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Attitude Of Students Towards Mathematics Subject At Secondary Level

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ABSTRACT

Students' attitudes toward mathematics subject and its learning have been subject to numerous studies in the past six decades. These studies treat such attitudes as both desirable learning Outcomes and associates of mathematics achievement. This study designed to evaluate Attitude of students towards the Subject of Mathematics at secondary level. The objective of the study was, to find out the attitude of students towards Mathematics subject at secondary level. The study was descriptive in nature and was carried out in district Lakki Marwat. The Arts students of the class 9th of Urban Govt. Girls High School Lakki Marwat was selected as the samples of the study. The attitude scale was used by the researcher to find out the attitude of students towards Mathematics subject. The students were divided into positive, negative and neutral groups on the basis of mean categorization the mostly students come into positive category, which means that they have positive attitude towards Mathematics subject.

KEYWORDS: Attitude, Achievement, Culture,

INTRODUCTION

For desirable achievement of students learning outcomes, positive attitude of the students towards the subjects including mathematics and science is very important.Majority of the studies concluded that learner's attitude is a significant variable for achievement such as (Mullis et. al. 2000; Schreiber,2002; House,2006; Van den Broeck, Opdenakker, & Van Damme,2005).

Schreiber J.B et al 2002 the attitude property scale to some extant depend on culture because the process of teaching learning is extremely influenced by culture. Here the researcher in the study focused toward investigate thoughts of learners about mathematic and also focused that learners was to what extant agreeable in the direction of learning or concerned about mathematic furthermore manipulated movements of students about mathematic.The study aim

was to know the attitude of students towards the subject of Mathematics in this particular area because the mathematics subject is known as the basic of our daily life and also considered the most important subject especially at secondary level.

Statement of the Problem

Study investigated the attitude of students towards mathematics subject at secondary level Students; these attitudes may be caused by the method of teaching. The examination it sought to answer the question, "To find out the attitude of students towards Mathematics subject at Secondary level".

Research objective of the study

To find out the attitude of students towards Mathematics subject at Secondary level

Research question of the study

What is the attitude of students towards the subject of Mathematics at secondary level?

Significance of the study

Under-mentioned points elaborated study importance

1. The study may give the review of present day position of the educational progress of students.
2. Study result may give a base to our educational planner's and supervisor for future planning's.
3. This study may be helpful for the selection of subject at secondary level.

LITERATURE REVIEW

As per the Policy of National Education 2008, Pakistani education system has three stages: from grade one to eight (elementary); from grade ninth to twelve (secondary), and above thirteen years (higher education). Secondary level has four standards: science, commerce, computer, and arts and humanities. In 2015 Altun conduct a research study and define that most of the students select science humanities or arts group. For all these three standards, mathematics is one of the mandatory subjects. Mathematics has a key role in problem solution and to bringing a perspective that manages abilities and required by day by day life.

Mathematics importance in daily life:

Mathematics has a significant job in our life; or we can say that mathematics is all around us. it is used in almost every field of life. Without realizing we use math ability in daily life, school to the playground and from kitchen to office. Indeed, even a straightforward man utilizes math in his everyday life. Such as How much time is left for the gathering?, what amount of minutes I can rest, in short if a simple woman going to purchase food supplies she need to utilize fundamental math ideas. The vast majority of the students have fear from math. It would be an extraordinary thought if the math teacher understands the students about math value ability and use in life. Indeed, even the math tutor can utilize examples of daily life, to instruct students. We have to utilize math ideas to make any dish, to quantify the fixings etc. it has significant role in every fields of science, computer design, innovation, financial matters, business, trade and structure. In any case, practically all fields utilize some essential ideas of mathematics.

Student's attitude towards mathematics

The general execution of learners in English and arithmetic is low all through the nation. From the Boards of Intermediate and Secondary Education results this is clear that around 33% of the learners become certified mathematics with the least qualifying marks criteria (33% of the total score). In spite of the fact that it is hard to choose without proof, however the analysts have encountered that numerous students at optional level schools because of trouble in English and arithmetic.

Along these lines their schooling duration significant anxiety in the nation. Small execution plus towering go down of learners within math at optional stage essentially because of lack of able educators, less open door for instructors' to showing their teaching strategy, poor learners base at initial and center level, and generally less utilization of present day strategies and methods of educating and learning in the school. The instruction framework should be recharged in the light of logical advancements as per the ideal models with the purpose of bring together outlook (Açıkgöz, 2009). Moths important into Behavioral Sciences, trade as well as in the Social Sciences, vast majority of the Social Sciences stay away from mathematic assessment or even they show ineptitude to play out their appropriate capacities and skills, Mathematical procedures require a functioning learning process that develops effectively in student's conversations.

The Mathematics teaching method has been founded on the supposition that, learners are detached subject that amass what they realize as the reflection of reinforcement and rehashed practice (Keyser, 2000).

RESEARCH MTHEDOLOGY

Design and Nature of the Study was descriptive. The study was aimed to investigate the attitude of students towards mathematics subject at secondary level so a descriptive survey design was used for this study. All the Female secondary level Students was the population of the study; Target population was only 9th class Arts groups students of Urban female secondary school in district Lakki Marwat. According to John Curry and Thumb sample formula, 120 Female secondary level students were randomly selected as the sample of this study.

Table of Sample:

Respondents	Frequency
9Th CLASS STUDENTS ARTS GROUP	60

To measure the student's attitudes towards mathematics, subject the self-structured questionnaire was used which was on five point Likert scale comprises of 20 items.

The validity of the questionnaire was done through subject experts to check the content of the items, wording, phrases of sentence, the researcher was made required modifications in the items in the light of expert's suggestions.Reliability of the instrument was done through statistical procedure than the Cronbach alpha was used to know the consistency of the items, so those items was deleted which Cronbach alpha value was less than 0.85.The researcher distributed the questionnaire among the students himself and duly filled questionnaire return back by the students. The investigator used the SPSS 22.0 software for analyzing and organizing the data. The data counting expressed through number of respondent's percentage and measurement data was expressed through mean and standard deviation.

RESEARCH RESULT

Table#1: Showing the student's Attitude towards Mathematics subjects at secondaryLevel:

Statement	**Level (**frequency, percentage**)**					**Mean**	**S.D**
	SDA	**DA**	**UD**	**A**	**SA**		
Mathematics is useful in other subjects	1 (1.6)	0 (0)	1 (1.6)	3 (4.7)	55 (85.9)	4.8	0.605
Understanding mathematics is important to me	2 (3.1)	7 (10.9)	0 (0.0)	29 (45.3)	22 (34.3)	4.03	1.07

Mathematics is boring	35 (54.7)	5 (7.8)	3 (4.7)	7 (10.9)	10 (15.6)	2.20	1.61
I can usually manage the mathematics	4 (6.3)	13 (20.3)	4 (6.3)	34 (53.1)	5 (7.8)	3.38	1.12
Mathematics is useful in a different place	2 (3.1)	0	2 (3.1)	28 (43.8)	28 (43.8)	4.33	0.837
I like learning mathematics	1 (1.6)	6 (9.4)	7 (10.9)	7 (10.9)	39 (60.9)	4.28	1.12
I find mathematics difficult	14 (21.9)	17 (26.6)	7 (10.9)	15 (23.9)	7 (10.9)	2.73	1.37
do about mathematics after school	1 (1.6)	2 (3.1)	6 (9.4)	32 (50.0)	19 (29.7)	4.10	0.83
Mathematics' subject is relevant to today life.	3 (4.7)	1 (1.6)	2 (2.1)	20 (31.3)	43 (53.1)	4.35	1.00
I look forward to doing mathematics'	1 (1.6)	11 (17.2)	5 (7.8)	16 (25.0)	27 (42,2)	3.95	1.19
I am good in mathematics	1 (1.6)	2 (3.1)	4 (6.3)	17 (26.6)	36 (56.3)	4.41	0.88
I will avoid mathematics' once I leave school	23 (35.9)	5 (7.8)	10 (15.6)	7 (10.9)	15 (23.4)	2.76	1.65
I can learn mathematics' well without really understanding it	12 (18.0)	22 (34.4)	4 (6.3)	6 (9.4)	16 (25.0)	2.86	1.53
I find mathematics interesting	4 (6.3)	2 (3.1)	2 (3.1)	19 (29.7)	33 (51.6)	4.25	1.12
I can do my mathematics work	10 (15.6)	6 (9.4)	6 (9.4)	29 (45.3)	9 (14.1)	3.35	1.32
I plan to continue studying mathematics	9 (14.1)	6 (9.4)	6 (9.4)	27 (42.2)	12 (18.8)	3.45	1.33
I want to make sense of what I'm learning in mathematics	4 (6.3)	5 (7.8)	6 (9.4)	15 (23.4)	30 (46.9)	4.03	1.24
Learning mathematics is important for getting a job in the future	4 (6.3)	1 (1.6)	1 (1.6)	25 (39.1)	29 (45.3)	4.23	1.06
I enjoy studying mathematics	2 (3.1)	4 (6.3)	1 (1.6)	11 (17.2)	42 (65.6)	4.45	1.04
I could manage with a harder mathematics course	5 (7.8)	7 (10.9)	1 (1.6)	26 (40.6)	21 (32.8)	3.85	1.25

Table includes the item wise analysis of the interest attitude scale which was developed by researcher to find out the attitude of the learners towards the mathematics subject at secondary level. It was observed that an absolute majority of respondents have positive response to the mathematics subject, because 90 % respondents have strongly agreed that **learning of mathematics at school level is useful for other subject's**. Results show that the mean value is 4.85 and standard deviation is 0.605. most of the respondents were favor to the statement that, **understands the mathematics** we're doing is important to me for the reason that 79.7 % respondents agreed to that, thus the mean and standard deviation values are 4.03 and 1.07 respectively which shows the importance of subject, Therefore, on the basis of mean score we can say that respondents have positive attitude towards mathematics subject. Most of the respondents have negative attitude, because 62% have strongly disagreed to the statement that "**Mathematics is boring subjects**" While 26 % have agreed to the statement. The mean score is 2.20 and the standard devotion is 1.61. The results show the positive attitude of the respondents towards Mathematics subjects. It was observed that mostly respondents were in favor that they **can usually manage the mathematics they do at school**, because percentage of agreed respondents is 61% and the results also show that the mean is 3.38 and the standard

deviation is 1.12. Results concluded that majority respondents have positive attitude towards the mathematics subjects. Majority of the respondents were in favor that many of the things we learn in mathematics' **are useful in a different place**, because 87.6% respondents are agreeing with the statement, the result also shows that mean value is 4.33 and standard deviation is .837, Therefore that the mostly respondents have positive attitude towards the mathematics subject. Most of the respondents were agree with the statement '**I like learning mathematics' as** a result that the percentage of agreed respondents is 71.8% and the mean value is 4.28 and standard deviation is 1.12, clarify that the majority respondents are in favor the mathematics subject. From above table confirm that most of the respondents were feel that they find mathematics **'is difficult** because the respondents were disagreed with the statement the percentage of disagreed respondents is 48.6 and the mean score value is 2.73 and standard deviation is 1.37, it is manipulated that the majority respondents have positive attitude towards the mathematics subject. Which most of the respondents were support of the view **that they are might go on to do about mathematics'** after school, the mean value is 4.10 and standard deviation of 0.83, thus the results explaining that out of total respondents 79.7% have the positive attitude towards the subject. Maximum respondents were of the view that **Mathematics' subject is relevant to today life**, the percentage of agreed respondents is 84.4 and the mean score 4.35and standard deviation is 1.00, the results confirms that the majority respondents were favor to the mathematics subject. Majority respondents were positive response to the statement **'I look forward to doing mathematics'** as the percentage difference of agreed respondents is 67.2% and disagreed respondents is 18.8% and the mean value is 3.95 and standard deviation is 1.19 which reflects their positive attitude. The respondents were in favor of the statement that **I am good in mathematics** because more of the respondents 82.9 are agree and strongly agree with this statement, and the results of mean score is 4.41 and standard deviation.88, its clarify that majority of the respondents have positive attitude towards the mathematics. out of total respondents most of the respondents were not agreeing with the **'I will avoid mathematics'once I leave school'** for the reason that 43.7% respondents were not agreeing with the statement, the results also explaining that mean value is 2.76 and standard deviation is 1.65, so its concluded that majority of the respondents have interested in mathematics subject. Most of the respondents are disagree with the statement **I can learn mathematics'** well without really understanding it, Therefore, On the bases of percentage which disagreed respondents are 52.48, mean score 2.86 and standard deviation is 1.53, result shows that majority of the respondents have positive attitude towards the mathematics subject. Maximum number of the respondents was in favor of the statement, because the results of percentage are shows that most of the respondents 81.3% were agreed that **finding mathematics' is interesting**, results also elaborating that the value of mean is 4.25 and standard deviation is 1.12, result makes clear that most of the respondents have positive attitude towards the mathematics subjects. Out of total respondents most of the respondents were agree with the statement even when it gets hard, **I can do our mathematics'** work, according to the result mean is 2.06 and standard deviation is 1.54, also elaborating that 59.4% respondents were agreeing and 25% were disagree. Regarding results most of the respondents were interested in mathematics, mostly respondents find mathematics' interesting, because they were agreed with the statement **that 'I plan to continue studying mathematics'** when the time comes to choose, It's clear from the above percentage which 61% are finding mathematics 'interesting, results shows that the mean is 3.45 and standard deviation is 1.33, also explain that the majority of the respondents were favor to the mathematics subject. Results also explain that mostly respondents were in the favor of the statement **'I want to make sense of what I'm learning in mathematics'**, because results clarify that out of the total 70.3% respondents were agree with the statement, results also shows that the mean value is 4.03 and standard deviation is 1.24, concluded most of the respondents have positive attitude towards the mathematics. 84.4% of respondents were having the opinion that **'learning mathematics is important for getting a job in the future'**. The results elaborate that the mean score is 4.23 and standard deviation is 1.06, according to mean categorization respondents have positive

attitude towards the mathematics subject. Mostly respondents were thought that **they enjoy studying mathematics**, because the results show that 82.8% respondents were in the favor of this statement the mean score is 4.45 and standard deviation is 1.04, confirm that the majority of the respondents have interested in mathematics subject. Majority of the respondents 73.4 were in favor that **they can manage with a harder mathematics course,** the mean score is 3.85and standard deviation is 1.25, according to mean categorization respondents have positive attitude towards the mathematics subject.

CONCLUSIONS:

According to the conclusions of current study and from attitude scale, item wise analysis that the majority of the students have positive attitude about Mathematic subject regarding Mathematics is useful in other subjects, Understanding mathematics is important to me, Mathematics is boring, I can usually manage the mathematics, Mathematics is useful in a different place, I like learning mathematics, I find mathematics difficult, do about mathematics after school, Mathematics' subject is relevant to today life, I look forward to doing mathematics', I am good in mathematics,I will avoid mathematics' once I leave school,I can learn mathematics' well without really understanding it, I find mathematics interesting,I can do my mathematics work, I plan to continue studying mathematics, I want to make sense of what I'm learning in mathematics, Learning mathematics is important for getting a job in the future, I enjoy studying mathematics, I could manage with a harder mathematics course , thus found highly interested in the mathematics. Results shows from the item analysis the attitude property scale to some extant depend on culture of teaching because the process of teaching learning is extremely influenced by culture.

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