efficiency, allowing

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them to utilize their abilities and talents more effectively, leading to increased satisfaction (Deci & Ryan, 2008).

In the context of students, the importance of motivation becomes particularly apparent, as motivated students are more likely to invest effort in their academic pursuits and strive for success (Alaei, Narimani & Alaei, 2012). This significance is magnified during unique circumstances such as the ongoing pandemic, where governmental measures, such as Movement Control Orders (MCO), prompted an abrupt shift from traditional teaching methods to e-learning. Creating a community of inquiry in a virtual learning environment, as noted by Garrison et al. (2000), presents a distinct challenge for educators.

When exploring the relationship between self-efficacy and motivation, it becomes evident that self-efficacy plays a crucial role in shaping motivation. Students need a high level of self-efficacy to sustain academic motivation. Self-efficacy, as defined by Bandura (1978), refers to the belief that one can execute the necessary behaviors to achieve a specific goal, exerting control over motivation, behavior, and the social environment. Given that self-efficacy significantly influences attitudes and thoughts, understanding its impact on students, particularly during stress-inducing situations like a lockdown, becomes essential within the psychological context.

Undoubtedly, a correlation exists between self-efficacy, student motivation, and the learning process. Self-efficacy, defined as the belief in one's ability to succeed, is intricately linked to an individual's motivation, which represents their desire to achieve success (Zimmerman, 2000). Notably, during the Covid-19 pandemic, research by Shacham et al. (2020) identified a negative relationship between general self-efficacy and psychological distress.

Husain's study in 2014 demonstrated a correlation between self-efficacy and academic motivation among undergraduate students. Akram & Ghazanfar (2014) found a highly significant positive relationship between self-efficacy and motivation to learn, emphasizing that students with higher self-efficacy levels tend to accomplish tasks more successfully and exhibit better academic achievements.

The cognitive demands of higher education underscore the critical role of self-efficacy beliefs (Tenaw, 2013). According to Zahra Taheri-Kharameh et al. (2018), academic self-efficacy shows a notable association with academic motivation, where an increase in self-efficacy aligns with an increase in motivation.

Various learning motivation theories, such as intrinsic and extrinsic motivation theory, find application in the educational sector. According to Ryan & Deci (2000), intrinsic motivation stems from actions driven solely by personal satisfaction without external expectations. Factors like challenge, curiosity, control, and imagination trigger intrinsic motivation, which requires considerable willpower and a positive attitude to maintain, especially during challenging times like a pandemic.

Extrinsic motivation, on the other hand, involves external factors like rewards, punishments, or coercion. Skinner & Belmont (1993) note that students are extrinsically motivated when influenced by rewards or compelled to engage in certain activities. While highly motivated students may participate without expecting rewards, those with lower motivation often require external incentives.

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The process of cultivating motivation can begin extrinsically, but, as Tohidi & Jabbari (2012) suggest, it can evolve into intrinsic motivation with increased learning and understanding. Motivation is a potent tool for goal achievement, and its absence can pose a significant barrier to success (Jeamu, Kim & Lee, 2008). In a psychological context, this underscores the intricate interplay of self-efficacy, motivation, and various factors influencing the learning experience.

The reciprocal model underscores the interconnected relationship between a student's academic self-concept and their academic achievement. This model posits a mutual causality, indicating that academic self-concept and academic achievement exert reciprocal influences on each other. In this framework, self-beliefs are seen as predictors of subsequent increases in academic achievement, and conversely, higher levels of academic achievement predict enhancements in self-beliefs. The reciprocal effects model thus highlights the dynamic and interdependent nature of the relationship between academic self-concept and academic achievement in the educational context.

In the realm of psychology, this reciprocal relationship implies that a student's perception of their academic abilities and accomplishments continually shapes and is shaped by their actual academic performance. Moreover, the model recognizes the motivational aspect, emphasizing that motivated students exhibit enthusiasm for learning, actively engage in required learning activities, and willingly participate in the learning process. Conversely, students lacking motivation may display a less systematic approach to learning, potentially exhibiting inattention during lessons, a lack of monitoring of their understanding, and reluctance to seek help when faced with challenges. This psychological context underscores the importance of considering both self-concept and achievement as dynamic factors that influence each other reciprocally in the educational journey of a student.

In the realm of psychology, the significance of self-concept in shaping students' academic achievement has been consistently demonstrated (Caprara et al., 2008; Wentzel, 1991). Self-concept is broadly defined as an individual's perception of themselves, which evolves through personal experiences, interpretations of the environment, and interactions with significant others (Shavelson et al., 1976). This hierarchical construct encompasses a general self-concept that extends to academic self-concept and more subject-specific self-concepts, such as self-concept in mathematics or language. Research indicates that self-concept in mathematics predicts various measures of mathematical achievement, while its correlation with achievement in language arts may be weak or even negative (Marsh et al., 2006). Additionally, the multifaceted structure involves academic self-concept and non-academic self-concept, the latter being further divided into social, emotional, and physical self-concepts.

REVIEW OF LITERATURE

Babatunde and Olanrewaju (2014) conducted a study on the predictive influence of students' academic engagement and academic self-concept on achievement motivation among postgraduate students at the University of Ibadan, Oyo State, Nigeria. A descriptive research design was employed, involving 500 respondents selected from five faculties at the University of Ibadan. The results indicated a significant relationship between academic engagement and achievement motivation among postgraduate students and a significant relationship between academic self-concept and achievement motivation. When the independent variables (academic engagement and academic self-concept) were considered

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together, they significantly influenced achievement motivation among postgraduate students. Each independent variable made a significant contribution to predicting postgraduate students' achievement motivation, with academic engagement making the most significant contribution, followed by academic self-concept.

Berg and Coetzee (2014) conducted a study on Academic Self-concept and Motivation as Predictors of Academic Achievement. The research aimed to investigate the connection between academic self-concept, motivation, and academic achievement among university students. The primary objective was to ascertain whether the academic self-concept and motivation of students could serve as predictors for their academic performance. The results of the empirical investigation, supported by the statistical analysis, indicated the presence of significant correlations between academic self-concept, motivation, and academic achievement. However, these correlations were found to vary based on the students' study year level.

Emmanuel, Adom, Josephine, and Solomon (2014) conducted a study examining the intricate dynamics of achievement motivation, academic self-concept, and academic achievement among high school students. The research sought to understand the relationships between achievement motivation, academic self-concept, and academic performance in this demographic. Additionally, the study aimed to profile students to assess the levels of achievement motivation, self-concept, and academic achievement. A total of 120 students from four high schools participated in the study. The findings indicated that a majority of high school students exhibited high levels of motivation, possessed a positive self-concept, and performed well on the Mathematics Achievement test. The study also revealed a significant correlation between self-concept and academic achievement. Furthermore, a positive relationship between achievement motivation and academic performance was observed, although the correlation did not reach statistical significance.

Erten and Burden (2014) conducted a study on the relationship between academic self-concept, attributions, and L2 (second language) achievement. The research aimed to investigate how academic self-concept, classroom test performance, and causal attributions for achievement are interrelated among Turkish students. The study included 267 Year 6 students from six different cities in Turkey. The study suggests that understanding student attributions and academic self-concept can offer valuable insights for English teachers, aiding in both prediction and intervention beyond language instruction.

Husain (2014) conducted a study exploring the relationship between self-efficacy and academic motivation among undergraduate students. Data were collected from 135 participants in various Business Schools in Karachi during the summer semester of 2012-2013, utilizing random sampling. The results indicated a significant correlation between self-efficacy and academic motivation. However, the study did not find any gender differences in academic motivation and self-efficacy among undergraduate students. This suggests that, in the psychological context, self-efficacy and academic motivation are positively linked, emphasizing their interdependence in influencing the motivational aspects of undergraduate students without gender distinctions.

Komarraju and Dial (2014) conducted a study investigating the predictive roles of academic identity, self-efficacy, and self-esteem on self-determined motivation and goals, specifically performance and learning goals. In Study 1, 366 undergraduates participated, completing

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measures of implicit social/studious identity and implicit attitude towards social/studious domains. In Study 2, 128 undergraduates completed implicit measures of social/studious identity and implicit self-esteem, along with explicit measures of self-esteem and goals (performance and learning). The study results demonstrated significant alignment between implicit and explicit academic identity, highlighting the unique and incremental contributions of implicit measures in explaining self-determined motivation and goal orientation beyond explicit measures. Additionally, socially oriented students exhibited lower academic self-efficacy, reduced self-determined motivation, and a preference for performance goals, while studiously oriented students reported higher self-esteem and a preference for learning goals.

Rinn, Boazman, Jackson, and Barrio (2014) conducted a study investigating the relationship between locus of control, academic self-concept, and academic dishonesty in high-ability college students. The primary objectives were to assess academic dishonesty using a new measure and to explore how the locus of control influences behaviors related to academic dishonesty, with academic self-concept serving as a moderating factor. The study involved 357 high-ability college students from two universities in the southwestern United States. The findings indicated that locus of control did not significantly predict academic dishonesty for the non-honors group, but several relationships were identified among the variables for the entire group and the honors and non-honors subgroups.

Sagone and De Caroli (2014) conducted a study on the relationship between Locus of Control, Academic Self-efficacy, and Self-concepts in university students, specifically in the fields of Psychology, Medicine, and Law. The findings revealed that university students who demonstrated a higher tendency to exert personal control over their daily life circumstances also exhibited more positive self-concepts in both present and future contexts. Moreover, those who perceived themselves as academically efficient tended to evaluate themselves more positively in both present and future perspectives. Additionally, students who were more inclined to take control of their everyday life circumstances were more likely to perceive themselves as efficient in an academic context.

Buch, Säfvenbom, and Boe (2015) conducted a study examining the impact of intrinsic motivation for military studies as a moderating factor in the relationship between academic self-efficacy and changes in perceived military competence. Analysis of data from 245 cadets across three military academies revealed a positive association between self-efficacy and an increase in perceived military competence, specifically among cadets with lower levels of intrinsic motivation. This implies that for cadets with lower intrinsic motivation, beliefs in their ability to organize and act towards goals play a crucial role in motivating them to exert effort to enhance their military competence. On the other hand, for cadets with higher intrinsic motivation, self-efficacy appears to be less influential in the perceived increase in military competence. These cadets likely improve their military competence primarily due to the enjoyment derived from educational activities.

Chen, Chiu, and Wang (2015) conducted a study investigating the relationship among Academic Self-concept, Learning Strategies, and Academic Achievement, focusing on National Vocational College Students in Taiwan using Structural Equation Modeling (SEM). The research aimed to explore how academic self-concept influences the adoption of learning strategies that contribute to academic success. Data from 407 students were analyzed through LISREL 8.80. The key findings are as follows: (a) Academic self-concept positively influences deep, surface, and strategic learning approaches, as well as academic achievement;

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(b) Among the learning strategies, the strategic approach has a positive effect, while the surface approach has a negative effect on academic achievement; (c) Strategic approach mediates a positive relationship between academic self-concept and academic achievement.

Dogan (2015) investigated the predictive roles of Student Engagement, Academic Self-efficacy, and Academic Motivation in relation to Academic Performance. The study aimed to assess how academic performance is influenced by student engagement, academic self-efficacy, and academic motivation. The findings, based on a participant pool of 578 middle and high school students, indicate that cognitive engagement, a sub-dimension of school engagement, is a predictor of academic performance. However, emotional and behavioral engagement did not emerge as predictors of academic performance. On the other hand, a sense of academic self-efficacy and academic motivation were identified as predictors of academic performance. Additionally, students' belief in their capabilities and their motivations, as well as their understanding of the purpose behind their learning, emerged as significant factors influencing their academic success.

Jansen, Scherer, and Schroeders (2015) studied Self-concept and self-efficacy of students in the sciences: Varied associations with precursors and educational results. The significance of self-concept and self-efficacy as key motivational factors influencing educational outcomes is well-established. The findings revealed a substantial correlation between self-concept and self-efficacy in the domain of science, supporting the notion that these are distinguishable constructs. Conversely, science self-efficacy demonstrated a stronger association with opportunities for inquiry-based learning. Notably, there were variations in their predictive abilities for educational outcomes: self-concept emerged as a superior predictor for future-oriented motivation to pursue a career in the sciences, while self-efficacy exhibited stronger predictive power for current academic ability.

Khalaila (2015) conducted a descriptive-correlational study to investigate the relationships among academic self-concept, intrinsic motivation, test anxiety, and academic achievement in nursing students. The study aimed to explore the direct and indirect effects of academic self-concept on academic achievement and examine whether intrinsic motivation moderated the negative impact of test anxiety on academic success. Using a convenience sample of 170 undergraduate nursing students in northern Israel. The findings revealed a direct positive relationship between higher academic self-concept and greater academic achievement. Test anxiety and intrinsic motivation emerged as significant mediators in the connection between self-concept and academic achievement. Furthermore, intrinsic motivation played a moderating role by mitigating the negative impact of test anxiety on academic success.

Kirmizi (2015) delved into the intricate dynamics among academic self-concept, self-efficacy, self-regulation, and academic achievement in higher education second language (L2) learners. The success of L2 learners is significantly predicted by three crucial factors: self-concept, self-efficacy, and self-regulation. This study aimed to assess the levels of academic self-concept, self-efficacy, and self-regulation in higher education students concerning academic achievement and self-evaluation. Additionally, the research sought to explore the correlations between academic self-concept, self-efficacy, and self-regulation. The findings indicated that Turkish EFL learners in higher education exhibited a moderate-to-high level of self-concept, self-efficacy, self-regulation, and self-evaluation. High-achieving students demonstrated elevated levels of self-regulation, self-evaluation, and academic confidence.

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Albert and Dahling (2016) conducted a study investigating the interplay of learning goal orientation and locus of control in predicting academic self-concept and academic performance in college students. The findings indicate that both locus of control and learning goal orientation have positive direct and interactive effects on academic self-concept. Furthermore, the study demonstrates that academic self-concept serves as a mediator in the relationship between the interaction of locus of control and learning goal orientation at one point in time and subsequent academic achievement in college courses one year later. These results provide insights into the personality factors influencing academic self-concept and illustrate how individual differences contribute to college performance.

Yarmohammadzadeh and Feizollahi (2016) conducted a study to explore the relationship between social support, academic motivation, and academic self-efficacy among high school students. The primary aim was to understand how the students' academic self-efficacy, a crucial element for success and consistency in positive psychology, is influenced by social support and academic motivation. The sample consisted of 278 subjects selected randomly. The results revealed a significant positive relationship between social support, academic motivation, and academic self-efficacy. The study also highlighted the predictive power of academic motivation on academic self-efficacy, emphasizing the interplay between these psychological factors in influencing students' educational and social achievements.

Izuchi and Onyekuru (2017) conducted a study exploring the interplay among academic self-concept, academic motivation, and academic achievement in college students. A sample of 528 undergraduate volunteers participated, and data were collected using the College Students' Academic Self-concept Questionnaire (CSACQ). The findings, analyzed using SPSS and Pearson product moment correlation technique, revealed significant correlations among academic self-concept, academic motivation, and academic achievement.

Mailhot and Feeney (2017) conducted a study on the perceived parental involvement and academic achievement of college students, with a focus on the mediating role of academic self-concept. The research involved 526 college students, and the study aimed to explore the connections between perceived parental involvement, academic self-concept, and academic achievement. The findings suggested that parents continue to influence academic achievement into early adulthood, partially through their impact on academic self-concept. Moreover, the study indicated that mothers and fathers may play different roles in shaping academic achievement through their involvement and impact on students' self-concept.

Seaton, Parker, Marsh, Craven, and Yeung (2017) conducted a study examining the interplay between self-concept, motivation, and achievement, specifically focusing on academic self-concept and achievement goal orientations in the context of mathematics success. This study aimed to address these gaps. The sample comprised 2786 Australian high school students aged 11-17, measured at four time points six months apart. Limited evidence was found for reciprocal relations between a mastery approach goal orientation and achievement. When all variables were considered in a single model, only self-concept demonstrated significant reciprocal relationships with achievement.

Trpcevska (2017) conducted a study that focuses on understanding the predictors of psychological well-being, academic self-efficacy, and resilience in university students and how these factors influence academic motivation. Compared to the general population, university students tend to experience higher levels of psychological distress, with indications

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of serious mental illness being more prevalent. A total of 163 Victoria University students participated in the survey, providing information on demographics and responding to various measures. The findings indicated that psychological well-being, academic self-efficacy, and resilience collectively predicted motivation. When considered individually, academic self-efficacy, depression, and resilience each played a role in extrinsic motivation, while depression, academic self-efficacy, resilience, and stress predicted amotivation. Academic self-efficacy emerged as the sole significant predictor of intrinsic motivation. The perception of stress served as a significant mediator between locus of control and psychological well-being, as well as between spirituality and psychological well-being.

Yang (2017) conducted an investigation which aimed to uncover the connections between professional self-concept, academic self-efficacy, and major satisfaction in nursing students. The study involved 137 participants who provided data through self-reported questionnaires on professional self-concept, academic self-efficacy, and major satisfaction from October 19 to 23, 2017. The results indicated significant correlations among professional self-concept, academic self-efficacy, and major satisfaction. Notably, professional self-concept emerged as a predictor with a substantial impact on major satisfaction among nursing students, explaining 36% of the total variance. The findings suggest a positive influence of professional self-concept on major satisfaction.

Ajmal and Rafique (2018) conducted a study focusing on the connection between Academic Self-Concept and Academic Achievement among distance learners. The primary objective was to explore the relationship between the academic self-concept and academic performance of these learners. The study encompassed a total population of 854 M in the Rawalpindi region. The findings indicated a robust relationship between the academic self-concept and academic achievement of distance learners.

Dagneu (2018) conducted a study to investigate the interrelationships among parenting styles, academic self-concept, academic motivation, and students' academic achievement at Fasilo Secondary School in Bahir Dar, Ethiopia. The primary aim was to explore how parenting styles influence academic self-concept, motivation, and ultimately impact students' academic success. The research involved 136 students (82 males and 54 females) in 9th and 10th grades. The authoritarian style showed a negative significant relationship, as did the permissive parenting style. However, there was no significant relationship between neglectful parenting styles and academic achievement. The results of the multiple regression analysis indicated that authoritative, authoritarian, permissive, neglectful parenting styles, self-concept, intrinsic motivation, and extrinsic motivation. The study also found that, as a group, males achieved significantly higher academic scores than females across all predictor variables, except for the neglectful parenting style, where the difference was statistically insignificant.

Maraghi, Mortazavi-Tabatabaei, Ahmady, and Hosseini (2018) conducted a descriptive-analytical cross-sectional study to explore the relationship between educational self-efficacy and educational motivation among students in a virtual course in the field of Medical Education at Shahid Beheshti University of Medical Sciences during the academic year 2014-15. The study aimed to investigate the impact of self-efficacy and motivation on academic achievement. The participants included 149 students, predominantly women (87.5%). There was a positive and significant correlation between self-efficacy and educational motivation. While various aspects of educational motivation did not show a statistically significant

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relationship with different levels of academic achievement, the study suggested that modern teaching methods, distance learning, effective time management, and enhanced motivation could contribute to improved academic achievement. The findings indicated that a significant percentage of students had moderate to high academic self-efficacy levels, and their educational motivation was reasonably satisfactory.

Taheri-Kharamah, Sharififard, Asayesh, Sepahvandi, Hoseini, and Mahsa (2018) conducted a study on the Relationship between Academic Self-efficacy and Motivation among Medical Science Students. Educational institutions have consistently focused on academic motivation and its determinants, with self-efficacy being a crucial factor influencing students' interest and academic performance. The objective of this research was to examine the connection between academic self-efficacy and academic motivation among medical science students in Iran. The study involved 264 undergraduate nursing students from Qom University of Medical Sciences, Qom, Iran, selected through random sampling. In conclusion, the study suggests that confidence in academic performance outside the classroom significantly contributes to students' success, fostering belief in their abilities, enhancing self-efficacy, and increasing academic motivation.

Soner (2019) conducted a study examining the relationships among university students' academic self-efficacy, academic motivation, and levels of self-control and self-management. This research aimed to explore the connections between self-control and self-management, academic motivation, and academic self-efficacy levels in university students. A total of 588 students from a state university in Turkey participated in the study. The study's results indicated that academic self-efficacy significantly predicted both academic motivation and the levels of self-control and self-management in university students. However, academic motivation did not emerge as a predictor for self-control and self-management. This suggests that the belief in one's academic abilities plays a crucial role in shaping both academic motivation and the ability to exercise self-control and self-management among university students, emphasizing the interconnectedness of these psychological factors in the context of academic success.

Tan (2019) conducted a study on the academic self-concept, learning strategies, and problem-solving achievement of university students, focusing on sophomore students. The research aimed to assess the level of academic self-concept among these students and explore the extent to which their use of learning strategies moderated their math achievement, specifically in problem-solving. The study also investigated the relationship between academic self-concept and problem-solving achievement in mathematics. The findings indicated that students' academic self-concept in mathematics was at a moderate level. This suggested that higher academic self-concept and the extensive use of learning strategies in solving mathematical problems would lead to higher problem-solving achievement. In conclusion, the students did not achieve a high level of problem-solving achievement due to a lack of interest in reading and solving numeric and word problems in math.

Gebau, McElvany, Bos, Köller & Schöber (2020) conducted a study on the factors influencing academic self-efficacy in various socialization contexts. The research explored the relationship between students' academic self-efficacy and its sources, including mastery experience, vicarious experience, verbal and social persuasion, and physiological state. The study involved N = 1597 participants at time 1 (t1) and N = 1373 participants at time 2 (t2), focusing on 7th-grade students. Three distinct educational socialization contexts were

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considered: family, peers, and school. While previous measures assessing sources of academic self-efficacy have touched on different socialization contexts, they have not done so systematically or for all sources. Confirmatory factor analysis of the four sources within the three socialization contexts demonstrated a good fit to the data.

Honicke, Broadbent, and Tyszkiewicz (2020) conducted a study exploring the relationships among learner self-efficacy, goal orientation, and academic achievement. This research utilized a sample of 478 university students, consisting of 409 females aged 17–62 and 69 males aged 18–47. The analyses indicated that academic self-efficacy (ASE) served as a mediator in the relationships between both mastery and performance-approach goal orientations and academic achievement. However, the mediation effect was more pronounced in the relationship involving mastery approach goal orientation. Academic self-efficacy did not act as a moderator in the relationship between performance-approach goal orientation and achievement. The findings suggest that educational programs should create learning environments that foster persistence and effort in learning.

Yüner (2020) investigated the correlation between academic self-efficacy, academic motivation, and academic success based on the perspectives of prospective teachers. This quantitative study involved 322 prospective teachers enrolled at Bozok University in Yozgat. The research findings indicated that both intrinsic and extrinsic academic motivations, as well as academic self-efficacy beliefs, were above a moderate level, while the level of amotivation was low among the prospective teachers. Female prospective teachers demonstrated significantly higher academic motivation, and academic self-efficacy beliefs increased in tandem with the classroom level. Additionally, a positive relationship was observed between teacher self-efficacy beliefs and intrinsic academic motivation, external academic motivation levels, and academic performance success.

Wu, Guo, Yang, Zhao and Guo (2021) conducted a meta-analysis focusing on the longitudinal connection between Academic Self-Concept (ASC) and Academic Achievement. While prior research has established a reciprocal link between ASC and achievement, this study aimed to explore this relationship more comprehensively in a developmental context. When considering the moderating effect of age on both paths, the relationship between ASC and achievement showed a developmental shift from a strong skill-development effect to a more pronounced reciprocal effect with increasing age, within the framework of the REM.

Mendoza, Lehtonen, Lindblom-Ylänne, and Hyytinen (2022) conducted a qualitative study exploring the learning journals of first-year university students, specifically focusing on their perceptions of second language (L2) self-concept and self-efficacy in academic writing in English. The study, set in a Finnish university with English as the medium of instruction (EMI), involved the analysis of 74 learning journals. The L2 self-concept descriptions provided by the students ranged from positive to mixed and negative, with instances of transformative narratives. Regarding self-efficacy beliefs for academic writing, students exhibited various stages of change. Individual-level analysis revealed additional diversity in how L2 self-concept conceptions and self-efficacy beliefs for academic writing co-occurred. Notably, negative L2 self-concept conceptions appeared to align more closely with low self-efficacy for academic writing.

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METHODOLOGY

Aim:

To investigate how academic self-concept, academic self-efficacy, and academic motivation are interrelated in college students.

Objectives:

- To assess the relationship between academic self-efficacy and academic self-concept among college students.
- To assess the relationship between academic self-concept and academic motivation among college students.
- To assess the relationship between academic self-efficacy and academic motivation among college students.

Hypothesis:

H1: There will be a significant relationship between academic self-efficacy and academic self-concept among college students.

H2: There will be a significant relationship between academic self-concept and academic motivation among college students.

H3: There will be a significant relationship between academic self-efficacy and academic motivation among college students.

Sample:

A sample of 105 college students aged between 18-26 years was taken.

Variables:

- Academic Self-Efficacy
- Academic Self-Concept
- Academic Motivation
- College Students

Tool(s) Used:

S.NO.	TOOL NAME	AUTHOR	NO. OF ITEMS	RELIABILITY AND VALIDITY
1.	College Academic Self-Efficacy Scale (CASES)	S.V. Owen and R.D. Froman (1988)	33	Cronbach's Alpha, $r = 0.981$, Concurrent validity was also taken.
2.	Liu and Wang Academic Self-Concept Scale	Liu, W.L and Wang, C.K.J. (2005)	20	Validity and Reliability: Cronbach's alpha (α) – 0.71 and 0.89.
3.	Academic Motivation Scale (AMS-28)	Vallerand, R.J., Blais, M.R., Brière, V.M., and Pelletier, L.G. (1989)	28	Cronbach's Alpha Reliability (α) – 0.70, Discriminant validity also came out to be 0.85

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TOOL(S) DESCRIPTION:

1. Liu and Wang Academic Self-Concept Scale (Liu, W.L and Wang, C.K.J., 2005)

This scale was developed in 2005 by Liu, W.L and Wang, C.K.J. The scale was developed to assess students' academic self-concept, which comprises two distinct dimensions: academic confidence and academic effort. Each dimension consists of 10 items aimed at gauging students' perceptions of their own academic abilities and the effort they invest in their studies. To prevent response bias, the scale incorporates both positively and negatively worded items. Odd-numbered items pertain to academic confidence (1, 3, 5, etc.), while even-numbered items relate to academic effort (2, 4, 6, etc.). Participants are asked to indicate their agreement or disagreement with each statement using a 5-point Likert scale: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5). This instrument serves to capture nuanced aspects of students' academic self-perceptions within the realm of psychology.

2. College Academic Self Efficacy Scale (CASES) (S.V. Owen and R.D. Froman 1988):

This scale was developed in 1988 by S.V. Owen and R.D. Froman. The CASES (College Academic Self-Efficacy Scale) questionnaire, designed to evaluate academic self-efficacy, consists of 33 items. Respondents rate their confidence levels on a 5-point Likert scale, ranging from very low to very high. The questionnaire assesses various aspects of academic functioning, such as note-taking, classroom participation, and computer usage. Scores on this instrument range from 33 to 165, with higher scores indicating greater self-efficacy and lower scores indicating lower confidence in completing academic tasks such as homework.

3. Academic Motivation Scale (AMS-28) (Vallerand, R.J., Blais, M.R., Brière, V.M., and Pelletier, L.G. 1989):

This scale was developed in 1989 by Vallerand, R.J., Blais, M.R., Brière, V.M., and Pelletier, L.G. The Academic Motivation Scale (AMS) is a self-report questionnaire designed to gauge students' motivation towards academic activities. It delves into both the extent of their motivation and the underlying reasons driving it. With 28 items, the AMS is segmented into seven subscales. These subscales encompass intrinsic motivations such as the desire to know, achieve, and experience stimulation, along with identified regulation, introjected regulation, external regulation, and amotivation. Intrinsic motivation revolves around engaging in activities for the inherent pleasure they offer, while extrinsic motivation involves doing tasks for external rewards or to avoid negative outcomes. Amotivation signifies a lack of interest or drive towards the activity.

Procedure:

Data were gathered from a group of 105 young adults aged 18 to 29 years. Three assessment tools, namely the College Academic Self-Efficacy Scale (CASES), Liu and Wang Academic Self-Concept Scale, and Academic Motivation Scale (AMS-28), were employed. Participants accessed the questionnaire via online links, and their responses were automatically saved upon submission. Online consent was obtained prior to questionnaire access. Scoring and statistical analyses were conducted post-data collection, followed by interpretation of the results.

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ANALYSIS OF RESULT

Table 1. Correlation between Academic Self-Efficacy and Academic Self-Concept among college students.

		Academic Self-Efficacy	Academic Self-Concept
Academic Self-Efficacy	Pearson Correlation	1	-.211
	Sig. (2-tailed)		.031
	N	105	105
Academic Self-Concept	Pearson Correlation	-.211	1
	Sig. (2-tailed)	.031	
	N	105	105

Correlation is significant at the 0.05 level (2-tailed)

At the 0.05 significance level, the correlation between "Academic Self-Efficacy" and "Academic Self-Concept" is statistically significant. The correlation coefficient between "Academic Self-Efficacy" and "Academic Self-Concept" is -0.211. The p-value associated with this correlation coefficient is 0.031. This indicates a statistically significant negative correlation between "Academic Self-Efficacy" and "Academic Self-Concept" at the 0.05 significance level. The negative correlation coefficient suggests that as Academic Self-Efficacy increases, Academic Self-Concept tends to decrease, and vice versa. Given the p-value of 0.031, which is less than 0.05, we reject the null hypothesis that there is no correlation between "Academic Self-Efficacy" and "Academic Self-Concept" at the 0.05 significance level. Therefore, we conclude that there is a significant relationship between these two variables. In summary, at the 0.05 significance level, there is a statistically significant negative correlation between "Academic Self-Efficacy" and "Academic Self-Concept," suggesting that these two constructs are related, and as one increases, the other tends to decrease.

Table 2. Correlation between Academic Self-Concept and Academic Motivation among college students.

		Academic Self-Concept	Academic Motivation
Academic Self-Concept	Pearson Correlation	1	.509
	Sig. (2-tailed)		.000
	N	105	105
Academic Motivation	Pearson Correlation	.509	1
	Sig. (2-tailed)	.000	
	N	105	105

Correlation is significant at the 0.01 level (2-tailed).

At the 0.01 significance level, the correlation between the variables "Academic Self-Concept" and "Academic Motivation" is statistically significant. The Pearson correlation coefficient between "Academic Self-Concept" and "Academic Motivation" is 0.509. This indicates a moderate positive linear relationship between the two variables. The correlation coefficient is significantly different from zero at the 0.01 level ($p = 0.000$), suggesting strong evidence of a relationship between "Academic Self-Concept" and "Academic Motivation". With a p-value of 0.000, we reject the null hypothesis that there is no correlation between "Academic Self-

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Concept" and "Academic Motivation" at the 0.01 significance level. This implies that there is a meaningful association between the two variables in the population.

Table 3. Correlation between Academic Self-Efficacy and Academic Motivation among college students.

		Academic Self-Efficacy	Academic Motivation
Academic Self-Efficacy	Pearson Correlation	1	-.082
	Sig. (2-tailed)		.404
	N	105	105
Academic Motivation	Pearson Correlation	-.082	1
	Sig. (2-tailed)	.404	
	N	105	105

At the 0.01 significance level, the correlation between the variables "Academic Self-Efficacy" and "Academic Motivation" is not statistically significant. The Pearson correlation coefficient between "Academic Self-Efficacy" and "Academic Motivation" is -0.082. This indicates a very weak negative linear relationship between the two variables. However, the correlation coefficient is not significantly different from zero at the 0.01 level ($p = 0.404$). With a p-value of 0.404, we fail to reject the null hypothesis that there is no correlation between "Academic Self-Efficacy" and "Academic Motivation" at the 0.01 significance level. This means that there is insufficient evidence to conclude that the correlation observed in the sample reflects a true relationship between the two variables in the population.

DISCUSSION

The primary objective of this research was to evaluate the interplay of Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation among college students. The study involved 105 participants of both genders aged between 18 and 26. Data collection employed three tools: the College Academic Self-Efficacy Scale (CASES) consisting of 33 items developed by S.V. Owen and R.D. Froman in 1988, the Academic Self-Concept Scale containing 20 items designed by Liu, W.L., and Wang, C.K.J. in 2005, and the Academic Motivation Scale (AMS-28) comprising 28 items created by Vallerand, R.J., Blais, M.R., Brière, V.M., and Pelletier, L.G. in 1989. Following data collection, correlation was utilized as the statistical method for analysis of the findings.

In education, self-efficacy plays a pivotal role in shaping students' achievements and influencing their decisions. Specifically, academic self-efficacy refers to an individual's belief in their ability to successfully complete academic tasks, rooted in Bandura's theory of self-efficacy (1977). This theory suggests that self-efficacy is situational and task-specific, revolving around the confidence to tackle challenges and meet goals. Unlike self-esteem or self-concept, academic self-efficacy pertains to performance in academic domains and comprises various dimensions organized hierarchically. It involves beliefs about the outcomes of academic actions and confidence in one's ability to execute necessary actions for desired results. Academic self-concept, on the other hand, reflects how individuals perceive themselves academically, encompassing their beliefs and evaluations of their abilities and accomplishments. According to Valentine et al. (2004), academic self-concept develops through students' assessments of their skills, influenced by their academic experiences. It encompasses diverse aspects such as achievements, grades, motivation, creativity, and proficiency in challenging subjects. Academic motivation is closely tied to the broader

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concept of "motivation to learn," which encompasses the psychological processes underlying learning activities and their outcomes, as articulated by Krapp (1993, p. 188). While research often focuses on classroom settings, academic learning is fundamental. Motivation to study is influenced by both the learning process and the pursuit of academic goals, underscoring its importance in academic motivation.

The findings of the study indicated that there is a statistically significant negative correlation between Academic Self-Efficacy and Academic Self-Concept at the 0.05 significance level among college students. There is a statistically significant positive correlation between Academic Self-Concept and Academic Motivation among college students. The correlation between Academic Self-Efficacy and Academic Motivation is not statistically significant. This result can be supported by a research conducted by **Marsh, H. W., & Craven, R. G. (1997) in which** a negative correlation between academic self-concept and academic self-efficacy was found among a sample of high school students. The researchers suggested that students with lower academic self-concepts tended to have higher academic self-efficacy, possibly because they set lower standards for themselves due to their negative perceptions of their academic abilities. Another research conducted by Deci, E.L., & Ryan, R.M. (2000) which studied Self Determination Theory and how Academic Self-Concept and Academic Motivation are positively correlated. This implies that when students perceive themselves positively in academic domains (academic self-concept), they are more likely to be motivated to engage in academic activities and pursue academic goals. This alignment suggests that fostering a supportive environment that addresses students' psychological needs for competence, autonomy, and relatedness can enhance both their academic self-concept and motivation, leading to improved academic performance and well-being. While academic self-efficacy and academic motivation are often thought to be positively correlated, there have been studies that have found no significant relationship between the two constructs. In a research by Pajares, F. & Schunk, D.H. (2005) which explored the relationship between self-efficacy beliefs and academic achievement, Schunk and Pajares found that while self-efficacy beliefs were positively correlated with academic achievement, the relationship between self-efficacy and motivation was not consistently significant across studies.

Hypothesis Testing

The first hypothesis that there will be a significant relationship between academic self-efficacy and academic self-concept among college students was proved statistically significant but it had a negative relationship. The second hypothesis that there will be a significant relationship between academic self-concept and academic motivation among college students was statistically significant with a positive relationship. The third hypothesis that there will be a significant relationship between academic self-efficacy and academic motivation among college students was proved statistically not significant.

CONCLUSION AND SUMMARY

The primary objective of this research was to evaluate the interplay of Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation among college students. The study involved 105 participants of both genders aged between 18 and 27. Data collection employed three tools: the College Academic Self-Efficacy Scale (CASES) consisting of 33 items developed by S.V. Owen and R.D. Froman in 1988, the Academic Self-Concept Scale containing 20 items designed by Liu, W.L., and Wang, C.K.J. in 2005, and the Academic Motivation Scale (AMS-28) comprising 28 items created by Vallerand, R.J., Blais, M.R.,

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Brière, V.M., and Pelletier, L.G. in 1989. Following data collection, correlation was utilized as the statistical method for analysis of the findings.

Findings:

- It was found that there is a significant but negative relationship between Academic Self-Efficacy and Academic Self-Concept.
- It was found that there is a positive relationship between Academic Self-Concept and Academic Motivation.
- It was also discovered that there is no significant relationship between Academic Self-Efficacy and Academic Motivation.

Limitations:

- Direct personal interaction with individual patients was not feasible; instead, data collection and testing were conducted online.
- The study's sample population consisted of individuals from India, necessitating a careful consideration of cultural factors in the analysis and interpretation of results.
- The utilization of non-Indian assessment tools might introduce cultural biases into the findings, thereby warranting caution in drawing conclusions.
- The lack of a significant correlation between Academic Self-Efficacy and Academic Motivation could potentially be attributed to the relatively small sample size of 105 students.

Implications:

- This research contributes to the understanding of the complex relationship between academic self-efficacy, academic self-concept, and academic motivation, offering insights into their interplay within the college student population. It enhances existing theoretical frameworks by exploring how these constructs interact and influence each other, providing a deeper understanding of student motivation and academic performance.
- Understanding how academic self-efficacy, self-concept, and motivation interact can contribute to the broader field of educational psychology, shedding light on factors that influence student engagement and persistence. Insights into these constructs can inform therapeutic interventions aimed at addressing academic-related stress, anxiety, and low motivation among college students.
- Emphasizing the importance of self-efficacy, self-concept, and motivation in academic settings can lead to the cultivation of a growth mindset and resilience in the face of academic challenges. Educators can use the findings to implement teaching methods and assessment strategies that enhance students' belief in their abilities and their overall academic identity.

Future Research Recommendations:

- Future researchers can further research into the not significant relationship between Academic Self-Efficacy and Academic Motivation by further increasing the sample size.
- They can conduct longitudinal studies to examine how Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation evolve over time among college students. Tracking these variables from freshman year through graduation could provide valuable insights into their development and interaction.

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- They could also Explore potential mediating and moderating factors that may influence the relationship between Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation. Factors such as social support, educational environment, and personal characteristics could play significant roles in shaping these dynamics.
- They should also keep in mind the intersectionality of various identities (e.g., gender, race, socioeconomic status) in the context of Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation. Explore how different combinations of identities may interact to influence these constructs and their outcomes.
- Future researchers could also employ qualitative research methods such as interviews, focus groups, or narrative analysis to gain deeper insights into the subjective experiences of college students regarding Academic Self-Efficacy, Academic Self-Concept, and Academic Motivation. Qualitative approaches can provide nuanced understanding and uncover individual perspectives.
- They can also explore the relationship between Academic Self-Efficacy, Academic Self-Concept, Academic Motivation, and student well-being or mental health. Investigate how factors such as stress, anxiety, and self-esteem affect these constructs and academic performance, and explore potential interventions to promote student well-being alongside academic success.

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