

**Comparative study of relationship between personality factors and empathy among rural and urban adolescents**

**Jotika Judge**

Ph.D Student

Department of Psychology

Panjab University, Chandigarh, India.

**Abstract**

*The purpose of this study was to examine the relationship between personality factors and empathy. A random sample of 150 boys (age range 16-18 years) were administered a measure of Personality i.e. Big Five Inventory (John & Srivastava, 1999), along with the Toronto Empathy Questionnaire (Spreng, McKinnon, Mar & Levine, 2009). The results indicated that openness to experience; agreeableness, conscientiousness and extraversion are positively related to empathy. Neuroticism is negatively related to empathy. In terms of personality factors urban boys are found to be high on openness to experience and neuroticism. Rural youth is found high in terms of agreeableness while no regional differences are found in terms of empathy.*

Keywords: - Empathy, personality factors, rural and urban adolescent boys.

**Introduction**

Adolescent population is the strength of every nation. India being the house of more than 243 million of adolescents (UNICEF, India) is in dire need to ensure meticulous development of this section of our population. Adolescence is marked by rapid growth not only in terms of physical development but psychological and social development as well. Adolescence is the age when people develop more advanced patterns of thinking and a greater and more precise sense of self, as they try to make their own identities (Steinberg, 2007). These identities they carry on in adulthood and later life. Thus it becomes important that during this period, it must be ensured that the development is taking place in the right direction as it has the capacity to harm not only an individual but society at large. Adolescence is a vulnerable period in terms of development as young people establishes lifelong behaviour patterns which are associated with adult life outcomes (Morgan & Todd, 2009). Personality development is at its peak during this age as individual tries to have a sense of self identity and tries to find his role and place in the outside world. Personality development is like a change in the layers of self and understanding these layers aptly (Klimstra, 2012). Identity formation is the key developmental task of this age, and it is based entirely on development of one's personality.

Since the beginning of personality research, theorists have described personality factors, during this age from perspective of psychosexual development, ego development, identity formation,

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cognitive development and self – psychology (Bailey, 1993). All these theories while explaining the stages and process of personality development have put forward different aspects of personality. One such theory of personality has been developed in recent years by Costa & McCrae (1990), known as Big Five theory of personality. This model is based on common language descriptors of personality, and includes five factors namely openness to experience (the degree of intellectual curiosity, creativity and a preference for novelty and variety a person has), conscientiousness (tendency to be organized and dependable, [self-disciplined](#), dutifully, achiever, planned individual), extraversion (being outgoing, energetic), agreeableness (tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others) and neuroticism (tendency to experience unpleasant emotions easily).

Another aspect that is in its developmental stages during adolescence is that of empathy. Empathy develops and increases as adolescent moves towards adulthood (Pfeifer et al., 2008). It is a skill necessary to understand the perspective and emotions of other individual. As during adolescent the shift occurs towards forming new social contacts (Oswalt, 2010), the interpersonal understanding becomes even more important. In adolescence, critical social skills that are needed to feel concern for other people and understand how they think undergoes major changes. It is a period of attaining self-mastery but this does not stops an adolescent to cultivate empathy towards fellow beings. Self-development and social development goes hand in hand. This doesn't mean that during the period of self-mastery that a teenager lacks empathy towards his fellow human beings. Adolescence is marked with low levels of empathy just because teenagers become more self-absorbed as they pass through the process of self-discovery which takes up most of their energies. Thus, it is not an unwillingness to engage with others or lack of empathy, it is simply a sign of developing confidence to engage on an emotional level with others (Uche, 2012, a).

As it is evident that personality development and development of empathy are important aspects of adolescence lives, it becomes important to focus on these two aspects. During adolescence, teens want to become productive members of society and in their development from childhood they understand that in order to day so, they need to acquire certain skill sets (Uche, 2012, b). Thus, looking into aspects of personality and traits like empathy becomes imperative, so as adolescents can be provided with right environment to develop and sustain such skills. This study looks into relationship between two of these important aspects namely personality factors and empathy and how these factors influence adolescents.

Based on review of literature following hypothesis were proposed

1. Openness to experience, conscientiousness, extraversion, and agreeableness will be positively related to empathy and Neuroticism will negatively relate to empathy.
2. There will be significant regional differences in personality factors.
3. No regional differences in terms of empathy

## **Method**

Purposive sampling technique was used for this study. 150 (75 rural and 75 urban) participants,

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who met the inclusion criteria, were taken for the analysis. The data for the study was collected from Jalandhar district, India. Participants were given the standardized questionnaire along with semi schedule questionnaires regarding sex, education, socio-economic status and age. Participants were from middle socio economic group and staying in nuclear family in urban and rural area.

### **Measures**

#### **Big Five Inventory (BFI)**

The Big Five Inventory (John &Srivastava, 1999) was used to assess the personality factors of the participants. It assesses personality on the basis of five domains viz. openness to experience, agreeableness, conscientiousness, extraversion and neuroticism. It is a self-report inventory consisting of 44 items, on a five - point Likert scale, with responses ranging from disagrees strongly to agree strongly. The scale has showed adequate convergent-discriminant validity.

#### **The Toronto Empathy Questionnaire (TEQ)**

The Toronto Empathy Questionnaire (TEQ; Spreng, McKinnon, Mar & Levine, 2009) was used to assess empathy as a primarily emotional process, Questionnaire consists of 16 questions, and each rated on a five point scale from 'never' to 'often'. The TEQ demonstrated strong convergent validity, and good internal consistency and high test-retest reliability. The TEQ is a brief, reliable, and valid instrument for the assessment of empathy.

### **Statistical Analysis**

Descriptive statistics viz, mean and standard deviation was performed. Correlation was used to find therelations between variables and another objective of the present study was to find regional differences for variables viz. personality factors and empathy among adolescent boys. For this purpose, t - test was also applied to check for rural-urban differences.

### **Results**

**Table 1: Shows the Correlation of Empathy and Personality Factors**

Personality Factors	Coefficients
Openness to Experience	.50**
Conscientiousness	.46**
Agreeableness	.16**
Extraversion	.22**
Neuroticism	-.07*

P<\_.05\* and .01\*\*

**Table 2: shows the Rural-Urban differences in terms of personality factors and empathy**

Variables	Rural		Urban		T-value
	Mean	S.D.	Mean	S.D.	
Personality Factors					
Openness to Experience	24.4	9.14	31.06	10.63	3.21**
Conscientiousness	30.9	8.79	27.98	9.50	0.02
Agreeableness	35.28	8.4	22.28	8.3	1.81**
Extraversion	25.17	3.7	25.53	8.46	0.36
Neuroticism	10.86	4.99	22.64	7.7	1.50**
Empathy	39.8	8.96	42.29	12.50	0.08

P<\_.05\* and .01\*\*

### Discussion

The current study primarily aimed to investigate the associations between personality factors and empathy and also found regional differences in these two variables among urban and rural adolescent boys. Personality development is among the most important growth factor during adolescence (Hopwood et al., 2011). An individual’s conduct in daily life is hugely impacted by his personality. Various aspects of personality effects varied spheres of an individuals’ life. The present study found the impact of personality factors on empathy among adolescent boys. Openness to experience, conscientiousness, agreeableness and extraversion are found to be positively related to empathy. Openness to experience involves being attentive to inner feelings and intellectual curiosity (Costa & McCrae, 1992), Both these traits relate to empathy as intellectually curious individual would like to scoop more into knowing and understanding others’ perspective and having an awareness to inner feelings only adds up to feelings of empathy. This finding is line with other researches done with big five model and empathy (Thompson, 1985; Barrio et al., 2004; Erlanger & Tsytsarev, 2012; Song & Shei, 2017). Conscientiousness being a trait characterised with dutifulness and dependability is closely related with empathy. As individuals high on this trait rarely depends on others for their needs and have a sense of duty towards others’ it is not hard to believe that they show high signs of empathetic understanding. They also have less interpersonal conflicts and rarely have disagreements with others due to their self-disciplines and responsible behaviour, thus being able to have better perspective understanding (MacCann et al., 2009). Agreeableness has always been related with empathy and is considered to be an important predictor of empathy (Costa, Terracciano & McCrae, 2001; Magalhaes, Costa & Costa, 2012; Costa et al., 2014; Melchers et al., 2016). Agreeableness is the most important social dimension of big five traits, being characterised by feelings of compassion and cooperation thus it

is likely that it substantially correlates with empathy, in particular, empathic concern, which refers to tendency to help others or to feel responsible and concerned about the well-being of others (Mooradian, Davis & Matzler, 2011 ). People high on extraversion have a people oriented or relational oriented listening style (McCroskey et al., 2001) which helps them to understand the concerns of others in a better way. Extraversion is also marked with feelings of warmth towards others, which enables the individuals high on this dimension to be highly affectionate and to easily form close attachments with other people (Costa & McCrae, 1995). Not all Big Five personality traits are positively related with empathy, neuroticism is found to have negative correlation with empathy. Neuroticism by its very definition is instability of emotions, and if one is not able to understand his own emotions well, it is difficult to understand and feel the emotion of others. Neuroticism is more closely associated with personal distress which makes it difficult to take into account the problem of others (Song et al., 2017). Some researches although; believe that instability in one's own emotions makes an individual more perceptible to emotion of others (Shiner, Roberts & Caspi, 2005; Song et al., 2017). Neuroticism leads to feelings of anxiety or fear within oneself, and such an individual would have greater ability to understand another's emotional state (Eysenck & Eysenck, 1985).

The result of the present study revealed that the urban and rural adolescents differed significantly with respect to some of the personality traits like agreeableness, openness to experience and emotional stability wherein urban children were better with respect to openness to experience while rural adolescents were better with respect to agreeableness and emotional stability. With regard to agreeableness rural adolescents were high as they live in more intact environments where social harmony and social values are given utmost importance. Rural adolescents have tendency to be cooperative, compassionate and they value getting along with others highly (Rajkumari, 2013). Similarly, they are more emotionally stable than their urban counterparts as the feeling of community where everyone is free to share their feelings with others is more prevalent in rural areas. Urban areas have moved more towards materialistic pleasures than focusing on emotional states (Manchanda et al., 2015). An individual with high level of openness to experience is interested in new things, especially new knowledge and art and unconventional ideas. They are usually characterized as adventurous, imaginative, knowledgeable, and creative. Urban adolescents are high on this dimension as knowledge acquisition and exploration is valued more and educational opportunities are more readily available in urban areas (Census, 2011). Rural areas, in comparison, have more conventional values and curiosity and new ideas are not appreciated as highly. The differences in personality factors can be attributed to the cultural differences in and the child rearing practices followed in the two areas and also to the differences in the opportunities available for the adolescents in the two areas (Rajkumari & Hunshal, 2013).

Rural and urban adolescents are different from one another in terms of certain personality traits, but no significant difference is found among them in terms of empathy. Adolescents from both the areas have found to be average on the trait. Empathy is a skill that can have important implications in social life of individuals. The results are not matter of concern as adolescence is the time when empathy development is in progress. Late adolescents are better at this emotion as compared to early adolescents (Shellenbarger, 2015). Nevertheless, it is important that adolescents are taught to hone this skill, irrespective of their regional, personal, educational differences. As development of empathy in adolescence has lifelong implications and influences social competencies throughout adulthood (Allemand, Steiger & Fend, 2015). Empathy is a trait which is instinctively present in each individual, this is because human race is a social race and has learned to survive and thrive in communities, as a result of evolution. It is the conditioning that adolescents receive from society around them which determines if they will focus on their empathetic consciousness or otherwise (Uche, 2012). It is important to provide adolescents with an environment where there empathetic skills can flourish further.

The first limitation of the study is that the sample is based only on adolescents' boys, for better understanding and clear picture of adolescents it is important to include girls' population as well. The sample belongs to middle socio-economic strata and includes boys only from nuclear families which again limit its scope. For further studies, it is recommended that sample be included from different socio-economic strata as well different family structures.

### **Conclusion**

The results of this study allowed us to conclude that empathy is positively related to favourable personality factors. Thus, focus should be put in schools to teach students the art of being empathetic towards one another. This is a positive emotion which will not only add to their psychological health but also lead children towards better inter as well as intrapersonal understanding.

### **References**

- Allemand, M., Steiger, A.E. & Fend, H.A. (2015) Empathy development in adolescence predicts social competencies in adulthood. *Journal of Personality*, 3(2), pp 229-41. doi: 10.1111/jopy.12098.
- Bailey, S. (1993). Personality development in adolescents. *The Journal of Forensic Psychiatry*, 4 (3), pp 415-419.
- Barrio, V., Aluja, A. & Garcia, L.F. (2004). Relationship between empathy and the Big Five Personality traits in a sample of Spanish adolescents. *Social behaviour and Personality*, 32 (7), 677-682. Doi: 10.2224/sbp.2004.32.7.677

- Costa, P., Alves, R., Neto, I., Miguel, P., Portela, M. & Costa, M.J. (2014). Associations between Medical Student Empathy and Personality: A Multi-Institutional Study. *PLoS ONE* 9(3): e89254. <https://doi.org/10.1371/journal.pone.0089254>.
- Costa P, Magalhães E, Costa M (2012). A latent growth model suggests that empathy of medical students does not decline over time. *Advances in Health Science Education*, 18(3), pp 509-522.
- Costa, P.T. & McCrae, R.R. (1992). NEO personality Inventory Professional Manual. Odessa, FL: Psychological Assessment Resources.
- Costa P., Jr., Terracciano A., McCrae R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of Personality and Social Psychology*, 81, pp 322–331. 10.1037/0022-3514.81.2.322 .
- Erlanger, A.C.E & Tsytsarev, S.V. (2012). The Relationship between Empathy and Personality in Undergraduate Students' Attitudes toward Nonhuman Animals. *Society & Animals*, 20, pp 21-38.
- Eaves, L. J., & Eysenck, H. J. (1975). The nature of extraversion: A genetical analysis. *Journal of Personality and Social Psychology*, 32, 102-112
- Hopwood, C.J., Donnellan, M.B., Blonigen, D.M., Krueger, R.F., McGue, M., Iacono, W.G. & Burt, S.A. (2011). Genetic and environmental influences on personality trait stability and growth during the transition to adulthood: A three wave longitudinal study. *Journal of Personality and Social psychology*, 100 (3), pp 545-556. doi: [10.1037/a0022409](https://doi.org/10.1037/a0022409)
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). New York: Guilford Press.
- Klimstra, T., (2012). Adolescent personality development and Identity Formation. *Child development perspectives*, 7 (2), pp 80-84. doi: 10.1111/cdep.12017
- MacCann, C., Duckworth, A. L., & Roberts, R. D. (2009). Empirical identification of the major facets of conscientiousness. *Learning and Individual Differences*, 19, pp 451-458. doi:10.1016/j.lindif.2009.03.007
- Manchanda, R., Abidi, N. & Mishra, A.K. (2015). Assessing materialism in urban youth. *Management*, 20 (2), pp 181-203
- Melchers, M.C., Li, M., Haas, B.W., Bischoff, L., & Montag, C. (2016). Similar Personality Patterns Are Associated with Empathy in Four Different Countries. *Frontiers in Psychology*, 7. doi: [10.3389/fpsyg.2016.00290](https://doi.org/10.3389/fpsyg.2016.00290)
- Mooradian, T.A., Davis, M. & Matzler, K. (2011). Dispositional empathy and the hierarchical structure of personality. *The American Journal of Psychology*, 124(1), pp 99-109.

- Morgan, S. L., & Todd, J. J. (2009). Intergenerational closure and academic achievement in high school: A new evaluation of Coleman's conjecture. *Sociology of Education*, 82, pp 267–286.
- Oswalt, A. (2010, November, 17). An introduction to adolescent development. Retrieved from [http://www.mentalhelp.net/poc/view\\_doc.php?type=doc&id=41156&cn=1310](http://www.mentalhelp.net/poc/view_doc.php?type=doc&id=41156&cn=1310).
- Pfeifer, J.H., Iacoboni, M., Mazziotta, J.C. & Dapretto, M. (2008). Mirroring others' emotions relates to empathy and interpersonal competence in children. *Neuroimage*, 39(4), pp 2076-85. Doi:[10.1016/j.neuroimage.2007.10.032](https://doi.org/10.1016/j.neuroimage.2007.10.032)
- Rajkumari, L. (2013). Influence of home environments on personality traits of adolescents (doctoral dissertation). Retrieved from: <http://krishikosh.egranth.ac.in/bitstream/1/87116/1/th10623.pdf>
- Rajkuamri, L. & Hunshal, S.C. (2013). Influence of locality, age and gender on personality traits of urban and rural adolescents. *Karnataka Journal of Agricultural Science* 28(2), pp 256-259.
- Shellenbarger, S. (October, 2013). Teens Are Still Developing Empathy Skills. The Wall Street Journal. Retrieved from: <https://www.wsj.com/articles/teens-are-still-developing-empathy-skills-1381876015>
- Shiner, C., Roberts, B.W. & Caspi, R.L. (2005). Personality Development: Stability and Change. *Annual Review Psychology*, 56, pp 453–84 doi: 10.1146/annurev.psych.55.090902.141913
- Song, Y. & Shi, M. (2017). Associations between empathy and big five personality traits among Chinese undergraduate medical students. *PLoS ONE* 12(2).doi:10.1371/journal.pone.0171665
- Spreng, R.N., McKinnon, M.C., Mar, R.A. & Levine B. (2009). The Toronto Empathy Questionnaire: Scale development and initial validation of a factor-analytic solution to multiple empathy measures. *Journal of Personality Assessment*, 91, pp 62-71. doi: 10.1080/00223890802484381
- Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral science. *Current Directions in Psychological Science*, 16, pp 55–59.
- Thompson, R.L. (1985). Empathy and openness to experience in counsellor trainees. Retrieved from: <https://shareok.org/bitstream/handle/11244/12131/Thesis-1998-T475e.pdf?sequence=1>
- Uche, U. (2012, September, 12). Is it normal for teenagers to lack empathy? Retrieved from <https://www.psychologytoday.com/blog/promoting-empathy-your-teen/201209/is-it-normal-teenagers-lack-empathy>