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IMPACT OF STUDENTS' ATTITUDE ON ACADEMIC ACHIEVEMENT AT SECONDARY SCHOOL LEVEL

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ABSTRACT
The academic achievement of the students is a major factor to evaluate the success of teaching-learning process. To achieve this objective the attitude of students can play a vital role. Moreover, teachers have notable contribution to nourish positive attitude of the students which enhance learning capabilities. The primary objective of this study was Impact of students' attitude and academic achievement at secondary school level. The secondary school students from district Lahore were the population of this research while 429 respondents were selected as sample through simple random sampling technique. The study was quantitative based on correlational research design. For collection of data questionnaire self-administered questionnaire was used through survey method. The Statistical Package for Social Sciences (SPSS) was administered to analyze the research questions. The findings of the study indicated that there was a significant correlation of students' attitude with academic achievement. Further, there was a significant effect of students' attitude on their academic achievement. The study is beneficial for the successful completion of teaching learning process by adopting innovative strategies through students' positive attitude.
Keywords: *Academic Achievement, Students' Attitude, Secondary Level*

INTRODUCTION
Academic achievement is very important, especially in today's educational environment. Accomplishment is emphasized in schools from the very beginning of formal schooling. As a result, a key duty of the educational system at the school level is to set the scene for young accomplishment. In the sphere of science and technology, a mathematical breakthrough is regarded as the barometer. Math is the father of all sciences, and it has a special place in the school curriculum (Melad, 2022). It is seen as a vehicle for teaching a kid to think, reason, analyze, and speak rationally, which applies to any topic that requires analysis and reasoning. Math achievement aids in the development of quantitative skills in learners, who then conduct experiments with numbers and forms of geometry, formulate hypotheses and test them, generalize the findings with proof, make decisions using Mathematics, develop precision, rational and analytical thinking, reasoning, problem-solving competence, positive attitudes, and aesthetic sense (Bray & Spaulding, 2014; Nja et al., 2022).
Achievement is the result of the interplay of three factors: attitude, preparedness, and learning opportunity. Math is the foundation of the Science and Technical Education Pyramid, on which the whole superstructure of technological advancement is constructed. Mathematics is the cornerstone of the huge superstructure of science and technical education, which is essential for our economic growth, social structure modernization, and democratic institutions to operate effectively. Scientific progress and technological advancements are evergreen buzzwords in all nations across the world. In the aforementioned cases, mathematics plays a significant role (Sölpük, 2017). The Attitude includes an open mind, the ability to reason

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rationally and dispassionately, the willingness to recognize facts, no matter how uncomfortable or distasteful they may be, and ultimately, an understanding of one's own reasoning power's limitations. The development of a society devoid of poverty, starvation, disease, and other ills like violence, exploitation, and oppression is another goal of scientific and mathematical ability and performance. Economic and natural progress can only be achieved with the help of mathematicians (Bray & Spaulding, 2014: Gbore & Daramola, 2013).

Attitude is the result of a complex interaction of inherited and environmental factors that result in predispositions or talents. Attitude is another example of skill existing in the talented group to such a much higher degree than its likely expression in adult success, certain but not all qualities shared by persons who thrive later in scientific effort may be identified to some degree. Mostly, it intends to evaluate the capabilities of the students in various disciplines (Meral, 2019; Verešová & Mala, 2016).

Research Objectives

1. To analyze the role of teachers to increase students' attitude towards learning.
2. To identify the relationship between students' attitude and academic achievement.
3. To find out the effect of students' attitude on academic achievement.

LITERATURE REVIEW

There has been very little research done on anxiety and how it affects academic performance, particularly in teacher preparation programmers. The more anxious a student is, the worse his or her scores will be in statistics, mathematics, and medicine, according to a study that found a negative and substantial correlation between test anxiety and academic performance. Students in the arts and sciences experienced significantly different levels of anxiety, according to previous research, and this worry is associated with low academic achievement (Verešová & Mala, 2016). It has been shown that academic success has a negative relationship with anxiety, emotional maturity, and social maturity, whereas academic success has a negative relationship with anxiety (Kpolovie et al., 2014). A study of anxiety levels found a substantial difference between male and female successful (passing) scientific students, but not a difference between male and female failed students. The levels of anxiety among youngsters in rural and urban areas, as well as between boys and girls, varied dramatically (Sölpük, 2017). In both private and public institutions, it was also discovered that there is no substantial difference in Academic Anxiety between male and female Xth grade pupils (Dhull Jitendra, 2013). The mean academic anxiety score for boys and girls did not vary substantially, but the mean score for girls was bigger than the boys', indicating that females had more academic anxiety than men (Kanchan Bala, 2014). The measurement of intelligence is, maybe more than any other, one of psychology's most significant contributions (Nisbett, 2013). According to psychological point of view, it has been realized that every individual has different cognitive abilities as compare to other person which is called intelligence. Moreover, GMA has been identified as a common component that supports performance on all mental ability tests (Narmadha & Chamundeswari, 2013).

Specific cognitive attitudes, also known as attitudes, are a subset of GMA that aims to provide a unified assessment of a single attitude (Foxcroft & Roodt, 2013). After a specific amount of training and/or practice, a person's attitude refers to their ability to acquire a particular level of skill or ability. Cognitive ability tests (CATs) evaluate specific mental talents including linguistic, mathematical, and arithmetic skills, as well as reasoning capacity

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(Foxcroft & Roodt, 2013). Measures of perceptual speed and spatial abilities are often included in attitude tests. Psychomotor attitude devices also test skills. It has been acknowledged that individual attitude can be evaluated but general cognitive ability may measure multiple attitudes ((Byars & Rue, 2011). Unfortunately, the widespread adoption of standardized CATs has resulted in a flood of false beliefs and assumptions one of these fallacies is that cognitive capacity is mostly determined by genetics, with just a little influence from the environment. Incremental theorists, on the other hand, see it as flexible. Increasing your effort, working hard, and learning from your failures may all help you enhance your cognitive abilities (Nisbett, 2013).

According to this paradigm, genetic heredity does not define a person's cognitive capacity in and of itself, but it does have a significant impact on how that person's enhance capabilities in various circumstances (Hunt, 2014). As a result, cognitive test results represent a person's abilities, acquired knowledge, and skills, as well as other contextual factors (Kuncel & Hezlett, 2010). Environmental influences, such as secondary school, may then influence multiple attitudes examined in this research.

The past researches investigated that the natural engagement with learning process is the best factor to enhance the cognitive abilities which emphasized positive attitude towards achievements. There is a well-established relationship between cognitive ability and capacity of schooling received (i.e. the highest grade received). According to psychologists, schooling and the development of cognitive capacities are inextricably linked. Studies have validated this link by analyzing particular educational reforms, such as increased mandatory schooling. More schooling years have regularly been found to have a long-term influence on cognitive function in these investigations. As a result, education might be utilized as a proxy for psychometric testing and as a predictor of ability. (Brinch & Galloway, 2011). Because the two criteria are so closely connected, it is impossible to deny that cognitive capacity plays a vital role in completion of learning process. Whereas, the curriculum is a major icon to interact the students towards learning. In development of curricula is also impact on the creativity building of learner by including the instructional and helping material of teachers (Deary et al., 2007). The past studies investigated that the positive behavior with cognitive abilities enhance the achievements of learners (Soares et al., 2015).

There is a contradiction that how to measure the CAT statistics with correlation of education attributes and also no one knows what it is or how it is happening Although there is a positive link between cognitive test results and schooling, it is hard to find out the correlation whether there is a reciprocal effect (Hunt, 2014). According to certain research, it's possible that the relationship between the affiliations at higher levels of academic attitude have been seen as a consequence of greater environmental complexity and a significant concentration on extended secondary education (Carlsson, 2015).

The contrast between quantity and quality of schooling might be the tipping point in this very emotional matter, even when samples are comparable. The study has also proven that the quality of schooling has a major impact on intelligence ratings. The development of educational quality in all schools is one of the main difficulties confronting the South African educational system. This is a necessary condition for the educational system to efficiently fulfill its core mission of educating adolescents for the workplace while also optimizing knowledge and skill creation among these pupils (McNeal, 2014).

It is undeniable that without human resources, our world of labor cannot operate properly. The workforce improves the quality and quantity of labor production by consistently using their knowledge, skills, and wisdom. All point to the importance of human resources in

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accomplishing overall strategic company goals. As a result, selecting this workforce is an important part of an organization's strategic planning objectives (Dagnew, 2017). Organizations must strategically develop a process to match talent supply with present and future talent demand. Human resource selection techniques are especially important for identifying incumbents who have a reasonable chance of succeeding. Failure to do so might have disastrous ramifications for the company. To boost the productivity and competitiveness of the organization, several strategies and procedures are used in human resource selection Where untrained, inexperienced job seekers are seen as a dangerous investment in a struggling local economy, education and skills development is a top focus. In light of this, it's worth noting that research articles on the variety of selection approaches used in South African businesses have shown a growing tendency toward psychological evaluations (Karali, & Aydemir, 2018).

Although there is clearly a lot of study and debate about educational accomplishment and cognitive ability, there has been little investigation into the relationship between secondary schooling (including subject choice) and GCA level (Kuncel et al., 2014). There is a scarcity of research on adolescent reasoning skills and the influence of subject-based content on teenagers' reasoning ability at the secondary school level. An inquiry into what it is about early school education that increases later cognitive performance is required. There's a strong need to see whether school curricula or different disciplines have an influence on inelegancy (Baker et al., 2010). To further understand the significance of the association between mathematical skill and GCA in young individuals, researchers have urged that their findings be replicated in a larger, more diverse sample (Shah & Khan, 2015).

METHODOLOGY

This study is quantitative based on descriptive research design. In this research the students at secondary school level from District Lahore were the population and 429 respondents were administered as sample which were chosen by simple random sampling technique. A self-administered questionnaire was used based on the previous researches according to the study variable students' attitude while academic achievement of the students was evaluated from their previous mark sheets. Five points Likert scale 1. SDA to 5. SA format was structured for questionnaire. In this study the content and face validity of the questionnaire was administered. The validity is a procedure to assess what is supposed to be measure accurately (Gray, 2014). To evaluate the content validity, it was assessed whether the items of the questionnaire are best fit according to the review of literature include in this research. Moreover, the face validity was also administered with the help of some experts related to the education field. Additionally, the reliability is a process to in order to assess the consistency of the questionnaire when applied more time (Creswell, 2014). For this study the Cronbach'S Alpha Coefficient was applied to analyze the reliability of the questionnaire that was greater than 0.7 (Nunnally 1978). A formal Permission letter was issued by the department to pursue for data collection and to assess the targeted sample. The researcher personally visited to the sample institutions with the permission of the honorable supervisor and the principals of target institutions. Before the data collection it was given the appropriate instructions to fill the questionnaire to the respondents. It was also be ensured to the respondents that the collected data will be entirely used for academic purpose and kept confidential. The data was collected without given any compensation and on the willing of the respondents. A tool was constructed by using five-point Likert scale (1. SDA to 5. DA) collect data. For this study the data will be collected by using questionnaire through survey method. The data received from

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respondents through research instruments was appropriately collated, evaluated, and interpreted using relevant statistical methods. The response of the collected data was coded and entered into sheets by using Statistical Package for Social Sciences (SPSS). For this study descriptive (M, SD) and inferential statistics (Pearson Correlation, Multiple Regression Analysis) were applied according to the research questions.

DATA ANALYSIS

Table 1. Descriptive Analysis for students' attitude

Statements	*M*	*SD*
Students' attitude affects their performance in the class.	3.41	.97
Students' attitude helps in problem-solving techniques.	3.56	.95
Student's attitude helps in verbal ability.	3.37	.96
Verbal reasoning facilitates the students in English.	3.90	.88
Students do better in mathematics because of their high numerical ability.	3.00	.91
Higher-order attitude among students improves their IQ level.	2.87	.96
Students' confidence is increased by attitude towards learning.	3.12	.87

To assess the level of the respondent's descriptive analysis was administered. Statistically, mean value was between 2.87 to 3.90 which shows that the respondents were satisfied about students' attitude.

Table 2. Descriptive Analysis for students' attitude

Statements	*M*	*SD*
Students' future planning is done by their attitude.	2.97	.93
Teachers can protect students' choice in Arts are science subjects by their attitude.	3.29	.91
Teachers can protect students' choice in Arts are science subjects by their attitude.	3.50	1.00
Higher-order thinking skills are enhanced by teachers' effort.	3.64	.92
Attitude is helpful to protect the learning ability of the students in a specific subject.	3.43	1.06
Attitude test predicts students' success in a job.	2.99	.98
Science students have a practical approach towards the subject as compared to art students at the secondary level.		

To assess the level of the respondent's descriptive analysis was administered. Statistically, mean value was between 2.97 to 3.64 which shows that the respondents were satisfied about students' attitude.

Table 3. Descriptive Analysis for students' attitude

Statements	*M*	*SD*
Teachers create interest among students based on their attitude.	3.38	1.04
Quantitative skills among students help them in mathematics.	3.50	.90
Scientific attitude reduces students cramming.	3.30	.96
Teachers improve students' comprehension levels by	3.85	.89

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understanding their attitudes.		
Knowing the students' attitude help to adopt the proper profession.	2.86	1.01
Students lack logical reasoning.	2.74	.94
Attitude-related contents are included in the course.	3.15	1.06

To assess the level of the respondent's descriptive analysis was administered. Statistically, mean value was between 2.74 to 3.85 which shows that the respondents were satisfied about students' attitude.

Table 4. Descriptive Analysis for students' attitude

Statements	*M*	*SD*
Students' mental health affects the students' attitude.	2.75	.99
Teachers' appreciation motivates the students which affect their attitude.	3.43	.93
Activity-based learning helps the students to develop a attitude.	3.16	.98
Teachers guide the students to adopt a profession according to their interests.	3.97	.91
Teachers understand the students' psychology.	2.82	1.03
Students' attitude-related contents are included in the exams.	3.14	1.01
Students face problems in profession if their attitude is not understood properly	3.37	.96

To assess the level of the respondent's descriptive analysis was administered. Statistically, mean value was between 2.75 to 3.97 and which shows that the respondents were satisfied about students' attitude.

Table 5. *Relationship between students' attitude and academic achievement*

Variable	SA	AA
Students' Attitude	1	
Academic Achievement	.453(**)	1

*** Correlation is significant at the 0.01 level (2-tailed).*

In order to examine the correlation between the students' attitude and academic achievement Pearson Correlation was administered. Statistically, that there was moderate association of students' attitude with academic achievement of the students, the r value was .453 respectively.

Table 6. *Effect of Students' Attitude on Academic Achievement (Multiple Regression Analysis)*

DV	*Constructs*	*Std. Error*	*Beta*	*t*	*Sig*
Academic Achievement	(Constant)				
	Students' Attitude	.056	.484	8.71	.00*

For analyzing the effect of attitude on academic achievement of students, statistically, students' attitude had moderate effect on academic achievement, the beta value was .484.

Conclusions

It concluded that secondary school respondents were satisfied about the variable of the study students' attitude. Moreover, there was a significant correlation of students' attitude with

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academic achievement. Furthermore, it was identified the significant effect of students' attitude on academic achievement.

Discussion and Recommendations

The findings of this research is beneficial for the teachers, policy makers and education leaders to adopt the innovative strategies and techniques for the enhancement of the learning competencies of the learners for the betterment of academic achievement. Moreover, this study has an enrich literature to know about the attitude of the students while he/she is on learning. This study gives awareness to students, that how student' attitude is useful for the progress of their academic achievement. This research is a pathway to evaluate the achievement of the students by adopting positive attitude in classroom which can enhance the skills to achieve learning objectives. Moreover, it is a need of new age to get awareness about modern trends in education sector, therefore, this study is beneficial for higher authorities to adopt innovations regarding skills which is valuable not only for students but also for the teaching staff. A successful teacher in modern era is considered not only instructor but also consider mentor and role model which provide the positive attitude towards students and emphasized on it for the enhancement of students' achievement.

Pakistan is one of the developing nations where secondary education institutions' standards are in progress. Pakistani public institutions are making efforts for formulating a new method for boosting students to follow studies within their nation rather than going abroad. This strategy utilized for developing educational sector and encouraging the educational sector for meeting the standards as per the quality of education and country's needs. Several efforts have been made for developing and maintaining the management system on the basis of philosophy of spreading speedy education system in the secondary schools. Although this research work has given useful findings for the development of secondary education but there are some of the limitations which have been identified and might guide the future research work.

Therefore, the training of teachers at secondary level is in under-developed nation is feeling constraints to work for more achievement successfully. The development in education sectors and giving effective secondary education that raised the expansion at basic level in numerous nations. In remain tenaciously very less literacy rate at secondary level. Additionally, this is probably going to change quickly in the coming time as the present grade school pupils become mature enough for secondary school. The further researches may be conducted with other constructs for the enhancement of students' achievement. Moreover, studies may be conducted in other levels of education for the enhancement of students' performance with other constructs.

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