

# Dizygotic twins: A comparative study on temperament in Bagar and Khadar zones of Haryana

■ Reetu Devi<sup>1</sup>, Bimla Dhanda<sup>1</sup> and Pinki Rani\*

Department of Home Science, FGM Govt. College, Adampur, Hisar (Haryana) India

<sup>1</sup>Department of Human Development and Family Studies, C.C.S. Haryana Agricultural University, Hisar (Haryan) India

## ARTICLE INFO :

Received : 16.04.2018  
Revised : 09.05.2018  
Accepted : 24.05.2018

## KEY WORDS :

Temperament, Dizygotic, Behaviour, Children, Rhythmicity, Development

## HOW TO CITE THIS ARTICLE :

Devi, Reetu, Dhanda, Bimla and Rani, Pinki (2018). Dizygotic twins: A comparative study on temperament in Bagar and Khadar zones of Haryana. *Adv. Res. J. Soc. Sci.*, 9 (1) : 111-113, DOI: 10.15740/HAS/ARJSS/9.1/111-113.  
Copyright@2018 : Hind Agri - Horticultural Society

\*Author for correspondence

## ABSTRACT

Dizygotic twins are that they develop from two different eggs. Temperament defined as person emotional and behavioural modes of response to environmental events. 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. Temperament was taken as dependent variable and cultural zone 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 dizygotic twins indicated that highly significant difference were found between bagar and khaddar dizygotic twins on sociability (2.82\*\*), emotionality (4.11\*\*) and total temperament (3.78\*\*) of twins.

## INTRODUCTION

Dizygotic twins are that they develop from two different eggs. In fraternal twins each twin is fertilized by its own sperm cell. Children are born with their natural style of interacting with or reacting to people, places and things. This natural behaviour style in everyday situations is known as temperament.

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). Temperamental stability is influenced by both biological and environmental factors, as well as cultural factors in some cases.

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

**Objective:**

To compare the temperament among monozygotic twins in two cultural zone

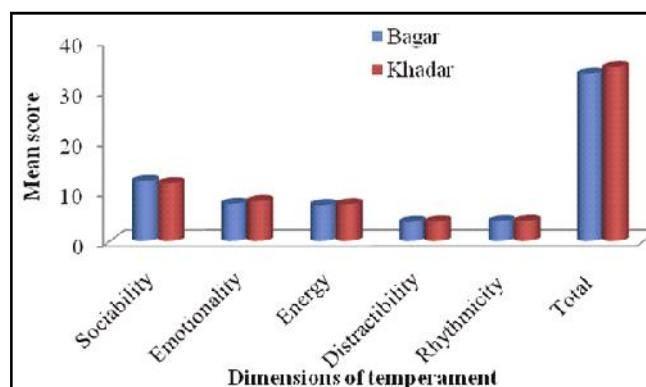
**MATERIAL AND METHODS**

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 cultural zone was taken as independent variable. The Malhotra Temperament Schedule (MTS) developed by Malhotra and Malhotra (1988) was used to assess child’s temperament.

**OBSERVATIONS AND ANALYSIS**

Result on dizygotic twins indicated that highly significant difference were found between bagar and khaddar dizygotic twins on sociability (2.82\*\*), emotionality (4.11\*\*) and total temperament (3.78\*\*) of twins. But non-significant differences were found on energy (1.20), distractibility (0.81) and rhythmicity (0.72) dimension of temperament on the basis of standard deviation (Table 1 and Fig. 1).



**Fig. 1 :** Mean comparison of temperament dimensions among dizygotic twins in two cultural zones

It is further mean comparison shows that dizygotic twins of khaddar zone was better in response of temperament dimensions as compare to bagar zone dizygotic twins.

**Conclusion:**

It was concluded that dizygotic twins indicated that highly significant difference were found between bagar

Domains of temperament	Bagar (n=128) Mean±SD	Khadar (n=168) Mean±SD	Z Value
Sociability	11.96±1.29	11.53±1.47	2.82**
Emotionality	7.42±1.11	7.94±1.11	4.11**
Energy	7.18±1.09	7.33±1.10	1.20
Distractibility	3.82 ±0.76	3.89±0.74	0.81
Rhythmicity	3.94±0.60	3.99±0.63	0.72
Total	33.42±2.91	34.73±3.39	3.78**

and khaddar dizygotic twins on sociability, emotionality and total temperament of twins. Cross-cultural studies on the five-factor model of temperament across two continents have supported temperamental dimensions such as sociability, emotionality, energy, distractibility and rhythmicity to experience were influenced by their environment and cultural difference (Barrick *et al.*, 2005).

## REFERENCES

- Barrick, M.R., Parks, I. and Mount, M.K. (2005). Self-monitoring as a moderator of the Relationships between personality traits and performance. *Personnel Psychol.*, **58** : 745-767.
- Hill, J. (2012). Biological, psychological and social processes in the conduct disorders. *J. Child Psychol. & Psychiatry*, **43** : 133-165.
- Kagan, J., Snidman, N., Zentner, M.R. and Peterson, E. (2005). Infant temperament and anxious symptoms in school age children. *Develop. & Psychopathol.*, **11** : 209-224.
- Malhotra, S. and Malhotra, A. (1988). Malhotra's Temperament Schedule (MTS). Agra: National Psychological Corporation.
- 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.
- Syeda, K.F. Haider and Hussain S. (2009). Study of personality difference among identical twins and fraternal twin in Pakistan. *J. Res. Scientific Personality*, **46** (2) : 101-114.
- 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.

9<sup>th</sup>  
Year  
★★★★★ of Excellence ★★★★★