

Neuroticism as a dimension of personality among dizygotic twins

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Abstract:- This multicultural twin study examined the structure and sources of individual differences in neuroticism. This study assessed cultural influences on the neuroticism component of the personality. A pair of 110 twins in the age group of 3-6 years from five cultural zones of state Haryana was taken. The data were analyzed for neuroticism culture wise and yield new insight into the trait. The results revealed that there was a significant cultural difference in neuroticism trait of personality in dizygotic twins. The respondents of mewat zone had better personality traits against their counterparts.

Keyword- *Neuroticism, twins, dizygotic twins, environment, culture.*

I. INTRODUCTION

Neuroticism trait of personality is shaped by both genetic and environmental factors; among the most important of the latter are cultural influences. However, culture does not have a deterministic influence or rather; its influence is probabilistic (Stryker & Burke, 2000). Neuroticism concerns the ease and frequency with which a person becomes upset and distressed. Neuroticism, "contrasts emotional stability and even temperedness with negative emotionality, such as feeling anxious, nervous, sad, and tense; has been linked to the avoidance temperament (Caspi et al. 2005). Culture is a key determinant of what it means to be a person (Church, 2000; Diener, Oishi, & Lucas, 2003; and Triandis & Suh, 2002). Dizygotic (DZ) twins share, on average, half of the genes that differ from person to person Robert, (2008). Dizygotic are not as optimal as identical twins for deciphering the degrees of genetic influence, but they are a very good basis for comparison for identical twins.

II. METHODOLOGY

The study was conducted in five cultural zones of Haryana state namely Khadar, Bagar, Nardak, Mewat and Ahirwal. A pair of 110 twins (220 twins) in the age group of 3-6 years from different villages was assessed depending upon the availability of the twins were taken as sample. A Five Factor Personality Questionnaire (Cathy, 2011) was used for assessing the personality traits of preschool twins.

III. RESULTS

Results from current data shown the comparison of the mean levels of neuroticism in dizygotic twins. The trait neuroticism across five cultures shown systematic patterns, but significant difference. The highest mean value on neuroticism was found in dizygotic twins of Mewat zone (23.2) followed by Khadar zone (23.1) then Ahirwal (22.5) and least mean value for the dizygotic twins of Bagar zone (21.3) as depicted through Table 1. The findings supported by particularly biological theories as those proposed common neural pathways for experiencing extraversion and neuroticism (Canli et al., 2004). Neuroticism and trait anxiety tend to be associated with negative stimuli. The individuals who report neuroticism tends to be directed towards threatening stimuli (Bar-Haim et. al., 2007). Jang *et al.*, (2002) found that the influence of the environment was consistent across all dimensions and facets. Shared environmental influences accounted for a negligible proportion of the variance, whereas nonshared environmental influences accounted for the majority of the environmental variance.

Mean comparison of Neuroticism among dizygotic twins in five cultural zones (N=220)			
Zones	Mean	SD	F-value
Bagar	21.3	3.3	4.66*
Nardak	21.6	2.6	
Khadar	23.1	2.2	
Mewat	23.2	2.4	
Ahirwal	22.5	2.4	

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