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## Self-Efficacy: Practicability in Students' Scholastic Performance

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**Abstract.** Research was conducted to know about the prediction of self-efficacy and its effect on scholastic performance of urban and rural students. Self-Efficacy is the belief of students on their abilities and the amount of effort to arrange and organize for the goal achievement. The objective of the study was to compare self-efficacy and scholastic performance across schools location. All students of 5 Government Higher Secondary Schools for Boys covered the study sample. The data was collected from 488 students of Government Higher Secondary Schools for Boys with the help of 19 items self-efficacy questionnaire. The data was analysed by using *t*-test, analysis of variance and post-hoc for multiple comparison with the help of Statistical Package for Social Sciences (SPSS-17). The difference was found between self-efficacy and scholastic performance across schools' location. Recommendations were drawn to enhance self-efficacy for students' motivation and success in their career. Self-efficacy of rural students was high and the scholastic performance of these students was not good. It is discussed that work must be done to enhance and improve the scholastic performance of the rural students.

**Keywords:** Efficacy, Self-efficacy, Motivation, Scholastic Performance

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## INTRODUCTION

### INTRODUCTION

Motivation is the core area in educational psychology. The man is trying to investigate and inquire it since man's existence on earth. Motivation becomes more important when the educators face different types of problems while the students react in different situations in the process of teaching and learning. This may be on the basis of difference in energy level and performances where they want to work or not ready to work; are the results of the concept of motivation (Rasheed, 1997).

Motivation is purposive and dynamic in nature. This is the base for the satisfaction of behaviour and activity. If there is no proper motivation, then it is not easy to achieve the level of satisfaction. Motivation works like a charge to complete the activities or to perform the job better. For the purpose to make the environment better and to serve the organism in a best way; it is important to know deeply the properties of human behaviour (Arif, 1992).

To know in depth the scope and real concept of human behaviour, it is necessary to explore the level of motivation. Without proper knowledge about the level of motivation, it is not possible to comprehend the above phenomena. To know properly that how the person is to strive and act, it requires making the proper evolution of the concepts and theory of motivation. The visualization in totality of personal and non-personal experiences requires full understand the importance and the psychology of motivation (Crowl, Kaminsky, & Podell, 1997).

Maslow (1987) believed that first human requires fulfilling its basics needs like food, water and shelter. After this human require security and then recognition and appraisal. Finally, in short, he made a hierarchy of that from basic to self-actualization. Achievement motivation based on the characteristics of personality, it's the product of the two needs which have a conflict: First is about the need to gain or achieve success and that is to prevent from failure. The theory of the locus of control classify and differentiate on the basis of the belief one have that the control of event and their live basis on what. While studying attribution theory that somehow it is divided into internal and external attributes which are the cause of gaining success or some time failure.

Bandura (1977) gave difference in motivation on the basis of efficacy expectation and self-efficacy. Efficacy expectations can be explained that of the personal belief one has the capacity to achieve the goal and consistent in achieving the goal with the help of required effort.

In self-efficacy, people judge their capabilities for the organization and execution of their efforts to gain the desired and required performance. It is the most important concept in human behaviour and performs a key role in the selection of making the choice and also it gives explanation and answers to the questions that how human effort will be to face the challenges and complete the task in the face of living life. This also give a detail explanation that what will be the degree of anxiety and level of confidence while performing a job of some human (Pajares, 1996). This is very important concept because it gives explanation that even with the same knowledge, abilities and skills human are still different in their behaviour and show different behaviour, it explains that with the help of our belief it is easy to predict capabilities that one possess. It means that to complete the task competently require self-efficacy on one side along with the skills and knowledge on the other side (Bandura, 1986). Teachers' responsibility is to transfer and transform knowledge to make students' personalities harmonized and balanced to enable them to cope all situations of life by giving awareness about their potentials and skills.

In Pakistan, the quality of teaching has been probed frequently. The general concept about teaching is that teachers usually use outdated and non-conducive teaching methods which are not helpful for students' personality development. The teacher role is not only to embed learnt concepts into practice but also to make them conscious about their own capabilities and potentials. This target can be achieved if teachers make them efficacious about required amount of effort to complete the task within time (Khan, 2011).

Generally, the students think that rote memorization and reproduction of learned concepts is demanded by them in examination. So they put all effort just to take good grades. There is a need to change such thinking and to shift it to make them efficacious. Efficacy is the skill to achieve a desirable or intended result. Self-efficacy is a belief on capacity to execute behaviors needed to be successful for specific performance achievements (Aggarwal, 2014).

Self-efficacy is a person's sureness or the capacity for execution to achieve the goals and accomplish tasks. It is actually the confidence that individual has with the help of which he can cope different situations successfully. This is striving which one person possess to reach and achieve the goals. It is the energy that required spending for the goal achievements. It is the work with the help of intelligent guesses to perform the work and derive the results and conclusion (Bandura, 1977).

Bandura (1977) gave the idea of self-efficacy for the first time. His first publication was "Self-efficacy: Towards a unifying theory of behavioural change". Later Bandura continues his work and makes the link of cognitive development with the social element. Bandura explains in detail about the effect of environment on behavioural construct. In other publication "Self-efficacy: the exercise of control", Bandura (1977) highlighted the phenomenon with the theory of personal which worked concurrently to regulate the human well-being and attainment.

## METHODS

From 17, 5 Government Higher Secondary Schools for Boys took part in the study. Purposive sampling technique was applied to address study objectives and to draw comparison on self-efficacy (SE) and scholastic performance (SP) between Grade XI students of science and arts groups studying in urban and rural Government Higher Secondary Schools for Boys. Out of 5, 3 Government Higher Secondary Schools for Boys (GHSS A, B & C) were located in urban area and 2 Government Higher Secondary Schools for Boys (GHSS D & E) were in rural area. Out of 488 Grade XI students, 320 and 168 students were studying in urban and rural Government Higher Secondary Schools respectively having Pre-Medical, Pre-Engineering, Computer Science and Humanities groups. The students had different social background and diverse abilities.

The Departmental Board of Studies (DBS) gave approval after the thorough review of study by supervisor. After the approval of the study from the Board of Advanced Study and Research (BASAR), permission was granted to conduct the study. After getting approval, the students were approached to collect the data.

Adapted 19 items questionnaire developed by Khan (2001) was validated by experts of the field. 44 students took part for try-out of the study to check its reliability (0.842) that was not included in actual sample. Prior filling the questionnaire; the purpose of the study, confidentiality of data, freedom of withdrawal and

code of ethics were explained to them. Demographic sheet was taken from sample students. The questionnaire had 9.5 cut-off score.

Collected data with the help of questionnaire was tabulated and compiled. For marking the questionnaire 00 was given to wrong answer and 01 to correct answer. *t*-test, analysis of variance (ANOVA) and Post-hoc multiple comparison were applied. Significance was tested at .05 level as the criterion for the rejection of null hypotheses. Statistical Package for Social Sciences (XXIII) was used for statistical analysis.

### Results and Discussion

**Table 01: Significant difference in mean scores of Grade XI students on self-efficacy**

Groups	School	M	SD	t	P
Pre-Medical	GHSS A & E	16.91 & 18.36	2.22 & 1.21	-2.76	.00
	GHSS B & E	17.36 & 18.36	1.60 & 1.21	-2.39	.02
	GHSS C & E	16.04 & 18.36	1.35 & 1.21	-5.89	.00
Pre-Engineering	GHSS A & E	16.04 & 18.33	2.59 & 0.89	-3.96	.00
	GHSS B & E	16.11 & 18.33	2.82 & 0.89	-3.15	.00
	GHSS C & E	15.82 & 18.33	1.85 & 0.89	-6.41	.00
Computer Science	GHSS B & D	16.39 & 18.24	2.04 & 1.47	-4.14	.00
Humanities	GHSS A & E	15.62 & 16.50	3.22 & 1.82	-1.86	.06
	GHSS A & D	15.62 & 18.14	3.22 & 0.93	-5.53	.00
	GHSS B & E	10.59 & 16.50	2.71 & 1.82	-14.25	.00

\* The mean difference is significant at the 0.05 level.

The independent-samples test was applied to investigate the difference between mean scores of all groups of Grade XI students. The results show statistical significant difference between the self- efficacy scores among rural and urban schools across science and arts groups except one humanity group of one rural (GHSS E) and urban (GHSS A) school that shows statistical non-significant difference. It means that there was a significant difference between mean scores of rural and urban Government Higher Secondary Schools for Boys. Students studying in rural Government Higher Secondary Schools have high self-efficacy as compared to urban schools' students.

**Table 02: Significant difference in mean scores of Grade XI students of Urban and Rural schools on self-efficacy**

Descriptive Statistics				t-test for equality of means			
SE	N	M	SD	t	df	P	MD
Urban Schools	320	15.08	3.30	-10.31	485.99	.00	-2.3
Rural Schools	168	17.44	1.73				
SP Urban Schools	320	650.72	103.75	1.93	394.57	.05	17.1
Rural Schools	168	633.59	86.95				

\* The mean difference is significant at the 0.05 level.

To examine the mean difference between rural and urban Grade XI students of Government Higher Secondary Schools for Boys, *t*-test was used. The results show statistical significant difference between self-efficacy scores among rural and urban schools across science and arts groups. On contrary, statistical non-significant difference was found between scholastic performance scores. This shows that rural Grade XI students are highly efficacious and know their potentials irrespective of their location. But on the other hand, urban Grade XI students show better in academics.

**Table 03: Post Hoc Analysis among Pre-Medical group of Grade XI students of all schools on self-efficacy**

(I) Groups	(I-JM)	MD (I-J)	SE	P
GHSS A	GHSS E -	1.44	.49	.04
	GHSS B	-1.00	.48	.24
	GHSS C	2.31	.50	.00
GHSS E	GHSS A	1.44	.49	.04
	GHSS B	1.00	.48	.24
	GHSS C	2.31	.50	.00

Post hoc was applied to analyze multiple comparison of Pre-Medical group of rural and urban schools on self-efficacy. With reference to each groups of students of GHSS A, GHSS B, GHSS C and GHSS E; the results show statistical non-significant difference between GHSS B and GHSS E (.24). With reference to each groups of

students of GHSS A, GHSS C and GHSS E; the results show statistical significant difference between GHSS A and GHSS E (.04); and GHSS C and GHSS E (.00).

**Table 04: Post Hoc Analysis among Pre-Engineering group of Grade XI students of all schools on self-efficacy**

(I) Groups	(I-JM)	MD (I-J)	SE	P
GHSS A	GHSS E	-2.29	.66	.00
GHSS B	GHSS E	-1.93	.61	.01
GHSS C	GHSS E	-2.50*	.62	.00
GHSS E	GHSS A	1.93*	.61	.01
	GHSS B	2.29*	.66	.00
	GHSS C	2.50*	.62	.00

\* The mean difference is significant at the 0.05 level.

Post hoc was applied to analyze multiple comparison of Pre-Engineering group of rural and urban schools on self-efficacy. With reference to each groups of students of GHSS A, GHSS B, GHSS C and GHSS E; the results show statistical significant difference between GHSS A and GHSS E (.00); GHSS B and GHSS E (.01); and GHSS C and GHSS E(.00).

**Table 05: Post Hoc Analysis among Humanities group of Grade XI students of all schools on self-efficacy**

(I) Groups	(I-JM)	MD (I-J)	SE	P
GHSS A	GHSS D	-2.51	.57	.00
	GHSS E	-.87	.42	.25
GHSS B	GHSS D	-7.54	.57	.00
	GHSS E	-5.90	.43	.00
GHSS C	GHSS D	-3.82	.73	.00
	GHSS E	-2.18	.63	.00
GHSS D	GHSS A	2.51*	.57	.00
	GHSS B	7.54	.57	.00
	GHSS C	3.82*	.73	.00
GHSS E	GHSS A	.87	.42	.25
	GHSS B	5.90	.43	.00
	GHSS C -	2.18*	.63	.00

\* The mean difference is significant at the 0.05 level.

Post hoc was applied to analyze multiple comparison of Humanities group of rural and urban schools on self-efficacy. With reference to each group of students of GHSS A and GHSS E, the results show statistical non-significant difference between GHSS A and GHSS E (.25). With reference to each groups of students of GHSS A, GHSS B, GHSS C, GHSS D and GHSS E; the results show statistical significant difference between GHSS A and GHSS D (.00); GHSS B and GHSS D (.00); GHSS B and GHSS E (.00); GHSS C and GHSS D (.00); and GHSS C and GHSS E (.00).

**Table 06: Post Hoc Analysis among Pre-Medical group of Grade XI students of all schools on Scholastic Performance**

(I) Groups	(I-JM)	MD (I-J)	SE	P
GHSS A	GHSS E	-73.51*	22.44	.00
GHSS B	GHSS E	-30.35	22.22	.52
GHSS C	GHSS E	26.03	23.19	.67
GHSS E	GHSS A	73.51*	22.44	.00
	GHSS B	30.35	22.22	.52
	GHSS C	-26.03	23.19	.67

\* The mean difference is significant at the 0.05 level.

Post hoc was applied to analyze multiple comparison of Pre-Medical group of all schools on scholastic performance. With reference to each groups of students of GHSS A and GHSS E, the results show statistical significant difference between GHSS A and GHSS E (.00). With reference to each groups of students of GHSS B, GHSS C and GHSS E, the results show statistical non-significant difference between GHSS B and GHSS E (.52); and GHSS C and GHSS E (.67).

**Table 07: Post Hoc Analysis among Pre-Engineering group of Grade XI students of all schools on Scholastic Performance**

(I) Groups	(I-JM)	MD (I-J)	SE	P
GHSS A	GHSS E	3.66	26.78	.99
GHSS B	GHSS E	-49.28	24.81	.20
GHSS C	GHSS E	65.52	25.11	.05
GHSS E	GHSS A	-3.66	26.78	.99
	GHSS B	49.28	24.81	.20
	GHSS C	-65.52	25.11	.05

\* The mean difference is significant at the 0.05 level.

Post hoc was applied to analyze multiple comparison of Pre-Medical group of all schools on scholastic performance. With reference to each groups of students of GHSS A, GHSS B, GHSS C and GHSS E; the results show statistical non-significant difference between GHSS A and GHSS E (.99); GHSS B and GHSS E (.20); and GHSS C and GHSS E (.05).



**Table 08: Post Hoc Analysis among Humanities group of Grade XI students of all schools on Scholastic Performance**

(I) Groups	(I-JM)	MD (I-J)	SE	P
GHSS A	GHSS D	-15.13	14.16	.82
	GHSS E	-54.54	10.64	.00
GHSS B	GHSS D	-10.24	14.24	.95
	GHSS E	-49.65	10.75	.00
GHSS C	GHSS D	39.61	18.34	.19
	GHSS E	.207	15.78	1.00
GHSS D	GHSS A	15.13	14.16	.82
	GHSS B	10.24	14.24	.95
	GHSS C	-39.61	18.34	.19
GHSS E	GHSS A	54.54	10.64	.00
	GHSS B	49.65	10.75	.00
	GHSS C	-.207	15.78	1.00

\* The mean difference is significant at the 0.05 level.

Post hoc was applied to analyze multiple comparison of Humanities group of all schools on scholastic performance. With reference to each groups of students of GHSS A, GHSS B, GHSS C, GHSS D and GHSS E; the results show statistical non-significant difference between GHSS A and GHSS D (.82); GHSS B and GHSS D (.95); GHSS C and GHSS D (.19); and GHSS C and GHSS E (1.00). With reference to each groups of students of GHSS A, GHSS B and GHSS E; the results show statistical significant difference between GHSS A and GHSS E (.00); GHSS B and GHSS E (.00).

#### Discussion

Research was aimed at predictive analysis of self-efficacy and its impact on students' scholastic performance. Self-efficacy refers to the individual's ability to perform the task with personal belief in their competence to shape and execute the extent of effort and performance required to succeed in life. With the help of self-efficacy individuals become aware about their potentials to accomplish the task with in time. The study objective was to compare self-efficacy and scholastic performance across schools location. Collectively, a comparison of urban and rural schools across science and arts groups on self-efficacy, rural schools' students

are highly efficacious as compared to urban schools' students. Furthermore, even comparing all urban and rural schools' students, rural schools' students show better behaviour on account of self-efficacy. On contrary, academically urban schools' students secured good marks. Results showed different facts that in one hand rural schools' students are better in self-efficacy while urban schools' students are better in academic performance.

In multiple comparison of self-efficacy and scholastic performance, Pre-medical, Computer Science and Humanities groups, sometimes statistical significant and sometimes statistical non-significant difference was found. The results with reference to groups on self-efficacy and scholastic performance show the variations. Post-hoc analysis among Pre-Engineering groups of urban and rural Grade XI schools' students, on self-efficacy and scholastic performance shows significant difference. It means that there is no significant difference between self-efficacy and scholastic performance across schools' location.

The study conducted by Aslam and Ali (2017) on the effect of self-efficacy on students' success in education shows that learners with high educational self-efficacy were well in academic achievement as related to the students with low self-efficacy. Significant difference was found by Pavani and Agrawal (2015) between high self-efficacious students and their academic achievement. High self-efficacious students fix higher goals to achieve and are able to face the complex situation and to work in a stress as relate to the pupils with low self-efficacy as they will be unable to do the same (Triantoro and Ahmad, 2013). Self-efficacy contributes to academic efficacy (Herrera, Al-Lal and Mohamed, 2020; Yokoyama, 2019; Addison, Wade, and Benjamin, 2018; Tiyuri et al., 2018; Akram and Ghazanfar, 2014; Zimmerman & Bandura, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992).

Use of cognitive and meta-cognitive strategies to get good grades in classroom is more frequent in efficacious students (Pintrich & Garcia, 1991). Academic self-efficacy contributes to secure good grades, in-class seat work and home work. Self-efficacy plays a facilitative role in the process of cognitive engagement that raises the self-efficacy beliefs and, thereby, higher performance is acquired to be successful in the classroom (Pintrich & De Groot 1990). Self-efficacy is the most important variable in performing a given activity. It is the belief of a person to perform the assign task for the achievement of the goal (Bandura, 1986). Self-efficacy intervene the effect of dynamic learning approaches on the outcome of the learner. This shows that self-efficacy significantly controls self-reliance of individual to proceed for the best learning outcomes or scholastic performance (Kustyarini, 2020). Self-efficacy is related to students' academic achievement so institution must have to work on the improvement of students' academic self-efficacy (Matovu, 2021).

Research on self-efficacy and achievement suggests that performance in schools is improved and self-efficacy is increased when students a) adopt short-term goals so it is easier to judge progress; b) are thought to use specific learning strategies such as outlining that help them focus attention; and c) received rewards based on performance, not just engagement, because performance rewards signal increasing competence (Graham & Weiner, 1996). Sensitivity to context of self-efficacy belief makes it an ideal vehicle for the exploration of differences in perception of competence as a function of developmental factors (Wighfield & Karpathian, 1991).

To have proper understanding about how to develop the academic self-efficacy belief, it is important to know the different factors that how students use efficacy at various age and school level to get good marks. Self-efficacy plays a very important role in the life and development of the students. Self-efficacy is a trigger of one's dispositions by which human know their strengths. The subject teacher has to guide the students to know their capabilities and potential to excel in life. Teachers are responsible to make students' aware about their abilities to achieve goals successfully which ultimately enhance students' self-efficacy.

Self-efficacy is the individual confidence on his competences to execute the level of energy required to surpass in life. This is general perception that highly efficacious students secured high marks in examination but results may differ from this myth. As study shows that efficacious students secured low and low efficacious students received good grades. This may be because of their unawareness about potentials. So, proper awareness may be given to them to boast in life by giving them lectures on self-efficacy and its relevancy to set and attain achievable life targets. Students-centred approaches to cater their inner may be the good strategy applied by the teachers. Other techniques to make them aware about their efficacy are to arrange curricular, co-curricular and extra-curricular activities.

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