

A Review of the Link Between Self-efficacy, Motivation and Academic Performance in Students

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Abstract

Self-efficacy refers to one's perceived ability to learn or accomplish things at specific levels. It is a belief in one's abilities. A large body of research indicates that self-efficacy improves academic motivation, learning, and accomplishment. Similarly, modern motivation theories concentrate on the cognitive and emotional processes that initiate, guide, and maintain human behavior. When the teacher and peer support are paired with a school atmosphere that supports social values, student motivation to achieve positive social goals and engage in positive classroom behaviors rises. Without a doubt, self-efficacy is linked to student motivation and learning. The conviction in one's ability to achieve is referred to as self-efficacy. Motivation, on the other hand, is defined as an individual's drive to achieve. Thus, self-efficacy and motivation are related. Through a review of literature, the aim of the research described in this paper sought to assess the extent to which student engagement, academic self-efficacy, and academic motivation influence academic performance also the relationship between self-efficacy and academic performance, in order to investigate the link between academic achievement, student involvement (cognitive, emotional, and behavioral), academic motivation, and self-efficacy in students.

Keywords: self-efficacy, academic, motivation, performance, students.

Introduction

Bandura (1977) proposed that self-efficacy influences an individual's activity selection, effort, and perseverance. People who lack confidence in their ability to do a task may avoid it; those who think they are capable should engage gladly. Individuals who believe in their talents are expected to work harder and persevere longer when faced with challenges than those who question their abilities.

According to self-efficacy theory, people obtain information to evaluate their efficacy from their performance successes, vicarious (observational) experiences, modes of persuasion, and physiological markers. Individual performances are the most dependable indicators of efficacy. Success increases efficacy whereas failure decreases it; but, if a strong sense of

efficacy is created, a failure may not have much of an influence. Individuals can also learn about their capabilities via the expertise of others. Similar others provide the finest foundation for comparison (Schunk, 1989). Seeing comparable peers do a task convinces viewers that they, too, are capable of completing it. Vicarious information has a smaller influence on self-efficacy than performance-based information; a vicarious improvement in efficacy might be canceled out by future failures. Self-efficacy is neither the single nor even the most important effect on conduct. Many variables influence behavior. Other key elements in accomplishment settings are skills, result expectancies, and the perceived worth of outcomes. When necessary, abilities are absent, high self-efficacy will not result in competent performance.

Self-efficacy is multidimensional, meaning it varies depending on the domain or environment. This means that having a strong sense of effectiveness in one domain does not necessarily translate into having a similar degree in another. Even within the same area, distinct levels of self-efficacy beliefs may exist in different settings. Learners with high self-efficacy explain their failures to fewer tries rather than a lack of ability, whereas those with low self-efficacy attribute their failures to a lack of talent (Pintrich, 2003). During the Covid-19 epidemic, a negative link between general self-efficacy and psychological discomfort was discovered (Shacham et al., 2020). Husain and Schmidt (2014) discovered a link between self-efficacy and academic motivation among undergraduate students in his study. According to one study, there is a significantly substantial positive association between self-efficacy and the drive to learn (Akram & Ghazanfar, 2014). Another study found that pupils with greater levels of self-efficacy complete their activities more successfully and achieve higher academically.

Methodology

In this regard, the aim of the research described in this paper sought to assess the extent to which student engagement, academic self-efficacy, and academic motivation influence academic performance also the relationship between self-efficacy and academic performance. A systematic literature review approach is taken for this analysis, in order to understand the link and relationship between student's self-efficacy and motivation-performance in the academic sphere. Given the significance of academic success in higher education, knowing the factors that impact it is critical. This research has identified shortcomings in the current study. Associative studies may be used to analyze school engagement, and ideas connected to academic motivation, self-efficacy, and academic achievement to better comprehend the concepts and highlight the correlations that exist among other factors.

Self-efficacy Dimensions and Role

Perceived self-efficacy is described as people's perceptions about their capacities to achieve specific levels of performance and exert control over events in their life. People's feelings, thoughts, motivation, and behavior are all influenced by their self-efficacy beliefs. These many consequences are produced by such beliefs via four primary mechanisms. Cognitive, motivational, emotional, and selection processes are among them. A high sense of effectiveness improves human achievement and personal well-being in a variety of ways. People who are confident in their talents see tough activities as challenges to be overcome rather than dangers to be avoided. Such a positive viewpoint promotes intrinsic interest and deep involvement in activities. They create tough objectives for themselves and stay committed to them (Bandura & Wessels, 1994).

Self-efficacy is made up of two parts: (a) prediction of outcome and (b) prediction of efficacy. Prediction of outcome refers to an individual's prediction that his or her actions will result in a specific outcome. A forecast of effectiveness refers to a person's prediction of whether or not he or she will be able to effectively execute a set of procedures to accomplish the intended result. As a result, self-efficacy does not assess one's present skill set, but rather one's opinion of how he or she can execute a task at hand. Despite Bandura's claim to the contrary, self-efficacy theory is theoretically problematic, and the core idea of efficacy expectations is not unequivocally distinct from result expectations. Similarly, we believe that what is being evaluated in empirical investigations is unclear (Eastman & Marzillier, 1984).

When learning complicated activities, persons with high self-efficacy attempt to better their assumptions and tactics rather than looking for reasons such as a lack of enthusiasm for the activity. For example, employees with high self-efficacy are better able to gather relevant information, make informed judgments, and then take appropriate action, especially when under time constraints. Such qualities are useful in occupations that require dealing with furious consumers in a contact center or conquering sophisticated technological issues in a short amount of time. Low self-efficacy, on the other hand, can lead to inconsistent analytic thinking, which impairs the quality of problem-solving - a critical ability in an increasingly knowledge-based society. In a dynamic work environment where continuous learning and performance improvement is required, strong self-efficacy allows employees to respond less defensively when receiving unfavorable feedback (Heslin & Klehe, 2006).

Four essential sources of information impact self-efficacy: performance successes, vicarious experience, verbal persuasion, and physiological information. Internal personal characteristics and external environmental elements are also drivers of self-efficacy. The unpredictability and controllability of its factors influence the degree of change in self-efficacy. Self-efficacy influences how people behave in terms of behavior selection, effort expenditure and persistence, cognition processes, and emotional reactions. Self-efficacy is measured along three dimensions: magnitude, strength, and generality. Self-efficacy should be quantified in terms of specific assessments of competence that may change across domains of activity, various degrees of task demand within a given activity domain, and different situational conditions. Bandura (1997a) identified generality as a third significant assessment feature of self-efficacy. As previously stated, the generality of self-efficacy relates to the degree to which self-efficacy beliefs are positively associated, either within the domain, across behavioral domains, or across time. Self-efficacy beliefs across the domains of concern are used to assess generality.

In addition to length, breadth, and depth, a dimension is employed to be able to utilize geometrical language when addressing phenomena that are dependent on four variables: For identifying locations in space-time, time is considered the fourth dimension. The universality feature of self-efficacy, according to Maibach and Murphy (1995), has not received significant attention in health promotion research. The majority of health promotion research solely assesses the strength dimension of self-efficacy. They claim that measuring all three elements of self-efficacy is not always essential and that the objective of the research will determine which dimensions are required.

Academic Self-efficacy

Academic self-efficacy relates to one's belief in one's ability to succeed at specific levels (Schunk, 1991). According to Pintrich & De Groot (1990), academic self-efficacy beliefs were favorably connected to intrinsic worth, cognitive and self-regulatory technique utilization, and negatively related to testing anxiety. Self-efficacy is also favorably connected to numerous outcome indicators including grades, seatwork performance, test and quiz scores, and essay and report quality. Bandura's social-cognitive theory emphasizes the importance of people's self-efficacy beliefs, specifically their perceived capacities to exert control over their level of functioning and environmental demands. These beliefs have an impact on cognitive, motivational, emotional, and decision-making processes. They also have an impact on ambitions and goal commitment, degree of motivation and endurance in the face of adversity, cause attribution for triumphs and failures, and perception of environmental problems and obstructions (Bandura, 1997).

Academic self-efficacy beliefs influence students' educational and professional goals (Zimmerman & Bandura, 1994). They not only help students define and achieve academic goals, but they also bring great enjoyment and satisfaction with their achievements. Among the techniques focusing on task value, we considered optimum experience, which is the basic idea of psychological selection theory (Massimini & Delle Fave, 2000). This hypothesis investigates the long-term developmental influence of the experiences that people link with their daily activities. Within this concept, the subjective appraisal of environmental chances for action (challenges) and human capacities (skills) in confronting them is connected to the perceived quality of experience. When people perceive both high obstacles and high skills in a specific activity (Massimini et al. 1987), they are more likely to have an ideal experience or flow.

Motivation and Academic Performance

The urge to act in the service of a goal is referred to as motivation. It's a critical component in creating and achieving our goals. One of the driving elements underlying human behavior is motivation. It encourages rivalry and fosters social interaction. Its absence might result in mental diseases like depression. Students' motivation is an essential issue in higher education, especially given the importance of academic achievement in their professional lives. Student motivation is the factor that determines how students perceive the learning process. A variety of studies have been undertaken to investigate the impact of student motivation on academic achievement, and various researchers have utilized different definitions of student motivation. Lumsden (1994), for example, investigated students' engagement in education and the sources of their motivation. Marshal (1987) saw student motivation as a force that benefited the learner. According to Ames (1990), motivation to learn is dependent on a long-term, high-quality connection to learning and commitment to the learning process. Most motivation theorists think that motivation plays a role in the execution of all learned responses, and that taught behavior will not occur unless it is energized. According to Bomia et al. (1997), student motivation is defined as the student's willingness, need, desire, and duty to engage and thrive in the learning process.

Education is a critical component in human resource development. Academic performance is a measure of a student's achievement in several academic courses. Teachers and school authorities often assess accomplishment by classroom performance, graduation rates, and

standardized test scores. Several variables impact children's academic achievement, including their learning abilities, family background, peer influence, teacher quality, and learning infrastructure. Graduation rates are collected by state and federal education officials as a baseline indicator of secondary school success. Each state administers annual examinations to students in elementary, middle, and high school to measure topic mastery (Shakeel & Peterson, 2020). There are several things that might influence a student's academic achievement. However, in today's circumstances, the most familiar variables are Parenting Styles, in which a supporting style has the intended effect on pupils, and Student Characteristics, in which laziness is a prevalent problem for today's generation. Level of Internet Connectivity, where not just students but everyone suffers from poor internet connectivity, and finally, being uninspired has the greatest impact on kids' academic performance. The potential of a student to develop or increase their academic performance is determined by their surroundings and personal traits. Social aid, which includes encouragement, inspiration, and parental participation, was an excellent strategy to boost kids' progress and accomplishments. Regular school attendance and self-motivation are essential in establishing the elements impacting kids' academic achievement. Student's academic performance is substantially influenced by the availability of teaching and learning resources, students' personality traits, personal objectives, and teachers' degrees of expertise.

Relationship Between Self-efficacy and Motivation

Self-efficacy is based on a person's conviction in their own ability to succeed, whereas motivation is based on the person's desire to succeed. Those with strong self-efficacy frequently have high motivation, but this is not a certain result. Educators have long struggled with how to encourage their students. Because intrinsically motivated students can concentrate better and for longer periods of time on a topic, they gain the capacity to adopt a variety of tactics to deal with problems. They labor with attention and perseverance to gain mastery. This is known as flow, and it is achieved through engaging in any activity, learning and implementing the necessary abilities, and being able to identify the obstacles of the activity. This activity improves and strengthens the capacity to focus and succeed. Furthermore, genuinely driven pupils have stronger self-regulation. To understand the link between self-efficacy and motivation, self-efficacy is reported to be a key component in motivation. In this setting, the self is viewed as a cognitive structure that offers reference mechanisms and a collection of sub-functions for perception, assessment, and behavior regulation (Bandura, 1978). Thus, the idea of self-efficacy is essentially a belief in one's ability to accomplish a specific activity. It is precisely described as people's assessments of their ability to organize and execute courses of action necessary to achieve specified sorts of performances (Bandura, 1997) and (Bandura, 1986). Over two decades of study, the validity of self-efficacy as a predictor of student motivation and learning has been firmly established. It is suggested that self-efficacy is a significant predictor of student motivation.

Relationship Between Self-efficacy and Academic Performance

Education is now widely regarded as the primary key to a nation's moral, cultural, political, and socioeconomic progress. In the previous two decades, nations that have adopted substantial educational endeavors have achieved revolutionary gains and accomplished miracles (Shah, 2009). Nowadays, most individuals compete with one another in order to succeed in their academic fields. However, some elements, such as self-efficacy, have an impact on academic achievement. Individuals' self-efficacy views differ, fluctuate under different

conditions, and can alter over time. Furthermore, it improves performance in academics, the workplace, and many other areas. Indeed, educators are particularly interested in the links between self-efficacy and academic performance (Witt-Rose, 2003). Self-efficacy for self-regulation, according to Klassen et al., (2008), indicates an individual's conviction in his or her ability to apply a range of learning techniques, avoid distractions, finish homework, and engage in class learning, and has been shown to impact academic accomplishment. Furthermore, according to Yusuf (2011), Albert Bandura pioneered the notion of perceived self-efficacy in 1977, which impacts and alters human behavior. Furthermore, students who were able to initiate their study activities with self-efficacy and develop applicable self-learning strategies are more likely to progress and achieve better because non-self-regulated students are not truly engaged in the learning process and may be subjected to any type of shallow knowledge and low academic achievement (Zimmerman, 2000).

Aside from that, one of the major questions highlighted in educational research is the causal influence of self-efficacy on academic accomplishment. When studies strive to determine if mastery, linguistic emotional, and psychological factors are the key causes of generating self-efficacy, the causality impact of self-efficacy becomes more intriguing. Thus, Bandura proposed four types of experience or influencing factors that might be used to enhance self-efficacy: mastery experience, vicarious experience, verbal persuasion, and physiological arousal. According to the study, mastery experience, or the perceived consequence of one's prior performance, is the most influential. Students do tasks and activities, evaluate the outcomes of those actions, utilize these interpretations to form beliefs about their capacity to perform subsequent tasks or activities, and behave in accordance with those beliefs. Furthermore, vicarious experience, often known as modeling, refers to the beneficial impacts on efficacy beliefs that come from witnessing how other individuals accomplish (Bandura, 1997). Zhu et al. (2011) experimentally evaluated these assertions with middle school children and found substantial relationships between mastery experiences, vicarious experiences, verbal persuasions, physiological arousal, and self-efficacy, supporting the validity of self-efficacy theory. Recognizing that self-efficacy influenced academic performance, this study was designed to investigate the link between self-efficacy and academic performance, as well as the factors that influenced self-efficacy. Furthermore, academic accomplishment has been differently characterized as either a degree of competency gained in academic work or formally acquired knowledge in school courses, which is frequently reflected by the percentage of marks received by students in examinations (Kohli, 1975).

Given that self-efficacy has an impact on academic achievement, the elements that influence self-efficacy should be investigated. Typically, students are easily influenced by peers, and become involved in emotional control, psychological arousal, and so on. There are direct experiences/mastery experiences and indirect experiences/vicarious experiences offered by social or models, verbal persuasion, and individuals' physical and emotional conditions among pupils, according to Bandura (Bandura, 1995). Direct experiences are the most beneficial for self-efficacy beliefs. While a person may build a strong confidence in self-efficacy as a result of his own successes, his failures may have a detrimental impact on these views. Efficacy perceptions based on previous experiences have an impact on future success or failure status and, as a result, academic motivation. Students with strong self-efficacy views are more eager to participate in learning activities than students with low self-efficacy beliefs. Efficacy perceptions based on previous experiences have an impact on future success or failure status

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Discussion

The relationship between academic performance, student engagement (cognitive, emotional, and behavioral), academic motivation, and self-efficacy was studied in middle and high school students in this study; the analysis was followed by a study to determine whether student engagement (cognitive, emotional, and behavioral), academic motivation, and self-efficacy predict academic performance variances in adolescents. According to a study of the literature, several earlier research was undertaken with either high school or middle school pupils. Wang and Holcombe (2010), for example, included only middle school students in their study, whereas Hepinger's study included only high school students. Our literature search also found some distinctions between the behavioral involvement seen in our study and the behavioral engagement exhibited in studies presented in the literature. The measure used for this study assessed behavioral engagement, often known as involvement in school activities, as "*regular attendance, adherence to school regulations, and not getting into trouble in school.*" A study of the literature reveals that the research findings are to be expected. Academic achievement is influenced by students' strong faith in their academic abilities. Furthermore, when compared to other academic performance variance-predicting factors, self-efficacy is the most powerful predictor.

Conclusions

The aim of the current study sought to assess the extent to which student engagement, academic self-efficacy, and academic motivation influence academic performance also the relationship between self-efficacy and academic performance. A comprehensive analysis of the study data led us to the conclusion that self-efficacy is the biggest predictor of academic performance, or academic success, in middle and high school pupils. Academic motivation and cognitive engagement, a subdimension of student involvement, were also found to predict academic achievement in the current study. It also revealed that the two are connected. Students who trust in their own ability and willingness to behave academically will be able to push themselves to study and so perform the cognitive processes necessary to help them succeed. It is recommended that teachers and parents both, should try to enhance the self-efficacy and motivation together, in order to increase academic performance in students. Students should also do additional work in order to boost their self-efficacy, and increase their motivation. However, schools setting shuld be designed to help the, achieve it. Furthermore, the role of psychologist is schools can be an important addition to achieve this goal and support student's development, as they can help to boost student's self-efficacy levels, and therefore better prepare them for work. Future studies can try and identify stundents self-efficacy and motivation levels, and through a longitule study can understand individuals work performance in the market.

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