International Journal of Applied Social Science *RESEARCH PAPER*
Volume 5 (9&10), September & October (2018) : 734-737 ISSN : 2394-1405 (Print)
Received : 19.04.2018; Revised : 01.05.2018; Accepted : 16.05.2018

A correlation of cognitive capability and performance outcome across gender

ARTI DEVI*[1] AND NEETU SINGH[2]
Department of Human Development and Family Studies, School for Home Sciences,
Babasaheb Bhimrao Ambedkar University, Lucknow (U.P.) India

ABSTRACT

The present study was conducted at Lucknow District in Uttar Pradesh. The purpose of this study is relationship of cognitive capability and performance outcome among high school students across gender. In this paper we study the positive relationship between cognitive capability and performance outcome across gender. In many school systems, transfer from primary to secondary face of education is marks by grading system and there is no demarcation of quantitative performance of student. Purposively 120 respondents selected in Lucknow district 60 girls and 60 boys in high school students. Self-made questionnaire for examine extracurricular activity and performance outcome were administered. Cognitive capability test during Transition period developed by P. Vasundhara also used to assessing of cognitive capability. Data was analyzed in term of percentage, t-test analysis and correlation.

Key Words : Performance outcome, Extracurricular activity, Cognitive capability

INTRODUCTION

Cognitive capabilities are the characteristics of an individual that determine the stage /level of an individual performance (when maximal performance is attempted) on the selected cognitive tasks appropriate to late concrete and early formal operational stage of Piaget's theory of cognitive development. Cognitive development is must more than the addition of new facts and ides to an existing store of information. According to cognitive development theory adolescence id dominated by a radical shift in one's ability to think and to solve the problems.

Cognitive refers to the inner processes and products of the mind that lead "knowing". It includes all mental activity- attending remembering, symbolizing, categorizing, planning reasoning problem solving creating and fantasizing. This stage can be attributed by the use of logic and involves different processes such as development of abilities to short objects on the basis of size, shape, etc. At Adolescence, young people become capable of Hypothetic-deductive reasoning. When faced with a problem, they start with a general theory of all possible factors that might affect an outcome and deduce from it specific hypothesis about what might happen. Cognitive development is not always self generating. Many Cognitive changes proceed slowly and gradually. Few abilities are absent during one period in and suddenly present in another. Cognitive growth is considered as a high desirable educational goal, and many curricula are designed to develop student's particular

How to cite this Article: Devi, Arti and Singh, Neetu (2018). A correlation of cognitive capability and performance outcome across gender. *Internat. J. Appl. Soc. Sci.,* **5** (9&10) : 734-737.

cognitive skills. The meaning of cognitive development can be defined as students understanding levels of concepts or principles, students' operational stage; the concrete operational stage or the formal operational stage, and thinking abilities.

Extracurricular activities are found at all levels of our school system, especially in secondary schools (Foster, 2008). The terms extracurricular activities, co-curricular activities, and non-classroom activities have all been used interchangeably to mean experiences and activities such as debate, athletics, music, drama, school publications, student council, school clubs, contests, and various social events (Emmer, 2010).

Review of literature :

Daniel *et al.* (2012), conduct study on "cognitive ability and anomalous preference" Evidence from a new laboratory study of high school students with similar schooling background shows that small- stakes risk aversion and short-run discounting are less common among those with higher standardized test scores. The relationship with test scores survives controls for parental education and wealth. We find some evidence that elementary school GPA is predictive of preferences measured at the end of high school. Two laboratories provide suggestive evidence of evidence of possible causal impact of cognitive resources on expressed preferences.

Bora (2012) has given buy level of cognitive development and personality pattern of mishing adolescents in Assam. The study was conduct on 500 student from Lakhimpur and Dhemaji district under the age group of 13-16 year both boys and girls Mishing community. Result was indicated that the cognitive level of class 9-10 boys and girls were found very low in Lakhimpur and Dhemaji District. The cognitive level of class 9 girls of Mishing adolescent is better than the boys. The 9th standard student of the level of cognitive development is significantly correlated with the extroversion-introversion, self-concept temperament and respectively. Thus the study result in the fact that there is strong multiple co-relation between cognitive development, personality pattern, academic achievement, general mental ability and socio-economic background.

Sunday (2010) has conduct study was carried out on the relationship between students' participation in school based extracurricular activities and their achievement in physics. The samples used for the research work were selected randomly from four senior secondary schools in Mainland Local Government Area of Lagos State. A total number of two hundred physics students comprising one hundred females and one hundred male students. Three null hypotheses were postulated and tested at 0.05 level of significance to find the relationship between students participation in school based extracurricular activities and their achievement in physics. The instruments used were students' questionnaire and physics students achievement test (PAT). The data collected were analyzed using simple regression statistical analysis and the results of the findings showed that school based extracurricular activities having significant influence on students' achievement in physics. Finally, it was recommended in this study that a larger sample from both rural and urban areas should be used by future researchers to give a fairly valid result; importance of extra-curricular activities to the students should be highly emphasized.

Singh and Mishra (2013) has conduct study on Lucknow District in Uttar Pradesh. The purpose of this study is to document how being involved in extra-curricular activities can influence development in academics, social skills, and high school completion. 60 students of age group between 13 to 15 years comprised the sample of the study. Self made questionnaire for school students were administered. Data was analyzed in term of percentage and t-test analysis. The statistical analysis revealed that all the 6 types of extracurricular activities, *viz*., Yoga, Horse riding,

Sport activities, Dance, Music and Indoor and outdoor activities together showed significant role in impact of extracurricular activities on students in Private School. Students who participate in extracurricular activities generally benefit from the many opportunities afforded them. Benefits of participating in extracurricular activities included having better grades, having higher standardized test scores and higher educational attainment, attending school more regularly, and having higher a higher self concept. Those who participate in out-of-school activities often have higher grade point averages, a decrease in absenteeism, and an increased connectedness to the school.

METHODOLOGY

Descriptive cum exploratory research design was adopted in the present study. The present study was conducted in Lucknow city and high school student were selected to conduct the research. The sample for study consists of 120 respondents in high school students, 60 male and 60 female selected. The multistage purposive random sampling was used to select the sample from the selected School of Lucknow. The data was collected through interview method. Standardized tool like Cognitive Capabilities Test Inventory for transition period; (CCT-T) by P. Vasundhara 2005 Used to measure cognitive capability in high school students, pre-design and pre-tested questionnaire was used to get information at individual and family level. The data was coded and analyzed with SPSS 20 version using appropriate statistical techniques.

RESULTS AND DISCUSSION

These results indicate that there is positive correlation Cognitive capability and performance outcome. It means that when Cognitive capability decreases then performance outcome also decreases.

As their value is positive and p.0.05 thus null hypothesis is rejected.

Table 1 : Relationship between cognitive capability and performance outcome

Dependent variables	Mean	S.D	R	Significant value	Conclusion
Performance outcome	5.78	1.36	.461	.000	
Cognitive capability	19.97	2.78			

r =.461**, N=120

Conclusion and Recommendation :

Positive relationship between cognitive capability and performance outcome. After conducting present study I would recommend that during adolescence stage, extracurricular activity will help in having cognitive ability. It should be promoted in family and at school level. It's give a clear message to the community that early foundation age carried cognitive development and its impact correlates in competitive performance also. In later life, any competitive examination will assess comprehensive, analytical classified and so on cognitive abilities. For that, extracurricular activity will help an individual for their better performance. Extracurricular activity should be provided to both male and female equally at school level so that their cognitive abilities wouldn't suffer especially for female students.

REFERENCES

Adams, W. (2007). Individual differences in mathematical abilility: genitec, cognitive and behavioral factors".

J. Res. I special Education Needs, **7** : 97-103

Bandura, A. (1986). Social foundations of thought and action: A social cognitive view. (pp. 34-54) Eaglewood Cliffs: Prentice Hall.

Bandura, A. (2006a). Adolescent development from an agentic perspective. In F. Pajares& T. Urdan (Eds.), Self-efficacy beliefs of adolescents (pp. 1-43). Greenwich,CT: Information Age Publishing.

Bauer, K.W. and Liang, Q. (2003). The effects of personality and precollege characteristics on First- year activities and academic performance. *J. College Student Development*, **44** : 277-290.

Bora, R. (2012).Level of cognitive development and personality pattern of mishing adolescents in Assam; *Internat. Referred Res. J.,* **3** : 69-71.

Cacchio, M. and Wai, J. (2010). Sex difference in the right tail of cognitive abilities: A 30 years examination. *J. Intelligence*, **38** : 421-423.

Conway, A. (2009). An investigation into the benefits of extracurricular activities like Clubs and Societies to students and colleges: Are these benefits evident in the opinions and perceptions of staff and students in DIT? B.Sc. Dublin Institute of Technology.

Eccles, J. (2003). Extracurricular activities and adolescent development. *J. Soc. Issues*, **59**(4) : 865-889.

ERIC Digest. (2005). The mediating effects of schools, communities, and identity. *Sociol. Edu.*, **76**: 89-105.

Habibollah, N., Abdullah, R. and Tengku Aizan, H. (2008). Male Versus Female Intelligence among Undergraduate Students: Does Gender Matter? *Asian J. Scientific Res.*, **1**(5) : 539-543.

Holloway, J.H. (2000). Extracurricular activities: The path to academic success. Educational Leadership, December 1999/ January 2000. Association for Supervision and Curriculum Development. Arlington, VA.

Marsh, H.W. and Kleitman, S. (2002). Extracurricular activities: The good, the bad, and the nonlinear. *Harvard Educational Review*, **72** : 464-512.

Mirivis, P. and Hall, D. (1994). Psychological success and the boundary less career. *J. Organisational Behaviour*, **15**(4) : 365-380.

Luo, D., Thompson, L.A. and Detterman, D.K. (2003). The causal factor underlying the correlation between psychometric g and scholastic performance. *Intelligence*, **31**(1) : 67-83.

Noam, G.G., Biancarosa, G. and Dechausay, N. (2003). Afterschool education: Approaches to an emerging field. Massachusetts: Harvard University.

Zaff, J., Moore, K., Papillo, A. and Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *J. Adolescent Res.*, **18**(6) : 599-630.

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