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# Temperament of school going children

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■ ABSTRACT : Temperament is a core element of the human's personality. Child's temperament might be involved in the child's social relationship and affect his or her social development. This study aims to investigate temperamental dimensions of children studying at schools affiliated to Central Board of Secondary Education and Haryana Board of Secondary Education. From Hisar city, two schools affiliated to CBSE and two schools affiliated to HBSE were selected at random. From each school 40 children were randomly selected. Total sample comprised 160 children (84 boys and 76 girls). Malhotra Temperament Schedule (Malhotra and Malhotra, 1988) was used to assess mothers' perception of their children's temperament. Results revealed that there were no differences between boys and girls in sociability, emotionality, distractibility and rhythmicity but boys were more energetic than girls.

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emperament refers to relatively consistent, basic dispositions inherent in a person that underlie and modulate the expression of activity, reactivity, emotionality and sociability. Thomas and Chess (1977) identified nine main dimensions of temperament which encompass those described by Goldsmith et al. (1987). These are the activity level of the child; the regularity of bodily functioning including sleep, hunger and bowel movements; adaptability to changes in routine; response to new situations; level of sensory threshold to produce a response to external stimulation; the general degree of distractibility and the degree of persistence and attention span. On the basis of a profile on these dimensions, a child can be described by certain temperamental styles as easy, difficult or slow-to-warm-up. A child with difficult temperament is likely to evoke feeling of frustration and irritation. On the other hand, child with easy temperament is more likely to evoke positive feeling. The behaviour disorders in children cannot be explained by temperament alone, it requires consideration for interplay of temperament and environment. When child's temperamental characteristics are such that he or she is able to master the expectations of the environment then this interplay of child and environment promote normal development. Inhibition,

difficult temperament or high activity level can result in isolation of the child by the peer group. Once isolated, the child may be precluded from the possibilities of establishing normal social relationships, experience of normal social interactive play behaviours and the development of those social and cognitive skills which are encouraged by peer relationships and social play (Rubin and Krasnor, 1992).

### ■ RESEARCH METHODS

The present study was conducted purposively in Hisar city of Haryana state. From Hisar, on the basis of information provided by Education Department, two schools affiliated to CBSE and two schools affiliated to HBSE were selected at random. From each school 40 children were randomly selected. Thus, a total of 160 children were selected from four schools irrespective of sex. Of these 160 children, 84 were boys and 76 were girls. Malhotra Temperament Schedule (MTS) developed by Malhotra and Malhotra (1988) was used to assess mother's perception of their children's temperament. This schedule has been divided into five temperamental dimensions *i.e.*, sociability, emotionality, energy, distractibility and rhythmicity, respectively.

Children were divided into three categories: low, intermediate and high categories of different temperamental dimensions on the basis of obtained scores in different dimension of temperament. High sociability indicates that the child is quite responsive to the environment, adjustable, adaptable and uninhibited. For emotionality dimension of temperament, high in emotionality indicates that the child is positive and happy in mood. High in energy dimension indicates that child exhibits high physical and psychological energy. High distractibility describes that the child is highly distractible. High on rhythmicity dimension indicates that child is regular and predictable in biological functions.

#### ■ RESEARCH FINDINGS AND DISCUSSION

As depicted in Table 1, sociability dimension of temperament, 22.5 per cent children fell in low category, 46.9 per cent in intermediate category and 30.6 per cent in high category. Majority of children (76.9%) belonged to high category of emotionality, followed by intermediate (18.1%) and low (5%). Near about fifty per cent of children had intermediate level of energy followed by low (38.1%) and high (8.8%) category. In distractibility dimension of temperament,

more than fifty per cent of children (61.90%) fell in intermediate category and 31.2 per cent fell in high category. Sixty per cent of children fell in high category of rhythmicity dimension, followed by intermediate (38.1%) and very low percentage (1.9) in low category.

These results indicate that about fifty per cent of children fell in intermediate category of sociability and energy. Majority of the children belonged to high category of emotionality and rhythmicity. About sixty per cent of children belonged to intermediate category of distractibility.

### Association between educational board and temperament of children :

Chi-square was run to examine association between temperamental dimensions and educational boards. Table 2 indicates that there was no significant association between educational board and sociability, emotionality, energy, distractibility and rhythmicity. Percentages of children from two different educational boards in different categories of temperamental dimensions are exhibited in Table 2.

It can be interpreted from these results of Table 2 that temperament of children was not dependent on educational

Temperamental dimensions	Categories of temperamental dimensions			
	Low	Intermediate	High	
Sociability	36 (22.5)	75 (46.9)	49 (30.6)	
Emotionality	8 (5.0)	29 (18.1)	123 (76.9)	
Energy	61 (38.1)	85 (53.1)	14 (8.8)	
Distractibility	11 (6.9)	99 (61.9)	50 (31.2)	
Rhythmicity	3 (1.9)	61 (38.1)	96 (60.0)	

Figures in parentheses indicate percentages

Temperament variables	Categories	Educational Board		x <sup>2</sup> values
remperament variables		C.B.S.E. (n =80)	H.B.S.E. (n= 80)	x values
Sociability	Low	21 (26.2)	15 (18.8)	
	Intermediate	38 (47.5)	37 (46.2)	2.01
	High	21 (26.3)	28 (35.0)	
Emotionality	Low	6 (7.5)	2 (2.5)	
	Intermediate	13 (16.2)	16 (20.0)	2.32
	High	61 (76.3)	62 (77.5)	
Energy	Low	29 (36.2)	32 (40.0)	
	Intermediate	40 (50.0)	45 (56.2)	5.01
	High	11 (13.8)	3 (3.8)	
Distractibility	Low	6 (7.5)	5 (6.2)	
	Intermediate	47 (58.7)	52 (65.0)	0.66
	High	27 (33.8)	23 (28.8)	
Rhythmicity	Low	2 (2.5)	1 (1.2)	
	Intermediate	31 (38.7)	30 (37.5)	0.39
	High	47 (58.8)	49 (61.3)	

Figures in parentheses indicate percentages

boards. However, more number of children from CBSE board (11 children) fell in high category of energy dimension as compared to children from HBSE affiliated board (3 children).

# Comparison of temperament of children on the basis of education board :

To compare the temperament of children from CBSE and HBSE affiliated schools, 'Z'-test was run. Energy was found significantly different on the basis of educational boards,  $Z = 2.21^*$ , p< .05. Mean and standard deviations of different temperament dimensions are presented in Table 3.

It can be interpreted from these findings that children from CBSE affiliated schools were more energetic ( $\overline{\mathbf{x}} = 6.67$ ) than children from HBSE affiliated schools ( $\overline{\mathbf{x}} = 6.42$ ).

## Comparison of temperament of boys and girls on the basis of educational board :

To compare temperament of boys and girls from CBSE and HBSE affiliated schools, Multivariate analysis of variance (MANOVA) was run. Educational board and sex of child were taken as independent variables and dimensions of temperament (sociability, emotionality, energy, distractibility, rhythmicity) were taken as dependent variables. Main effect of educational board was non-significant, F (5,152) = 1.16. Main effect of sex of child was found to be significant, F (5,152) = 2.95, p<.05. Interaction effect of educational board and sex of child was non-significant, F (5,152) = 0.78.

As shown in Table 4, follow-up test revealed that boys from both the educational boards ( $\overline{\mathbf{x}} = 6.89$  and 6.55, respectively) were significantly more energetic than girls ( $\overline{\mathbf{x}} = 6.36$  and 6.30, respectively).

Results of present study revealed that mean scores of selected children were similar to standard mean scores given by Malhotra and Malhotra (1988). Results indicated that about fifty per cent of children fell in intermediate category of sociability and energy. Majority of children belonged to high category of emotionality and rythmicity. These are indicators of easy temperamental style. Malhotra and Malhotra (1988) and Balda *et al.* (2009) also found that majority of boys and girls fell in easy temperamental style.

Significant sex differences were found for energy dimension of temperament. Boys were more energetic than girls. Thus, it may be concluded that mothers perceive boys' and girls' temperament in a different manner. There were no significant differences in mean values for sociability, emotionality, attentivity and rhythmicity dimensions of boys and girls. These findings got support from Malhotra and Malhotra (1988). These authors also found that boys were more energetic than girls. Energy dimension of temperament included physical and psychological energy, that is, activity and intensity level. Boys were more active than girls who got support from previous literatures Buss (1989) also indicated that boys were more active than girls and girls were more fearful than boys. Kohnstamm (1989) and Prior et al. (1989) also reported that boys were more active than girls. In another study, Prior et al. (2000) also reported that boys were more aggressive and hyperactive than girls. In another study, Oren (2006) also examined relationships between temperament and gender of child and obtained similar results. Walker et al. (2001) also investigated the relation between sex and temperament of pre-school-aged children. Teachers' rated children's temperament was used. Boys were rated as more active, more

Temperament dimensions	Educatio	— 'Z'-values		
Temperament unitensions	C.B.S.E. (n =80) Mean $\pm$ SD	H.B.S.E. $(n=80)$ Mean $\pm$ SD		
Sociability	$11.45 \pm 1.39$	$11.76 \pm 1.51$	1.35	
Emotionality	$6.10\pm0.77$	$6.21\pm0.59$	0.97	
Energy	$6.67\pm0.79$	$6.42\pm0.62$	2.21*	
Distractibility	$3.15\pm0.35$	$3.15\pm0.30$	0.09	
Rhythmicity	$3.54 \pm 0.39$	$3.54 \pm 0.40$	0.08	

\* Means differ significantly in the same row at 5% level

	nperament of boys and girls on the basis of educational board Educational board				
Temperamental dimensions	C.B	S.E. H.B.		S.E.	F-values
	Boys(n =46) Mean $\pm$ SD	Girls (n= 34) Mean ± SD	Boys (n = 38) Mean $\pm$ SD	Girls (n=42) Mean ± SD	
Sociability	11.53±1.25	11.34±1.56	11.74±1.69	11.78±1.37	13.10*
Emotionality	6.12±0.84	6.09±0.67	6.19±0.66	6.22±0.52	
Energy	6.89 <sup>b</sup> ±0.73	$6.36^{a}\pm0.78$	$6.55^{b}\pm0.74$	6.30 <sup>a</sup> ±0.46	
Distractibility	3.18±0.31	3.11±0.41	3.14±0.29	3.15±0.32	
Rhythmicity	3.53±0.39	3.54±0.38	3.53±0.47	3.55±0.34	

Note:\* Means with different superscripts in the same row differ significantly at 5% level

distractible and less persistent than girls. de Boo and Kolk (2007) also reported gender differences in temperament of 9-13 years old children. Balda *et al.* (2009) conducted a study with pre-school children and found that boys were more active and less withdrawn as compared to girls.

#### **Conclusion :**

From the above results and discussion, it can be concluded that educational board did not influence any temperamental dimensions of the children. Children from CBSE and HBSE affiliated schools had nearly similar sociability, emotionality, distractibility and rhythmicity however they had different energy levels. Children from CBSE affiliated schools were more energetic than their counterpart. Further, results compared with temperament of boys and girls from CBSE and HBSE affiliated schools revealed that sex of child was found to be significant while interaction effect of educational board and sex of child was non-significant. Boys from both the educational boards were significantly more energetic than girls.

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### ■ REFERENCES

Balda, S., Duhan, K. and Irving, K. (2009). Gender differences in temperament of pre-school children. *Internat. J. Family & Home Sci.*, 5(2): 89-92.

**Buss, A. (1989).** Temperaments as personality traits, (pp. 49-58) In: G.A. Kohnstamm, J.E. Bates and M.K. Rothbart (eds.), *Temperament in Childhood.* John Wiley and Sons, NEW YORK, (U.S.A.).

Goldsmith, H.H., Buss, A.H., Rothbart, M.K., Thomas, A., Chess, S., Hinde, R.A., and McCall, R.B. (1987). Roundtable: What is temperament? Four approaches. *Child Develop.*, **58** (2) : 505-529.

Goldstein, F.G., Rollins, H.A. and Miller, S.H. (1986).

Temperament and cognitive style in school- age children. *Merrill-Palmer Quarterly*, **32**(3): 263-273.

Kohnstamm, G.A. (1989). Temperament in childhood: Cross-cultural and sex differences. In : G.A. Kohnstamm, J.E. Bates, and M.K. Rothbart (Eds.), *Temperament in childhood* (pp. 483-508). John Wiley and Sons, NEW YORK (U.S.A.).

Malhotra, S. and Malhotra, A. (1988). *Malhotras Temperament Schedule*. (M.T.S.). National Psychological Publishing Corporation, Kacheri Ghat, AGRA (U.P.) INDIA.

**Oren, M. (2006).** Child temperament, gender, teacher-child relationship, and teacher-child interactions. Ph.D. Dissertation. Department of the Childhood Education, Reading and Disability Services. The Florida State University, College of Education.

**Prior, M.R., Sanson, A.V. and Oberklaid, F. (1989).** The Australian temperament project. In: G.A. Kohnstamm, J.E. Bates and M.K. Rothbart (Eds.), *Temperament in childhood* (pp. 537-56). John Wiley and Sons, NEW YORK (U.S.A.).

Rubin, K.H. and Krasnor, L.R. (1992). Interpersonal problem solving and social competence in children. In V. B. van Hasselt and M. Hersen (Eds.), *Handbook of social development: A lifespan perspective*. Plenum Press, New York. pp. 283-323.

Thomas, A. and Chess, S. (1977). *Temperament and development*. Brunner/Mazel, NEW YORK (U.S.A.).

Walker, S., Berthelsen, D. and Irving, K. (2001). Temperament and peer acceptance in early childhood: Sex and social status differences. *Child Study J.*, **31**(3): 177-192.

#### ■ WEBLIOGRAPHY

deBoo, G.M. and Kolk, A.M. (2007). Ethnic and gender differences in temperament and the relationship between temperament and depressive and aggressive mood. *Personality & individual Differences*, 43 (7): 1756-1766. Retrieved from *http://www.sciencedirect.com/science/article/pii/S0191886907001821 on November10*, 2011.

Prior, M., Sanson, A., Smart, D. and Oberklaid, F. (2000). Pathways from infancy to adolescence: Australian temperament project 1983-2000. Research Report retrieved at *http://www.aifs. gov.aw/institute/pubs/resreport4/7.html on November 10, 2011.* 

