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Research Paper

Construction And Standardization of a Parental Involvement Scale

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ABSTRACT

Parental involvement in early stages of learning is an important factor in students' learning and success in school and in life. Parental involvement is generally defined as parental involvement in their children's educational process with the goal of improving their academic and social well-being. This includes supporting and monitoring homework at home, attending school activities and parent-teacher interaction sessions, communicating with teachers, volunteering at school and working with the community (Deegoda et.al). The purpose of this paper is to develop and standardize a Parental Involvement Scale (PIS) for Secondary school students. For item analysis, the draft scale was administered to a sample of 200 people. The scale was prepared in two versions: English and Assamese. The final scale had 55 items spread across six areas of parental involvement. The Reliability of the English version scale was found to be .823 and the Assamese version was found to be .953.The investigator showed the Parental Involvement Scale to a number of experts seeking judgment on the coverage of the constructs to determine the validity of the scale.

Keywords: Parental Involvement, Construction, Standardization

Parent involvement typically refers to parents' actions at home and at school that support their children's educational progress. It means participation of parents in such activities as reading to children, encouraging them to do their homework independently, monitoring their activities both inside and outside the four walls of their home and providing coaching services to improve their learning in various subjects. This participation is seen by educators as supportive of instructions which may or may not influence school policies (Epstein, 1984, 1985, Epstein and Salinas, 1993, Moles, 1987, Ost, 1988).Parental involvement is defined as parents' involvement in their children's lives, at school, coaching them, spending time together, doing activities, attending activities, listening to and talking with them, reading together, having meals together, going on vacation, teaching them, guiding them, assisting them in their academic activities, teaching citizenship, life skills, and developing their unique talents and abilities, knowing what is going on in their lives, keeping close track of where and with whom they spend their time, being aware of their interests and passions, having the correct frame of mind, being interested in children's activities, loving them without condition, giving them food and

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shelter, clothing, and a variety of experiences. (Baumgardnee, 2007). Deforges & Aboucher (2003) defined four patterns of involvement i.e Parental involvement in children's homebased activities and school-based activities, direct parental involvement in academic activities of their children. Measures of parent involvement commonly include the quality and frequency of communication with teachers as well as participation in school functions and activities (Dearing, McCartney, Weiss, Kreider, & Simpkins, 2004; Dearing, Kreider, Simpkins, & Weiss, 2006; Machen, Wilson &Notar, 2004). Parent involvement also characterizes parents' values and attitudes regarding education and the aspirations they hold for their children (Catsambis, 2001; Englund, Luckner, Whaley, & Egeland, 2004). Although values and attitudes do not directly influence academic outcomes, they can indirectly improve academic achievement by increasing children's motivation and persistence in difficult educational tasks.

Objectives of the Present Study

The objectives of the present study are:

- **1.** To construct a Parental Involvement Scale (PIS) including six dimensions to measure the Parental Involvement of the Secondary School students.
- 2. To standardize the Parental Involvement Scale.

Rationale of the Present Study

Students achieve greater academic success when schools and families collaborate to motivate, socialize, and educate them (Caplan, 2000). Students with involved families have higher grades and test scores, complete more homework, have better attendance, and exhibit more positive attitudes and behaviours. Henderson (1987) discovered that academic achievement gained through family involvement with Elementary school students continued into middle and high school. When parents become involved in their children's education, they gain a better understanding of what is taught in school as well as teaching and learning in general. They learn more about the children's knowledge and abilities, as well as the programmes and services provided by the school (Moorman 2007, Caplan 2000, Drake 2000). The parent's acceptance of the child and education, their aspirations for the child, the attention they pay to the child's education, the encouragement and guidance they provide, the way they influence as role models for the child's academic activities, their decisions regarding the child's education, provision of physical facilities and care for the child's physical fitness, all influence the child's education. The ability of these parental activities to influence academic achievement varies. The success of any education system to a large extent depends on the proper preparation of students in their initial stages of education. This initial education impacts the rest of their lives, and determines society's future. Parental involvement in these stages of learning is a crucial force in students' learning and success at school and in life. The more the parents involve in the process of imparting education to their children, the more the children might excel in their academic career and to become the productive and responsible members of society. It has been assumed that academic achievement of students may not only depend on the quality of schools and the teachers, rather the extent of parental involvement has vital role to play in it.

In this regard, the researcher has made an attempt to construct a Parental Involvement Scale (PIS) to measure the parental involvement of the Secondary school students in a systematic manner. A review of related literature in this area indicates the importance of a Parental Involvement Scale in the formation of Indian families, including its dimensions. As a result, the proposed study is an attempt to fill these gaps. Keeping this in mind, the investigator

decided to develop a Parental Involvement Scale to assess parental involvement among Secondary School students in the Sivasagar District of Assam.

REVIEW OF RELATED LITERATURE

The researcher made an effort to find the relevant literature on parental involvement in order to learn more about various variables related to those dimensions.

The investigator carefully reviewed the literature pertaining to PIS creation before creating the Parental Involvement Scale (PIS). It was noted that many studies had revealed various parental involvement dimensions.

Baumrind (1973) describes two critical aspects of family climate.

• They were: i. The extent of parental control and direction; ii. The emotional support and encouragement parents provide for their kids.

Jackson and Stretch (1976) identify four types of parental involvement.

- Parents acting as both recipients and supporters
- Parents serving as non-instructional volunteers
- Parents serving as instructional volunteers
- Parents making decisions

Three different categories of Parental Involvement activities are listed by **Taylor & Devis** (1984) as follows:

- Home-centered activities: These activities include teaching parents the abilities they need to support the success of their kids.
- Activities centred on school: These initiatives involve enhancing communication between home and school and vice versa.
- Partnership focused activities: These activities include opportunities to focus together on student achievement for all students.

Eccles & Harold (1993) conducted a longitudinal study on Parental Involvement and evolved a scale on the basis of following dimensions:

- Monitor: deals with the parent's responses to teacher's request ions for helping their child with school work.
- Volunteer: parent participation in any activities at school.
- Involvement: is a report of parental role with the child's daily activities.
- Progress: achievement related contact.
- Extra help: asking for extra help.

Similarly, **Grolnick and Sowiaczek (1994)** identified three levels of involvement. The dimensions were as follows:

- Behaviour
- Cognitive-intellectual and
- Personal

Epstein (1995) identified six areas in which parents are involved in their children's academic achievement. They were as follows:

- Parenting (helping families with child rearing and parenting skills)
- Interaction (involves developing effecting effective home school communication)

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- Participating in volunteer work (creating ways that families may become involves in activities at the school)
- Home learning (supporting learning activities in the home that reinforce school curricula)
- Making decisions (including families as decision makers through school site council, committees)
- Collaborating with the community (services with family needs and serving the community)

Doris L. Prater, Andrea B. Bermudez and Erniel Owens of Houston Clear Lake(1997) identified three types of involvement. These are-Discussion, Parental Acceptance at schools and Parental Supervision at Home.

Izzo, Weissberg, Kasprow, and Fendrich (1999) identified the four dimensions of Parental Involvement as follows:

- Parent-teacher contact frequency
- Parent-teacher interaction quality
- Participation in school-related activities
- Participation in home educational activities

Parental involvement is defined by **Fan** (2001) as having aspirations for their children's academic achievement, communicating with children about education and school matters, communicating with teachers about their children, and supervising schoolwork at home.

Parental Involvement Rating Scale developed by Gafoor & Naseema (2001) includes nine components. These are-

- Parental Acceptance
- Parental Aspiration
- Parental Attention
- Parental Encouragement
- Parental Guidance
- Parental Influence
- Parental Decision Making
- Parental Provision of Physical Facilities
- Parental care to the Physical Fitness of Child
- **Desforges and Abouchar (2003)** distinguished four types of parental involvement. They were as follows:
 - Parental involvement in their children's school-based activities
 - Direct Parental Involvement in Children's Academic Activities
 - Indirect Parental Involvement in Children's Academic Activities

Wenfan and Qiuyun (2005) investigated the relationship between three dimensions of parental involvement in 12th grade students (family obligations, family norms and parent information network).

Chohan & Arora (2009) developed 'The Parental Involvement Scale' (TPIS) in three areas. They were:

- Connection
- Monitoring and
- Psychological autonomy

From the review of the literature with respect to various dimensions of parental involvement, it was seen that the dimensions like, Aspiration and expectation of parents, Parenting style, Home rules and supervisions, Attending school base activities, Volunteering at school are almost common in case of most of the scales. Dimensions like Discussing school activities, Communicating, Learning at home, Decision-making, Collaborating with communicating etc. are not found to be common.

Taking into consideration the common dimensions along with the variations, six dimensions were considered by the investigator for constructing Parental Involvement Scale in the present study.

The dimensions were:

- 1. Aspiration and expectation of parents
- 2. Parenting style
- 3. Home rules and supervisions
- 4. Discussing school activities
- 5. Attending Parent Teacher Association (PTA)

Operational Definitions of the Terms Used

The various terms used in the topic of this study are operationally defined as below:

- 1. Parental Aspiration and Expectation: This term is defined in this study as how much parents wanted their child to earn a specific grade or how likely parents thought their children could actually achieve those marks.
- 2. Parenting style: Parenting style means creating home environments that promote learning by providing information about topics such as a child's health, nutrition, safety, discipline, home conditions to support study, adolescent's needs, parenting approaches, information to assist schools in getting to know the child, and so on.
- **3.** Home rules and supervisions: It refers to parental activities such as monitoring home-related behaviours such as watching television (T.V), mobile viewing, eating, dressing, conversing with friends over phone calls, checking homework, observing assignments, monitoring school progress, and class activities of class IX students studying in Government and Private schools in the Sivasagar district of Assam.
- **4. Discussing school activities:** This term refers to the ongoing conversation between parents and their children about school-related activities, programmes, near and long-term school plans, and other academic issues, etc. of class IX students in Assam's Sivasagar district.
- **5. Participating in P.T.A:** In this study, this term refers to a formal organisation of parents, teachers, and staff that is intended to facilitate parental involvement in activities such as involvement in school events, volunteering in the classroom, going on field trips, participating in school functions, and so on for class IX students in the Sivasagar District of Assam.
- **6.** Volunteering: Volunteering refers to an activity performed by parents of class IX students in the Sivasagar district of Assam for the benefit of the school at the request of the principal/headmaster or school management.

METHODOLOGYOF THE PRESENT STUDY

Following methodology was adopted in the present study.

Method used in the study

In the present study, Descriptive Survey method was used.

Population

The population of the present study comprises all the Secondary school students admitted in Class IX during the academic session 2019-2020 in the 252 Secondary Schools of Sivasagar District of Assam affiliated to SEBA; out of which 157 schools are Government Provincialized and 95 schools are Private. There were total 4,828 Secondary school students who were studying in Class IX during the session of 2019-20. The total no of students studying in urban schools were 2,403 and total no of students studying in rural schools were 2,418. Moreover, there were 2,416.03.

Sample of the study

For the present study, the Purposive Sampling Technique was used to select the sample schools, and the Incidental Sampling Technique was used to select the sample of students in class IX in the Secondary schools of the Sivasagar District of Assam. Because the number of private English medium and private Assamese medium Secondary Schools is limited, and the majority of English medium Secondary Schools are located in urban areas, the Purposive Sampling technique was deemed the best method for selecting schools.6 students studying in Government schools and 2,405 students studying in Private schools.

Statistical techniques used in the study

The statistical technique used in the present study were Mean, Standard Deviation, 't' test and Product moment Co –efficient of Correlation.

CONSTRUCTION OF DRAFT PARENTAL INVOLVEMENT SCALE

One of the main objectives of the present study is to construct a Likert type Parental Involvement Scale (PIS) to measure parental involvement in home based and school based activities of the class IX students studying in Government/Provincialized and Private schools in Sivasagar district of Assam.

This objective encompasses the following sub objectives:

- 1. To prepare a draft Parental Involvement Scale.
- 2. To try out the draft Parental Involvement Scale on a sample.
- 3. To make item analysis of the draft Parental Involvement Scale to measure the Parental Involvement level of the class IX students.
- 4. To select the items for final Parental Involvement Scale.
- 5. To determine the reliability of the Parental Involvement Scale.
- 6. To determine the validity of the Parental Involvement Scale.

The Parental Involvement Scale (PIS) was developed in this study based on the six dimensions of parental involvement, namely parental aspiration and expectation, parenting style, home rules and supervisions, discussing school activities, attending Parent Teacher Association (PTA), and volunteering at school. The constructed PIS was divided into five points Likert type Scale, consisting of five possible responses, namely Strongly disagree, Agree, Undecided, Disagree, Strongly Disagree. To avoid guessing, some items were written in negative form and others in positive form.

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The positive items were assigned a weightage ranging from 5 (strongly agree) to 1 (strongly disagree). The negative items received weightage ranging from 5 (strongly disagree) to 1 (strongly agree). The parental involvement score of a subject was the sum the score of all the 97 items of the scale. Higher scores on PI Simply better and positive parental involvement and lower scores on PIS imply negative involvement towards parental involvement concerns. There was no time limit to complete the scale but it was asked to complete the scale as quickly as possible. The distribution of test items over different dimensions of PIS is presented in the Table-1 below:

SI.	Dimensions	Item Serial No	No. of Items			Total
No.		Favorable	Unfavorable	Favorable	Unfavorable	
1	Aspiration and Expectation of Parents	1,2,3,4,7,8,9,10,11,12, 13,14	5,6	12	2	14
2	Parenting Style	16, 20, 23, 25, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 45, 46, 49	15, 17, 18, 19, 21, 22, 24, 26, 27, 28, 42, 43, 44, 47,48	20	15	35
3	Home Rules and Supervision	51, 52, 53, 54, 55, 59, 60, 61, 63, 66, 67, 68, 69, 70, 72, 73	50, 56, 57, 58, 62, 64, 65, 71, 74, 75, 76	16	11	27
4	Discussing School Activities	78, 81, 82, 84, 85	77, 79, 80, 83	5	4	9
5	Attending Parent Teacher Association	86, 87, 88, 89, 91	90, 92	5	2	7
6	Volunteering at School Activities	93, 94, 95, 97	96	4	1	5
Total		•	•	•	•	97

Table-1Distribution of Items in Parental Involvement Scale (PIS)

Try out of the Draft Parental Involvement Scale (PIS)

The draft parental involvement scale was administered to 200 class IX students from Government/Provincialized and Private schools in the Sivasagar district of Assam for the purposes of this study. Purposive Sampling Technique was used to select Secondary schools in the Sivasagar district, and Incidental Sampling Technique was used to select students studying in Secondary schools in the Sivasagar district. Because there were few English medium schools and most of them were in urban areas, the researcher decided to use the purposive sampling technique in order to select both English and Assamese medium schools.

During the administering of the draft PIS, the investigator attempted to establish a good rapport with the respondents by engaging in some friendly conversation. A suitable sitting arrangement was made, and the draught PIS was distributed to respondents for feedback. Respondents were asked to read the instructions carefully. Oral instructions were also given as needed. Following the completion of all responses, each respondent was given a draught PIS.

Item Analysis

The following steps were followed for item analysis of the draft PIS:

- The responded draft PIS of 200 Class IX students were scored by using the scoring key developed by the investigator and then arranged in order from the highest score to the lowest score.
- Then 25% of the total answer sheets (for class IX students) i.e., 25, with the highest score were selected and named "Upper Group", and the lower 25 answer sheets (for class IX students) with lowest scores were named as "Lowest Group". The rest answer sheets constituted the "Middle Group".
- The mean scores obtained on each individual item by high scoring group and low scoring group were computed.
- The difference between the mean scores obtained by the high scoring group and the low scoring group on a particular item was found out. This difference was considered as the discriminating power of that particular item.
- To find out whether the discriminating power of a particular item is significant or not, the 't' value for each item was found out.
- 't' value equal or greater than 1.75 indicate that the average response of the high and low group to a statement differs significantly. (Edwards, 1957)
- Items having 't' value > 1.75 and < 1.75 were then identified. Out of 97 items, 75 items have significant 't' value (t>1.75). The distribution of the 75 items of the PIS according to different dimensions is shown in the Table-2 below:

SI.	Dimensions	Item Number	No. of Items		Total
No.			Favourable	Unfavourable	
1	Aspiration and	1, 2, 3, 4, 5, 7, 10, 11, 14	8	1	9
	Expectation of Parents				
2	Parenting Style	16, 17, 18, 19, 20, 21,	15	11	26
		24, 25, 26, 27, 28, 31,			
		32, 33, 34, 35, 36, 37,			
		38, 39, 40, 41, 43, 45,			
		46, 47			
3	Home Rules and	50, 51, 52, 53, 54, 55,	11	10	21
	Supervision	56, 57, 58, 60, 61, 62,			
	_	64, 65, 66, 67, 68, 69,			
		71, 75, 76			
4	Discussing School	77, 79, 80, 81, 82, 83,	4	4	8
	Activities	84, 85			
5	Attending Parent Teacher	86, 87, 88, 89, 90, 92	4	2	6
	Association				
6	Volunteering at School	93, 94, 95, 96, 97	4	1	5
	Activities				
Total			46	29	75

Table 2: Distribution of items (Dimension wise) having 't' ≥ 1.75

Selection of Items

The investigator decided to select 55 items from the items having satisfactory 't' value for the final draft Parental Involvement Scale (PIS) to balance weightage to the different dimensions of PIS. The distribution of the 55 items of the Final PIS according to different dimensions of PIS is shown in the Table-3 below:

SI.	Dimensions	Item Number	No. of Items		Total	
No.			Favourable	Unfavourable		
1	Aspiration and Expectation of Parents	1, 2, 3, 4, 5, 7, 10, 11, 14	8	1	9	
2	Parenting Style	16, 17, 18, 19, 20, 21, 25, 32, 33, 36, 37, 38, 39, 40, 41	11	4	15	
3	Home Rules and Supervision	50, 52, 56, 57, 58, 60, 64, 67, 68, 69, 75, 76	5	7	12	
4	Discussing School Activities	77, 79, 80, 81, 82, 83, 84, 85	4	4	8	
5	Attending Parent Teacher Association	86, 87, 88, 89, 90, 92	4	2	6	
6	Volunteering at School Activities	93, 94, 95, 96, 97	4	1	5	
Total			36	19	55	

 Table-3: Distribution of Items (Dimension wise) of the final Draft Parental Involvement

 Scale

Scoring of the Scale

The scoring key for favourable and unfavourable items against these five responses is given in the table-4 below:

Table-4: Scoring Key for Measuring the Parental Involvement Scale (PIS) for class IX students

Items	Strongly Agree (SA)	Agree (A)	Undecided (U)	Disagree (D)	Strongly Disagree (SD)
Favourable	5	4	3	2	1
Unfavourable	1	2	3	4	5

The above-mentioned scoring keys were used for scoring the answer sheets. Higher the scores in the scale denote higher the parental involvement of class IX students.

Reliability of Parental Involvement Scale

To compute the reliability of the parental Involvement Scale, the investigator adopted the following procedure:

- The spilt half technique of finding reliability was decided as appreciate by considering the nature and purpose of the scale.
- In order to compute the split half reliability, the final form of Parental Involvement Scale (PIS) was administered upon a sample of 200 class IX students out of which 100 Assamese Medium and 100 English Medium school students studying in Government/ Provincialized and Private schools in Sivasagar District of Assam.
- Odd-even method was used to split the test into two equal halves.
- The Scoring of each answer sheet was done separately for these two halves of odd and even items.
- Then the coefficient of correlation between these two parts of the test was calculated using the formula of Product-moment co-efficient of correlation which showed the reliability of the half test. The reliability of the English version of the scale was found as 0.70 and the reliability of the Assamese version of the scale was found as 0.91.

The Co-efficient of reliability of the whole test was then estimated by using Spearman-Brown Prophecy formula and the reliability of the full test of English version was found to be 0.823 and Cornbach's alpha as (α =0.851). The reliability of the full test of the Assamese version was found to be 0.953 and Cornbach's alpha as (α =0.921).

Sl. No	No. of Students	f Students Co-efficient of reliability of the whole test		
1	100(English Version)	0.823	0.851	
2	100(Assamese Version)	0.953	0.921	

 Table 5: Reliability of the Parental Involvement Scale

Validity of Parental Involvement Scale

The draft Parental Involvement Scale (PIS) was presented to members of the DRC, Department of Education, Dibrugarh University for suggestions in order to determine the content validity of the Parental Involvement Scale. The investigator modified the Parental Involvement Scale in response to their suggestions. Furthermore, the investigator presented the draft Parental Involvement scale to a number of experts for feedback on the coverage of the constructs, and after incorporating certain suggestions, the draft of the scale constructed was considered satisfactory for the final test.

CONCLUSION

The purpose of this study was to create and standardize the Parental Involvement Scale. The reliability and validity of the Scale were established. The scale is now ready to be used to assess Secondary school students' Parental involvement.

REFERENCES

- Borgohain, N.K. (2006). Parental involvement in child's education at primary school level: A case study. The PhD thesis submitted to Department of Sociology, Dibrugarh University, Dibrugarh, Assam.
- Brown, F. (1983). *Principles of educational and psychological testing*, NY: Holt, Rinehart & Winston.
- Chakrabarti, S. (2003). Study of parental involvement and home environment in relation to the school achievement of urban children. A PhD thesis submitted to Department of Education, Calcutta University, Calcutta
- Chakraborty, S. (2015). A study on scientific attitude of secondary school students of Dibrugargh district of Assam. A PhD thesis submitted to Department of Education, Dibrugarh University, Dibrugarh, Assam.
- Chouhan, V.L. & Arora, G.G. (2009). *Manual for the parental involvement scale (TPIS)*, NPC Agra, Manasvi, U.G-1
- Creswell, J.W. (2017). Educational research: Planning, conducting and evaluating quantitative and qualitative research (4th Edition). Uttar Pradesh: Pearson India Education Services Pvt. Ltd.
- Deforges, C. & Aboucher, A. (2003). The impact of parental involvement, parental support and family education on pupil achievements and adjustment: A literature review. DFES Research Report 433.
- Ebel, R.L. & Frisbie, D.A. (1991). *Essentials of educational measurement (5th Edition)*. New Delhi: Prentice Hall of India Pvt. Ltd.
- Ebel, R.L. (1966). *Measuring educational achievement*. Englewood Cliffs, New Jersey: Prentice Hall Inc.

- Eccles, J. S. & Harold, R.D. (1993). Parent –school involvement during the early adolescent years. *Teachers College Record*, 94(3), 568-587
- Edwards, A.L. (1957). *Techniques of attitude scale construction*. New York, Ferrer and Simons International University Edition.
- Epstein, J.L. (1994). Family math that's above average: Take home activities for kids and their parents. *Instructor*, 103(8), 17-19.
- Epstein, J.L. (1995). School, family, community, partnerships: Caring for the children we share. *Phi Delta Kappan*, 77(9), 701-712
- Gronlund, N.E. (1982). *Constructing achievement tests*. Englewood Cliffs, N.J: Prentice-Hall Inc.
- Grolnick, &Slowiaczek (1994). Parent's involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development*, 65(1), 237-252. Doi:10.2307/1131378
- Handique, I.R. (2016). Effect of parental involvement and study habits on academic achievement of secondary school students in Lakhimpur and Dhemaji district of Assam. APhD thesis submitted to Department of Education, Rajiv Gandhi University, Arunachal Pradesh.
- Kelley, L.T. (1939). The upper and lower groups for the validation of test items. *Journal of Educational Psychology*, *30*(1), 17-24. http://doi.org/10.1037/h0057123.
- Khan, A.G. (2001). *Influence of certain parental variables on academic achievement of elementary school pupils*. A PhD thesis submitted to Department of Education, University of Calicut, Calicut.
- Kohl, L.(1998). *Methodology of educational research*. New Delhi: Vikash Publishing House India Pvt. Ltd.
- Kumar, A. (2016). Construction and standardization of an achievement test in Punjabi or class IX students. *International Education & Research Journal*, 2(12), 27-28.
- Maphoso, L.S., & Mahlo, D. (2014). The influence of parental involvement on academic achievement in boarding and non -boarding schools. *Mediterranean Journal of Social Sciences*, 5(2), 155-163. DOI:10.5901/mjss.2014.v5n2p155
- Mishra, K. S., & Jain, S. (2013). Impact of achievement, motivation, gender and locale on achievement in Mathematics among secondary school students. *Edutracks: Monthly Scanner of Trends in Education, 12* (11), 31-34.
- Mubeen, S., Saeed, S., & Hussain, A.M. (2013). Attitude towards mathematics and academic achievement in mathematics among secondary level boys and girls. *Journal of Humanities and Social Science*, 6(4), 34-41.
- Rafiq, H. M. W., Fatima, T., Sohail, M.M., Saleem, M., & Khan, M.A. (2013). A study on parental involvement and academic achievement of secondary school students of Lahore, Pakistan. *International Journal of Humanities and Social Science*, 3(8),209-223.
- Ramakrishnan, K. (2005). Scholastic motivation of secondary school pupils in relation to *intelligence, self-concept, classroom climate and parental involvement*. A *PhD* thesis submitted to Department of Education, University of Calicut, Calicut.
- Topor, D.R., Keane, S.P., Shelton, T.L.& Calkins, S.P. (2010). Parental involvement and student academic performance: A multiple meditational analysis. *Journal of Preventionand Intervention in Community*, 38(3),183-197
- Vijayalakshmi, K., & Muniappan, K. (2016). Parental involvement and achievement of Secondary school students. *International Journal of Indian Psychology*, 3(4), 65.
- Wenfan, Y.&Qiuyun, L. (2005). Parental involvement and mathematics achievement: Contrast across racial and ethnic groups. *The Journal of Educational Research*, 99(2),116-127. http://doi.org./10.3200/JOER.99.2.116

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Conflict of Interest

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