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Research article

INFLUENCES OF SOCIO-ECONOMIC STATUS AND MULTIPLE INTELLIGENCES TO THE ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS

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ABSTRACT

A relationship on socio-economic status, multiple intelligences and the academic performance of secondary school students was conducted to account if indeed these factors could influence the students. Correlational survey method was used in this study using survey questionnaires. Respondents were the randomly selected 40 students from secondary schools in MSU-Naawan Integrated Developmental School. Data were collected by Multiple Intelligence Scale using a survey questionnaire for the randomly selected students. Student respondents' first to fourth grading grades were taken as ameasure for academic performance. Data were analyzed using descriptive statistics. Identifying the multiple intelligences of secondary school students, and inferential statistics were analyzed using the spearman rho to determine the relationship between the socio economic status, multiple intelligences and academic performance of the students. Study showed that there was no significant relationship between socio-economic status and academic performance of the students but there was a strong significant relationship between demographic profile and academic performance of the students. Hence, the study suggested that teachers and parents should enhance their collective efforts to help the students augment their academic performance.

Keywords: multiple intelligence, academic performance, MSU Naawan

INTRODUCTION

The Theory of Multiple Intelligences was developed in 1983 by Dr. Howard Gardner, professor of education at Harvard University. It is mainly concerned with the fact that intelligence has many dimensions. This theory states that every individual has an innate, unique intelligence that can develop and progress through training and consistent effort. From birth, all human beings have different abilities and every child has unique gifts. Until 1940s, as Rogers stated that children are meritorious because of their inner potentials, creativity, power to learn, ability to learn languages, and potential to use brain Ikiz*et al*., 2010).

Learners from the first century tend to be more active, creative, and innovative. A recent journal from Educational Research and Reviews found that based on Gardner's Multiple Intelligence theory, students with more intelligences opt to excel academically and in extra-curricular activities than those with only one intelligence (Pour *et al*., 2016).

While a human's innate intelligence already appears at an early age, others have their intelligences developed during adolescence. In this age, they are under secondary schools that mainly mold them in uncovering their true potentials, while their interests, habits, and talents are honed by their environment and in their respective homes. Home factors such as socio-economic status, and parent's educational background are said to be the foundation of the child's molding. Based from the recent study on Genetic Influence on Family Socioeconomic Status and Children's Intelligence that most 'environmental' measures involve significant genetic influence and that associations between these environmental measures and children's development are mediated genetically (Plomin, 1994; Plomin*et al*., 2013; Vinkhuyzen*et al*., 2010).

Many children have inborn potentials and gifts but only those who can afford schooling and further trainings can progress and cultivate their talent. The common tagline, "Poverty is not a hindrance to success", may not held applicable for those whose talents are exceptional yet they won't be able to get ample avenues where their talents could flourish. Hence, this study was conducted to depict a picture of how students performed academically when there are potential influences of socio-economic conditions of the family given their inherent multiple intelligences.

MATERIALS AND METHODS

This studyselected the total population of the sections determined as heterogeneous one section in MSU-Naawan Integrated Developmental School. A survey questionnaire was developed in this context of study, pretested and given to student respondents. The data were analyzed using inferential statistics which is concerned with the analysis of a subset of data leading to predictions or inferences about the entire set of data (Walpole, 1998). The research design was correlational research because it determines if a relation exists between two or more variables. The degree of relation is expressed as a correlation coefficient represented by a number between 0.00 (no relation) to 1.00 (perfect correlation) (Gines *et al.,* 1998).

RESULTS AND DISCUSSION

Parents educational Attainment

Figure below showed the parents educational attainment. In father's educational attainment 2.5% of them were elementary graduate, 25% were High school graduate, 72.5% of them were college graduate. In mother's educational attainment 3% of them are elementary graduate, 40% of them are high school graduate, 35% of them are college level, 20% of them are college graduate and 7.5% of them are graduate level.

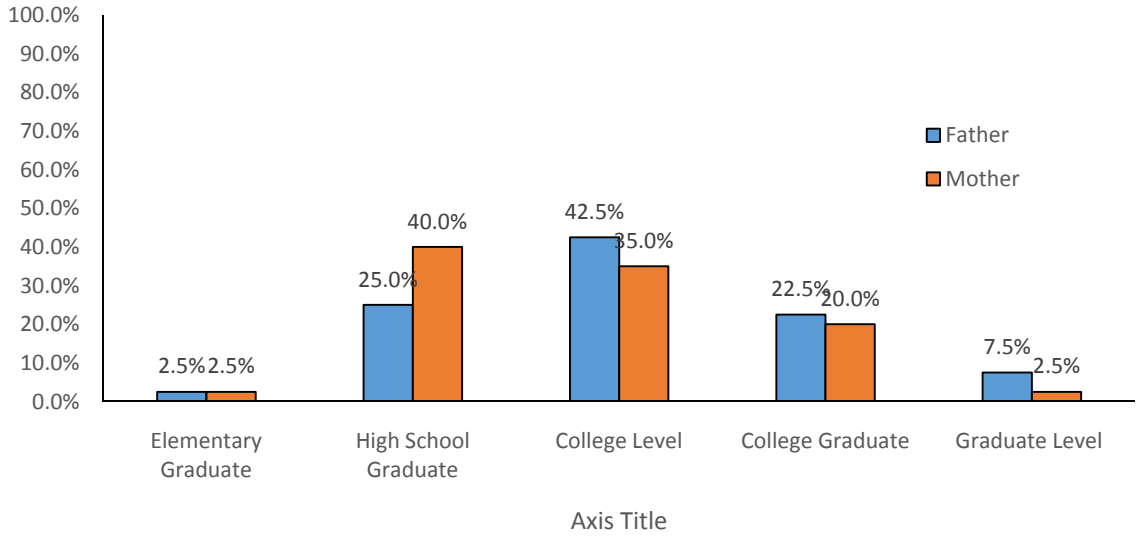


Figure 1. Percentage distribution of respondents parents monthly income

Monthly income of the respondent

Figure below showed the monthly income of the respondent, 15% of them got the monthly income of 5,000 and below, 25% of them got the monthly income of 5,001 to 10,000, 32.5% of them got the monthly income of 10,001 to 20,000 and 10% of them got the monthly income of 30,000 and above.

Multiple intelligence of the students in MSUN-IDS

The figure showed that high school students' top three intelligence is Existential, Intrapersonal, and Kinesthetic, while the bottom three is Interpersonal, Verbal and Visual intelligence. The top MI of the students in MSUN-IDS is Existential Intelligence with an excellent level. This means that the students are curious about their existence and are goal-oriented. They often asked questions about what life is, and what is the purpose of their actions and experiences.

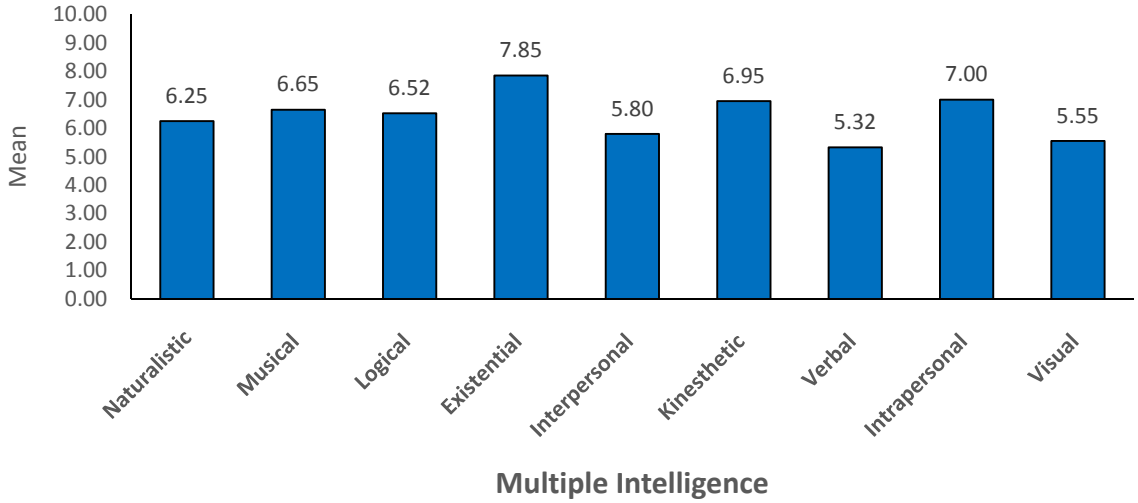
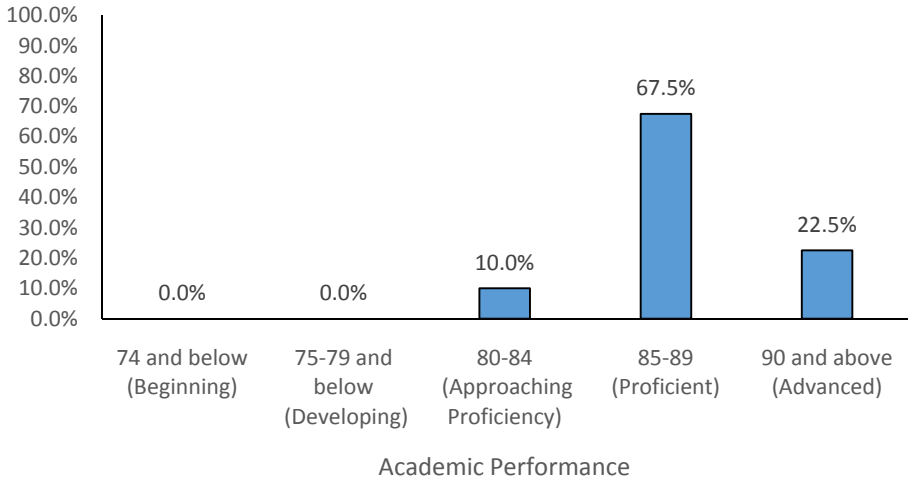


Figure 3. Multiple intelligences of the students in MSU-N IDS

Academic performance

Figure below showed the academic performance of the MSU-N IDS students. Ten percent (10%) of them were approaching proficiency. 67.5% were proficient and 22.5% were advanced.



Relationship between Multiple Intelligences and academic performance of secondary students

The correlation relationship value 0.90428 with p-value of $1.27X10^{-15}$ indicates a very strong significant relationship of multiple intelligences to academic performance at $\alpha = 0.05$. Hence, if the multiple intelligence is high, it also follows that the academic performance is high, in the same way that the lesser the multiple intelligence value, the lesser the academic performance is. Therefore, the extent of the multiple intelligence is directly related to academic performance or grades.

Table 3. Correlation analysis between students' academic performance and multiple intelligences.

Spearman rho	r-value	p-value	remarks
Multiple Intelligence Academic performance	0.90428*	$1.27X10^{-15}$	Significant

** Significant at α=0.05.*

Relationship between socioeconomic status and academic performance

By spearman rho correlation, the value of rho (ρ) = 0.27. There is no relationship between socio-economic status and academic performance. This means that socio-economic status did not influence and affect the grades of the students.

Spearman rho	r-value	p-value	remarks
Fathers Educational attainment	0.4896	0.0714	Not Significant
Mothers Educational attainment	0.4584	0.1539	Not Significant
Monthly Income	0.794	0.0797	Not Significant

Significant at α=0.05.

SUMMARY AND CONCLUSION

Findings of this study showed that multiple intelligence were determinant to academic performance of the students. Multiple intelligences and academic performance had strong significant relationship. However, socio-economic status alone did not have a significant relationship with academic performance.The highest educational attainment of the parents of the respondents is graduate or master's degree and the lowest is elementary graduate. The correlation value $1.27X10^{-15}$ indicated a strong relationship of multiple intelligences to academic performance at $\alpha = 0.05$. Hence, there is a stronger the intelligence is, the bigger the academic performance, in the same way that the weaker the multiple intelligence value, the academic performance is smaller. Therefore, the extent of the multiple intelligence is directly related to academic performance or grades.There is no relationship between socio-economic status and academic performance. This means that socio-economic status does not influence and affect the grades of the students. A strong significant relationship was observed between socio-economic status and multiple intelligences. Hence, the higher the socioeconomic status that involves higher income and higher educational background of the parents, the higher the multiple intelligences scores. Therefore, multiple intelligences leads to good academic performance

IMPLICATIONS AND RECOMMENDATIONS

It is known that multiple intelligence is significantly related to students' academic performance. Thus, it is recommended that a study correlating multiple intelligences and other factors like peer pressure, teacher factor, intelligent quotient, and environment factors should be conducted. Among the aspects in the socio-economic status and multiple intelligences, the former affects the latter. Thus, school administrators should impose regular Parent-teacher Association meetings, free seminars, and programs that help parents with average and below-average SES develop their child's intelligence and maximize their child's potential. The result of this same study is more reliable and valid if the whole population or absolute sampling is being considered. Thus, it is recommended that the same study be conducted using the whole population of secondary students in a specific school. Socio-economic status such as income, educational background, and occupation is known to be a negligible factor in academic performance. Thus it is also recommended that other factors such as parental separation or divorce, single-parenthood, maternal deprivation, and family size be correlated with parental motivation to show if those factors affect the type of strength of the child's multiple intelligence. Finally, it is also recommended to explore the use of other statistical tools and models in analyzing the data to obtain more conclusive results.

REFERENCES

1. Akinsanya, O. O., K. O. Ajayi, and M. O. Salomi. 2011. Relative effects of parents' occupation, qualification and academic motivation of wards on students achievement in senior secondary school mathematics in Ogun State. http://www.bjournal.co.uk/paper/BJASS_3_2/BJASS_03_02_11.pdf. January 5, 2012.
2. Anastasi, A. 1976. Psychological testing. Macmillan Publishing Co., Inc. New York, U.S.A.
3. Aquino, G. V., and P. U. Razon. 1993. Educational psychology. Rex Printing Company, Inc. Quezon City, Philippines.
4. Bandura, A., and K. Bussey. 1999. Social cognitive theory of gender development and differentiation. Psychological Review.
5. Bilbao, P. P., B. B. Corpuz, and A. T. Llagas, G. G. Salandanan. 2006. Lorimar Publishing Co., Inc., Quezon City, Manila, Philippines.
6. Gines, A. C., P. B. Dizon, A. B. Fulgencio, P. H. Obias, and F. G. Vendivel. 1998. Educational psychology. Rex printing Company Inc. Manila, Philippines.
7. Goldenberg, C., R. Gallimore, L. Reese, and H. Garnier. 2001. Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's schoolperformance.http://www.stanford.edu/~cla deg/documents/CauseOrEffect_000.pdf. January 11, 2012.
8. Hughes, M., and C. J. Kroehler. 2005. *Sociology*. McGraw-Hill Companies Inc. New York, U.S.A.
9. Ikiz, Ebru F., Cakar, Firdevs S., 2010. Yil:2 Sayi:3 2010-Guz (s. 83-92)

10. Keith, P. B., and M.V. Lichtman. 1994. Does parental involvement influence the academic achievement of Mexican-American eighth graders? Results from the National Education Longitudinal Study. School Psychology Quarterly.
11. Gardner, H. Multiple intelligences. http://teaching.uncc.edu/learning-resources/articlesbooks/best-practice/education-philosophy/multiple-intelligences. 2000.
12. Omoregbe, O. N. 2010. The effect of parental education attainment on school outcomes. http://www.fags.org/periodicals/201003/1973238801.html. January 31, 2012.
13. Papalia, D. E., S. W. Olds, and R. D. Feldman. 1998. Human development 3rd edition. McGraw –Hill Companies Inc., New York, U. S. A.
14. Plomin R., DeFries J., Knopik V., Neiderhiser J., Top ten replicated findings from behavioral genetics. 2013.