

Family size: The effects on temperament of twins in Khadar zone

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■ **ABSTRACT** : Family size is an indicator of societal structure that may vary over time, with concomitant implications for individual development and social relations in different cohorts. 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 4 – 10 years will be taken. The dimensions of temperament will be assessed individually. Temperament was taken as dependent variable and family size was taken as independent variable. The Malhotra Temperament Schedule (MTS) developed by Malhotra and Malhotra (1988) was used to assess child's temperament. This schedule can be used on all child populations whether normal or abnormal, within an age range of 4-10 years of both sexes and of any socio-economic class. Malhotra Temperament Schedule consists of nine dimensions or variables of child's temperament and the operational terms of these dimensions are given as: Activity, Rhythmicity Approach or withdrawal, Adaptability, Threshold of responsiveness, Intensity of reaction, Quality of mood, Distractibility, Attention span and persistence. These nine dimensions were further grouped into five categories namely sociability, emotionality, energy, attentivity/distractibility and rhythmicity. To arrive at factor scores the means of the constituting temperament dimension are to be added. The Malhotra Temperament Schedule (MTS) schedule measured temperament variables on a 5 point rating scale, and categorized by standardized method. Result revealed that family size was non-significantly associated with sociability ($\chi^2 = 4.50$), emotionality ($\chi^2 = 5.84$), energy ($\chi^2 = 2.29$), distractibility ($\chi^2 = 3.61$) rhythmicity ($\chi^2 = 4.09$) and with total temperament ($\chi^2 = 5.84$).

■ **KEY WORDS**: Temperament, Family size, Personality traits, Twins, Behaviour, Children, Emotions, Development

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Family size may be considered from two perspectives. At the individual level, it defines one aspect of an individual's family background or

environment. As such, it represents a potential influence on the development and accomplishments of family members. At the societal level, family size is an indicator

of societal structure that may vary over time, with concomitant implications for individual development and social relations in different cohorts.

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).

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 and Waller (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 family size on temperament among twins in Khadar zone.

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

RESEARCH FINDINGS AND DISCUSSION

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Table 1 : Associations of temperament of twins with family size in Khadar zone

Variables	Temperament scores			χ^2
	Khadar zone			
Family size	Low	High	Total	
Sociability				
Small	30	44	74	4.50
Medium	35	63	98	
Large	33	91	124	
Total	98	198	296	
Emotionality				
Small	25	49	74	5.84
Medium	25	73	98	
Large	23	101	124	
Total	73	223	296	
Energy				
Small	28	46	74	2.29
Medium	34	64	98	
Large	35	89	124	
Total	97	199	296	
Distractibility				
Small	26	48	74	3.61
Medium	23	75	98	
Large	30	94	124	
Total	79	217	296	
Rhythmicity				
Small	22	52	74	4.09
Medium	17	81	98	
Large	26	98	124	
Total	65	231	296	
Total temperament				
Small	29	45	74	5.84
Medium	25	73	98	
Large	17	107	124	
Total	71	225	296	

* indicates significance of value at P=0.05

Associations of temperament of twins with family size in Khadar zone

Family size was non-significantly associated with sociability ($\chi^2 = 4.50$), emotionality ($\chi^2 = 5.84$), energy ($\chi^2 = 2.29$), distractibility ($\chi^2 = 3.61$) rhythmicity ($\chi^2 = 4.09$) and with total temperament ($\chi^2 = 5.84$).

Conclusion:

It was concluded that Family size was not associated with temperament and its dimensions in bagar zones. Julia *et al.* (2014) also found some that positive and better relationships between parents resulted beneficial for children and avoided children's behavioral problems.

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