Self efficacy among academically low and high achievers



The present study aims to assess the relationship of mindfulness with selfefficacy among academically low and high achievers as Confidence and belief in achieving goals is a good predictor of success.

Mindfulness is an inherent state of consciousness that differs among individuals for a variety of reasons and that can be changed by individual. The definition of mindfulness points out that it is the awareness that emerges through paying attention on purpose, in the present moment (Kabat-zinn, 2003). It is considered a capacity available to everyone, although individuals differ in their tendency to be mindful (Brown & Ryan, 2003)

When students can learn to be fully present they can increase the quality of their learning performance by being more focused and become better able to deal with stressful situations and through their increased learning they can achieve considerably high grades (Langer, 1993). When a student is mindful he/she becomes able to approach learning situations from a novel perspective while drawing upon previously learned material. They can learn the material and are better able to relate it with their previous knowledge (Langer, Hatem, Joss, & Howell, 1989)

Mindfulness is an element of consciousness that is characterized by a heightened state of awareness in which an individual is attentive to being in the present moment. This enhanced attention to and awareness of current experience or present reality has been shown to be associated with enhanced self-awareness, self-regulated behaviors, and positive emotional states. (Brown, Kirk & Richard, 2003) Attention plays a role in a student's life

to achieve high grades if they pay proper attention at the appropriate time.

To be in a state of mindfulness in reference to academics we mean conscious awareness in which the individual is aware of the context and content of information. Increasing mindful awareness can deepen and broaden the understanding of the context and content of the subjects.

Attention is a complex construct and is related to a variety of cognitive processes (e. g., perception, memory, planning, and speech) (Mirsky, Fantie, & Tatman, 1995; Zimmerman & Leclercq, 2002). Because of its centrality in the education it is of significant importance. The individual have tendency and opportunity to continually process information from various perspectives and it helps in increasing levels of creativity and knowledge. When students use mindfulness in their learning processes they utilize creativity, experience cognitive flexibility and are thus able to better use information and retain that information for a longer period of time (Langer, Hatem, Joss, & Howell, 1989; Thornton & McEntee, 1995). More recent studies in education have revealed a sharp increase in memory and creativity for mindful treatment groups (Langer, 1997).

It has been observed that mindful learners are more mentally present and active (Langer, 1993). They plan what they will learn and the strategies they will use and they control and self-regulate their learning. As readers, they use strategies to organize, elaborate on, and evaluate text (Paris, Wasik, & Turner, 1996). They integrate what they learn in school texts with their personal experiences to actively construct their own meanings and ideas and to use them in flexible ways.

For the reasons that they are more constructive and give meanings to world according to their understandings that's why they are considered to be more real and are original thinkers. More mindful individuals are generally perceived as being more genuine than less mindful individuals and this has been shown to increase positive effect (Langer & Moldoveneu 2000).

Attention is the foundation of better retention of information and better cognitive functions in our life style (Cooley & Morris, 1990), where multitasking has become the norm. Children also are multitasking as they face information overload due to watching hours of television, playing video games, surfing on internet, doing their home works and preparing for their exams etc. Developmental research indicates that children's attention to specific information depends upon the importance they place on the information and that children in later stages of development are better able to logically control their selective attention (Wright & Vliestra, 1975).

In a study of mindfulness practice by Richart and Perkins (2000) in the classroom and took an example of a math lesson from a traditional didactic instructional classroom and a mindful constructivist classroom where students had more freedom to explore answers on their own. Second grade students were given the following problem: There are 26 sheep and 10 goats on a ship. How old is the captain? 88% of the students from the traditional classroom setting answered " 36". Not one student commented that the question did not make any sense although they averaged in the 85th percentile on the tests. In contrast nearly a third of the students in the more mindful constructivist classroom questioned the sense of problem. (p29)

In order for children to learn in the classroom they must be able to focus their attention. Mindfulness affects the grades in such a way that if the student present in the class is not paying attention to the lecture being delivered, then the understanding of the syllabus will not be as easy as it would've been had he/she been paying attention hence clearing concepts and asking questions to understand the confusions hence mindfulness is necessary for achieving academic achievements. The more mindful the student in the class, the better is his achievement.

In one of the studies by Langer, Hefferman, & Keiester, (1988) mindfulness in the workplace showed increase in creativity, decreased burnout and greater enjoyment of tasks Researchers in social psychology have also found benefits of mindfulness in a range of areas including increased creativity, increased productivity in the workplace (Park, 1990), increased attention (Langer & Bodner, 1995), greater liking of a task (Langer et al., in press), and use a lot of effective learning methods (Langer & Piper, 1987; Langer, Hatem, Joss, & Howell, 1989; Langer, 1997).

Education is an area that often seems to prosper in mindlessness.

Traditionally, children have been taught to memorize course content and view what is being offered in the classroom from the teacher's perspective.

Children need to make sense of what they learn instead of solely memorizing facts. In the educational context other mindful manipulations have involved asking students to make material more meaningful for themselves, compared to groups asked to memorize it (Lieberman & Langer, 1997). As students memorize most of the things that they do not understand. They do not pay attention to clear their concepts and just learn it by rote. As we know https://assignbuster.com/self-efficacy-among-academically-low-and-high-achievers/

that material learned by rote memory has no personal meaning. Many problems are not solved because many students think in automatic and habitual ways. This automatic mode of thought is called mindlessness. The cost of mindless thinking is significant because it limits our ability to make good decisions (Langer, 1997)

As discussed earlier that the mindful students retained the information better, for a longer period of time and was able to utilize it in more creative ways. Perspective should be taken into consideration because it brings out better performance (Lieberman & Langer, 1997). Almost all of the facts most of people learned in school were taught to us in a perspective-free way that encourages mindless use of the information because it does not occur to us to question it again. In contrast, information presented in the mindful, perspective-taking condition was learned better by high school students, even though they had to deal with more information. In this way mindful teaching practices can have a mark effect on student learning and it also shows that students who learn mindfully can retain the information better.

Individuals develop patterns of stress response from birth through continued interaction with the environment. Young (1995) acknowledges that educators today recognize that students are suffering from stress in very different ways than a decade ago. The literature indicates that children are under a great deal of external pressure both at home and in school, resulting in many of the same physiological symptoms of distress as adults (Miller & McCormick, 1991). While much of the research on children and stress was conducted two decades ago, available research indicates that environmental stress negatively affects children. In a study seven and eight year olds were https://assignbuster.com/self-efficacy-among-academically-low-and-high-achievers/

studied for two to four years, researchers found that increase in stressful life events were related to decrease in ratings of academic performance, though unrelated to ratings of social behaviors (Kiselica, Baker, Thomas & Reedy 1994). Mindful teachings and mindful learning by the students can decrease this stress.

Academic achievement

Academic achievement is defined as excellence in academic disciplines, in class. Loe & Fieldman, (2007) define academic performance as one's ability to complete class work and homework and they define academic underachievement as problem in learning and applying knowledge including earning poor grades. As this study is in Pakistani perspective so we first need to know the Pakistani educational system.

There are two main types of schools in Pakistan government and private. In both school types, almost always, the formal education system comprises of 5 years of primary, 3 years of middle, 2 years high (Metric/GCSE) and 2 years of higher secondary schooling (FA/FSc. O level/A level). While similar in their educational structures, the two school-types differ in terms of financing and regulation. Public schools are schools that are provided by state and federal funding. Schools are heavily dependent on the state, although in recent years the system has become considerably decentralized and responsibility for the delivery and management of education has shifted to the districts. The government provides free education till primary although government primary schooling is mandated to be tuition-free and there are nominal fees in middle and high school. Most of the Government schools are single-sex

schools (exceptions occur when schools are coeducational up till primary after which they become single-sex). (Monazza, 2009)

Some of the major problems faced by public schools include limited financial resources, poor quality of content and a greater demand for education amongst parents of school-aged children. Pakistan's public schools are overcrowded and underfunded. In Public schools classes are often overcrowded. As Class size is a factor that can cause various difficulties in understanding the lecture. The smaller the class size, the more attention each individual student will receive. In a smaller class, child will get personal attention (Grace, 2007). Class size effect the attention student seeks from the teacher as well as he pays in understanding the concepts. Sometimes due to larger class size, students cannot see the blackboard. They then lose their interest in the lecture being delivered, get engaged in gossips with their friends and other activities. And so by wasting their precious time their grades in class gradually decrease. Another reason is that in our schools generally is no concept of seats rotation due to which the pupils who are less competent always try to sit at the back rows of the class. They become habitual back benchers and the ones who are more competent and capable always try to grab seats in the front rows. As a result teachers pay more attention to them, consequently making them able to remain attentive and engaged in class lessons and activities resulting in higher grades.

Since learning is more personal and responsibility is more on the shoulders of the students, education requires students to monitor and regulate their own learning. In order to achieve goals students should have mindfulness i.

e. paying attention to the studies and self-efficacy beliefs that will lead to https://assignbuster.com/self-efficacy-among-academically-low-and-high-achievers/

achievement of goals. Students can help themselves by focusing more on what they are studying and it would lead enhance their learning performance/meaningful learning and hence they can better deal with stressful situations. Self-efficacy on the other hand involves confidence in achieving goals and it also in return helps decrease academic stress.

Students' perceptions of their abilities contribute to their self-esteem, confidence and ultimately to the level of motivation towards their studies are related to educational achievement. Attention is related to motivational processes (Parasurman, 1998; Zimmerman & Leclercq, 2002). When student is motivated they will form beliefs about what they can do and set goals for themselves and hence pay more attention to their studies and will eventually lead to academic achievement.

Self-efficacy suggests to people's beliefs about their abilities to perform a task successfully at selected levels (Bandura, 1986, 1997). It influence the choices one makes and the courses of action one performs and so Self efficacy can also be explained as a belief in one's capabilities to organize and perform the tasks required to deal with the future situations (Bandura, in press, p. 2). These beliefs of personal proficiency effect behavior in several ways. Individuals typically select tasks and activities in which they feel capable and avoid those in which they do not. Students who are confident in their ability to manage, perform, and regulate their task performance at a designated level of competence are representing high self- efficacy. The construct of self-efficacy helps in explaining the findings that the behavior of individuals is not always perfectly predicted from their capability to complete

a specific task but how a person believes they will perform is often more important.

According to Bandura academic self-efficacy is grounded in self-efficacy theory (Bandura, 1977). According to this theory, it is an "individual's self-confidence in his/her ability to manage and carry out a given course of action to resolve a problem or achieve a task" (Eccles & Wigfield, 2002, p. 110). Academic self-efficacy refers to one's belief that one can successfully achieve at a designated level on an educational task or get a specific academic goal and it is positively related to academic achievement (Bandura, 1997; Eccles & Wigfield, 2002; Elias & Loomis, 2002; Gresham, 1988; Linnenbrink & Pintrich, 2002; Schunk & Pajares, 2002). Self-efficacy theory suggests that academic self-efficacy may differ in strength as a function of problem solving. Some individuals may believe they are most efficient on difficult tasks, while others only on easier tasks.

One's self-efficacy has a great influence over one's choice of action, the kind of effort one spends, and how much one is able to keep that effort in the face of difficulty (Bandura, 1986, 1997; Schunk, 1995). Thus, self-efficacy beliefs have been found to influence students' approach, their academic grades, their engagement in an activity, and how planned they may be while doing a task (Pajares & Johnson, 1996; Pajares & Miller, 1994, 1995).

Therefore, Self-efficacy is supposed to effect performance via the influence on task perception. Each task achievement is assessed as a "threat" or a "challenge," and persons with high self-efficacy beliefs are more likely to evaluate the tasks as a challenge (Chemers, Hu, and Garcia, 2001; Lazarus

and Folkman, 1984; Pintrich and De Groot, 1990). That is, the degree to which a person feels confident about his or her capability to handle a given situation affects whether a certain task is supposed as stressful or threatening, rather than as a challenge. When a task is assessed as a challenge, one is more likely to select an effective coping strategy and to carry on the task.

Self-efficacy also influences performance, confidence and self belief. Individuals with high self-efficacy practice challenging targets (Locke & Latham, 1990), do their best, search for new solutions, and carry on in difficult task; this behavior leads to the improvement of actual ability and to goal achievement (Tuckman & Sexton, 1992). On the other hand, individuals with low self-efficacy practice lower levels of performance. Doubt and uncertainty during task performance weaken their concentration, and they give up easily when faced with difficult tasks. This process adversely affects the development of actual ability, which is reflected in lower achievement (Tuckman & Sexton, 1992).

A research suggests that high self-efficacy produces a feeling of calmness when approaching difficult tasks while low self-efficacy may result in an individual perceiving a task as more difficult than reality, which, in turn, may create anxiety, stress and a narrower idea on how best to approach the resolving of a problem or activity (Eccles, 2005).

Students' self-efficacy beliefs also seem to be considerably associated to the stress and their academic performance (Lane & Lane, 2001). Therefore, lesser the stress better will be the performance and more a student will be

motivated and more the stress the poor will be the performance and student will be less motivated. Moreover researches show that self-efficacy beliefs have positive effects on student motivation and achievement (Pintrich & De Groot, 1990; Zimmerman, Bandura & Martinez-Pons, 1992; Pajares & Miller, 1994). Self-efficacy beliefs can determine how people feel, think, motivate themselves, and behave. Consequently motivation is improved when students recognize that they are making improvement in learning or feel they are competent enough of handling the task. In turn, as students make effort to do the tasks and become more skillful they develop a sense of selfefficacy for performing well (Schunk, 1991). Self-efficacy beliefs play a key role in the self-regulation of motivation (Bandura 1994). According to Bandura, people motivate themselves and they form beliefs about what they can do, they set goals for themselves and plan courses of action designed to understand valued futures. Individuals who have a high sense of self-efficacy for accomplishing a task work harder and persist longer when they come across difficulties, whereas those who do not feel efficacious may give up or avoid a task (Schunk 1991). .

Those who are more competent seem to set higher performance goals, get rid of faulty strategies more quickly, find out solutions in the face of difficulties and work more accurately than those with lower efficacy. Students who are confident in their capability to organize and achieve task performance are showing high self- efficacy. Whereas, students who are uncertain about their ability to successfully complete a task often participate less readily, do not work as hard, and give up quickly when faced with difficulty. Due to repeated failures in the classroom, it was hypothesized that

students may feel that they cannot adequately perform certain behaviors and tasks to achieve a desired outcome. The resultant negative outcome may be lower academic self-efficacy. (Bong & Skaalvick, 2003; Eccles & Wigfield, 2002; Elias & Loomis, 2002; Gresham, 1988; Schunk & Pajares, 2002; Wentzel, 1999).

However, negative self-efficacy could also disappoint a student and cause a student to fail in their personal or professional activities. Thus, students may face stress which may negatively impact academic achievement. Self-efficacy and stress are closely related concepts. According to a research by Zajacova, Lynch & Espenshade investigates the joint effects of academic self-efficacy and stress on the academic performance. The survey was used as an instrument to measure the level of academic self-efficacy. The results suggest that academic self-efficacy is a more healthy and consistent predictor than stress of academic success.

Self-efficacy is a better predictor of academic success than stress. Studies suggest that both academic stress and self-efficacy have some effect on academic outcomes, and there is some evidence that self-efficacy may be a better predictor (Pintrich and De Groot, 1990). Self efficacy and stress joint influence as determinants of academic success in schools/college. In a study by Hackett, Betz, Casas, and Rocha-Singh, (1992) identified both stress and academic self-efficacy as predictors of good grades. Good grades were associated with low perceived stress and high self-efficacy.

In case of education, self-efficacy is seen to be related with effort, persistence and achievement. In one of the research by Chemers, Hu &

Garcia (2001), shown that children with higher self-efficacy strived for longer periods and used more useful problem solving strategies than students with lower self-efficacy.

Therefore, self-efficacy changes the way a student works in order to get good grades and becomes more experienced and accurate about getting good grades in class and they keep on comparing themselves with their peers. Furthermore, classrooms that allow for extensive social comparisons (with the performance of other students) tend to lower self-efficacy of students whose performances are viewed as deficient when compared to others.

People with low self-efficacy may believe that things are tougher than they really are, a belief that promote stress, narrow vision of how best to solve a problem. High self-efficacy, on the other hand, helps to create feelings of calmness in approaching difficult tasks and activities. As a result, self-efficacy beliefs are strong determinants and predictors of the level of achievement that individuals finally attain.

The relationship between gender and self efficacy has also been a focus of the previous researches. It is assumed that Girls often outperform than boys. However, it is reported that males are tend to be more confident than females in academic areas related to mathematics, science and technology despite the fact that achievement differences in these areas are diminishing (Fuller, Hua & Snyder, 1994). While in areas related to language, arts both male and female students' exhibits similar confidence and this is also a truth that girls typically are high achievers (Pajares, in press)

Keeping the above literature in view the rationale behind this research is to find the relationship between mindfulness and self efficacy among academically low and high achievers. There are a number of factors that may affect student's achievement. These may include personal characteristics such as confidence in their abilities and attention they pay while studying. Confidence and belief in achieving goals is a good predictor of success. An increased academic self-efficacy may encourage the student's confidence in utilizing his/her abilities to understand the course content, and achieve high grades. Simultaneously being mindful in the classroom can increase student's ability to keep their attention which increases learning and academic performance. Moreover study will also allow the readers to understand that high achieving students might have different motivation to study than low achievers and that they are able to organize their study materials and study habits more efficiently. Active and independent engagement in the learning process might be more favorable to achievement than a passive and instructor dependent one. Although a lot of work is done on self efficacy and mindfulness in the education field but the lack of research in reference to Pakistan provided a rationale for examining the relationship between mindfulness and self efficacy. The research also investigates that which of these factors are characteristics of high-achieving and low-achieving students in the hope that the outcomes can be utilized to enhance student performance in the future.

HYPOTHESES

On the basis of the literature review the hypotheses formulated are:

There exists a positive/significant correlation between mindfulness and selfefficacy among students.

Students who are academically high achievers will perform high on mindfulness and self efficacy as compared to academically low achievers.

Method

The present study was conducted to find out the Relationship between mindfulness and self-efficacy among academically low and high achievers

Participants

In the present study "convenient sampling technique" was used. The sample consisted of 70 students out of which 35 were girls and 35 were boys within the age range of 13 -16 studying in 9th and 10th grades at government schools. Co relational research design was used.

Inclusion criteria

The participants selected for the research were low and high achievers. Above 70% were considered as high graders and below 50% were considered as low graders. Girls who were above 70% were taken as high achievers and boys who were below 50% were taken as low achievers. The students of age ranging from 13-16 years were included in the study. The sample was collected from government schools to maintain the consistency.

Exclusion criteria

Students who were average i. e. between 50% – 70% were excluded from the study. Also girls below 70% and boys above 50% were excluded from the study. Students suffering from any physical and mental disability to answer were also not part of the study.

Instruments

The data was gathered by the use of the mindfulness based self efficacy scale and Toronto mindfulness scale.

Demographic data sheet

Demographic questionnaire (see appendix C) was designed by the researcher for this study to provide descriptive information about the participant's name(optional), age, gender, grade, school, hobbies, their grades in last class, their personal evaluation of grades and their participation in co curricular activities and in sports.

Academic achievement

The academic achievements of the child were screened through his/her examination record in the previous class. Academic achievement was accessed in form of grades that student got. The divisions of grades according to the percentages are given below:

Grade A Above 70%

Grade B 60-70%

Grade C 50-60%

Grade D 40-50%

Mindfulness Based Self Efficacy Scale (Cayoun & Freestun 2004)

Self efficacy was measured by mindfulness based self efficacy scale (See Appendix D)

The MSES is a 35-item scale and consists of 7 subscales of self efficacy, each containing 5 items. Behavior (items 1, 8, 15, 22, 29), Cognition (items 2, 9, 16, 23, 30), Interoception (items 3, 10, 17, 24, 31), Affect (items 4, 11, 18, 25, 32), Interpersonal (items 5, 12, 19, 26, 33), Avoidance (items 6, 13, 20, 27, 34), Mindfulness (items 7, 14, 21, 28, 35). To calculate self-efficacy, 18 items must be scored in reverse. These are: 4, 5, 6, 8, 11, 14, 16, 17, 22, 23, 25, 26, 27, 28, 29, 30, 34, 35. High scores indicate high self efficacy and low scores indicate the low levels of self efficacy. The cronbach's alpha reliability of the scale was 0. 71. There was no cultural bias item in the questionnaire. This scale is valid and reliable.

Participants were asked to evaluate their perception of self-efficacy on a 5-point Likert-type scale (0= not at all, 4= completely). The estimated time to complete the instrument was 10-15 minutes approximately. Scale was administered in English. No special permission was taken from the researcher as questionnaire was easily available on internet.

Toronto mindfulness scale (Lau, Bishop, Segal, Buis, Anderson, Carlson, Shapiro, Carmody, Abbey, Devins, 2006)

Toronto mindfulness scale (TMS) (See Appendix D) consists of 13-items. This instrument has two-factors Curiosity and Decentering. For the curiosity score following items are summed 3, 5, 6, 10, 12, 13. For the Decentering score https://assignbuster.com/self-efficacy-among-academically-low-and-high-achievers/

following items are summed 1, 2, 4, 7, 8, 9, 11. All items were written in positively keyed direction. The cronbach's alpha reliability of the scale was 0.

The items of Factor 1 (Curiosity) reflect an attitude of wanting to learn more about one's experiences e. g. "I was curious to see what my mind was up to from moment to moment". The items of Factor 2 (Decentering) reflect a shift from identify personally with thoughts and feelings to relating to one's experience in a wider field of awareness e. g. "I was aware of my thoughts and feelings without over identifying with them". Each item was rated on 5 point likert scale (0= not at all, 4= very much). The estimated time to complete the instrument was 8-10 minutes. Questionnaire was easily available on internet. There was no cultural bias item in the questionnaire. Scale was administered in English and is a reliable and valid scale.

Procedures

Before starting the data collection, a pilot study was conducted on a sample of 7 students. It was done to check the reliability and validity of the instruments and to determine the time needed to complete the instruments to assess the self efficacy and mindfulness in students by the researcher. The results of the present study indicated that the reliability of MSES was .

(See Appendix E) and the reliability of the TMS was . 72 (See Appendix E). This indicated that the scales are reliable.

After doing the pilot study the data was collected from 35 girls and 35 boys.

The research was conducted in F. G Girls' Public High School Lalazar, F. G https://assignbuster.com/self-efficacy-among-academically-low-and-high-achievers/

Girls' High School No 2 Iqbal Road and F. G Technical School for Boys. All the schools were taken from Rawalpindi.

Participation was voluntarily and data was collected in the classrooms. After the approval of the principal students were contacted. Participants were then provided with a consent form (see appendix A). In order to participate in the study it was required that they confirm consent by signing it. After participants agreed to the consent form, instructions were provided followed by an administration of both the MSES and TMS scales.

Data collection was completed in about six or seven days. Average time taken by an individual was 20-25 minutes. It took about 30-35 minutes in each class due to instructions given to children, in distribution and collection of questionnaires. A little difficulty was faced by the students to comprehend the questions like "I was more invested in just watching my experiences as they arose. Than in figuring out what they could mean". But later on it was resolved by the researcher.

The data was analyzed with the help of statistical package for social sciences (SPSS Version 13. 0). For the purpose of analyzing Pearson correlation was used. And to see the difference of low and high achievers regarding variables of self efficacy and mindfulness in data independent sample t-test was applied.

Results

The study was conducted to find out the relationship between self efficacy and mindfulness among low and high achievers. A sample of 70 students (both girls and boys= 35) within age range of (13-16). The sample was https://assignbuster.com/self-efficacy-among-academically-low-and-high-achievers/

collected from 3 government schools of Rawalpindi and questionnaires were administered.

Then the data collected was analyzed with statistical package for social sciences (SPSS Version 13. 0). Descriptive statistics were computed for demographic characteristics of the participants. For this purpose Pearson correlation was used. And also to see the difference of low and high achievers regarding variables of self efficacy and mindfulness in data independent sample t-test was applied. Cross tabulation was also applied on the academic achievement of the students according to the ranges of self-efficacy.

Table 1

Frequency and Percentage of participants according to demographic variables of gender, age, grade and academic achievement (N= 70)

Variable

Label

Frequency(f)

Percentage (%)

Gender

Girl