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## ATTRIBUTION, STUDENTS' SELF-EFFICACY AND ACADEMIC ACHIEVEMENT

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#### **ABSTRACT**

Ways students explain causes of an event (desirable or undesirable) affect their behaviours. Attribution theory and self-efficacy are key components in theories of motivation and learning in varied contexts. Educational researchers from diverse fields of inquiry have used these notions to predict and explain a wide range of human functioning, from athletic skills to academic achievement. These factors impact on personal belief in one's capability to organize and execute courses of action required to attain designated types of performances. While some students are almost always successful, others seem doomed to fail. Part of the explanation lies in their belief about the causes of success and failure. Students must accept the fact that much of what happens to them is a result of what they do. This study therefore is an attempt to explore the impact of attribution style and students' self-efficacy on academic achievement with a view to evolving robust learning strategies to explicitly address the generally descending slide in academic achievement in Nigerian educational system.

Keywords: Attribution, Self-efficacy, Academic Achievement, Attributional Style, Locus of Causality, Self-perception.

#### THE CONCEPT OF ATTRIBUTION

According to Malle (2004), attribution is a concept within social psychology which describes the process by which individuals explain the cause of behaviours and event that they perceive. Research into attribution theory began in the early 20<sup>th</sup> century, when the Austrian psychologist, Fritz Heider, addressed the problem from phenomenology: why do perceivers attribute the properties of an object they sense to the object itself when those properties exist only in the minds of the perceiver? Heider extended his ideas to the question of how people

perceive one another and, especially, how they account for each other's behaviour. For example, if a person is yelled at by another, they will seek an explanation for the behaviour. Was the person yelling because he/she has an angry personality, or might they have a medical condition which does not allow them to act otherwise?

Attributions are inferences that people make about the cause of events and behaviour. People make attributions in order to understand their experiences. Attributions strongly influence the way people interact with others. According to Santrock, (2004), attribution refers to perceived causes of outcomes. Students, when given a learning task, refer to several resources to determine how they study the task, how they estimate their success, how much effort and time will they invest on the task. The result of this evaluation process relies on students' cognitions and motivational beliefs (Seegers, Van Putten and Vermeer, 2004).

Attribution theory explains how students interpret their achievements. According to Weiner (1986), a child may attribute test results to several factors, including ability or effort, assistance from the teacher, and the difficulty level of test. Furthermore, research indicates that different attribution patterns have been identified for successful and unsuccessful students (Kivilu and Rogers, 1998). Attribution theory deals with how the social perceiver uses information to arrive at causal explanations for events. It examines what information is gathered and how it is combined to form a causal judgement (Fiske, and Taylor, 1991).

Attribution theory is concerned with how and why ordinary people explain events as they do. Heider (1958) believed that people are naïve psychologists trying to make sense of the social world. People tend to see cause and effect relationships, even where there is none. Attribution theory focuses on how people attribute events and how those beliefs interact with self-perception. When an individual experience desirable and undesirable outcomes (such as success and failure) he can attribute the cause to something specific which in turn can lead to increased or decreased motivational behaviour. When people experience a particular outcome, attributions help them to understand what caused the event so that if the outcome was desirable they can do their best to experience it again (in other words, the event becomes positively reinforced). Alternatively, if the event is unpleasant or undesirable they can try to avoid the behaviour that caused it.

Attribution theory considers that students in their effort to make sense of their own behaviour or performance are motivated to discover its underlying causes. Common causes usually advanced to explain successes or failures are ability, effort, task case or diffidently, luck, mood, help or hindrance from others. No wonder attribution theorists (Weary, 2000; Weiner, 2000) say that in a way students are like intuitive scientists seeking to explain the cause behind what happens.

Weiner (2000), identified three dimensions of attributions: Locus; stability and controllability. Locus; refers to whether the cause of success or failure is internal or external to the person. Self – esteem is an important issue in the locus dimension of attribution. A student who perceives his success as being due to internal factors as effort are more likely to have higher self-esteem following success than one who believes that their success was due to external reason of luck or help. The consequence of failure in this case leads to decreased self-esteem.

Stability: stability is the extent to which the cause of a student's performance remains the same or changes. How a student perceives stability of a cause has influence on his expectation of success. If he attributes a positive outcome to a stable cause; eg. Aptitude, he expects future success, but where he attributes negative outcome to a stable cause, he expects future failure. When a student perceives the cause of his failure as changeable bad-luck or lack of effort, he might develop expectations of success in future since the cause might change.

Controllability; this refers to the extent to which an individual can control the cause of his performance. For instance, a student might see his aptitude as internal, stable and controllable. He might also perceive chance/luck as external to him, variable an uncontrollable.

Researchers classify attributions along two dimensions: internal vs. external and stability vs. instability. By combining these two dimensions of attributes, researchers can classify a particular attribution as being internal-stable, internal-unstable, external-stable, or external-unstable.

Internal vs. External; Attribution theory proposes that the attributions people make about events and behaviour can be classed as either internal or external. In an internal, or dispositional attribution, people infer that an event or a person's behaviour is due to personal factors such as traits, abilities, or feelings. In an external, or situational attribution, people infer that a person's behaviour is due to situational factors. Example: Angela's car breaks down on the freeway. If she believes the breakdown happened because of her ignorance about cars, she is making an internal attribution. If she believes that the breakdown happened because her car is old, she is making an external attribution.

Stable vs Unstable; When people make a stable attribution, they infer that an event or behaviour, is due to stable unchanging factors. When making an unstable attribution, they infer that an event or behaviour is due to unstable, temporary factors. Example: Enob get a "D" in Government. If he attributes the grade to the fact that he always has bad luck, he is making a stable attribution. If he attributes the grade to the fact that he did not have much time to study that week, he is making an unstable attribution.

Attribution bias can occur when people make an attribution guessing about the causes of events or behaviours. These guesses are often wrong. People have systematic biases, which lead them to make incorrect attributions. These biases include the fundamental attribution error or correspondence bias. This is the tendency to attribute other people's behaviour to internal factors such as personality traits, abilities and feelings. It assumed that people's behaviour correspond to their personal attributes. When explaining their own on the otherhand they tend to attribute it to situational factors. Example, Ofa falls asleep in class. Menge-Obasi attributes his behaviour to laziness. When he fell asleep in class last week, however, he attributed his own behaviour to all-night reading.

Attributional style on the other hand is a cognitive and personality variable that reflect the manner in which individuals explain the causes for the successes and failures in their lives (Peterson and Seligman, 1984).

Attributional style can have a major impact on motivation and attainment because the way we attribute cause affects future expectations. Wilson and Linville (1985) have identified three specific attributional styles: Optimistic, Pessimistic and Hostile.

#### **Optimistic attributional style;**

A person with a optimistic attributional style will attribute negative outcomes to external events and positive outcomes of internal events. This is known as a self-serving attributional style. A student therefore, will attribute failure on an exam to something outside of themselves; perhaps the exam paper was extraordinary had, or the teacher hadn't covered the content in enough depth. Success, on the other hand, would be attributed to their own effort, superior preparation and stable measures such as innate intelligence.

#### Pessimistic attributional style;

A person holding a pessimistic attributional style will tend towards explaining negative outcomes in terms of internal and stable factors. A student who fails an exam, therefore, would attribute their failure to something about themselves and to something they couldn't change (such as their level of intelligence). In the event of success they would attribute the outcome to something external and unstable such as luck

#### Hostile attributional style;

A hostile attributional style tends towards blaming external factors for undesirable outcomes. This blame can manifest itself in hostility towards the external entity seen to be responsible. Student might become hostile towards a teacher they believe is responsible for their failure.

#### THE CONCEPT OF SELF-EFFICACY:

In 1977 Albert Bandura initiated the conception of perceived self-effication in his seminal article entitled "Self-efficacy: Toward a unifying theory of behaviour change" to predict and explain a wide range of human functioning (Yusuf, 2011). He defined self-efficacy as one's belief in one's ability to succeed in specific situations or accomplish a task. For decades, the tenets of self-efficacy have been extended for beyond the bounds of psychology, reaching fields as diverse as health, medicine, social and political change, psychopathology, athletics, business, and international affairs (Pajares, 1996). Two important aspects of this definition warrant further explanation. First, self-efficacy is a belief about one's capability, and as such, does not necessarily match one's actual capability in a specific domain. Research finding have suggested that most individuals actually overestimate their academic capabilities (Bandura, 1997; Pajaras, 1996). Bandura argued that the most useful efficacy judgements are those that slightly exceed one's actual capabilities, as this modest overestimation can actually increase effort and persistence during difficult times. Second important aspect is the idea that individuals make use of their efficacy judgements in reference to some goal, which reflects both the task-and situation – specific nature of efficacy beliefs.

It is not enough for individuals to possess the requisite knowledge and skills to perform a task. They also must have the conviction that they can successfully perform the required behaviour under challenging circumstances. That is to say that, unless people believe they can produce desired efforts by their actions, they have little incentive to act. Efficacy belief, therefore, is a major basis of action, (Artino, 2012). Bandura, (1997), hypothesized that self-efficacy affects an individual's choice of activities, effort and persistence. People who have low self-efficacy for accomplishing a specific task may avoid it, while those who believe they are capable are more likely to participate. Moreover, individuals who feel efficacious are hypothesized to expend more effort and persist longer in the face of difficulties than those who are unsure of their capabilities. He argued that, the tendency for efficacious people to expend more effort and persist longer is because most personal success requires persistent effort. Simply put; low self-efficacy is self-limiting. In order to succeed, individuals need a strong sense of task-specific self-efficacy, tied together with resilience to meet the unavoidable obstacles of life.

Self-efficacy has been thought to be a task-specific version of self-esteem (Lunenburg, 2011). The basic principle behind self-efficacy theory is that individuals are more likely to engage in activities for which they have high self-efficacy and less likely to engage in those they do not (Van der Bijl and Shortridge-Baggett, 2002). According to Maddux (2002), people behave in the way that executes their initial beliefs; thus self efficacy functions as a self-fulfilling prophecy. Self-efficacy has influence over peoples' ability to learn, their motivation and their

performance, as people will often attempt to learn and perform only those task for which they believe they will be successful (Lunenburg, 2011). The theory is clearly illustrated in the following quote by Mahatma Gandhi: "If I have the belief that I can do it, it shall surely acquire the capacity to do it even if I may not have it at the beginning".

Self-efficacy theory postulates that people acquire information to evaluate efficacy beliefs from four (4) primary sources; enactive mastery experiences (actual performances/performance outcome), vicarious experiences (observation of others), verbal persuasion, and physiological feedback.

Enactive mastery experience/performance outcome; According to Bandura (1977), positive and negative experiences can influence the ability of an individual to perform a given taken. If one has performed well at a task previously, he or she is more likely to feel competent to perform well at a similar associated task. Mastery experiences are the most influential source of efficacy information because they provide the most authentic evidence of whether one can muster whatever it takes to succeed. Success builds a robust belief in one's personal efficacy. Failures undermine it, especially if failures occur before a sense of efficacy is firmly established.

Vicarious experiences; People can develop high or low self-efficacy vicariously through other people's performances. A person can watch someone in a similar position perform, and then compare his own competence with the other individual competences. If a person sees someone similar to them succeed, it can increase their self-efficacy. However, the opposite is also true; seeing someone similar fail can lower self-efficacy.

Verbal persuasion; According to Robbins (2004), self-efficacy is also influenced by encouragement and discouragement pertaining to an individual's performance or ability to perform. Also, the level of credibility directly influences the effectiveness of verbal persuasion, where there is more credibility; there will be a greater influence. Although verbal persuasion is also likely to be a weaker source of self-efficacy belief than performance outcomes, it is widely used because of its ease and ready availability.

Physiologically feedback; According to Bandura (1977), people experience sensations from their body and how they perceive this emotional arousal influences their beliefs of efficacy. Some examples of physiological feedback are; giving a speech in front of a large group of people, taking an exam etc. all of these tasks can cause agitation, anxiety, sweaty palms, and/ or a racing heart (Redmond, 2010). Although this source is the least influential of the four, it is important to note that if one is more at ease with the task at hand they will feel more capable and have higher beliefs of self-efficacy.

### STUDENTS ATTRIBUTION STYLE, SELF-EFFICACY AND ACADEMIC ACHIEVEMENT

Several researchers that have studied academic achievement have reported that one of the most successful predictors of academic achievement has been attributional style (Kloosterman, 1984). The dimensions of optimism in relation to attributional style, provides a framework for understanding the relationship between attributions and academic performance. New parallel by Wilson and Linville (1985) were based on the reasoning that, in the first year of college, students might experience a series of academic setbacks common to the transition from one level of schooling to another, such as more challenging courses and a new social environment. The way in which students explain these academic setbacks is crucial. Students who blame their academic differences on internal, stable factors are likely to experience anxiety, put forth little effort, and thus have difficulty in learning new material. Dweck (1996) indicated that encouraging students to attribute their poor performance to unstable causes resulted in both improved effort and performance. She reasoned that students who view their intelligence as a stable trait react to failure very differently from students who view their intelligence as unstable. Therefore, students understanding of their attributional styles may help them improve their academic performance (Metallidou & Vlachou, 2007).

Students that attribute their successes in an academic task to personal efforts and ability are likely to have high self-efficacy. Students with low self-efficacy for learning tend to avoid many learning tasks that are challenging, whereas students with high self-efficacy are more likely to persist with effort at a learning task. This is so because Bandura (2005) opined that people with high self-efficacy – that is those who believe they can perform well – are more likely to view difficult tasks as something to be mastered rather than something to be avoided.

An individual's judgment about why a performance level occurred or personal perception and understanding why they accomplished a specific performance level is self-efficacy dependent. Students with positive/high self-efficacy tend to differ in terms of quality of effort, using more deep cognitive and metacognitive processing strategies than their counterparts with weaker efficacy beliefs (Pintrich & Groot, 1990).

Students that are pessimistic (those in their attributional style tend explain negative outcomes in terms of internal and stable factors), have low self-efficacy. They are likely to possess negative thoughts and think of task's demands as threatening not as challenging and therefore set low objectives for themselves (Aid Suraya & Van Ali 2009). On the other hand, those with optimistic attributional style (self-serving attributional style) are able to initiate their study activities with self-efficacy and develop applicable self-learning strategies and are more likely to progress and achieve better because non-self-regulated students are not really involved in learning process and

consequently they might be subjected to any kind of shallow knowledge and low academic achievement (Pintrich & Schunk, 2002).

The major goal of formal education is to equip students with the intellectual tools, efficacy beliefs and intrinsic interests needed to educate them in a variety of pursuits throughout their lifetime. Strong, resilient efficacy beliefs is more critical for learners to exercise control over their own learning in progressively more independent, technology – mediated learning environments. The manner/ways learners attribute the causes of events in learning situations impact on their motivation and self-belief based on the expectations. Some tend to dismissed success as luck and effort rejected. Weiner, (2000) specified that ascriptions of failure to stable and uncontrollable causes (e.g lack of ability or task difficulty) decrease subsequent expectancies of success, where as attributions of failure to internal causes (lack of ability or effort) maximize negative esteem exacerbates negative mood and related effects following the outcome.

To say the least, students with high self-efficacy generally believe that they are in control of their own lives, that their own actions and decisions shape their lives, while students with low self-efficacy may see their lives as outside their control. According to Ormrod, (2006), students with high self-efficacy show better academic performance than those with low self-efficacy. He also opined that confident students typically take control over their own learning experiences and are more likely to participate in class, and preferred hand-on learning experiences. Those with low self-efficacy typically shield away from academic interactions.

#### INSTRUCTIONAL IMPLICATIONS OF ATTRIBUTION STYLE AND STUDENTS SELF-EFFICACY

- 1. Students choose to engage in tasks that foster the development of their knowledge, stills and abilities in those areas; exert effort in the face of difficulty; and persist longer at challenging tasks. Positive self-efficacy appears to influence quantity of effort. Students high in academic efficacy differ in terms of the quality of their efforts, using more deep cognitive and metacognitive processing strategies than their counterparts with weaker efficacy beliefs.
- 2. Educators are understandably concerned about teaching students knowledge and skills, research in self-efficacy have made it clear that simply possessing knowledge and skills does not ensure learners motivation. Students need both skill and the will to successfully function.
- 3. Attempting to build positive efficacy beliefs through programmes that overemphasize verbal persuasion methods is unlikely to be successful. Understanding of academic self-efficacy, educators are well positioned to develop and implement effective instructional strategies.

- 4. Teachers would do well to implement instructional practices that not only foster knowledge and skill attainment, but also promote the development of the necessary accompanying confidence.
- 5. When students set clear and specific goals, or are given a reasonable goal by a teacher, they are more motivated to perform than students who are given no goal or who are simply told to try their best.
- 6. Optimum level of self-efficacy is slightly above ability, in this situation, students are most encouraged to tackle challenging tasks and gain experience.

## STRATEGIES TO HELP STUDENTS CHANGE UNHEALTHY ATTRIBUTIONS TO IMPROVE SELF-EFFICACY

- 1. Student should be exposed to models that struggle to overcome mistakes before finally succeeding (Brophy, 1998) rather than those who have handled tasks with ease.
- 2. Learners should be guided to set goals that will help them judge their progress.
- 3. Teachers should promote mastery learning to enhance students self-efficacy.
- 4. Provide honest, explicit feedback to increase students efficacy beliefs.
- 5. Teachers should help facilitate accurate calibration of students self-efficacy. Learners must have realistic or accurate perceptions of their ability for a given task. Calibration is a measure of the difference between confidence in performance of specific activities (i.e self-efficacy) and actual performance.
- 6. From an instructional perspective, teacher can use other students as models to demonstrate how to successfully complete a learning task.
- 7. Teachers should adopt motivational strategies that enable learners cope with failures by retracing their steps to discover their mistake or discover another approach (e.g sometimes a teacher just need to tell students "you can do this").
- 8. Make sure that students are not overly aroused and anxious when students overly worry and agonize about their achievement their self-efficacy diminishes (Santrock, 2004).

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