

Original Research Article

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## Siblings: The Effects on Temperament of Twins in Khadar Zone, India

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### ABSTRACT

A sibling is one of two or more individuals having one or both parents in common. Temperamental stability is influenced by both biological and environmental factors, as well as cultural factors in some cases. Temperament refers to our inborn personality traits, which are genetic in nature. The present study was conducted in four districts namely; Hisar Fatehabad, Rohtak and Jind of Haryana state with the purpose of availability of maximum numbers of twins in the required age group. A sample of 296 pairs of twins in the age group for the study was chosen. Temperament was taken as dependent variable and siblings was taken as independent variable. The Malhotra Temperament Schedule (MTS) developed by Malhotra and Malhotra (1988) was used to assess child's temperament. Result revealed that number of siblings were significantly associated with sociability ( $\chi^2=4.87^*$ ) but nonsignificant with other dimensions of temperament i.e. emotionality ( $\chi^2=0.15$ ), energy ( $\chi^2=0.93$ ), distractibility ( $\chi^2=0.97$ ), rhythmicity ( $\chi^2=0.96$ ) and total temperament ( $\chi^2=1.15$ ) of twins.

#### Keywords

Temperament, siblings, personality traits, twins, behaviour, Children, emotions

#### Article Info

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### Introduction

A sibling is one of two or more individuals having one or both parents in common. A full sibling is a first-degree relative. A male sibling is a brother, and a female sibling is a sister. In most societies throughout the world, siblings often grow up together, thereby facilitating the development of strong emotional bonds. The emotional bond between siblings is often complicated and is

influenced by factors such as parental treatment, birth order, personality, and personal experiences outside the family.

Temperament is a recent and rapidly growing area in psychology as the role of temperament in influencing developmental pathways and outcomes has now been recognised. Extreme difficult temperament is often viewed as a risk factor for later behaviour problems (Hill, 2012).

Temperament defined as person emotional and behavioural modes of response to environmental events (Shaffer and Kipp, 2007). Temperamental characteristics indicate how children with many stresses may do well, while some with little or no stress have difficulty. While some children are mild and joyful, others are irritable.

Temperament refers to our inborn personality traits, which are genetic in nature. The different ways infants interact with and react to their environment and experiences are reflective of their temperament, or behavioral style.

All children have a temperament that will influence their emotions and how they adapt to change in their environments (Steinberg, 2014).

Easy children are pleasant to care for and they may receive and give back plenty of affection and attention. The fussy, energetic and difficult child may cry and kick when given attention. As development unfolds, the fussy and difficult child may create problem to the caregiver and may receive less nurturance and affection. Temperament comprised of individual differences in reactivity, self-regulation, activity and attention that manifest themselves early in life through strong genetic or neurobiological basis.

Syeda *et al.*, (2009) conducted that the differences between temperament of identical and fraternal twins due to their different environment, parents rearing practices and education do bring changes in their personalities. The temperament possibly shaped by the prenatal environment and provides an opportunity to study the behavioral differences between pairs. Twin studies proposed that individual differences in temperament dimensions appeared during early childhood and those genetically influenced.

Tellegen *et al.*, (2008) reported significant shared environmental influence on measures of two extraversion-related traits, Positive Emotionality and Social Closeness.

Twin Study suggest that individual differences in temperament, as measured at one age or another had different he pattern of changes that marked by genetically influences.

## **Objectives**

To assess the effects of siblings on temperament among twins in Khadar zone.

## **Materials and Methods**

The present study was conducted in four districts namely; Hisar Fatehabad, Rohtak and Jind of Haryana state with the purpose of availability of maximum numbers of twins in the required age group of 4 -10 years identified under UGC project of the department. A sample of 296 pairs of twins in the age group of 6 – 10 years will be taken.

The dimensions of temperament will be assessed individually. A variable is the set of value that forms a classification.

A value is anything which can be predicted. There were two types of variables in the study i.e. independent and dependent variable. Temperament was taken as dependent and siblings were taken as independent variable. The Malhotra Temperament Schedule (MTS) developed by Malhotra and Malhotra (1988) was used to assess child's temperament.

## **Results and Discussion**

### **Associations of temperament of twins with number of sibling in Khadar zone**

It was revealed that number of siblings were significantly associated with sociability ( $\chi^2=4.87^*$ ) but non-significant with other dimensions of temperament i.e. emotionality

( $\chi^2=0.15$ ), energy ( $\chi^2=0.93$ ), distractibility ( $\chi^2=0.97$ ), rhythmicity ( $\chi^2=0.96$ ) and total temperament ( $\chi^2=1.15$ ) of twins. It was concluded the dimensions of temperament, namely; sociability and distractibility of twins were significantly associated with their siblings in the family. Saudino *et al.*, (2004) also assessed parents' perceptions about their

children's temperamental differences and viewed that parents overstated sibling differences in temperament, which put negative influence between twins and siblings. (Zentner and Bates, 2008) measured children's temperament and found rearing practices were appropriate tool for determining temperament in children (Table 1).

**Table.1** Associations of temperament of twins with number of sibling in Khadar zone

Temperament Scores				
Variables	Khadar zone			
	Sociability			$\chi^2$
No. of sibling	Low	High	Total	
Up to 2	15	53	68	4.87*
3 and above	83	145	228	
Total	98	198	296	
Emotionality				
No. of sibling	Low	High	Total	$\chi^2$
Up to 2	17	51	68	0.15
3 and above	56	172	228	
Total	73	223	296	
Energy				
No. of sibling	Low	High	Total	$\chi^2$
Up to 2	19	49	68	0.93
3 and above	78	150	228	
Total	97	199	296	
Distractibility				
No. of sibling	Low	High	Total	$\chi^2$
Up to 2	15	53	68	0.97
3 and above	64	164	228	
Total	79	217	296	
Rhythmicity				
No. of sibling	Low	High	Total	$\chi^2$
Up to 2	12	56	68	0.96
3 and above	53	175	228	
Total	65	231	296	
Total Temperament				
No. of sibling	Low	High	Total	$\chi^2$
Up to 2	13	55	68	1.15
3 and above	58	170	228	
Total	71	225	296	

\*Significant at 5 % level of significance

## References

- Anonymous.2011.Temperament and Parenting - Temperament.com. Retrieved from <https://www.b-di.com/temperament.com/faqs.html>
- Hill, J. 2012. Biological, psychological and social processes in the conduct disorders. *Journal of Child Psychology and Psychiatry*, 43:133-165.
- Johnson, W., Krueger, R. F., Bouchard, T. J. Jr. and McGue, M. 2011. The personalities of twins: Just ordinary folks. *Twin Research*, 5:125-131.
- Kagan, J., Snidman, N., Zentner, M. R., and Peterson, E. 2005. Infant temperament and anxious symptoms in school age children. *Development and Psychopathology*, 11 : 209-224.
- Lamb, M. E., Chuang, S. S., Wessels, H., Broberg, A. G. and Hwang, C. P. 2012. Emergence and construct validation of the Big Five factors in early childhood: a longitudinal analysis of their ontogeny in Sweden. *Child Development*, 73:1517-24.
- Shaffer, R., and Kipp S., 2007. Mothers' appraisal of goodness of fit and children's social development. *International Journal of Behavioural Development*. <http://jbd.sagepub.com>.
- Steinberg, L. 2014. *The 10 basic principles of good parenting*. New York, NY: Simon & Schuster Paperbacks.
- Barrick, M. R., Parks, I., and Mount, M. K. 2005. Self-monitoring as a moderator of the Relationships between personality traits and performance. *Personnel psychology*, 58:745-767.
- Syeda K.F. Haider, Hussain S. 2009. Study of personality difference among identical twins and fraternal twin in Pakistan. *Journal of Research Scientific Personality*, 46 (2).
- Tellegen, A. and Waller, N. G. 2008. Exploring personality through test construction: Development of the multidimensional Personality Questionnaire. In: Boyle GJ, Matthews G, Saklofske DH, editors. *Handbook of Personality Theory and testing: Vol. II. Personality measurement and assessment*. Sage; Thousand Oaks, CA. 261-292.
- Walker S, Berthelsen D, Irving K. 2001. Temperament and peer acceptance in early childhood: sex and social status differences. *Child study Journal*, 31(3):177-192.

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