

ADAPTIVE BEHAVIOR OF FIRST GENERATION LEARNERS AND NON FIRST GENERATION LEARNERS IN LOWER SOCIO ECONOMIC CLASS IN KOLKATA: A COMPARATIVE STUDY

Madhurima Mukherjee

Research Scholar, Department of Home Science, Calcutta University, West Bengal, India

Dr. Nandini Chatterjee

Associate Professor, Department of Home Science, Calcutta University, West Bengal, India

Abstract

A study on education, especially on basic level of education may be useful to understand the growth of the society at large. Educational and behavioral excellence may be dependent on the literacy level of their previous generations. In this study we have used two terminologies, viz. FGL and NFGL. FGL implies the students whose parents are illiterate and they are the first generation learners. NFGL indicates the students whose parents are literate and therefore they are non-first generation learners. In this paper we consider the parents who don't have school going experience as a parent of FGL students. The present study explores the total Adaptive Behavior of First Generation Learners (FGL) with the age group 9 to 14 years as well as their Adaptive Behavior in each of the domains of Communication, Daily Living and Socialization skills. Moreover, the predictor of their performance and developmental delay in Adaptive Behavior were investigated in this study. Instruments included for the measurement are Socio Economy Scale of Kuppuswamy, 2012 and Vineland-II Adaptive Behavior Teacher Rating Scale, second edition, 2005. This study shows the comparison between 32 FGL and 32 non FGL school students in Kolkata who belong to Lower Socio Economy class. These students were recognized by their school teachers and 'trap teachers' of NGOs who access their developmental delay in the field of Adaptive Behavior. Wilcoxon matched pair signed rank test and Paired sample t-test were used to measure statistical inferences with the assistance of SPSS software (20 versions). The results reveal on the effect of gender of FGL students on composite score of Adaptive Behavior (AB) and its sub test. Although there is no significant gender difference as well as in composite score of AB but there is a relationship with its sub test like Communication, Daily Living Skills and Socialization skills among FGL and non FGL pupil is visible. So, parental literacy is an important factor which influences the developmental delay and performances of FGL students than the main stream NFGL students with same socio economy class.

IndexTerms: Adaptive Behavior, Communication and Daily Living Skills, Composite Score, FGL and NFGL, Kuppuswamy's Socioeconomic Status Scale, Statistical Analysis, Vineland –II Adaptive Behavior Teacher Rating Scale.

I. INTRODUCTION

The term "First Generation Learners" (FGL) here refers to the students who are the first one in their entire generation to go to school and receive an education (Awasthy&Khimani, 2015) or whose parents give thumb impression or can put a signature. Even they never went to school. These children face multiple problems in their daily life as well as in the school and community. Some mal-formation may be found in their "adaptability" which is visible to their school teachers or trap teachers of NGOs. Here Adaptive Behavior has been defined as "the performance of the daily activities required for personal and social sufficiency" (Sparrow, Balla, & Cicchetti, 1984)

If we go by the Darwinian theory of evaluation then adaptability bears a genetic basis. We adapt to survive- bring about changes in our behavior in order to adjust better with the environment (Hurlock, 2003). And this change can possible only because of learning. Learning and adaptive behavior goes hand-in-hand. (Saini, et.al. 2013), stated that education of parents and their family income related to adaptive behavior of their children. People learn to adapt themselves to change. So, adaptive behavior can be defined in various ways, the simplest being that it is the performance of daily activities required for personal and social sufficiency (Bullington, 2011). Furthermore, it is how individual are able to cope up with the demand of common life and how well a person meets the standards of personal independence, expected to someone in their particular age group, socio-cultural background and community setting. In this study, adaptive behavior of the students measured by communication skills, daily living skills and socialization skills using Vineland Adaptive Behavior Teacher Rating Scale.

II. REVIEW OF LITERATURE

First Generation Learners are called “disadvantage learners” (Awasthyet.al. 2015) they come from disadvantage area of learning and they are economically very poor. Not only this, they have been considered to be linguistically deficient, academically unsuccessful, socially and economically backward (An Ethnography Study, Awasthyet.al. 2015). The current study focuses on those children, who live in metropolitan city like Kolkata because this section of our society needs supportive programs to aid learning. Parental education, their attitude and their interaction patterns influence directly to the academic success as well as receptivity, express ability and written skills of their children. Poor habits of living hamper their activities in the personal life as well as academic field and in school community of the children. In the sense of socialization, Bandura, 1986, said that behavior used to shape in the part through observational and direct learning experience which a child learns from their parents.

1. First Generation Learner

First Generation Learners come from illiterate family background with lack of basic educational knowledge and skills. As a poor result in school, they withdraw them from school activities(Article Central, 2000).They don't get academic support from their parents because of lack of education and time to spend their children where mother play an important role for academic achievement of the children.(Awasthy and Khimani,2015).

1.1 Adaptive Behavior

Price et.al. 2018 underlined the thought of Grossman, 1973, that Adaptive Behavior is the effectiveness and degrees to which the individual meets the standards of personal independence and social responsibility. On the other hand previous studies have shown that home chaos uniquely predicted higher levels of internalizing and externalizing behavioral problems as well as lower levels of Adaptive Behavior (Sabah et. al., 2011). Low level of adaptive functioning tends to delay in socio cultural standards and social responsibility. Our daily life activities like way of communication, social participation and environment at home, school, work place and community may limit for this deficit (American Psychiatric Association, 2013).

1.2 Communication

In this study, communication means the ability to speak, to listen, to understand others and to use of written language (Vineland-II). It is a skill that influences the adaptive ability of an individual in every facet of life (Adaptive Behavior Assessment System-II, 2008). There are three sub domains under this are:-

- a. **Receptive:** -It means the ability to listen and giving attention to others and how they understand instructions (Vineland-II).Some studies show that low receptive ability causes language disorder but this disorder does not indicate low intelligence. Many of students like FGL show problem in verbal skills with average intelligence. They face problem with communication, academic activity and social interaction (North Shore Pediatric Therapy, 2012).
- b. **Expressive:**-It means the ability to use words and sentences when they pursuing knowledge (Vineland-II). Express ability of a child helps in school readiness and school achievement (Tamis-Lemonda et.al, 2009). Findings reveled that maternal redirecting behavior or Illiterate home environment, negatively associated with expressive skill (Schmitt, 2011).
- c. **Written:**-Writing skill develops when a child makes out their own language and can be able to make meaningful letters (Vineland-II).Organization for Economic Co-operation and Development (OECD) 2013, says that to achieve goal of a society the ability to understand and evaluate it with written language is called literacy.

1.3 Daily Living Skills

The skill to demonstrate present situation and to do things alone personally and socially (Vineland-II) is required for daily independent living which is known as “independent living skills” or “daily living skills” (Flynn & Healy, 2012).Activities of Daily Living Skills (DLS) comprise the basic actions that involve caring for one's self and body, including personal care, mobility and eating (Mlinac&Feng, 2016)FGL have poor time management skills in their daily life so they show disrespectful attitude, are not focused, lazy, shy (Greenwald, 2012).There are three sub domains under this are:-

- a. **Personal:**-It means personal hygiene (Vineland-II) when family plays an important role for preventing behavioral problem among children so parental counseling is necessary for them (Jogdand and Naik, 2014)
- b. **Academic:** -Here it means the concept of time, money and math(Vineland-II).Some literatures suggested that children with poor academic background face problem with time management, motivation, stress management, personal problems related to family obligations, attendance issue because of their lack of academic preparation. (Zeisman,2012)
- c. **School Community:** It means behavior of a student in school environment and their approaches to learning (Vineland-II). From the beginning of life, the attachment formed between parent and child predicts the quality of future relationships with teachers and peers who play a leading role in the development of such social functions as curiosity, arousal, emotional regulation, independence, and social competence. Socialization process in school generally pressures the students to be like their peer (Jensen 2009).

1.4 Socialization Skill: - It means how pupil interacts with others and their recreational activities (Vineland-II). FGL students are very shy. Socialization and social status contribute significantly to behavior of first generation learners.(Jensen 2009). There are three sub domains under this are:-

- a. **Interpersonal relationship:** -It means students interaction with others (Vineland-II).From the theoretical perspective Wentzel, 2004, talk about causal mechanism for a good teacher-student interaction which influences the outcome of the

students. Keller, 1988, examined 154 black, Hispanic and White 7 year children and concluded that adaptive behavior of children with parents and teachers were relatively independent.

- b. **Play and Leisure Time**:- It means to measure their free time activities(Vineland-II). Due to lack of self-determination, play and leisure skills like hobbies, making destination, play and recreational activities are very much affected and delayed (Turygin& Matson,2014).Illiterate adolescent spent no time for reading for pleasure in each day (Nippold MA, et.al.2005).
- c. **Coping skills**:-Students show their responsibility and sensitivity to others effectively when they cope with the natural and social demands of his environment. Sometimes due to lack of motivation, the individual may refuse to do their task and finally their skills are not used adaptively (Turygin& Matson, 2014).

A major concern to the children with Illiterate family background is that their parents need to travel quite a long distance to give special attention to their children. Otherwise due to backwardness in communication, daily living skills and socialization, they may become socially isolated (Papadopoulos et.al. 2011).

III. RESEARCH OBJECTIVES

To find out any difference between FGL and NFGL to analyze their skills and to evaluate the gender proficiency within FGL the present research attempts:

- To find out the gender difference among FGL in the area of Adaptive Behavior.
- To estimate the predominance of the composite scores of Adaptive Behavior of Non-FGL over FGL.

IV. FORMULATION OF HYPOTHESIS

Based on the review of literature and research objectives, following hypotheses have been formulated:

- Gender wise there is no significant difference in Adaptive Behavior with respect to communication skills, daily living skills and socialization skills among FGL.
- In terms of composite score of Adaptive Behavior NFGL is not predominant over FGL.

V. RESEARCH METHODOLOGY

The present research has been conducted on the basis of the analysis of primary data as per Vineland Adaptive Behavior Teacher Rating Questionnaire, printed in both languages, English and Bengali. The sample size is 64 distributed equally between FGL and NFGL students, 32 each in number. Among those 32 of each group, boys and girls are of equal numbers, 16 each. They belong to same lower socio-economy class and they live in urban area of Kolkata. All these schools are under Sarva Siksha Abhijan (SSA). The age range of the sample is 10 to 13 years which is upper primary level. The interviewees are either school teachers or trap teachers of the NGOs who know both groups of students profoundly. These teachers had done counseling to their illiterate parents and convinced them for school enrollment. And finally they are able to motivate illiterate parents and give them basic education which helps them admitting their ward in school. Some questions were asked to the students by the researcher directly to avoid biasness and confusion of the teacher. Sometimes teachers also asked questions to their students in the time of form fill up. Teachers were also suggested to follow their track record and mark sheet to evaluate the students and their back ground. Since the scores are available in non-parametric form, we have selected Wilcoxon matched pair signed rank test in order to determine whether there is any significant difference between FGL and NFGL in their adaptive behaviors. We have used paired t test to measure the significant difference between the boys and girls among the FGL in terms of their adaptive scores. For the simplicity and accuracy we have used SPSS (20 version) to get the result.

VI. RESULTS AND DISCUSSION

Table 1: Adaptive Behavior of FGL& NFGL(Descriptive statistics)

| DIMENSIONS | MEAN | | SD | |
|-------------------------------|--------------|--------------|-------------|--------------|
| | FGL (N-32) | NFGL (N-32) | FGL (N-32) | NFGL (N-32) |
| ADAPTIVE BEHAVIOUR | 75.72 | 78.97 | 5.45 | 11.37 |
| COMMUNICATION SKILLS | 78.78 | 86.63 | 5.55 | 6.01 |
| 1.Receptive | 13.03 | 13.68 | 1.062 | 0.93 |
| 2.Expressive | 9.56 | 11.03 | 0.91 | 1.47 |
| 3. Written | 11.96 | 13.75 | 1.87 | 1.68 |
| DAILY LIVING SKILLS | 75.75 | 81.75 | 7.72 | 7.94 |
| 1. Personal | 10.93 | 12.09 | 1.06 | 3.00 |
| 2.Academic | 10.53 | 11.25 | 0.91 | 1.52 |
| 3. School Community | 12.31 | 13.62 | 1.87 | 1.69 |
| SOCIALIZATION SKILLS | 78.84 | 86.63 | 4.88 | 7.49 |
| 1. Interpersonal Relationship | 11.59 | 12.62 | 1.56 | 1.66 |
| 2. Play and Leisure Time | 12.00 | 14.15 | 1.10 | 1.52 |
| 3.Coping Skills | 10.31 | 11.65 | 1.33 | 1.92 |

Measurement of Consistency

| Dimension | Coefficient of Variation (S.D/Mean*100%) | |
|-------------------|--|--------|
| | FGL | NFGL |
| Adaptive Behavior | 7.18% | 14.40% |

From Table -1 we understood about the average and standard deviation of FGL and NFGL in terms of their adaptive behavior. By using those values we have found out coefficient of variation in Table – 2 to understand the consistency within the group. It has been observed that FGL is more consistent in their adaptive behaviors rather than NFGL although NFGL secured higher average score than FGL.

Table 3: Gender difference in adaptive behavior of FGL (Paired sample t test)

| | Difference between Gender | Paired Difference | | | | | | Inferences |
|--------|----------------------------|-------------------|--------|-------|----|----------------------|-------------------------|--|
| | | Mean | SD | t | df | Tabulated value of t | Significance level 0.05 | |
| Pair 1 | Communication skills (M&F) | 1.688 | 7.872 | 0.858 | 15 | 2.731 | No | Communication skills are equal among both gender |
| Pair 2 | Daily living skills (M&F) | 5.750 | 10.396 | 2.212 | 15 | 2.731 | No | Daily living skills are equal among both gender |
| Pair 3 | Socialization skills (M&F) | 1.938 | 6.933 | 1.118 | 15 | 2.731 | No | Socialization skills are equal among both gender |

M=Male, F=Female

From the above paired sample t- test table (Table – 3), it has been observed that the calculated values of t are less than their tabulated values in all the skills for a two tailed test under 5% level of significance for 31 degrees of freedom (Approximated to Z-Test). Therefore we may accept the null hypothesis and can conclude that there is no significant difference between boys and girls for FGL in terms of Communication skills, Daily living skills, and Socialization skills. Therefore we can clearly rule out the difference in skill sets in terms of gender, at least for FGL.

Table 4: Difference between sub domains of adaptive behavior among FGL and NFGL

(Wilcoxon matched pairs signed rank test)

| Domains | Absolute Z-value | Tabulated Z-value |
|-----------------------|------------------|-------------------|
| Communication skills | 3.966 | 1.645 |
| Daily living skills | 2.778 | 1.645 |
| Socialization skills | 4.374 | 1.645 |
| Composite score of AB | 1.677 | 1.645 |

*- Significant beyond 0.05 level

1= FGL, 2=NFGL

From the Wilcoxon matched pairs signed rank test, it has been observed that calculated values of Z (absolute value) in all cases are more than their tabulated values for a one tailed test under 5% level of significance. Therefore we may reject the null hypotheses and can conclude that there are significant differences between FGL and NFGL in terms of adaptive behaviors including its sub domains, e.g communication, and daily living and socialization skills. The observation of Table – 4 is interesting and by referring the mean value from Table – 1 we may conclude that in regard of adaptive behavior NFGL appears to be predominant over FGL significantly (As the mean is higher) and this inference may be substantiated qualitatively also. One tailed tabulated values are also supporting these inferences (Since all calculated Z values are negative in sign. Therefore, NFGL > FGL in all domains).

VII.SYNOPSIS OF INFERENCES

1. In terms of the composite score of adaptive behavior first generation learners are more consistent than non – first generation learners (Reference: Table – 2)
2. Gender wise for FGL there is no significant difference in terms of adaptive behaviors including their different domain skill sets. (Reference: Table –3)

3. There is a significant difference between FGL and NFGL in terms of scores of adaptive behavior including their domain skills and NFGL is predominant over FGL for adaptive behavior. (Reference: Table – 1 & 4).

VIII. CONCLUSION

The results which have been revealed are quite logical and clearly reconciling with the practice. The skill sets and the adaptive behaviors should not be gender dependent. Our result shows this. Since in education the guidance should be started from home and parental influence may create a difference, FGL are having lack of getting the opportunities. Therefore their skills should be little less than NFGL and here the scope of schools and educational organizations lie. This is now their responsibility to make up this significant difference between the FGL and NFGL in the higher classes. This is how the schools can play an important role to create a society of not only equality but also of equity, at least terms of knowledge and wisdom.

IX. LIMITATION

Limitation of this study is the size of the sample. A large sample would allow for the examination of other variable influence like number of siblings and their education and drop out tendency, their home and school environment, learning opportunity, work pressure and social acceptance. Another limitation may result from the fact that the survey form is filled by the caregiver of FGL students and sometime they may be biased. They nurture those students to some extent. So it is not possible to judge them without monitoring them rest of the time appropriately. Lack of educational resources like computer, calculator, dictionary etc., they deprived from some skills which make difference among FGL and non-FGL students.

X. IMPLEMENTATION

The issue of adaptive behavior of FGL is important for the purpose of classification and their placement as well as program planning and intervention. These students are most at risk when they turn into secondary education where drop out level is very high among them. So they need moral and education support in the field of academic, daily living and in social sense. Research shows that FGL students face much more home chaos uniquely predicted higher levels of internalizing and externalizing behavioral problem as well as lower level of Adaptive Behavior (Sabah.et.al.2011).

XI. ACKNOWLEDGMENT

I would like to express my sincere gratitude to my research guide Dr. Nandini Chatterjee, Associate Professor, Department of Home Science, Calcutta University for her continuous hand holding, esteemed suggestions and valued guidance for preparing this research article. I am also thankful to Mr. Indrajit Bandyopadhyay, Chief Financial Officer, Usha Martin Education & Solutions Limited for providing me the technical support, mainly in the area of quantitative analysis. And last but not the least I am indebted to the trap teachers of Right Track NGO and the teachers of Loreto St. Mary's Girls' High School, Bhoothnath High School, Manu Memorial Institution and St. Ann's school for devoting their precious time for providing me the primary data by arranging to fill up the structured questionnaire by each of the students and assist getting the information of their past socio economic, educational and behavioral status which in turn plays a pivotal role to infer a meaningful conclusion of my research.

BIBLIOGRAPHY

- 1 American Psychiatric Association, (2013). *Diagnostic and Statistical Manual of Mental Disorder fifth edition*. American Psychiatric Publishing, Arlington, Virginia.
- 2 Awasthy, G & Khimani, V. (2015). *Academic Challenges Faced by First Generation Learners in an NGO-Run School vis Government School in the Nainital District (Uttarakhand) of Northern India*. Azim Premji University, Bangalor.
- 3 Bourdieu, P. (1986). Cultural Capital. from http://en.wikipedia.org/wiki/Cultural_capital Retrieved on 1.05.14
- 4 Bullington, E.A. (2011). *Encyclopedia of Child Behaviour and Development*. Springer US, pg 31-32
- 5 DeFreitas, S.C. & Rinn, A., (2013), Academic achievement in first generation college students: The role of Academic self-concept, *Journal of the Scholarship of Teaching and Learning*, vol. 13, 1. <http://josotl.indiana.edu>
- 6 Denrell, J. (2007). *Adaptive Learning and Risk Taking*. *Psychological Review*. 114(1), 177-187
- 7 Flynn, L. & Healy, O. (2012). A Review of Treatments for Deficits in Social Skills and Self-help Skills in Autism Spectrum Disorder. *Research in Autism Spectrum Disorder*, 6, 431-441.
- 8 Greenwald, R. (2012). *Think of first-generation students as pioneers, not problems*. Retrieved from: <http://www.chronicle.com/article/think-of-First-Generation/135710/> on 3/4/2018
- 9 Grossman, H.J. (1973). *Manual on Terminology and Classification in Mental Retardation*. American Association on Mental Deficiency. Washington, D.C.
- 10 Hurlock, E. B. (2008). *Developmental Psychology: A life span Approach*. New Delhi: Tata McGraw-Hill Publishing Company Ltd.

- 11 Jensen, E. (2009). What Being Poor Does to Kids' Brains and What School Can Do About It. In *Teaching with Poverty in mind*. ASCD Book Publisher.
- 12 Jogdand S.S. & Naik J.D. (2014) Study of family in association with behavior Problems amongst Children of 6-18 years age group. *International Journal of Applied and Basic Medical Research*, Jul-Dec 2014, Vol 4, issue 2.
- 13 Keller, H.R. (1988). Children's Adaptive Behaviors: Measure and Source Generalizability. *Journal of Psychoeducational Assessment*, 6, 371-389.
- 14 Kumar, et.al. (2012). Kuppuswamy's Socio Economic Status Scale, a Revision of Economic Parameter. *International Journal of Research & Development of Health*, 1(1), 2-4.
- 15 Mancil, G.R. & Vinson, B. (2008). A Volume in Practical Resources for the Mental Health Professional. *Adaptive Behavior Assessment System-II: Clinical Use and Interpretation*, 51, 53-70.
- 16 Mlinac & Feng. (2016). Assessment of Activities of Daily Living, Self-Care and Independence. *Clinical Neuropsychology*, 31, 506-516.
- 17 Mukherjee, M. & Chatterjee, N. (2016). A Comparative Study on Intelligence of First Generation Learners and Non First Generation Learners from Lower Socio Economy Class in Upper Primary Level. *International Journal of Humanities & Social Studies*, 4(8), 190.
- 18 Nippold, M., et.al. (2005). Literacy as a Leisure Activity: Free-Time Preferences of Older Children and Young Adolescents. *Language, Speech and Hearing Services in School*, 36, 93-102.
- 19 North Shore Pediatric Therapy. (2012). Retrieved on 7/4/2018 from <https://nspt4kids.com>
- 20 Organization for Economic Co-operation and Development (OECD) 2013,
- 21 Papadopoulos et.al. (2011). Adaptive Behaviour of Children and Adolescents with Visual Impairments. *Research in Developmental Disabilities*, 32, 1086-1096.
- 22 Price et.al. (2018). The Application of Adaptive Behaviour Models: A Systematic Review. *Behavioural Science*, 8(1), 11. Retrieved from <https://doi.org/10.3390/bs8010011> on 2/3/2018
- 23 Ricks, J.R. (2016). Strategies for Enhancing the Transition of First-Generation Students to Postsecondary Education. *ACA Knowledge Centre-VISTAS online*. Article 77.
- 24 Sabah, et.al. (2011). Relation of home chaos to cognitive performance and behavioral adjustment of Pakistani primary school children. *International Journal of Behavioral Development*, 35(6), 507-516.
- 25 Saini, et. al. (2013). Ecological Environment as a Determinates of Adaptive Behaviour in Children. *American International Journal of Research in Humanities, Arts and Social Sciences*. Retrieved from <http://www.iasir.net> on 29.04.14.
- 26 Sarva Siksha Abhijan. Retrieved from <https://www.ssa.nic.in> 13/5/2012
- 27 Schmitt, S.A. & Simpson, A.M. (2011). A Longitudinal Assessment of the Home Literacy Environment and Early Language. *Infant and Child Development Journal*. Retrieved from <https://onlinelibrary.wiley.com> on 9/5/2018.
- 28 Sparrow, S.S., Balla, D.A. & Cicchetti, D.V. (2006). *Vineland Adaptive Behaviour Scale Second Edition, Teacher Rating Form Manual*. Pearson Clinical Assessment, Bloomington, MN.
- 29 Tamis-Lemonda, C.S. & Rodriguez, E.T. (2009). *Parents' Role in Fostering Young Children's Learning and Language Development*. Encyclopedia on Early Childhood Development. New York University, USA.
- 30 Turygin, N.C. & Matson, J.L. (2014). *Adaptive Behavior, Life Skills, and Leisure Skills Training for Adolescents and Adults with Autism Spectrum Disorders*. Louisiana State University, Baton Rouge, LA 70809, USA
- 31 Wentzel, K.R. (2004). Social Relationships and Motivation in Middle School: The Role of Parents, Teachers and Peers. *Journal of Educational Psychology*, 90, 202-209.
- 32 Zeisman, G. S. (2012) *First-Generation Student Success After Academic Warning: An Exploratory Analysis of Academic Integration, Personal Adjustment, Family and Social Adjustment and Psychological Factors*. (Unpublished doctoral dissertation) Portland State University, 619.