



Big five personality traits of post graduate students in relation to gender, type of family and residential background

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Abstract

A study was undertaken to study Big Five personality traits of post graduate students of Kashmir University, Kashmir. The sample for the present study consists of 250 post graduate students of Kashmir University. For the assessment of personality traits, NEO-FFI3 developed by McCrae and Costa (1986) was used for the collection of data. The data collected was analyzed with the help of various statistical techniques like %age, mean, S.D and t-test by using IBM SPSS. Neuroticism emerged as the dominant personality trait, with average level of extraversion and openness and low level of agreeableness and conscientiousness. Both male and female students either rural or urban don't differ significantly on Big Five personality traits except for neuroticism. Females scored high on neuroticism. Further students from nuclear families were scored high on conscientiousness than from students of joint families.

Keywords: personality traits, big five, post graduate students, gender, nuclear family & joint family, residential background

Introduction

The study of personality has a broad and varied history in psychology, with an abundance of theoretical traditions like psychodynamic perspective, dispositional or trait, cognitive, existential and humanistic, behavioural and social-learning perspective. The psychoanalytic perspective is biological in nature and based on the unfolding of a series of stages in which particular behaviors occur (Ryckman, 1997) [38]. The trait perspective assumes that there are "dispositional factors that regularly and persistently determine conduct in a variety of everyday situations" (Furnham, 1990) [17]. The cognitive perspective assumes that people's personality is never completely determined; people are changeable and always free to reinterpret their experiences in idiosyncratic ways (Ryckman, 1997) [38]. The existential perspective postulates the existence of an innate growth that moves individuals toward realization of their potentialities if environmental conditions are right (Ryckman, 1997) [38]. Lastly, the social behavioristic perspective assumes that most of our behavior is learned and purposive; we are guided by our motives to attain certain goals (Ryckman, 1997) [38]. Unlike psychoanalytic and existential perspectives, the social behavioristic perspective is not interested in the growth stages. In contrast, it is similar to the trait perspective which assumes that personality refers to regularities and consistencies in the behavior of individuals (Snyder and Ickes, 1985) [41]. However, the social behavioristic perspective asserts that our personality or behavior is learned, rather than innate. People's experiences and interactions continually influence one another (Rotter *et al.* 1972) [37], and behavior occurs as a result of complex interplay between inner processes and environmental influences (Bandura, 1971) [3].

All these perspectives and the followers of these schools have explained the term personality in their own way. Allport

(1961) [1] a trait theorist have defined it as, "personality is the dynamic organization of those psychophysical systems of an individual that determine his unique adjustment to his or her environment". R.B. Cattell (1946) [9] another trait psychologist has defined personality as the prediction of what a person will do in a given situation and he too like Allport has identified two main types of traits source and surface traits. Eysenck (1971) [15] another trait cum type psychologist has defined it as, "personality is more or less stable enduring organization of a person's character, temperament, intellect, and physique which determine his unique adjustment to the environment". Personality research has been given new impetus and direction over the past decade by a near consensus on the structure by which the myriad of more specific personality traits can be arranged. Today, the most talked about personality theory is the five factor theory, also known as the big five. The five factor theory seeks to provide a scientifically accurate framework for organizing the many individual's differences that characterize humankind. The five-factor or Big Five model emerged out of a series of attempts to understand the organization of trait descriptors in the natural language (Goldberg, 1993; McCrae *et al.* 2000) [20, 32]. The five big traits are as: Extraversion: according to Ehrhart (2006) [14] and Bozionelos (2004) [7], extraversion includes attributes of sociability, affiliation, and gregariousness along with the degree to which individuals are assertive, dominant, and experience positive affect. Agreeableness: Agreeableness is an interpersonal factor which refers to the quality of relationships through cooperation and trust (Judge *et al.* 1999) [22]. Organ and Lingl (1995) [33] argued that agreeableness "involves getting along with others in pleasant, satisfying relationship." Conscientiousness: Dependability, industriousness, and efficiency form the basic components of conscientiousness, and those high in this dimension may tend to be persevering,

hard-working, and achievement oriented (Ciavarella *et al.* 2004) ^[10]. Neuroticism: the trait includes attributes such as pessimism, excessive worry, low confidence, and tendencies to experience negative emotions (Bozionelos, 2004) ^[7]. Openness: "Openness is related to receptivity of new ideas, inventiveness, multiplicity of interests, flexibility of thought, and the tendency to develop idealistic ideas and goals" (Bozionelos, 2004) ^[7].

Most researchers and psychologists don't explicitly identify themselves with a certain perspective and often take an eclectic approach. Some research is empirically driven such as "Big Five" personality model whereas other research emphasizes theory development such as psychodiagnostics. A lot of research has been conducted on big five personality traits both in India and outside, it has been observed that a lot of demographic variables indeed have a substantial role in the individual's development of personality may be it age, positional order, family status, socioeconomic status, location and other diverse kind of variables. But still findings have been of contrasting nature, so here an attempt is made in order to validate the relationship between these selected demographic variable and big five personality traits. In current research paper will explore Big Five Personality Factors among students of university of Kashmir, later study will focus on how Gender, residential background and family type predict Big Five personality factors.

From the research reports conducted on personality and on similar constructs there is robust evidence that early emerging individual differences in personality shape how people experience and respond to a wide variety of developmental tasks, ranging from the cultivation of social relationships to the mastery of educational and work tasks (Caspi, Roberts, & Shiner, 2005) ^[8]. Many researchers have been able to explain variation in Big Five personality traits due to various demographic factors like gender, age, education, and ethnic/racial status (Goldberg, *et al.* 1998) ^[21]. Costa *et al.* 2001 ^[34] in a study concluded that women were higher in Neuroticism, Agreeableness, Warmth, and Openness to Feelings, whereas men were higher in Assertiveness and Openness to Ideas; similar results were obtained by Maccoby and Jacklin in a study conducted in 1974 ^[29]. Eisenberg, Fabes, Schaller, and Miller (1989) found evidence of greater facial expression of emotion in women, and the ability to decode nonverbal signals of emotion is consistently found to be more developed in adult women than in men (McClure, 2000) ^[31]. Differences in big five have also been found on racial background, but the differences have been claimed as primarily the result of social, economic, and cultural differences between the races rather than the direct product of race itself (Heuchert, *et al.* 2000) ^[19]. The study carried out by Mule *et al.* (2013) and Lippa, (2005) ^[27] has revealed that males and females differ in pleasantness and calmness; females scored significantly higher than males on both traits. Further it was seen that mean differences between men and women on agreeableness and emotional stability differ, men are more emotionally stable and less agreeable than women; Similarly In Feingold's (1994) ^[16] meta-analysis on gender differences in the five factor model (FFM), results showed that males score higher than females on emotional stability ($\sigma = 20.28$), and females score higher than males on

agreeableness ($\sigma = 0.61$). Bilquis and Mayuri (1999) ^[5] showed that child's personal and social background and age related variables did have significant relationship with the child's overall personality development. Mayuri and Devi (2001) ^[30] indicated that girls scored high on competition, maturity, self-control whereas boys scored more on guilt proneness. Paul *et al.* (2001) ^[34] studied gender differences in personality traits across 26 different cultures and concluded magnitude of gender differences varied across cultures. Singh *et al.* (2007) ^[40] revealed through their study that boys are reserved in nature, shy, tough-minded and careless of social life whereas girls are more outgoing, emotionally stable, socially bold, tender-minded, and more social. Zupancic *et al.* (2008) ^[43] studied gender differences and concluded differences were small and similar across countries. Kaur (2010) revealed that male adolescents perceived their home environment to be significantly more controlled, socially isolated, deprived of certain privilege, rejected and permissive whereas female adolescents perceived their home environment to be more protective and rewarding. Beer and Horn (2000) ^[4] studied the influence of rearing order on personality development within two adoption cohorts. Between- and within- family analysis of the study indicated that rearing order's influence on personality was very weak. The only clear difference was for conscientiousness, on which first reared siblings scored higher. Collins (2006) ^[11] studied the relationship between birth order and personality and the results revealed there is statistically significant relationship between first children and predicted, typical first child personality traits (namely responsible, cautious, motivated, driven, shy and intelligent). Armitage (2007) ^[2] study on "Birth Order" indicated that majority of students' responses confirmed Adler's birth order theory to their birth order. Dixon *et al.* (2008) ^[13] concluded that the youngest and three youngest siblings significantly differed from the oldest and oldest three siblings for Extraversion within and across families. An age effect was detected for Extraversion, whereas gender and family size did not have an impact. Healey (2008) ^[18] results revealed conscientiousness was rated more often as first born characteristic whereas Openness to experience was more often rated as a second-born characteristic. Bilquis and Mayuri (1999) ^[5] through their study proved that family type and size contribute indirectly to the personality development of children. Dayal and Mishra (2012) ^[12] aimed at investigating the patterns of personality formation of children as affected by family size, age and gender. Results indicated that some of the personality factors were affected by family size. The children of small family were more reserved, detached and critical in comparison to large family children. Also they were more excitable, impatient, demanding and overactive. No significant difference was found among boys and girls of small size family and a significant difference was found among boys and girls of large families in personality factor 'I', the boys being more tough-minded than girls. Roy (2002) ^[36] studied differences in personality traits across four metropolitan cities Calcutta Madras, Bombay and Delhi. Results revealed that personality patterns of the four cities were significantly different in four personality factors, namely dull-bright, submissive-assertive, tough minded- tender minded and group dependent- self sufficient. Savita and Duhan (2012) ^[39]

concluded that rural adolescents were significantly higher in their boldness, leadership, sensitivity and social warmth. Significant results were also found in the level of general ability, guilt proneness, mental health, self sufficiency and tension.

There are some other researches where these big five personality traits have been connected with diversity of variables like: carrier decidedness (Lounsbury, *et al.* 2005) [28], Career success (Judge *et al.* 1999) [22], achievement and academic motivation (Komarraju *et al.* 2009 [23]; Komarraju & Karau 2005) internet usage (Landers & Lounsbury (2006) [26], parenting (Prinzie, 2009), earnings (Nyhus & Pons 2005) learning style (Komarraju *et al.* 2011) [24], depression and substance abuse (Kotov, 2010) [25], Thinking style (Zhang, 2006) [42], values (Bilsky, & Schwartz 1994) [6] and so on. Further a study carried out by Roberts and colleagues (2007) [35] showed that personality traits can predict mortality, divorce, and occupational attainment as well as, if not better than, socioeconomic status and cognitive ability.

From the above review on personality research we can safely conclude that personality is influenced by a lot of demographic factors and it inturn can influence other dimensions of our day to day life- be it depression, abuse of substances, learning style of students, mortality, divorce rate, intelligence, learning habits, earnings an individual can made, satisfaction for job, carrier choice, academic and achievement motivation and other diverse life related events. Each of us has a unique personality that differentiates us from other people, and understanding someone’s personality gives us clues about

how that person is likely to act and feel in a variety of situations. Once we are able to assess an individual’s personality, we can safely and effectively manage that person as per the traits he possesses, and eventually we can assign a suitable position to that individual taking his or her personality traits into consideration.

Objectives of the study

1. To Study Big Five personality traits among post graduate students.
2. To compare big five personality traits of post graduate students on the basis of their gender, family status and residential background.

Hypothesis

- H₀₁:** male and female university students don’t differ significantly on big five personality traits.
- H₀₂:** university students from nuclear and joint families do not differ significantly on big five personality traits.
- H₀₃:** rural and urban students do not differ significantly on big five personality traits.

Methodology

Sample

The present study consists of 250 regular post graduate students of Kashmir division. These students have been purposively chosen from different departments. The demographic details of the sample group are given below in table 1

Showing Sample Distribution

Table 1

Gender	N	Residence		Family status	
		Rural	Urban	Nuclear	Joint
Male	89	58	31	63	26
Female	161	66	95	130	31
Total	250	124	193	193	57

Tools used

NEO Five Factor Inventory-3: for the assessment of personality traits, NEO-FFI3 developed by McCrae and Costa (1986) was used. It is a concise measure of five major dimensions of personality namely neuroticism, extraversion, openness, conscientiousness, and agreeableness. It is a 60 item instrument which basically is a revision of NEO FFI in which 15 out of 60 items have been replaced to improve its psychometric properties. It is to be noted that this scale is

applicable to age group of 12 years and older. The scoring is done by comparing the response sheet with the scoring key attached with the booklet.

Statistical techniques employed

For achieving the objectives of the present study, the collected data was analysed by using appropriate statistical techniques with the help of SPSS

Analysis and interpretation

Table 2 Showing frequency and percentage of neuroticism, extraversion, openness, agreeableness and conscientiousness among university students.

Trait	Low		Average		High	
	Frequency	%age	Frequency	%age	Frequency	%age
Neuroticism	15	6	101	40.4	134	53.6
Extraversion	104	41.6	109	43.6	37	14.8
Openness	51	20.4	126	50.4	73	29.2
Agreeableness	119	47.6	108	43.2	23	9.2
Conscientiousness	104	41.6	98	39.2	48	19.2

The table shows 6% of the group sample are low on neuroticism, 40.4% are average and 53.6% have high degrees of neuroticism; 41.6% of the group sample are low on extraversion, 43.6% are average on this trait and 14.8 have high degree of extraversion; 20.4% of the sample are low on openness, 50.4% are average on this trait and 29.2% have high degree of openness. So far as agreeableness trait is concerned 47.6% of the sample are low on agreeableness, 43.2% are average in this trait and 9.2% have high degree of agreeableness. For Conscientiousness trait 41.6% are low on conscientiousness, 39.2% are average and 19.2% are high on this trait.

Table 3 showing comparison of mean scores of personality traits of sample group w.r.t gender:

Personality traits	Gender	N	Mean	SD	t-value
Neuroticism	Male	89	24.62	5.65	2.12**
	Female	161	26.56	7.50	
Extraversion	Male	89	26.08	5.14	1.16 ^{NS}
	Female	161	25.24	5.80	
Openness	Male	89	28.16	4.89	1.25 ^{NS}
	Female	161	28.96	4.78	
Agreeableness	Male	89	28.13	5.24	1.40 ^{NS}
	Female	161	29.15	5.60	
Conscientiousness	Male	89	30.57	5.0	.09 ^{NS}
	Female	161	30.50	5.6	

** = significant at 0.01 level, * =significant at 0.05 level, NS = Not significant

Table 3 shows the difference between the mean scores of personality traits of university students with respect to gender. As is evident from the table, the calculated t-values of extraversion, openness, agreeableness and conscientiousness personality traits (t=1.16, 1.25, 1.40 & 0.09 respectively) are insignificant even at 0.05 level of significance. However, t-value of neuroticism personality trait (t=2.12) is significant beyond 0.01 level of significance. Therefore, the null hypothesis (H₀₂) which states that “male and female university students don’t differ on personality traits” stands rejected.

Table 4 showing comparison of mean scores of personality traits of sample group with respect to family status:

Personality traits	Family status	N	Mean	SD	t-value
Neuroticism	Nuclear	193	25.87	7.29	.001 ^{NS}
	Joint	57	25.87	5.67	
Extraversion	Nuclear	193	25.65	5.58	.61 ^{NS}
	Joint	57	25.14	5.58	
Openness	Nuclear	193	28.68	4.90	.07 ^{NS}
	Joint	57	28.63	4.58	
Agreeableness	Nuclear	193	28.94	5.56	.83 ^{NS}
	Joint	57	28.26	5.27	
Conscientiousness	Nuclear	193	30.99	5.16	2.25**
	Joint	57	28.94	5.82	

** = significant at 0.01 level, * =significant at 0.05 level, NS = Not significant

Table 4 shows the difference between the mean scores of personality traits of university students with respect to their family status. As is evident from the table, the calculated t-value of neuroticism, extraversion, openness and agreeableness personality traits (t=0.001, 0.61, 0.07 and 0.83

respectively) is insignificant even at 0.05 level of significance. However, the t-value of conscientiousness personality trait (t=2.55) is significant beyond 0.01 level of significance. Therefore, the null hypothesis (H₀₃) which states that “university students from nuclear and joint families do not differ on personality traits” stands rejected.

Table 5 showing comparison of mean scores of personality traits of sample w.r.t. residential background:

Personality traits	Residence	N	Mean	SD	t-value
Neuroticism	Rural	124	25.21	5.38	1.48 ^{NS}
	Urban	126	26.52	8.17	
Extraversion	Rural	124	25.68	5.44	0.40 ^{NS}
	Urban	126	25.39	5.73	
Openness	Rural	124	28.37	4.91	.98 ^{NS}
	Urban	126	28.96	4.73	
Agreeableness	Rural	124	28.25	5.35	1.55 ^{NS}
	Urban	126	29.32	5.60	
Conscientiousness	Rural	124	30.70	5.07	.51 ^{NS}
	Urban	126	30.35	5.68	

** = significant at 0.01 level, * =significant at 0.05 level, NS = Not significant

Table 5 shows the difference between the mean scores of personality traits of university students with respect to their residential background. As is evident from the table, the calculated t-values of neuroticism, extraversion, openness, agreeableness and conscientiousness personality traits (t=1.48, 0.40, 0.98, 1.55 and 0.51 respectively) are insignificant even at 0.05 level of significance. Therefore, the null hypothesis (H₀₄) which states that “university students from rural and urban areas do not differ on personality traits” stands rejected.

Conclusion

The present study was conducted to examine the leadership preferences and personality traits of university students with reference to various demographic variables (Gender, Family type and residential background). The main findings of this study are:

1. Overall majority of the students were found to have high degree of neuroticism, average level of extraversion and openness and low level of agreeableness and conscientiousness.
2. The male and female university students don’t differ significantly in personality traits like extraversion, openness, agreeableness, and conscientiousness, however, the female students were high in neuroticism than their male counterparts
3. The university students from nuclear families were found to have higher level of conscientiousness than students of joint families. However, on traits like neuroticism, extraversion, openness and agreeableness no significant difference was found between these two groups.
4. The university students from rural and urban areas do not show significant differences in terms of the personality traits (neuroticism, extraversion, openness, agreeableness, and conscientiousness).

References

1. Allport GW. Pattern and Growth in Personality, Holt,

- Rinehart & Winston, New York, NY, 1961.
2. Armitage S. Birth order: College students' perceptions of their ordinal position compared to Alfred Adler's categories. M.Sc. Thesis, The graduate school, University of Wisconsin Stout, 2007.
 3. Bandura, A. *Social Learning Theory*, General Learning Press, Morristown, NJ, 1971.
 4. Beer JM, Horn JM. The influence of rearing order on personality development within two adoption cohorts. *J Personal*. 2000; 68(4):789-819.
 5. Bilquis, Mayuri K. Personality development of rural children in three regions of Andhra Pradesh. *J. Com. Gui. Res*. 1999; 16(3):305-316.
 6. Bilsky W, Schwartz SH. Values and personality. *European journal of personality*. 1994; 8(3):163-181.
 7. Bozionelos N. The Big Five of personality and work involvement, *Journal of Managerial Psychology*. 2004; 19(1):69-81.
 8. Caspi A, Roberts BW, Shiner RL. Personality development: Stability and change. *Annual Review of Psychology*. 2005; 56:453-484.
 9. Cattell RB. *The description and measurement of personality*. New York: World Book, 1946.
 10. Ciavarella MA, Buchholtz AK, Riordan CM, Gatewood RD, Stokes GS. The Big Five and venture survival: is there a linkage? *Journal of Business Venturing*. 2004; 19(4):465-483.
 11. Collins CA. The relationship between personality and birth order and career choices. B.A (Social work) thesis, Providence College, Rhode Island, 2007.
 12. Dayal O, Mishra S. Impact of family size and gender on personality of school going Children among low income group families. *Asian J Home Sci*. 2012; 7(2): 544-549.
 13. Dixon MM, Reyes CJ, Leppert MF, Pappas LM. Personality and birth order in large fa. *Personal Individ. Differ*. 2008; 44:119-128.
 14. Ehrhart KH. Job characteristics beliefs and personality as antecedents of subjective person-job fit, *Journal of Business and Psychology*. 2006; 21(2):193-226.
 15. Eysenck HJ. *Dimensions of Personality*, London: Routledge and Regan Paul, 1947.
 16. Feingold, A. Gender differences in personality: a meta-analysis, *Psychological Bulletin*. 1994; 116:429-456.
 17. Furnham A. The development of single trait personality theories, *Personality and Individual Differences*. 1990; 11:923-9.
 18. Healey MD. Effects of birth order on personality: A within-family examination of sibling niche differentiation. A dissertation submitted to University of Canterbury, 2008.
 19. Heuchert JWP, Parker WD, Stumpf H, Myburgh CP. The five-factor model of personality in South African college students. *American Behavioral Scientist*. 2000; 44(1):112-125.
 20. Goldberg LR. The structure of phenotypic personality traits. *American Psychologist*. 1993; 48:26-34.
 21. Goldberg LR, Sweeney D, Merenda PF, Hughes JE. Demographic variables and personality: The effects of gender, age, education, and ethnic/racial status on self-descriptions of personality attributes. *Personality and Individual differences*. 1998; 24(3):393-403.
 22. Judge TA, Higgins CA, Thoresen CJ, Barrick MR. The big five personality traits, general mental ability, and career success across the life span. *Personnel psychology*. 1999; 52(3):621-652.
 23. Komarraju M, Karau SJ, Schmeck RR. Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and individual differences*. 2009; 19(1):47-52.
 24. Komarraju M, Karau SJ, Schmeck RR, Avdic A. The Big Five personality traits, learning styles, and academic achievement. *Personality and individual differences*. 2011; 51(4):472-477.
 25. Kotov R, Gamez W, Schmidt F, Watson D. *Linking big personality traits to anxiety, depressive, and substance use disorders: A meta-analysis*, 2010.
 26. Landers RN, Lounsbury JW. An investigation of Big Five and narrow personality traits in relation to Internet usage. *Computers in Human Behavior*. 2006; 22(2):283-293.
 27. Lippa RA. *Gender, Nature, and Nurture*, 2nd ed., Lawrence Erlbaum Associates, Mahwah, NJ, 2005.
 28. Lounsbury JW, Hutchens T, Loveland JM. An investigation of big five personality traits and career decidedness among early and middle adolescents. *Journal of Career Assessment*. The psychology of sex differences. Stanford, CA: Stanford University. 2005; 13(1):25-39.
 29. Maccoby EE, Jacklin CN. *The psychology of sex differences*. Stanford, CA: Stanford University Press, 1974.
 30. Mayuri K, Devi LU, Personality development of rural adolescents of Andhra Pradesh. *Ind. Psych. R*. 2001; 56(1):25-31.
 31. McClure EB. A meta-analytic review of sex differences in facial expression processing and their development in infants, children, and adolescents. *Psychological Bulletin*. 2000; 126:424-453.
 32. McCrae R, *et al*. Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology*. 2000; 78:173-186.
 33. Organ DW, Lingl A. Personality, satisfaction, and organizational citizenship behavior, *The Journal of Social Psychology*. 1995; 135(3):339-350
 34. Paul T, Costa J, Terracciano A, McCrae RR. Gender differences in personality traits across cultures: Robust and surprising findings. *J Personal Soc. Psychol*. 2001; 81(2):322-331.
 35. Roberts BW, Kuncel N, Shiner R, Caspi A, Goldberg LR. The power of personality: A comparative analysis of the predictive validity of personality traits, SES, and IQ. *Perspectives on Psychological Science*. 2007; 2:313-345.
 36. Roy DD. Personality differences across four metropolitan cities of India. *Ind. Psych. R*. 2002; 58(2):71-78.
 37. Rotter JB, Chance JE, Phares EJ. *Applications of a Social Learning Theory of Personality*, Holt, Rinehart & Winston, New York, NY, 1972.
 38. Ryckman RM. *Theories of Personality*, Brooks/Cole Publishing Company, London, 1997.
 39. Savita, Duhan K. Personality assessment of urban and rural adolescent boys from disorganised families. *J Social Soc. Anthropol*. 2012; 3(1):43-47.

40. Singh S, Moorjhani JD, Purohit S, Geryani M, Tanwar P. Perceived parental behaviour in relation to personality pattern among XI and XII grade adolescents. *Ind. Psych. R.* 2007; 68(4):195-206.
41. Snyder M, Ickes W. Personality and social behavior", in Lindzey, G. and Aronson, E. (Eds), *Handbook of Social Psychology*, 3rd ed., Random House, New York, NY. 1985; 2:883-947.
42. Zhang LF. Thinking styles and the big five personality traits revisited. *Personality and Individual Differences.* 2006; 40(6):1177-1187.
43. Zupancic M, Slobodskaya HR, Knyazev GG. Gender differences in child/ adolescent personality traits: Slovenes and Russians compared. *Horiz. Psy.* 2008; 17(3):43-63.