

Original Research Article

<https://doi.org/10.20546/ijcmas.2019.811.033>

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

Reetu Devi<sup>1\*</sup>, Bimla Dhanda<sup>1</sup> and Vijay Kumar<sup>2</sup>

<sup>1</sup>Department of Human Development and Family Studies (HDFS), CCS HAU, Hisar, India

<sup>2</sup>Director (FM) SNIATTE, CCS, Haryana Agricultural University, Hisar, India

\*Corresponding author

### ABSTRACT

Temperament refers to our inborn personality traits, which are genetic in nature. Gender is the range of characteristics pertaining to, and differentiating between, masculinity and femininity. Depending on the context, these characteristics may include biological sex, sex-based social structures, or gender identity. 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 gender 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 gender was significantly associated with emotionality ( $\chi^2=5.44^*$ ), but non-significantly with sociability ( $\chi^2=0.35$ ), energy ( $\chi^2=0.16$ ), distractibility ( $\chi^2=2.67$ ), rhythmicity ( $\chi^2=0.19$ ), and total temperament ( $\chi^2=1.03$ ) of twins. The results further revealed that the majority of male twins (29.8%) in low category of emotionality while as majority of female twins (82.1%) in high category of emotionality.

#### Keywords

Temperament,  
Gender, Personality  
traits, Twins,  
Behaviour,  
Children, Emotions

#### Article Info

Accepted:  
04 October 2019  
Available Online:  
10 November 2019

### Introduction

Gender refers to the socially constructed characteristics of women and men- such as norms, roles and relationships of and between groups of women and men. It varies from society to society and can be changed. While most people are born either male or female, they are taught appropriate norms and behaviours- including how they should

interact with others of the same or opposite sex within households, communities and work places.

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).

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 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).

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 the pattern of changes that marked by genetically influences.

## **Objectives**

To assess the effect of gender on temperament among twins in khadaar 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 gender was 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 gender in Khadar zone**

Gender was significantly associated with emotionality ( $\chi^2=5.44^*$ ), but nonsignificantly with sociability ( $\chi^2=0.35$ ), energy ( $\chi^2=0.16$ ),

distractibility ( $\chi^2=2.67$ ), rhythmicity ( $\chi^2=0.19$ ), and total temperament ( $\chi^2=1.03$ ) of twins (Table 1). The results further revealed that the majority of male twins (29.8%) in low category of emotionality while as majority of female twins (82.1%) in high category of emotionality. It was concluded that there was no association of gender with all the variables of temperament in Bagar zone i.e., sociability,

emotionality, energy, distractibility, rhythmicity and total temperament of twins.

Gender was significantly associated with emotionality aspect of temperament. Walker *et al.*, (2001) also supported this association with investigation on temperament of preschool children as found that boys were more active, more distractible and less persistent than girls.

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

Variables	Temperament Scores			
	Khadar zone			
	Sociability			
<b>Gender</b>	Low	High	Total	$\chi^2$
<b>Boys</b>	58	110	168	0.35
<b>Girls</b>	40	88	128	
<b>Total</b>	98	198	296	
	Emotionality			
<b>Gender</b>	Low	High	Total	$\chi^2$
<b>Boys</b>	50	118	168	5.44*
<b>Girls</b>	23	105	128	
<b>Total</b>	73	223	296	
	Energy			
<b>Gender</b>	Low	High	Total	$\chi^2$
<b>Boys</b>	54	114	168	0.16
<b>Girls</b>	43	85	128	
<b>Total</b>	97	199	296	
	Distractibility			
<b>Gender</b>	Low	High	Total	$\chi^2$
<b>Boys</b>	51	117	168	2.67
<b>Girls</b>	28	100	128	
<b>Total</b>	79	217	296	
	Rhythmicity			
<b>Gender</b>	Low	High	Total	$\chi^2$
<b>Boys</b>	38	130	168	0.19
<b>Girls</b>	27	101	128	
<b>Total</b>	65	231	296	
	Total Temperament			
<b>Gender</b>	Low	High	Total	$\chi^2$
<b>Boys</b>	44	124	168	1.03
<b>Girls</b>	27	101	128	
<b>Total</b>	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. Pp. 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.

### How to cite this article:

Reetu Devi, Bimla Dhanda and Vijay Kumar. 2019. The Effects of Gender on Temperament of Twins in Khadar Zone, India. *Int.J.Curr.Microbiol.App.Sci*. 8(11): 277-280.  
doi: <https://doi.org/10.20546/ijcmas.2019.811.033>