



Five Factor Personality Traits and Psychological Resilience Among Secondary School Students in Egypt

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Abstract

The purpose of this study is to investigate the relationships between the big five personality traits: (conscientiousness, agreeableness, neuroticism, openness to experience, extraversion) and psychological resilience among secondary school students in Egypt. The sample consisted of 200 male secondary school students. Aged ranged from 15-17 years (M=16.02, SD=5.12). It was found that significant positive associations existed between the psychological traits (conscientiousness, agreeableness, extraversion, openness to experience) and psychological resilience. Nevertheless, one personality trait; neuroticism, was found to be negatively associated with psychological resilience.

Keywords: Factor personality traits, psychological resilience, secondary school students

Introduction

The concept of resilience has received a variety of different and inconsistent definitions in previous studies (Ahern 2006). Hjemdal et al. (2006: 84) have defined resilience as “the protective factors, processes, and mechanisms that, despite experiences with stressors shown to carry significant risk for developing psychopathology, contribute to a good outcome”. Protective factors consist of individual and environmental factors (Compas & Reeslund 2009; Tusaie & Dyer 2004) that operate to protect from the negative effects of adverse situations and risks (Tusaie & Dyer 2004). The protective factors connected to resilience can be divided into three overarching categories; the personal characteristics and positive resources of the individual; a family environment marked by stability, support, and coherence; and a social environment external to the family that supports and strengthens an individual’s capacity to adapt and cope (Hjemdal 2009; Hjemdal et al. 2007). Though all individuals have the capacity and potential to develop resilience (Masten 2001), adolescent’s protective factors may change during the different stages of the development, whereas some protective factors may remain stable during the same period (Ahern 2006; Compas & Reeslund 2009). Factors protecting in one situation may therefore not be protective in another situation (Hjemdal 2009). That implies that being considered resilient at one developmental stage during adolescence does not necessarily imply that the same individual will be considered resilient at a later point during development or in life (Hjemdal 2009). Though studies of resilience have seldom focused on gender differences regarding resilience (Friborg et al. 2003), some studies have shown that adolescent boys tend to score higher in resilience compared to girls (Pinquart 2009; Scoloveno 2013; Skrove, Romindstad & Indredavik 2013).

Big Five Personality traits and psychological resilience

In the ‘Big Five model’, individual differences in personality are described by five factors: openness to experience, agreeableness, extraversion, conscientiousness, and neuroticism which is also referred to as lack of emotional stability. Studies investigating the relationship between these personality factors and resilience often demonstrated a positive relationship between extraversion, openness to experience, conscientiousness, agreeableness, and optimism and a negative relationship with neuroticism or emotional instability (e.g., Davey et al., 2003; Furnham, Crump, & Whelan, 1997; Riolli, Savicki, & Cepani, 2002). Conscientiousness, agreeableness, and openness to experience were also shown in Turkish samples to be associated with growth experiences following traumatic experiences (Karanci et al., 2012).

However, openness was negatively related with resilience in the study by Furnham et al. (1997). Friberg, Barlaug, Martinussen, Rosenvinge, and Hjemdal (2005) found that subscales of the Resilience Scale for Adults (RSA) were positively correlated with some personality factors. Emotional stability, which was indicated by absence of neuroticism, was significantly and positively correlated with RSA-personal strengths (perception of self and perception of future). Conscientiousness was correlated with RSA-perception of future and RSA-personal structure. Social competence subscale of RSA was strongly associated with extraversion and agreeableness; and RSA-social resources was associated with agreeableness, indicating a possible relationship between a supporting, reinforcing social network and authentic, trusting, empathic personality. Therefore, psychological resilience is mostly associated in the literature with relatively positive personality characteristics including optimism, extraversion, agreeableness, and conscientiousness, and negatively associated with neuroticism.(Gozde, 2014).

Chun Bun Lam & Catherine A. McBride-Chang (2007) explore the resilient (moderating) influences of gender-related personality traits and coping flexibility on the relations between life event stress and psychosocial adjustment in a sample of 291 Chinese young adults. Multiple outcomes (i.e., psychological, physical, and interpersonal aspects of adjustments) were separately examined with regression analysis. The interaction effects explained 5% of the unique variance in the psychological distress model and 4% of the unique variance in the interpersonal functioning model beyond the main effects. Coping flexibility tended to reduce the associations between life event stress and depression. Furthermore, masculinity buffered the link between life event stress and interpersonal functioning. The three-way interaction masculinity× femininity× stress also predicted additional unique variance in interpersonal functioning, which indicates that non-gender-typed respondents showed greater resilience to recent life stress than did their gender typed counterparts.

In his cross-sectional study, Grace Fayombo(2010) investigated the relationships between the big five personality traits: (conscientiousness, agreeableness, neuroticism, openness to experience, extraversion) and psychological resilience among 397 Caribbean secondary school adolescents. Pearson Product Moment Correlation and Stepwise Multiple Regressions were conducted to analyse the data. Results revealed statistically significant positive relationships between the personality traits (conscientiousness, agreeableness, openness to experience, extraversion) and psychological resilience, while neuroticism was negatively correlated with psychological resilience. The personality traits also jointly contributed 32% ($R^2 = 0.324$) of the variance being accounted for in psychological resilience and this was found to be statistically significant with conscientiousness being the best predictor while agreeableness, neuroticism and openness to experience were other significant predictors, however, extraversion did not contribute significantly.

The purpose of this study is to investigate the relationships between the big five personality traits: (conscientiousness, agreeableness, neuroticism, openness to experience, extraversion) and psychological resilience among secondary school students in Egypt.

Method

Participants

The sample consisted of 200 male secondary school students . Aged ranged from 15-17 years($M = 16.02$, $SD = 5.12$).

Measures

Personality Test Based on Adjectives (PTBA) was developed by Bacanli et al. (2009) based on the model of Big Five Personality Traits (Costa and McCrae 1992). PTBA is a Likert type scale including 40 pairs of opposite adjectives that can be graded from 1 to 7. PTBA consists of five dimensions: extraversion (9 items), agreeableness (9 items), conscientiousness (7 items), neuroticism (7 items), and openness to experience (8 items). Five dimensions explain 52.63 percent of the variance of PTBA. The test-retest reliability coefficient of PTBA ranged from .68 to .86 for all dimensions. The Cronbach Alpha coefficient of the dimensions of PTBA was found to be .89 for extraversion, .87 for agreeableness, .88 for conscientiousness, .73 for neuroticism, and .80 for openness to experience.

The 25-item, Likert format, Wagnild and Young (1993) resilience scale was used for data collection. It is self-reported summated rating scale, with responses ranging from strongly disagree (1) to strongly agree (7). Scoring and interpretation was in the following pattern: 25-100 very low resilience; 101-115 low resilience; 116- 130 moderately low resilience; 131-145 moderately high resilience; 145-160 high resilience; 161- 175 very high resilience, Wagnild and Young (1993) reported reliability co-efficient of .91 for the scale, while for the present study an Alpha reliability co-efficient of .861 was established, both indicating that the resilience scale is reliable.

Procedure

Before administering the two instruments, Informed consents for the students to participate in the study were obtained from their parents and the school principals. The adolescents were surveyed in their school halls by the researcher with the assistance of the school principals. The researcher took time to brief the participants on the process of answering the items in the questionnaires. The students were informed that the information would remain confidential and to buttress this, they were told not to write their names. The administration of the instruments lasted for approximately 30 minutes.

Data Analysis

Pearson Product Moment Correlation was conducted to analyse the data. All the negatively worded items were reversed during analysis.

Results

The aim of this research was to find out the relationships between the personality traits and psychological resilience. The statistically significant positive and negative correlations among the variables and psychological resilience are presented in Table 1. Conscientiousness significantly and positively correlated with psychological resilience ($r=0.632$, $p<0.05$); agreeableness with psychological resilience ($r=0.453$, $p<0.05$); openness to experience with psychological resilience ($r=0.441$, $p<0.05$); extraversion with psychological resilience ($r=0.273$, $p<0.05$); while neuroticism, significantly and negatively correlated with psychological resilience ($r=-0.411$, $p<0.05$).

These statistically significant positive correlations indicated that the healthier the personality traits, the more resilient the adolescent. The negative associations between neuroticism and psychological resilience however indicated that adolescents who have unhealthy personality such as neuroticism may not be psychologically resilient. There were also significant positive and negative associations among the variables thus: Conscientiousness correlated with agreeableness ($r=0.235$, $p<0.05$); conscientiousness

negatively correlated with neuroticism ($r = -0.338, p < 0.05$); conscientiousness personality was associated with openness to experience ($r = 0.452, p < 0.05$) but did not correlate with extraversion; indicating that a learner who is organized, thorough and plans ahead is also likely to get along with others, may not be anxious or experience depressed mood, is likely to be intellectually curious but may not be talkative.

Additionally, agreeableness correlated with openness to experience ($r = 0.357, p < 0.05$) and extraversion ($r = 0.366, p < 0.05$) but did not correlate with neuroticism, indicating that an adolescent that is considerate may probably adjust to new ideas and be assertive but may not be outgoing. Likewise, neuroticism did not correlate with openness and extraversion, indicating that an adolescent who displays angry and anxious personality may not be intellectually curious and even be popular; openness however correlated with extraversion ($r = 0.501, p < 0.05$) meaning that an adolescent who is insightful may likely be assertive.

Table 1. *Correlation Matrix of Psychological resilience, Conscientiousness, Agreeableness, Neuroticism, Openness to Experience and Extraversion*

Variables	Psy.	Con	Agr	Neu	Op.	Ext
Psychological Resilience	-					
Conscientiousness	0.632**	-				
Agreeableness	0.453**	0.235**	-			
Neuroticism	-0.411**	-0.338**	-0.003	-		
Openness to Experience	0.441**	0.452**	0.357**	-0.014	-	
Extraversion	0.273**	0.019	0.366**	-0.004	0.501**	-

Note: **Significant ($p < 0.01$). Psy.(Psychological Resilience), Con(Conscientiousness), Agr (Agreeableness), Neu (Neuroticism), Op.(Openness to Experience), Ext (Extraversion)

Discussion

This study aimed to investigate the relationships between the big five personality traits: (conscientiousness, agreeableness, neuroticism, openness to experience, extraversion) and psychological resilience among secondary school students in Egypt. It was found that significant positive associations existed between the psychological traits (conscientiousness, agreeableness, extraversion, openness to experience) and psychological resilience.

Nevertheless, one personality trait; neuroticism, was found to be negatively associated with psychological resilience. This was not surprising, as those who are characterized by conscientiousness, agreeableness, openness to experience and extraversion are healthy people, whereas neuroticism lends negative personality, which lacks resilience. Thus, one can say that the healthier the personality, the more the resilience.

Persons who are characterized by extroversion trait in this study tend to exert more energy coming from social context, excitement towards physical activities. This finding goes in the same line with the various studies (Nakaya, Oshio & Kaneko, 2006; Narayanan, 2008) which affirm that individuals who are extrovert tend to show resilience in an adversity primarily because of the energy that they have that enabled them to have positive outlook to do something about the conflict and also their motivation coming from the support group that they have.

Persons who are characterized by conscientiousness trait in this study tend to be organized, acts in a structured style, has high self-control and goal-oriented . According to

Fayombo (2010) conscientiousness is the greatest predictor among the other traits because it is highly related in having good emotional intelligence.

Persons who are characterized by agreeableness trait in this study tend to develop resilience because it primarily helps the individual in terms of allowing social engagement to happen for the emotional regulation of oneself in time of adversity but its degree does not have to be very high but not very low as well.

Persons who are characterized by openness to experience trait in this study tend to accept new ideas and be able to live at the present. Supported by the study made Burke et al., (2006), this trait shows good relationship with resilience because it affects the planning of the military officers and for suppression from challenging activities.

Neuroticism was negatively associated with psychological resilience. This finding confirmed the earlier literature that neuroticism has an inherent negative denotation (Fayombo, 2010) which is associated with negative emotional states and feelings such as anxiety, anger, guilt, and depressed mood (Matthews & Deary 1998).

Limitations and Further Study

Our sample included only boys. It is hard to draw conclusions about girls. This should also be addressed in future studies.

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