The Effects of Extrinsic Motivational Factors in Learning among Students in Secondary School in Negeri Sembilan

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Abstract

This article highlights some of the major research findings regarding the extrinsic motivational factors in learning mathematic among Students in Secondary School in Negeri Sembilan. This study is aimed to find the differences between extrinsic motivational factors which include teacher, peer-group, family, environment, and language according to gender and to find the relationship between this extrinsic motivation factor with the academic performances in mathematic. A total of 203 form four students from all three students in secondary schools in Negeri Sembilan were chosen to participate in this study by using random sampling method. The extrinsic motivational factors in learning mathematic were measured using a self-designed questionnaire that includes seven motivational factors. The reliability coefficient of Alpha Cronbach of this study was 0.82 and this questionnaire was validated by expert in psychology in university Technology Malaysia. Pearson Correlation was used to test the relationships between extrinsic motivational factors and academic performances in mathematic and t-test was used to test the differences. Results of the study shows all five extrinsic motivational factors have significant relationship with academic achievement of mathematic. Teachers emerged the strongest relationship among the other motivational factors and the relationship is significant in this study. While t-test result shows that all extrinsic motivation factors do not have significant differences with gender with $p>0.05$.

Keywords: Mathematic, Achievement, Environment, Extrinsic motivation, Peer-group, Language

1. Introduction

On 28th February 1991, during the launching of Malaysian Trade Council, the Prime Minister in his paperwork entitled 'Malaysia: Step Forward' has insisted about the nine challenges in Vision 2020. One of the challenges is to create a society who thinks ahead, has science competency, progressive and innovative. This society is also expected to use the modern technologies as well as contribute to the future civilisation and new inventions. Malaysia is now stepping forward towards becoming a developed country in the year 2020. In today's world, a country's power of competition with other countries is determined by its development and achievement in Science and Technology. As a developing country, we need more expertise in both fields.

On top of that, mathematics is one of the most essential subjects in secondary schools. The knowledge embedded in this subject is vital to every individual. That is why in the curriculum plans in Malaysian schools; this subject is put to the topmost priority. The importance of mathematics is obvious in several aspects like in the public examinations, in the fields of engineering, business, technology and administration.

Until now, students still have the perception that mathematics is the most difficult subject. This is proven with the students' lack of confidence in their mathematical answers. They constantly seek for confirmation on their answers from the teachers and parents. (Bulletin, School Division, 1989). Therefore, a student's readiness is vital for a more effective teaching. An experienced mathematics teacher would get close with his or her students to know in depth what are their students' weaknesses, interests, capabilities and needs in studying mathematic.

The study aimed is to identify the influencing factors of the students' achievement in mathematics in Malaysian secondary schools. Extrinsic motivation refers to motivation that comes from outside rewards, such as money or grades. The motivation comes from the pleasure one gets from the task itself or from the sense of satisfaction in completing or even working on a task. Hopefully the results and suggestions of this research will help the relevant parties to take several actions to improve the situations. Therefore, extrinsic motivation is the answer to help the students to feel more confident in answering mathematics examinations or quizzes.

An intrinsically motivated person will work on a math equation, for example, because it is enjoyable. Or an intrinsically motivated person will work on a solution to a problem because the challenge of finding a solution provides a sense of pleasure. In neither case does the person work on the task because there is some reward involved, such as a prize, a payment, or in the case of students, a grade.

Intrinsic motivation does not mean, however, that a person will not seek rewards. It just means that such external rewards are not enough to keep a person motivated. An intrinsically motivated student, for example, students may want to get a good grade on an assignment, but if the assignment does not interest that student, the possibility of a good grade is not enough to maintain that student's motivation to put any effort into the project.

Mathematic plays an important role in bringing our beloved country, Malaysia into a developed country to fulfill the Vision 2020. As stated in the Mathematic syllabus in Integrated Curriculum for Secondary Schools by Ministry of Education Malaysia (2005), elective science subjects are offered at the upper secondary level and consist of Biology, Mathematic, Physics, and Additional Science. The elective science subjects prepare students who are more scientifically inclined to pursue the study of science at post-secondary level. This group of students would take up careers in the field of science and technology thus they play a leading role in the field of national development.

According to New Straits Times dated March 13, 2009, the results of Mathematic in Malaysian Certificate of Educaion (MCE) showed high passing rate in both years of 2007 and 2008. There were total of 90.6% and 93.6% of total MCE candidates passed the Mathematic subject in year 2007 and 2008 respectively. However, we are aiming to help students in `achieving better results than just passing the subject. We aim to improve the percentage of getting A's among the MCE candidates. There were only 14.8% (2007) and 16.8% (2008) of total MCE candidates who scored 1A and 2A for the Mathematic paper (New Straits Times, March 13, 2009). Besides, we would like to instill the life-long learning skills among students. Thus, teachers and person who may concern should put efforts in helping students by applying various teaching and learning methods to ensure students may fully understand the mathematic content. Students will learn Mathematic by themselves even without examinations when they found interest in it.

2. Literature Review

Teachers do make a difference to motivate students in learning even though teachers are not as powerful as parents because parents are the first teacher to a baby since it was born. However, teachers can make school life miserable or appealing by filled the classroom with excitement and hope. Students will continue in their learning and even search more knowledge under the leading of enthusiastic teachers (Wlodkowski and Jaynes, 1990). Enthusiastic teachers care about what they teach and communicate to their students so that students understand the knowledge gained are important for further studies and job applications. Students are motivated to learn as to keep closed touch with the teachers on the topics discussed. Furthermore, enthusiastic teachers always look for new topics to discuss with students as to attract attentions from the students.

The clinical experiences by Wlodkowski and Jaynes (1990) showed that parents appear to be the primary influence on a students' motivation to learn. Moreover, research done by Henderson (1987) proved that students from the elementary level through high school benefit from family conditions and practices that emphasize and encourage learning in school for more than twenty years. The formative effect of parents on the learning motivation of their children has an impact at every stage of development. This influence will last through the high school years and beyond.

Peer-group are those closed peers who may influence the learning motivation among students. A student who closed with a gang of peer-group those who like to study will eventually join into the discussion groups formed.

On the other hand, a student who closed with peer-group those skip classes often will eventually follow their peer-group' foot step in skipping class. Students will feel cool and smart by hanging out with their peer-group in a gang rather than follow the advices of elders because peers with close age range tend to have closer mindset in thinking and point of views from the same perspectives.

According to Hunter (1967), circumstances in the environment can be arranged so a student will be encouraged to do something what will result in his learning. Therefore, the arrangement of seats in a classroom becomes a factor that motivates students in learning. The conformance of the learning environment will in turn motivate students' learning because they can easily focus on the teaching and learning process without distractions. Students lose focuses when they are in the uncomfortable learning condition such as in a classroom which is too hot or dusty.

Language is one of the crucial variables that affect the learning among students (Stones, 1983). Language is a medium among teacher and students in the teaching and learning progress. A teacher can assign the students what to do in learning an activity by involving language that would otherwise to be learned through conditioning or imitation. Therefore, using the common language for both teachers and students make the communication better. Students can understand the meanings delivered by teacher and at the same time, the teacher may understand better on the problems raised by the students. This can only achieved by having a common language that communicates between teachers and students. Thus, language is a motivational factor in learning because students are more willing to learn when they can understand the content better.

3. Problem Statement

From the background of the study, mathematic is an elective science subject offered at the upper secondary level. Mathematic is one of the compulsory subjects to be taken in MCE together with other science subjects. However, mathematic is one of the most important branches in science and had been regarded as a difficult subject for young students by mathematic teachers, researchers, and educators (Haluk Ozmen, 2004). Some students cannot score good results in mathematic because they are lack of motivations that will pushed them in learning mathematic.

The study focused on the students extrinsic motivations in learning mathematic. Aspects of students' motivation to learn can be classified either intrinsic or extrinsic (Etwistle *et al*., 1974). The applications of motivation in all teaching and learning processes are significant because they create life-long learning process towards an individual. Both intrinsic and extrinsic motivational factors influence students in their learning but we can promote better extrinsic motivation to students when we understand what are the extrinsic factors that motivating them.

This study focuses on extrinsic motivational factors contributing in learning mathematic such as facilities, parent teachers association, teacher, family, peer-group, school environment, and language used in teaching and learning process in secondary school in Negeri Sembilan. The main purpose of this study is to reveal the extrinsic motivational factors that help students in achieving good academic results in mathematic.

4. Aimed of the Study

The main aimed of this study is to determine the relationship between facilities, parent teachers association, teacher, teacher, family, peer-group, environment, and language that motivate students in learning mathematic and the differences between this motivation factors with gender. The dominant extrinsic motivational factor in learning mathematic was also taken into account in this study.

5. Research Methodology

The design of the study is descriptive based. Sampling survey was carried out to collect data regarding extrinsic motivational factors in learning mathematic among Form Four Students in secondary School in Negeri Sembilan, which includes Port Dickson District, Seremban District, and Rembau District. The population consists of all Form Four students who study mathematic in secondary schools in Negeri Sembilan which involves total of 395 students. The amounts of students were fixed to be at least of 196 students from all three selected schools by referring to the Sample Size Table of Krejcie and Morgan (1970). The number of students and respondents in each school was listed in the Table 1.

INSERT TABLE 1 ABOUT HERE

In this study, the data were collected through questionnaires and was distributed into selected school in Negeri Sembilan. There were two sections for each set of questionnaires. Section A was about the demographic data of the students whereas section B was the questionnaire items include all five extrinsic motivational factors which consists of teacher, family, peer-group, environment, and language. Items in the questionnaire were to be

answered based on 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). The relationships between extrinsic motivational factors and mathematic results were investigated by using Pearson Correlation because it is suitable to test the relationship between two variables with samples of 30 or more with smallest amount of error (Lodico, Spaulding, and Voegtle, 2006). The questionnaire was validated by the content experts by the lecturers with Associate Professor in the field research methodology and also expert in psychology while internal consistency reliability of Cronbach alpha was done by using SPSS 17.0.

6. Research Findings and Discussions

6.1 Extrinsic Motivational Factors in Learning Mathematic

Extrinsic motivational factors analyzed facilities, parent teachers association, teacher teachers, family, peer-group, environment, and language as mathematic learning factors among students. Data from seven factors were analyzed from 5 point Likert scales into frequency, standard deviation and percentage according to the motivational factors respectively. From the results of the study shows that 59.4% students agreed that school facilities motivated them in their study, while 3.9% disagreed with this statement. Most of them preferred good place to study such adequate place to study and quite place such as library.

The role of parent and teachers association (PTA) is also involved in this study. Most of the students agreed (69.1%) that PTA motivated them in learning mathematic by providing moral support and awarding students who performed well in mathematics. While 5.9% disagreed with the statements of PTA could motivated them in study mathematic and they felt that that is their duty to link with the school authority.

The total of 3.4% students disagreed and 57.9% students agreed on the statements that the teacher was a motivational factor for them in learning mathematic. From the mean value obtained, 57.9% students agreed that teacher played a significant role in motivating them to learn mathematic. There were 53.2% students agreed their mathematic teachers were readily to help students when they faced problems during the learning process. Results showed the willingness of teachers to care and help their students did motivate students in their learning. Thus, teachers should be more sensitive toward their students who need helps so that learning can promote motivation.

In this study, there were total of 39.0% students disagreed and 32.4% students agreed on family was a motivational factors for them to learn mathematic. Family had high percentage (39.0%) in disagreeing it as a motivational factor for students in learning mathematic. This shows that majority of the students did not recognize family as a motivational factor for them in learning mathematic otherwise they can hardly get motivated from their family. Meanwhile, there were 45.8% students claimed that family problems occurred will interfere their learning in mathematic. This implied that students understood on the significance of family as they might distracted from learning when problems arise in their family. Results implied the importance of family in showing the caring and loving to students thus they can be motivated in their learning process.

Majority of 64.6% students claimed that peer-group was a factor in motivating them towards mathematic learning while minority of only 10% students disagreed on that statement. This implied that students realized the importance of peer-group in their study life as they learned together and shared the knowledge gained. There was a high percentage (58.6%) of students agreed that they understood the mathematic content easily when studied together with their peer-group. Therefore, study group and peers collaboration should be encouraged in class to motivate students in learning mathematic.

Environment had 43.4% students agreed that it was an extrinsic motivational factor in learning mathematic among students while there were total of 29.4% students that disagreed on that statement. This implied that students rather to learn in places with better circumference which make them more comfortable. There were 35.0% students claimed that attractiveness of the classroom motivated them in learning mathematic. As a result, schools and teachers should encourage students in decorating their classrooms by having informative and attractive materials. For example, decoration materials such as poster of Periodic Table that motivate students to learn mathematic should be pasted in the laboratory and classroom.

There were majority of the students (52.0%) agreed that language was a motivational factor in learning mathematic but minority of students (17.2%) disagreed on that statement. Language is used in daily life for communication purposes. In this study, English has been used as a medium of instruction in teaching and learning process of mathematic. There was a high percentage of students (57.0%) agreed that English used as the medium of instruction did motivate them in learning mathematic. There were 41.4% students agreed they were more interested in learning mathematic by using English as the medium of instruction. This shows that students realized the importance of international language; English is used as a medium of instruction in teaching and

learning of mathematic because extra sources of knowledge can be easily obtained such as through internet searching, references books, magazines and etc.

6.2 Relationship between Extrinsic Motivational Factors and Achievement

Table 2 shows relationship between all seven motivational factors with students' academic performances; in this purpose the mathematic grades of the students were taken into account. The relationship was determined by using Pearson Correlation coefficient. Results of the study shows there were relationships between four motivational factors in learning mathematic with achievement.

INSERT TABLE 2 ABOUT HERE

Extrinsic motivational factors in learning mathematic among students in secondary school in Negeri Sembilan such as facilities, parent teachers association (PTA), teacher, family, peer-group, environment, and language were interrelated. However, only certain extrinsic motivational factors were found to be significantly related achievement. In this study, only parent teacher association, teacher, peer-group, environment, and language were significantly related with students achievement as shown in the Table 2 above.

Teacher found to have the strongest relationship with achievement (r=0.561, p=0.35). This is because teacher in their daily teaching prepared their teaching material very well before teaching in class. This followed by peer-group which have positive relationship with student achievement (r=.471, p=0.045) from the data of the study. Peers with the similar attitude towards learning can formed discussion groups and help each other in solving problems during learning sessions. Parent teacher association have third strongest relation with student achievement (r=0,45, p=0.001). Language had slight positive relationship with students achievement (p=0.41, p=0.001). This was because language could create comfortable circumstances for learning. While other extrinsic motivation factor such as facilities (r=-.120, p=0.089), family (r=0.079, p=.262) and environment (-.074, p=.294) shows that there is no significant relationship with students achievement in learning mathematic. Therefore, the study shows that parent teacher association, teacher, peer-group and language were significantly correlated with students achievement. Good relationships between these four extrinsic factors motivated students in learning mathematic.

6.3 The Dominant Extrinsic Motivational Factor in Learning Mathematic

In this section, the dominance of extrinsic motivational factors in learning mathematic among students was analyzed. The mean values were manipulated from the 5-point Likert scale ranged from 1-5 as mentioned before. The mean values for each of the extrinsic motivational factor represent the significance of the factor towards learning in mathematic among students. The mean values of each of the extrinsic motivational factors in learning mathematic were stated in the Table 3.

INSERT TABLE 3 ABOUT HERE

In overall, all the extrinsic motivational factors in learning mathematic among students in secondary school in Negeri Sembilan were moderate and the mean value is 3.34. The highest mean score among motivational factor in learning mathematic is peer-group with the mean value of 3.66. This was followed by language (3.59), teacher (3.55), environment (3.17), and family (2.92). It works as a guideline for those interested in knowing better of the motivational factors in learning mathematic.

Peer-group, language, teacher were considered as high mean in motivating students in learning mathematic while environment and family were moderately. From the mean value calculated, the most dominant motivational factor in learning mathematic among students in secondary school in Negeri Sembilan was peer-group, with the highest mean value of 3.66. This shows that peer-group played important roles in motivating each other to learn mathematic. They probably have a group study to ensure that what ever problem arise in learning mathematic, the group can easily overcome. Peer-group who were about the same age and had similar daily activities would have close mindset thus easier to share their thinking especially about learning. Therefore, students were passion in their learning when they had good peer-group with positive learning attitude.

This followed by extrinsic motivational factor of language with the second highest value of mean level (3.59). This shows that language was motivating students in learning mathematic because language is used as medium of instruction during the teaching and learning process. Language found to be a factor that caused difficulties for students in learning mathematic as the words used bring different meanings in mathematic even with the simple daily used vocabulary (Bergquist and Heikkinen, 1990). Therefore, the usage of language in teaching and learning process is vital to motivate students in their learning. Students agreed that the use of English in teaching mathematic motivates them in learning. The motivation of English used as medium of instructions is due to the ease of searching extra information and sources in English compared to other language.

Teacher was the key person delivering knowledge in classroom. In this study, teacher was ranked in third position with the significance level of 3.55. This shows that teacher was a factor in motivating students to learn mathematic. There were no doubt that teacher was the front line person who encouraged students the most when students need motivations. Besides, teachers who know well about the academic performances of the students were the first person to know the learning situation of the students. This helps teachers to investigate the problems faced by the students. Thus, teachers might take actions even in the early stage to assist students in overcoming the problem faced.

Parent teacher association emerged fourth placing in extrinsic motivational factors with mean value 3.17 and followed by environment was rank fifth in motivational factor for students in the study with the mean value of 3.17. This shows that the factor of environment did contribute to the motivation of students in learning mathematic. Thus, environment issues were important for students to focus in their studies. According to Hunter (1967), circumstances in the environment can be arranged so a student will be encouraged to do something what will result in his learning.

While facilities was in sixth placed in motivational factors with mean 3.14. The last but not least is the factor of family with the significance level value of 2.92. This shows that family was in the last ranking among all motivational factors studied. This was due to the lack of attention from family members on students' study progress. Besides, the lack of notification of students towards the caring and hidden motivation brought by family to them caused family to rank last among all the motivational factors studied.

In overall, all seven extrinsic motivational factors (facilities, parent teacher association, teacher, family, peer-group, environment, and language) in the study had mean significance value of 3.34 and standard deviation 0.55. This shows that extrinsic motivational factors were generally have moderate level of motivation for students in secondary school in Negeri Sembilan to learn mathematic. Extrinsic motivational factors should be paid attention on from all parties involved in the education so that students may motivated in learning mathematic thus perform well in their academic results. Besides, motivation became one of the factors that energizes and directs behavior of a student towards a goal (Woolfolk & Nicolich, 1980). This motivate students to make their effort in achieving own goals set thus success in their life in future.

6.4 The Differences between Extrinsic Factors and Gender

INSERT TABLE 4 ABOUT HERE

Based on table 4, all extrinsic factors such as facilities, parents teacher association, teacher, family, peer group, environment and language with gender does not have significant differences which gender $p>0.05$. The detailed results are as followed. For teachers, the result shows that male teacher obtained higher mean score (M=3.24, std= 0.045) compare to female teacher (FM=3.19, sd=0.45). Teacher motivational factor revealed F=0.478, df=201, $p=0.479>0.05$. In parent teacher association (PTA) result revealed that F=1.108, df=201, $p=0.294>0.05$. Male in PTA emerged slightly higher in mean (M=3.3741, sd=0.73) compare to female in PTA (FM=3.3733, sd=.656). As for family, male shows slightly higher mean (M=3.0392, SD=0.53) compare to female (FM=3.0200, SD=0.53). As a whole it shows that there is no significant differences between family with gender F=0.328, df=201, $p=0.8>0.05$.

In peer group, results shows that the female mean is slightly higher (M=3.655, SD=0.699) compare to male (M=3.0392, SD=0.655) and there is no significant differences between peer group with gender F=2.489, df=201, $p=0.842>0.05$.

In environment, the mean of female is higher (mean=3.210,SD=0.543) compare to male (mean=3.117 ,SD=0.601) and there is no significant differences between peer group with gender F=2.942, df=201, $p=0.250>0.05$.

The result of language shows that female mean (mean=3.44, SD=0,54) is higher than male (mean=3.4, SD=0.636). The result also revealed no significant differences between language according to gender F=2.846, df=201, $p=0.592>0.05$.

The result in facility revealed that the is no significant differences with gender t(-F=0.728, df=201, $p=0.395>0.05$ and mean score by male is higher (mean=3.19, SD=0.447) female (mean=0.310, SD0.461)

7. Recommendation

There are few recommendations to increase the motivation in learning mathematic among Students in secondary School in Negeri Sembilan. First of all, teacher should scaffold students in the process of learning Mathematic. An enthusiastic teacher with the correct techniques may increase students' interest in learning more than just sitting for examination. Secondly, family should pay more attention on academic progress of their children.

Suitable rewards and advices given makes students feel they are being cared and loved thus are more motivated in learning mathematic. Thirdly, cooperative learning should be applied in learning mathematic. Students in the same Zone of Proximal Development can explain the abstract concepts better to their peers. This motivates learning in mathematic as finding results showed that peer-group was a significant motivational factor. School, teacher and parents should prepare a conducive learning environment for students so that they can put themselves in the learning mood better. Environment is a unforgettable factor to motivate students in learning mathematic. The last but not least, medium of instructions that communicates teacher, student and mathematic content should be suitable as to avoid students from misunderstanding or not understanding the content. From the finding of the research done, English is the recommended language to be used as it motivates students in learning mathematic and provides lots of extra information everywhere such as internet and magazine.

8. Conclusion

This study revealed extrinsic motivational factors in learning mathematic among students in secondary school in Negeri Sembilan. Despite of the methodological limitations and nature of the instrument used in the study, results from the study shows that there are existing relationships among all five extrinsic motivational factors and students' academic performances in learning mathematic. Extrinsic motivational factors of teacher, family, peer-group, environment, and language were interrelated to each other. All extrinsic motivational factors were found to be significant to students in learning mathematic. Extrinsic motivational factors studied were found to have relationship with the students' academic performances. The most dominant extrinsic motivational factor in learning mathematic for students in secondary school in this study was peer-group.

In overall, this study provides supportive information towards extrinsic motivational factors in learning mathematic among Students in secondary School in Negeri Sembilan. However, there were some weaknesses found in this study that needs further research to be done into complement of this study. Hopefully this study does contribute to increase the learning motivation among Students in secondary School with the efforts from all parties concerned. Education that brings our beloved country a brighter future should be the most concerned issue from all.

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Table 1. Number of Population and Sample in Each School

School	Population	Sample
Port Dickson District	241	96
Rembau District	74	36
Seremban District	80	71
Total	**395**	**203**

Table 2. Relationship between Motivational Factors and Academic Performances of Mathematic

		Gred
Facility	Pearson Correlation	-.120
	Sig. (2-tailed)	.089
	N	203
Teacher Parent Association	Pearson Correlation	.45**
	Sig. (2-tailed)	.000
	N	203
Teacher	Pearson Correlation	.561
	Sig. (2-tailed)	.035
	N	203
Family	Pearson Correlation	-.079
	Sig. (2-tailed)	.262
	N	203
Peer group	Pearson Correlation	.471
	Sig. (2-tailed)	.045
	N	203
Enviroment	Pearson Correlation	-.074
	Sig. (2-tailed)	.294
	N	203
Languange	Pearson Correlation	.410**
	Sig. (2-tailed)	.000
	N	203
	Sig. (2-tailed)	
	N	203

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

* Correlation is significant at the 0.05 level (2-tailed)

Table 3. Mean values of extrinsic motivational factors in learning Mathematic

No	Factor	Mean Value	Standard Deviation
1	Facility	3.14	0.43
2	PTA	3.37	0.44
3	Teacher	3.55	0.45
4	Family	2.92	0.53
5	Peer-group	3.66	0.62
6	Environment	3.17	0.57
7	Language	3.59	0.58
	Overall	**3.34**	**0.55**

PTA= Parent Teacher Association

Table 4. Mean Distribution and Significant Values (t-test) For Significant Differences between Facilities, Parents Teacher Association Teacher, Family, Peer group, Environment and Language with Gender

	F	Min	Standard Deviation	Df	t	Significant
Teacher (M)	0.477	3.2355	.45375	201	.709	.479
(F)		3.1900	.44748	174.892	.707	.
Family (M)	0.328	3.0392	.52852	201	.254	.800
(F)		3.0200	.52909	176.605	.254	
Peer Group (M)	2.489	3.6554	.69865	201	-.199	.842
(F)		3.6738	.60398	159.346	-.194	
Enviroment (M)	2.942	3.1169	.60133	201	-1.154	.250
(F)		3.2104	.54317	164.555	-1.133	.
Languange (M)	2.846	3.4000	.63625	201	-.537	.592
(F)		3.4446	.54034	157.252	-.521	
Facility (M)	.728	3.1904	.44711	201	1.370	.395
(F)		31013	.46120	179.950	1.378	
PTA (M)	1.108	3.3741	.72639	201	.008	.294
(F)		3.3733	.65641	164.605	.008	

Significant level $\alpha = 0.05$

M= Male F =Female

PTA= Parent Teacher Association