

A Study of Personality in Relation to Resilience and Stress

***Mahima Sahi**, Post Graduate Student, Department of Psychology, Panjab University, Chandigarh

****M.Raghavi**, Post Graduate Student, Department of Psychology, Panjab University, Chandigarh

Abstract

With the growing amount of stress among individuals, a need was felt to investigate Personality types in relation to Resilience and Stress. The sample comprised of 100 college students (50 males and 50 females) in the age range of 18-23 years. For this purpose, Eysenck Personality Questionnaire-R Short Form (Francis et al., 1992), Perceived Stress Scale (Cohen et al., 1983), The 14 item Resilience Scale (RS-14; Wagnild & Young, 1993) and Stress Symptom Rating Scale (Heilbrun & Pepe, 1985) were administered. Data was analyzed using the Pearson Correlation Coefficient and t-ratio. Among females the results showed significant positive relationship between Stress (symptoms and perceived stress) with both Neuroticism and Psychoticism. Positive associations were also seen in perceived stress and stress symptoms among females. Among male's positive correlations were observed between Neuroticism and Stress (symptoms and perceived stress) and between Perceived Stress and Stress Symptoms. For the total sample, positive associations were observed between Stress Symptoms, Perceived Stress and Neuroticism. Also there was a positive relationship between Stress Symptoms and Psychoticism in the total sample. No significant gender differences were observed on dimensions of Psychoticism, Neuroticism, Extraversion, Resilience, Perceived Stress, however significant gender differences were observed on the dimension of Stress Symptoms. The results thus revealed stress proneness in individuals high on Neuroticism and Psychoticism. Further it was also observed that people high on Neuroticism and Psychoticism dimensions exhibit a decreased amount of resilience. The study invites interventional researches in order to inculcate resilience and reduce neuroticism to deal with stress successfully.

Keywords— personality types, resilience, stress symptoms, perceived stress

Introduction

‘Personality’ has always intrigued psychologists explicitly. Being a multifaceted concept various personality psychologists have looked upon the intricacies of personality distinctively. There are diverse theories of the concept, each elaborating the concept of personality in an idiosyncratic manner (Caspi et al., 2005). Personality is referred to as a consistent pattern of thinking, feeling and behaving (Pervin, Cervone & John, 2005). Schacter, Gilbert and Wegner (2009) posit that personality is an individual's characteristic style that remains unswerving throughout his life. Personality thus functions as a dynamic organized whole with simultaneous action of various psychological subsystems within an individual (Mayer, 2007). Eysenck (1967), a prominent British psychologist is credited with the “Trait” approach to personality. His theory highlights 3 dimensions of personality:

- a) **Introversion-Extraversion:** Extraversion tends to be manifested in individuals who seek external stimulation (i.e. from environment), are more social, outgoing, talkative, and energetic whereas Introversion is manifested in individuals who are high on internal stimulation, they prefer to be more reserved and solitary behavior (Thompson, 2008).
- b) **Psychoticism:** a dimension of personality characterized by aggressiveness and hostility whereby individuals high on Psychoticism appear to demonstrate a degree of emotional coldness and some cognitive impairment (Dictionary of Nursing, 2008).

c) Neuroticism: individuals high on neuroticism are characterized by excessive levels of anxiety, they tend to be worrisome, are moody and jealous (Thompson, 2008).

Resilience is understood as the relative capacity for healthy adaptation to life adversities. The word “resilience” is taken from the word “resile,” which means “to bounce or spring back” from re- “back” + salire- “to jump, leap” (Agnes, 2005). Resilience has been increasingly identified as an important area of both research and clinical intervention (Charney, 2004). It concerns both, the exposure of adversity and the positive adjustment to the outcomes of that adversity (Luther, 2000). Research calls attention to the fact that resilience has received little emphasis in the psychological literature due to a longstanding focus on disease and pathology (Bonanno, 2004). According to Theron (2004) and Barton (2005), resilient adolescents have inherent strengths that empower them to cope with adverse circumstances, referred to as protective factors which improve a person’s response to some environmental hazards resulting in an adaptive outcome.

The concept of Stress was introduced by Hans Selye (1977) in his GAS model i.e. General Adaptation Syndrome model. According to which each individual passes through 3 stages while witnessing stress:

- a) Alarm: where stressor is introduced and leads to an imbalance in homeostasis.
- b) Resistance: body fights back in response to stressors.
- c) Exhaustion: body lacks adaptation to stressors.

This investigation aimed to cover two dimensions in relation to stress viz. perceived stress and symptoms of stress. Perceived stress depends on the degree of congruence between the individuals and their environment, so that the individual experiences stress only if the particular situation is perceived to be threatening (Jong & Emmelkamp, 2000). It is evident that whether it is a student giving an exam, a driver dealing with heavy traffic or an office worker striving to finish a project by the deadline, the stress felt from these situations can have an adverse impact on performance (Falconer et al., 2002). Studies indicate that the variation of traits represented in people’s personalities can allow for considerably different responses to stress (Sarason & Sarason, 2005). Psychologists however have been really intrigued to study personality in relation to both resilience and stress. Studies indicate that individuals with positive and outgoing personalities experience less stress as compared to individuals with negative personalities, who experience higher degrees of distress (Vollrath & Torgersen, 2000). It is thus proposed that awareness of one’s own feelings can help one cope more effectively with stress (Sarason & Sarason, 2005). Treating resilience as a ‘trait’, demonstrates that individual differences might exist in dealing with similar negative life events and stressors, some of which may even be present at the time of birth (Caspi et al., 2003). Excessive stress however can lead to physical and mental health problems which can adversely be influenced by the personality of an individual (Niemi & Vainiomaki, 1999).

I. STATEMENT OF THE PROBLEM

The aim of the present study was to study Personality in Relation to Resilience and Stress.

II. HYPOTHESES

Based on the review of literature, following hypotheses were proposed:

- 1) It is expected that Neuroticism is negatively correlated with Resilience.
- 2) It is expected that Neuroticism is positively correlated with Stress (symptoms and perceived stress).
- 3) It is expected that Extraversion is positively correlated with Resilience.
- 4) It is expected that Extraversion is negatively correlated with Stress (symptoms and perceived stress).
- 5) It is expected that Psychoticism is negatively correlated with Resilience.
- 6) It is expected that Psychoticism is positively correlated with Stress (symptoms and perceived stress).
- 7) Significant Gender differences are expected in relation to Neuroticism, Psychoticism, Extraversion, Resilience and Stress (symptoms and perceived stress).

III. METHOD

Sample

The sample comprised of 100 college students (50 males and 50 females) in the age range of 18-25 years. Subjects were chosen from various colleges and University. Students belonging to a diverse set of streams participated in the study. Demographic information from the participants was also obtained.

Tests and Tools

Following standardized tests and tools were used to assess personality, resilience, perceived stress and stress symptoms:

- 1) Eysenck Personality Questionnaire-R Short Form (Francis et al., 1992)
- 2) Perceived Stress Scale (Cohen et al., 1983)
- 3) 14 Item Resilience Scale, RS-14 (Wagnild & Young, 1993)
- 4) Stress Symptom Rating Scale (Heilburn & Pepe, 1985)

IV. RESULTS AND DISCUSSION

Table 1 showing Means, S.D. and t-ratios of Personality, Resilience and Stress (N=100)

S.no.	Variables	Males		Females		t-ratios
		Means	S.D.	Means	S.D.	
1.	Neuroticism	3.16	1.73	2.78	1.75	1.08
2.	Psychoticism	2.42	1.5	1.8	1.07	1.8
3.	Extraversion	3.3	1.53	3.84	1.68	-1.63
4.	Resilience	68.36	16.52	74.42	12.24	-2.03
5.	Stress Symptoms	40.9	23.19	33.92	20.95	1.74*
6.	Perceived Stress	17.44	5.86	17.62	6.24	-.15

*t-ratio significant at .05 level = 1.66

**t-ratio significant at .01 level = 2.36

Table 2: Inter correlation matrix for Personality, Resilience and Stress among Females (N=50)

S.no.	Variables	1	2	3	4	5	6
1.	Neuroticism	-					
2.	Psychoticism	.11	-				
3.	Extraversion	-.15	-.02	-			
4.	Resilience	-.26	-.20	.11	-		
5.	Stress Symptoms	.24*	.23*	.06	-.4	-	
6.	Perceived Stress	.24*	.28*	-.19	-.57	.58**	-

*correlation value significant at .05 level = .23

**correlation value significant at .01 level = .33

Table 3: Inter correlation matrix for Personality, Resilience and Stress among Males (N=50)

S.no.	Variables	1	2	3	4	5	6
1.	Neuroticism	-					
2.	Psychoticism	-.07	-				
3.	Extraversion	-.12	-.03	-			
4.	Resilience	-.3	-.07	.14	-		
5.	Stress Symptoms	.41**	.16	.00	-.25	-	
6.	Perceived Stress	.4**	.03	.11	-.29	.50**	-

*correlation value significant at .05 level = .23

**correlation value significant at .01 level = .33

Table 4: Inter correlation matrix for Personality, Resilience and Stress in Total Sample (N=100)

S.NO	Variables	1	2	3	4	5	6
1.	Neuroticism	-					
2.	Psychoticism	.03	-				
3.	Extraversion	-.15	-.07	-			
4.	Resilience	-.3	-.16	.15	-		
5.	Stress Symptoms	.34**	.22*	.00	-.33	-	
6.	Perceived Stress	.31**	.13	-.05	-.4	-.05	-

*correlation value significant at .05 level = .15

**correlation value significant at .01 level = .21

1) Inter Correlation Analysis

A) Personality and Resilience

The current investigation undertook 3 dimensions of Personality viz. Neuroticism, Psychoticism and Introversion-Extraversion in relation to resilience.

- **Neuroticism and Resilience:** Neuroticism was expected to be correlated with Resilience and according to the results of this investigation the relation came out to be negatively correlated for males, females and subsequently for the total sample. Sills et al., (2005) in their study demonstrated a relationship between personality types and resilience and found that neuroticism was negatively correlated with resilience. This does stand meaningful as Zobel et al., (2004) defined neuroticism as a temperamental

sensitivity to negative stimuli and Schneider (2004) found it to be related with ineffective coping ability. Neurotic people, thus, are more vulnerable to emotional distress and disorder, hence low on resiliency (Kling et al., 2003).

- **Extraversion and Resilience:** Results of the current investigation demonstrated their relationship to be insignificant at .05 level of significance. But as per the review this stands contradictory, as extraversion is seen to be positively related to resilience (Campbell et al., 2006). The study of Campbell and Sills (2006) also supports the notion wherein resilience which acts as a social support is a buffer against life stressors (McCorkle et al., 2008) and extraverts have great amount of social withstanding so they ought to be high on resilience. Both social support and positive emotions have been frequently linked to extraversion giving extraverts an opportunity to bounce back efficiently as compared to other personality types (Bonanno et al., 2004). The results were insignificant in the current study probably because of a statistical fluke that might have occurred while data administration.
- **Psychoticism and Resilience:** The hypothesis that Psychoticism is correlated to resilience was proved insignificant at .05 level. The review although weak in this context exemplifies a negative correlation amongst the two. The study of Annalakshmi (2007) demonstrates that individuals high on Psychoticism tend to have lower Resilience, which is justified since the individuals susceptible to Psychoticism are characterized with a sense of emotional coldness, non-consideration for welfare of others and hence are unable to cope efficiently with the occurring stressors.

B) Personality and Stress

- **Neuroticism and Stress:** It was hypothesized that neuroticism is correlated with stress symptoms and perceived stress. Results came in line with the proposed hypothesis ($p > .01$) for males, females and the total sample. Berkel (2009) also supports the notion that stress is positively correlated with neuroticism since these individuals are characterized by high negative emotions which cause significant amount of distress. Vollrath (2000) demonstrated the same where individuals who were higher on neuroticism tended to demonstrate higher degree of daily stress. People with neurotic tendencies are high on negative affectivity and appear to be sensitive to minor failures and frustrations of daily life (Zobel et al., 2004).
- **Extraversion and Stress:** The current investigation hypothesized that extraversion is correlated with resilience; however, there were no significant associations between the two as per the results of this study. The review of literature has mixed opinions regarding the same, wherein Berkel (2009) highlighted significant associations between extraversion and distress. This seems to be highly implausible since extraversion is said to be characterized by a range of optimistic emotions and sociability and offers less reasons to be having distress. Contradictory findings revealed that adaptive personalities such as those characterized by extraversion experience less psychological distress (Vollrath, 2000). Lee-Baggeley et al., (2005) reported extraverts to be susceptible to lesser distress.
- **Psychoticism and Stress:** The results of this investigation came out to be insignificant for males in relation to both perceived stress and stress symptoms. However, in case of total sample there was a significant relation observed between Psychoticism and stress symptoms and in case of females a significant correlation was observed between Psychoticism and Stress (perceived stress and symptoms). The review of the literature demonstrates that those personality types that feature robustness as a trait demonstrate over time resistance to stress and psychological protection against the most difficult life events (Cosman 2010), but as is known Psychoticism in no way demonstrates robustness rather is characterized by a sense of emotional coldness and cognitive impairment hence is in no way positively associated to stress.

2) t-ratio Analysis

- **Gender Differences in Personality types, Resilience and Stress**

The current investigation also proposed to highlight gender differences in the dimensions of Personality, Resilience and Stress. The t-ratios although came insignificant in this relation demonstrating no significant gender differences in any of the above dimensions. Studies demonstrate that societies with less traditional roles like the West show significant gender differences in relation to Personality (Costa et al., 2001 & Schmitt et al., 2008).

- **Neuroticism:** As per the current investigation no significant gender differences were found on Neuroticism dimension and the hypothesis turned out to be insignificant. Although the review in relation to studies of Costa and McCrae (2001) administered on young population proposed significant gender differences in relation to neuroticism where women were high on neuroticism but more recent studies like the meta analysis of Roberts et al.,(2006) found no evidence for gender differences in rates of mean level personality changes across the lifespan thus one would not expect the relative differences between men and women's mean levels of these traits to change in older age. Gender differences however are broadly consistent with gender stereotypes: Women reported themselves to be higher on Neuroticism, Agreeableness, Warmth, and Openness to Feelings, whereas men were higher on Assertiveness and Openness to Ideas (Terracciano et al., 2001).
- **Extraversion:** Results depicted insignificant gender differences in extraversion which is to a degree supported by the review as well. Gender differences are small on the dimension of Extraversion with women typically scoring higher than men on its various facets. Costa et al., (2001) depicted in their study that women tend to score higher on Warmth, Gregariousness, and Positive Emotions, whereas men score higher on Assertiveness and Excitement Seeking. Lehmann et al., (2013) demonstrated that women are higher on extraversion as compared to men.
- **Psychoticism:** The current investigation doesn't demonstrate any significant gender differences in relation to Psychoticism. The review although stands contrary to the results of this investigation showing that men obtained higher means than women on Psychoticism in 34 countries as per a meta-analysis (Richard et al., 2010). In a study by Petrides (2003) significant gender differences existed in Psychoticism dimension where men scored higher than women on the dimension.
- **Stress:** No gender differences were observed in lieu of perceived stress. However, significant gender differences were observed in relation to stress symptoms ($p > .05$). As per studies of Verma et al., (2011), men and women respond differently to stress. Matud (2004) proposed that women scored significantly higher than men on chronic stress and minor daily stressors. This does seem true as women are higher on the affective vulnerability component showing more susceptibility to distress than men. Thus, score higher on stress scales as compared to men. Kaiseler et al., (2013) however depicts that both men and women respond equally to stress and there exist no significant differences in this relation.
- **Resilience:** Gender differences were expected in relation to resilience as per the present study but the results did not propagate any significant gender differences on the domain. The review however is inconsistent with this view. Studies propose that men have higher levels of resilience than women (Boardman et al., 2008). Men had higher resilience than women in coping with adversity (Morano, 2010), but the differences were limited. Adolescent boys scored higher on various subscales of a resilience measure than girls (Von Soest et al., 2010). This does stand significant in the sense that the social roles have ingrained the notion of "strength" in men over women making them more susceptible to resilience amidst various situations.

References

Abbasi, I.S. (2011). The Influence of Neuroticism on Stress Perception and Its Resultant Negative Affect. *Unpublished Master's Theses. San Jose State University, Washington Square, U.S.A. Paper 3965.*

- Agnes, M. (Ed.). (2005). *Webster's new college dictionary*. Cleveland, OH: Wiley.
- Amanda, A.U., Richard, E.Z., Susan, M., Michelle, G.C., Jonathan, M.S., James, W.G., Raphael, R., Allison, W., & Constance, H. (2010). The Role of Neuroticism and Extraversion in the Stress-Anxiety and Stress-Depression Relationships. *Anxiety Stress Coping*, 2010; 23(4): 363–381.
- Annalakshmi, N. (2007). Resilience in relation to Extraversion-Introversion, Psychoticism, and Neuroticism. *Indian Journal of Psychometry & Education*. 38, 51-55.
- Barton, W.H. (2005). Methodological challenges in the study of resilience. In: Ungar M (ed.). *Handbook for working with children and youth. Pathways to resilience across cultures and context*. California: SagePublications.
- Berkel, H.V. (2009). The Relationship between Personality, Coping Styles and Stress, Anxiety and Depression. *Unpublished Master's Theses. University of Canterbury, New Zealand*.
- Boardman, J.D., Blalock, C.L., & Button, T.M.M. (2008). Sex Differences in the Heritability of Resilience. *Twin Research and Human Genetics*. Vol. 11. Issue 1. pp12-27.
- Bolger, N., & Zuckerman, A. (1995). A Framework for Studying Personality in the Stress Process. *Journal of Personality and Social Psychology*, 1995, Vol. 69, No. 5, 890-902.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience. *American Psychologist*, 59, 20–28.
- Campbell, S., Laura, Cohan, Sharon L., Stein & Murray B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behavior Research and Therapy*, 2006, 44(4), 585-599.
- Caspi, A., Sugden, K., Moffitt, T. E., Taylor, A., Craig, I. W., & Harrington, H., et al. (2003). Influence of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science*, 301(5631), 386–389.
- Charles, S., Carver, & Smith, J.C. (2009). Personality and Coping. *Annual Review of Psychology*, 2010, 61:679–704.
- Charney, D. S. (2004). Psychobiological mechanisms of resilience and vulnerability: Implications for successful adaptation to extreme stress. *American Journal of Psychiatry*, 161, 195–216.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, Vol. 24, No. 4 (Dec., 1983), 385-396.
- Cosman, D., (2010). Psihologie medicala, Ed. Polirom, 14(8), pp. 300-302.
- Costa, P.T., Terracciano, A., & McCrae, R.R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of Personality Social Psychology*, 2001. 81(2):322-3.
- Dumitru, V.M., & Cozman, D. (2012). The relationship between stress and personality factors. *Human & Veterinary Medicine International Journal of the Bioflux Society*, 2012.
- Evans, W. (1981). Stress and Psychoticism. *Personality and Individual Differences*.
- Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, IL:Thomas.
- Eysenck, H.J., & Eysenck, S.B.G. (1992). *Eysenck Personality Question Brief Version*: London.
- Fayombo, G. (2010). The Relationship between Personality Traits and Psychological Resilience among the Caribbean Adolescents. *International Journal of Psychological Studies*.
- Ghimbulut, Ohana, Ratiu, Lucia, Opre, & Adrian. (2012). Achieving Resilience Despite Emotional Instability. *Academic Journal*.
- Heilbrun, A.B., & Pepe, V. (1985). Awareness of cognitive defenses and stress management: *British Journal of Medical Psychology*. Vol. 58(1). Mar 1985, 9-17.
- Hellmuth, J.C., & McNulty, J.K. (2008). Neuroticism, Marital Violence, and the Moderating Role of Stress and Behavioral Skills. *Journal of Personality and Social Psychology*.
- Jong, G. M., Emmelkamp, P. M. (2000). Implementing a Stress Management Training: Comparative Trainer Effectiveness. *Journal of Occupational Health Psychology*. 5(2):309-320.
- Kaiseler, M., Polman, R.C.J., & Nicholls, A.R. (2013). Gender Differences in Stress, Appraisal, and Coping during Golf Putting. *International Journal of Sport and Exercise Psychology*.

- Kling, K. C., Ryff, C. D., Love, G., & Essex, M. (2003). Exploring the influence of personality on depressive symptoms and self-esteem across a significant life transition. *Journal of Personality and Social Psychology*.85,922–932.
- Knezevic, J.H., Karadum, I., & Maglica, B.K. (2005). The sources of stress and coping styles as mediators and moderators of the relationship between personality traits and physical symptoms. *Review of Psychology*.
- Lee-Baggley, D., Preece, M., DeLongis, A., (2005). Coping with interpersonal stress: role of Big Five traits. *Journal of Personality*. 73:1141–80
- Lehmann, R., Allemand, M., Denissen, J.J.A., & Penke, L. (2013). Age and Gender Differences in Motivational Manifestations of The Big Five From Age 16 to 60. *Developmental Psychology*.
- Losoi, H., Turunena, S., Waljasa, M., Helminen, M., Ohmana, J., Julkunen, J., & Otajarvia, E.R. (2013). Psychometric Properties of the Finnish Version of the Resilience Scale and its Short Version. *Psychology, Community & Health*.
- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*.
- Matthews, G., & Falconer, S. (2002). Personality, coping, and task-induced stress in customer service personnel. In *Proceedings of the Human Factors and Ergonomics Society 46th Annual Meeting* (pp. 963-967). Santa Monica, CA: Human Factors and Ergonomics Society.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*.
- Mayer, J.D. (2007). Asserting the Definition of Personality. *The Online Newsletter for Personality Science*. Issue 1, Spring 2007.
- McCorkle, B.H., Rogers, E.S., Dunn, E.C., Lyass, A., & Wan, Y.M. (2008). Increasing social support for individuals with serious mental illness: Evaluating the compeer model of intentional friendship. *Community Mental Health Journal*. 45 (5), 359–366.
- Morano, C. (2010). Resilience and Coping with Trauma: Does gender make a difference?. *Journal of Human Behavior in the Social Environment*. Vol. 20. Issue.4. pp 553-568
- Mroczek, D.K., & Almeida, D.M. (2004). The Effect of Daily Stress, Personality, and Age on Daily Negative Affect. *Journal of Personality, 2004* : Blackwell Publishing 2004.
- Narayanan, A. (2007). Resilience in relation to Extraversion-Introversion, Psychoticism, and Neuroticism. *Indian Journal of Psychometry & Education*.
- Narayanan, A. (2008). The Resilient Individual: A Personality Analysis. *Journal of the Indian Academy of Applied Psychology*.
- Niemi, P.M., Vainiomaki, P.T. (1999). Medical students' academic distress, coping and achievement strategies during the preclinical years. *Teaching and Learning in Medicine*. 11 (3), 125–134.
- Neupert, S.D., & Mroczek, D.K. (2008). Neuroticism Moderates the Daily Relation between Stressors and Memory Failures. *Psychology and Aging*.
- Norris, C.J., Larsen, J.T., & Cacioppo, J.T. (2007). Neuroticism is associated with larger and more prolonged electro dermal responses to emotionally evocative pictures. *Psychophysiology*.
- Owens, J. (2007). Personality and Performance in Stressful Situations. *Unpublished doctoral dissertation*. Department of Psychology. Hanover College, Indiana, U.S.A.
- Peng, L., Zhang, J., Li, M., Li, P., Zhang, Y., Zuo, X., Miao, Y., & Xu, Y. (2012). Negative life events and mental health of Chinese medical students: The effect of resilience, personality and social support. *Psychiatry Research*.
- Pervin, L. A., Cervone, D., & John, O. P. (2005). *Personality: Theory and Research (9th ed.)*. Hoboken, NJ: John Wiley & Sons.

- Petrides, K.V., Jackson, C.J., Furnham, A., & Levine, S.Z. (2003). Exploring Issues of Personality Measurement and Structure through the Development of a Short Form of the Eysenck Personality Profiler. *Journal of Personality Assessment*.
- Psychiatric symptoms in young adults. *Behavior Research and Therapy*. 44 (2006) 585–599.
- Richard, L. & Terence, M. (1997). Gender Differences in Extraversion, Neuroticism, and Psychoticism in 37 Nations. *The Journal of Social Psychology*.
- Richter, J., Lauritz, L.E., Preez, E.D., Cassimjee, N., & Ghazinour, M. (2013). Relationships between Personality and Coping with Stress: An Investigation in Swedish Police Trainees. *Psychology 2013*.
- Roberts, B.W., Walton, K.E. (2006). Patterns of mean-level change in personality traits across the life course: a meta-analysis of longitudinal studies. *Viechtbauer W Psychology Bull*.
- Rovik, J.O. (2009). The role of personality in stress, burnout and help-seeking. A ten-year longitudinal study among Norwegian medical students and early career physicians. *Series of dissertations submitted to the Faculty of Medicine, University of Oslo No. 894 ISBN 978-82-8072-372-7*.
- Sarason, I. G., & Sarason, B. R. (2005). *Abnormal psychology: The problem of maladaptive behavior*. New Jersey: Prentice-Hall, Inc.
- Scalan, M. & Schroeder, D. (2004). Relationship between Big Five Personality Factors, Resiliency Attitudes, and Life Satisfaction in Divorced Parents. *Psi Chi Journal of Undergraduate Research: The National Honor Society in Psychology*.
- Schmitt, D. P., Realo, A., Voracek, M., Allik, J. (2008). Why can't a man be more like a woman? Sex differences in Big Five personality traits across 55 cultures. *Journal of Personality and Social Psychology*.
- Selye, H., 1977. *The Stress of Life*. McGraw-Hill Co, New York.
- Sill, L.C., Cohan, S.L., Stien, M.B. (2004). Relationship of resilience to personality, coping, and
- Simeona, D., Yehudaa, R., Cunilla, R., Knutelskaa, M., Putnamc, F.W., & Smitha, L.M. (2007). Factors associated with resilience in healthy adults. *Psychoneuroendocrinology*.
- Theron, L.C. (2004). The role of personal protective factors in anchoring psychological resilience in adolescents with learning difficulties. *South African Journal of Education*, 24:317-321.
- Thompson, E. R. (2008). Development and Validation of an International English Big-Five Mini-Markers. *Personality and Individual Differences*.
- Verma, R., Balhara, Y.P.S., & Gupta C.S. (2011). Gender differences in stress response: Role of developmental and biological determinants. *Indian Journal of Psychiatry*.
- Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality and Individual Differences*, 29(2), 367-378.
- Von S. T., Mossige, S., Stefansen, K., & Hjemdal, O. (2010). A validation study of the Resilience Scale for Adolescents. *Journal of Psychopathology and Behavioral Assessment*. 32, 215- 225. doi: 10.1007/s10862-009-9149-x
- Wagnild, G. M. (2009a). *The Resilience Scale User's Guide for the US English version of The Resilience Scale and The 14-Item Resilience Scale (RS-14)*. Worden, MT: The Resilience Center.
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1, 165-178.
- Waugh, C. E., Fredrickson, B.L., & Taylor, S.F. (2008). Adapting to life's slings and arrows: Individual differences. *Journal of Research in Personality* (2008).
- Yanna J. W., Colin, G.D.Y., & Jacob, B.H. (2011). Gender Differences in Personality across the Ten Aspects of the Big Five. *Frontiers in Psychology*.
- Zobel, A., Barkow, K., Schulze-Rauschenbach, S., von Widdern, O., Metten, M., Pfeiffer, U., et al. (2004). High neuroticism and depressive temperament are associated with dysfunctional regulation of the hypothalamic–pituitary–adrenocortical system in healthy volunteers. *Acta Psychiatrica Scandinavica*, 109(5), 392–399.