An insight into self-efficacy and its impact on students' achievement- A Review

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Abstract

Academic success and achieving good grades are among the main goals at all levels of Education. Academic achievement is directly related to the idea of self - efficacy as there are many instances to support the influence of its belief and impact on academic achievement. Understanding self is of prime importance in understanding one's ability to achieve what is expected of him/her. This paper has highlighted the concept of self-according to a few renowned psychologists, also, the authors have tried to review different work on self-efficacy andits impact on the academic achievements. It has been analyzed that Self-Efficacy improves Academic achievement, improves emotional health and well-being, and serve as a valid predictor of motivation and learning.Readiness to learn, Reinforcement and Extrinsic motivation can boost the potential of an individual by making an improved outcome. Students lack the ability to succeed because they do not have belief on their abilities.One needs to understand his/her strength or potential to better exhibit right behaviour leading to achieving success in any task provided. Learning or positive change in academics is dependent upon several factors like physiological, psychological, cultural, hereditary and socio economic factors. Greater the age and maturity, better the healthy intake of food, healthy hereditary characteristics, greater would be the attainment level of an individual.

In this research paper several other self efficacy related terms are also included, this research work puts an insight into the advantages of self – efficacy in the students' life.

Keywords: Self efficacy, Reinforcement, Students Achievement, Self-development, Extrinsic Motivation

Introduction

Since our childhood, we must have spent considerable time thinking about the idea of self.The sense of self refers to the way a person thinks about his or her traits, beliefs and motive of being in the world. As we grow, our interaction with other people, our experiences and the way we perceive others, form the basis of our self. On a broader perspective, there are three aspects of selfhood. These are realistic and average patterns of experience in which people lay hold of the meaning of self.The first is the experience of our activities in conscious state

such as when we try to count our achievements, failures, opinions, traits, hobbies, values etc. Without these attributes, self would have no meaning. The second root is the interpersonal aspect of selfhood. When somebody joins a group and feels positive or on the contrary feels terror in joining another group, one celebrates his/her victory on defeating a rival. These incidences reveal the interpersonal aspect of self. The third root is the implementation function. When we have a goal to work upon, we get up early, take decision, make a resolution regarding what do we want to do or achieve, these experiences form the implementation function of self as an active agent. Self can be understood as a subject and an object.When an individual says 'I know who I am', the self is being described as a knower and as an object, self gets observed and comes to be known. Self has several kinds which are formed as a result of our interactions with our physical and sociocultural environments.The very first concept of selfmay bewhen a child cries for milk when he/ she is hungry which leads to the development of awareness. With growth of a human being, there comes a distinction between personal and social self. Child's psychological and social needs with connection to his/ her environment lead other components of personal self.

Self-concept is dependent to an individual, can be positive or negative, changes over time and also influence an individual's life. To be aware of oneself is self-concept. Since the inception of understanding of personality theories, it was a need to know behavior which aids in understanding an individual.

Different Authors has written extensive text on the idea of Self Efficacy.

Literature Surveyed

In this section, the work of different authors on self efficacy analysis and impact is presented.

Ying-yao Cheng (2020) contributed seven fine papers on optimizing adolescents' learning performance that consider psychological issues related to self-efficacy and well-being of students from diverse backgrounds and geographical locations.

Maliha Nasir Et al. (2019) examined relationship between academic self-efficacy and academic achievement of students in pre service teacher training programs.

GPA (York, Gibson, & Rankin, 2015). Although academic achievement is regularly operationalized as GPA, followed distantly by 'Grades,' these cognitive domain variables (i.e. involving knowledge and the development of intellectual skills; Bloom, Engelhart, Furst, Hill, &Krathwohl, (1956) are too narrow. For example, students may have similar measurable outcomes (e.g. GPA), yet their learning experiences may vary considerably. Overall, the definitions of academic achievement largely neglect that academic success can be shaped not only by cognitive variables but also non-cognitive variables

Huang (2012) conducted a meta-analysis and reported that ASE differs between gender, age, and other psychological and physiological factors.

The self-esteem is directly in relation with four factors according to Argyle (2008) that are views of others, comparison with others, professional role in the society, self-identification.

Acosta (2001), E.S. Acosta, Academic performance reflects self-concept. Experiences relating to success or failure in one's life affect pupil's self-concept. Success reinforces one's actions and inculcates acceptable and right behaviour to be repeated.

The term Self- efficacy was propounded by Bandura (1960) in his socio cognitive theory. It is defined as an individual's belief in his or her ability to accomplish a specific task successfully.

In contrast, SE comprises an individual's evaluation of own ability to achieve a goal or self-belief to do so. For example, in academic situation, it can be assumed that learners with high SE have higher motivation to learn, resulted in higher academic achievement, because those learners believe that they have an

ability to achieve their goal. It is known that SE is influenced by gender, age, and domain

Bandura(1989), described people who doubt their abilities tend not to get engaged in difficult tasks. As stated above, individuals with a high level of self-efficacy cope with challenging situations in a more mature way, while not considering these as a threat.

Bandura (1982) emphasizes major difference in the way individuals feel and act between those with low self efficacy and those with a high level of self-efficacy. Individuals suspicious of their own abilities tend to avoid challenges and difficult tasks.According to the Social Cognitive theory, self-efficacy is one of the most important variables that influence the academic performance and achievement.

Collins (1982) demonstrated in a clear way the importance of self-efficacy beliefs and skill application on academic performance. The study showed that people may perform poorly on tasks not necessarily because they lack the ability to succeed, but because they lack belief in their capabilities.

According to Maslow (1970), some people achieve their goals moving from basic needs to self-actualization. He studied the mind of others on the basis of two things i.e. experiences and free will. He focused mainly on the individual's urge for self-actualization- a state in which an individual achieves best according to his/ her capability. Maslow believed self actualizers to be the supreme achievers. He conducted a research on outstanding individuals and he found certain characteristics of personality traits in them as of supreme achievers.

Carl Rogers (1959) approach of personality totally focusses on 'Self'. He categorizes self-concept into three types as Self-image, Self-esteem and ideal self.

Firstly, self-image does not necessarily reflect truth as it depends upon theinfluence of parents, media and friends. The answer to the question i.e. "Who am I?"would be answered in a different manner by many like you are tall,

beautiful, impulsive, student etc.Secondly, self-esteem is the extent to which we value ourselves. It involves the degree of positive and negative views about oneself.

As in the case of Pavlov's experiment (1927) with hungry dog, there was a relation between sound of bell and response. Learning is the result of such repeated associations occurring in our environment. Operant conditioning induces or dissuades the rate of response through reinforcement or punishment. Through operant conditioning, an individual makes an association between a behavior and a consequence. For example, an animal presses the green button and a food palette comes in front and on the contrary if it presses the red button, it receives a shock. For future, it learns to press green button instead of red. It is applicable in almost all our daily activities.

Observational learning occurs through observing and imitating others' actions. The concept of self-efficacy revolves around Albert Bandura's social cognitive theory, which emphasizes the role ofobservational learning, social experience, and reciprocal determinism in developing a personality\

Thirdly, ideal self is the notion about yourself set by you after gaining experiences from the society, life and what you admire about yourself.

Learning is a permanent modification in behavior because of the experiences faced. It depends upon several factors like physiological, psychological, cultural and socio economic factors. For learning to happen, one needs to have better opportunities or exposure of variety of circumstances, resources to learn and have maturity to grasp, better understanding of concepts. Thus, effective learning can boost up the confidence leading towards attainment of success. J.B.Watson (1920), the famous psychologist suggested that in whatsoever we behave that is a result of our learning process. There are three types of learning according to behavioral psychology i.e. classical conditioning, operant conditioning and observational learning. Classical conditioning is

a process of learning in which an association is made between a stimulus and a response

Related terms

Self-Knowledge: It is the knowledge of oneself or thirst to achieve information that may help in development of self which in turn tells us about our mental representations. It includes information of our basic traits i.e. our strength, weakness, challenges etc. It assesses the human nature as positive or negative. There are several sources of self-knowledge. To justify an example would be suffice as some people may think an individual to be timid and shy while others may think him/her to be bold and extrovert and others may think him/her to be possessing all of these qualities. Therefore, physical world and social comparison play an important role in gaining knowledge of self. Ignorance of self-personality and information barrier are the major hindrances in obtaining self-knowledge.

Self-esteem: In terms of Psychology, self-esteem refers to the overall sense of self-worth, how much does an individual appreciate and love himself/herself. It is the appraisal of our own beliefs, behavior and thoughts. It serves as a motivation factor for an individual for manifestation of their full potential. It is satisfaction with oneself and one's good opinionof one's dignity.

Self-regulation:It is control over oneself. If a person has good emotional self-control then he tends to keep a check on his emotions. According to Albert Bandura, a researcher and an expert in self-efficacy, self-regulation is a continuous active process in which an individual monitors his/her own behavior, judge it and reacts on feeling about own behavior. Bandura states that confidence on self is pivotal in diverting our emotions, thoughts and behavior towards positivity. Imagine two people who are highly determined to crack a competitive examination. They both actively keep a track of their academic improvement on a regular basis. One out of those two have a high self-esteem and believes if he puts on best efforts he would achieve the desired results on the other hand another individual has low self-esteem, he thinks

less efforts will also show the fruitful results. Hence, self-regulation has direct impact on productivity and self-esteem of an individual.

Self-efficacy can boost student achievement, foster emotional health and well-being, and serve as a valid predictor of motivation and learning.

Self-Concept and Academic Performance: Knowing thyself enhances the chance of achieving greater heights of success and prosperity.

Cognitive Science and Learning

Cognitive Science is the study of the mind and its processes. This study focusses on intelligence and behavior and how is information transformed. Mental operations include language, attention, memory, perception, retaining power, readiness, interest, will power etc. Cognitive Science comprises of the study of learning and its related performance and also focusses upon how people process information and develop mastery.

Factors affecting Learning

Learning of every individual is affected by several factors mainly intellectual factors, physical factors, emotional and social factors, environmental factors, teachers' and own personality etc. Success in academics is dependent upon the level of intellect that depends upon the way through which the content has been taught and methods of study adopted by students.For example in order to simplify the mathematical problems related to Algebra, knowledge of basic arithmetic solutions is primarily important. Physical characteristics such as health, nutrition, body mass index are directly proportional to effective learning of an individual as healthy mind resides in a healthy body.

Learning is mediated by number of factors like everyone learns in accordance with their blend of personal and environmental factors. Intelligence is positively related to learning ability. Several students possess intelligence in different dimensions such as one may be good at

academics, one may excel in dance and one could be a good sports person. This shows that the above mentioned students have unique talents in their own area. Howard Gardener has remarkably proposed eight areas of Intelligence in Educational practice i.e. linguistic, logical, spatial, musical, bodily, interpersonal, intrapersonal and naturalist intelligence. All these types of intelligence show that an individual has an outstanding capacity

Human Intelligence is the mental potential that consists of the abilities to learn from experience, adapt to new situations, understand and handle abstract concepts and use knowledge to manipulate one's environment.

When students face a new academic task, they ask themselves "Can I perform this task?" (self-efficacy) and "Why should I do this task?" (task value). If their answer to the first question is "yes," they proceed to the next question (Keskin, 2014). This reasoning suggests that self-efficacy is considered a predictor of task value, and not vice versa. In short, as regards the relationship between self-efficacy and the expectancy-value variables, the described findings support the idea that competence beliefs may drive students' expectations and task/subject values in the school context.

Role of motivation in learning

Learning depends upon readiness to learn and is self-initiated but the learner has to persistently and actively involved in the learning activity. The greater the readiness, the greater will be the attention given to the work on hand and the sooner will the desired result be achieved. It is very important for a learner to get the learner into a state of motivation and readiness for it increases the vigor to wholeheartedly learn something.

One sure means of putting the law of effect into operation is to assist the learner to achieve ends and purposes which he is zealous to attain. The real problem in motivating schoolwork is to discover values strong enough to stimulate the pupils to effective effort.

The value that appeals strongly to one individual may have little or no appeal to another individual. Moreover, the values that appeal strongly to one individual at one time may not appeal so strongly at another time.

The teacher must be continually on the alert to perceive these differences and fluctuations. Since all learners do not react similarly, the motivation of learning must be varied for different individuals. An understanding of the nature of motivation is important, because motivation determines, not only the intensity of the effort to learn, but also the extent to which this effort is made an activity of the total personality.

Motivation of learning activities helps the pupil to concentrate on what he is doing, and thereby to gain satisfaction. Continuous motivation is needed to help learners concentrate on the lessons to be learned. The importance of motivation in its simplest form is seen in the experiments made in the way animals and human beings learn.

Self efficacy and students' achievement

Research suggests that self-efficacy can boost student achievement, foster emotional health and well-being, and serve as a valid predictor of motivation and learning.

Grade Point Average (GPA) is a common measure of students' academic achievement, which is considered as a reflection of academic success and achieving the pedagogical goals. In a recent review of academic success, approximately 55% of the selected articles from over 20 peer-reviewed journals reported that the most frequently used indicator of academic success was academic achievement, or more concretely, Khageswar Bhat Et al. (2022) investigated self-efficacy and academic performance of students in relation to gender and streams of education

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Individuals with a high level of self-efficacy assign higher goals to themselves and exercise

more effort and willingness to have them accomplished. Locke and Latham (1990) defined that the more challenging the goals are, the more motivation they stimulate. A high level of Rudina Shkullaku – The Relationship between Self – efficacy and Academic Performance in the Context of Gender among Albanian Students bring about higher academic accomplishments.

In conclusion we can say that findings on a strong positive relationship between self-efficacy and academic performance suggested the need to direct counseling attention not only towards first year students dealing with adaptation issues but also to older students who are about to graduate. The absence of any significant gender differences in the academic performance demonstrates that Albanian students, both men and women, are not anymore influenced and stereotyped in their choice in the field that they prefer to study. Despite several limitations, the findings of the study provide a first step towards the identification of the relationship between self– RudinaShkullaku – The Relationship between Self – efficacy and Academic Performance in the Context of Gender among Albanian Students efficacy and academic performance among Albanian students. Future research might address the same issues, but with improved measures and a larger representative population of Albanian students.

Principles of Self efficacy can be categorized as Enactive mastery and verbal persuasion.
Personal assessment information that is based on an individual's accomplishments is enactive mastery. Appraisal, feedback, and positive encouragement from others are aspects of verbal persuasion. Previous successes raise mastery expectations, while repeated failures lower them. For Example: I have had positive or negative experiences with this activity in the past or in other similar experiences. Individuals are persuaded by others that they are capable of succeeding in specific tasks. For Example: People have told me I can or can't do this activity.
"In order to succeed, people need a sense of self-efficacy, to struggle together with resilience to meet the inevitable obstacles and inequities of life."

Albert Bandura

Conclusion
Undoubtedly, classroom training is one of the crucial and most important media for promoting and building self-efficacy. A student with strong efficacy will feel confident about his/ her learning abilities and will do good in assignments, be interested in taking part in classroom activities, being proactive all the time, be motivated to apply and adapt to new situations, show strong intrinsic motivation to learn from mistakes and overcome hurdles..

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