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Resilience, vulnerability and mental health

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Abstract

This study investigated the association of resilience with indices of vulnerability including psychological distress, depression, and anxiety; and mental health in a sample of students. 214 (97 boys, 114 girls) were included in this study. All participants completed Connor-Davidson Resilience Scale (CD-RISC), Mental Health Inventory (MHI), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and General Health Questionnaire (GHQ). Resilience was positively associated with psychological well-being and negatively associated with psychological distress, depression and anxiety. Psychological health and vulnerability indices are influenced by different levels of resilience through self-esteem, personal competence and tenacity, tolerance of negative affect, control, and spirituality.

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Keywords: Resilience, psychological distress, depression, anxiety, mental health.

1. Introduction

Resilience, which has been broadly defined as a dynamic process where individuals display positive adaptation despite experiences of significant adversity or trauma (Goldberg & Williams, 1988). Resilience is often conceptualized as existing along a continuum with vulnerability and implies a resistance to psychopathology, though not total invulnerability to the development of psychiatric disorder (Goldberg, 1972). Resilience is seen as more than simple recovery from insult, rather it can be defined as positive growth or adaptation following periods of homeostatic disruption (Richardson, 2002).

The first theory about the resilience relies on the characters that related to positive outcomes in exposure to difficulties of life (Tugade & Fredrickson, 2004). Latter these researches explained that the external protective factors such as efficient schools and relationship with protective adults are affected in promotion of resilience (Richardson, 2002). The current theories believe that resilience is a multidimensional construct comprise of constitutional variables such as temperament and personality accompanied with specific skills for example problem-solving skills (Campbell-Sills, Cohan & Stein, 2006).

Currently, clinical psychologists assess the models of resilience under conditions of loss, bereavement, depression and pain (Bonanno, 2004; Charney, 2004; Tedeschi, Park & Calhoun, 1998). Concordant results of these studies confirm the positive and protective influence of resilience in the successful opposition and growth adaptation

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with stressful conditions that had been referred. In contrast, lower and weaker levels of resilience are related to vulnerability and psychological disorders (Bonanno, 2004; Campbell-Sills et al., 2006). In this study, we assess the relation of resilience with vulnerability and mental health indexes. We assume that; a) there are negative correlations between resilience and vulnerability indexes, and; b) there are positive correlation between resilience and indexes of psychological health.

2. Method

2.1. Participant

A sample of N=256 college students volunteers attending in this study. All participants were asked to complete Connor-Davidson Resilience Scale (CD-RISC), Mental Health Inventory (MHI), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI) and General Health Questionnaire (GHQ). Mean age of participants was 13.22 years (SD = 2.25, range = 19-29), Mean age of boys participants were 22.74 (SD = 2.29, range = 20-29) and Mean age of girls participants were 21.61 (SD = 2.11, range = 19-25).

2.2. Measures

Connor-Davidson Resilience Scale (CD-RIS) - The CD-RISC (Connor & Davidson, 2003; Besharat, 2007) consists of 25 items designed to measure resilience. Responses are reported on a 5-point Likert scale that ranged from 0 to 4. The reliability and validity of scale is verified.

Mental Health Inventory (MHI) - The MHI (Veit & Ware, 1983; Besharat, 2006) consists of 34 items designed to measure a psychological well-being and psychological distress on a 5-point Likert scale that ranged from 1 to 5. The reliability and validity of Persian form of scale in patient and normal samples is verified (Besharat, 2006).

Beck Depression Inventory (BDI) - The BDI (Beck, Rush, Shaw & Emery, 1979; Beck, Steer & Garbin, 1988) comprises 21 items designed to measure a depression symptom on a 4-point Likert scale that ranged from 0 to 63. The reliability and validity scale in is verified.

Beck Anxiety Inventory (BAI) - The BAI (Beck, Epstein, Brown & Steer, 1988; Beck & Steer, 1993), The BAI consists of 21 items. It is a self-report questionnaire that measures the anxiety level on a 4-point Likert scale from 0 to 63. The reliability and validity of scale verified in variables researches.

General Health Questionnaire (GHQ)- The GHQ (Goldberg, 1972; Goldberg, Gater, Sartorius, Ustun, 1997; Goldberg & Williams, 1988; Taghavi, 2001), To measure General Health, participants responded to the General Health Questionnaire which comprises 28 items and four subscales measuring somatic symptom (7 items), anxiety and insomnia (7 items), social dysfunction (7 items), and depression (7 items) on a 4-point Likert scale. The reliability and validity of scale verified in variables researches.

3. Results

First, the girls and boys students compare in Resilience, Psychological well-being, Psychological distress, Depression, Anxiety and General health with multiple regression analysis. The result show that both of boys and girls students are significantly different in depression, anxiety and general health subscales. The descriptive statistics and multiple regression analysis for the variables included in the study are presented in Table 1.

Table 1. Descriptive Statistics and Multiple regression analyses

Variable	boys(n=97)	Girls(n=114)	total (n=211)	MS	F	P
	M(SD)	M(SD)	M(SD)			
Resilience	71/88(15/77)	69/38(15/61)	70/53(15/70)	327/713	1/331	0/250
psychological well-being	54/35(8/60)	52/27(9/48)	53/22(9/12)	226/428	2/740	0/099
psychological distress	49/18(15/22)	53/16(16/46)	51/33(15/99)	830/616	3/283	0/071
Depression	11/02(2/83)	11/85(3/06)	11/47(2/98)	36/893	4/200	0/042
Anxiety	11/47(3/32)	12/48(3/67)	12/01(3/54)	53/274	4/298	0/039
General health*	22/25(6/25)	27/03(6/56)	6/21(6/46)	165/555	41/014	0/046

* The high value in this variable show the more problem in General health

* df =1

Then, correlation coefficients between Resilience and other variables computed separately in two groups. The results of correlation test show that correlations among Resilience and Psychological well-being are positive and significant. The correlations among Resilience and Psychological distress, Depression, Anxiety, General health are negative and significant. The results of correlation testing are given in Table 2.

Table 2. Correlations coefficients between resilience and other variables

Variable	boy students	girl students	total students
	r(p*)	r(p*)	r(p*)
Resilience-Psychological well-being	0/506	0/557	0/538
Resilience-Psychological distress	-0/461	-0/457	-0/463
Resilience-Depression	-0/588	-0/633	-0/615
Resilience-Anxiety	-0/611	-0/644	-0/632
Resilience-General health	-0/452	-0/496	-0/481

* All correlations are significant in $\alpha=0.01$ ($p=0.000$)

4. Discussion

The current study evaluated the relationship between resilience, psychological well-being, psychological distress, depression, anxiety and general health. Results demonstrated that resiliency has positive correlation with psychological well-being and negative correlation with vulnerability indexes including psychological distress, depression and anxiety. These finding are accordance with the previous researches (Benetti & Kambouropoulos, 2006; Besharat, 2006; Besharat, 2007; Bonanno, 2004; Rutter, 1985; Southwick, Vythilingam & Charney, 2005; Taghavi, 2001; Veit et al., 1983; Werner, 1984).

Tugade and Fredrickson (2004), Carle and Chassin (2004) suggested that positive affect has been shown to help individuals pass undesirable experiences. Some researchers, as a probability explanation, suggested that resilience result in enhancing self-esteem and successful opposition of negative experiences via increasing positive affect (Benetti et al., 2006; Bonanno, 2004). On the basis of this explanation, resiliency by means of enhancing the self-esteem, as intermediate mechanism, led to positive adaptability. If it will be accepted, we expect that the lower resiliency yield weak self-esteem and inefficacy in opposition to negative experiences. Therefore, psychological pathologies, distress, depression and anxiety led to weak resiliency.

Competence and hardiness are components of resiliency (Connor & Davidson, 2003). It seems that increased competency due to resiliency is related to vulnerability and mental health indexes. Thus, raising the value of

resiliency through increasing the personal competence (Zautra, Johnson & Davis, 2005) and enhancing hardiness (Garmezy, 1985) is related to greater degrees of mental health indexes.

Another component of resiliency is restraint (Campbell-Sills et al., 2006). This capacity helps resistant individual in managing the stressful circumstances, not just recovery (Bonanno, 2004) but positive growth and a new level of equilibrium (Taghavi, 2001).

Resiliency is related to vulnerability and mental health indexes via belief and spiritual values. Spirituality as a protective factor (Connor & Davidson, 2003) can increase resistance against life stressors; on the other hand, superiority will be achieved through the positive adaptation.

From theoretical viewpoint, findings of this study can add the resilience construct to the body of personality theories and also to range of positive psychology. In practically, these results can be used in improving the educational programs and interfering designs on the resiliency. The limitations of this study were: restriction of sample group and correlation method that restricted the generalization of findings and also causality interpretations of variables. The other searches are studying reliability measures of resiliency scale (Besharat, 2007).

References

- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression: a treatment manual*. New York: Guilford.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77-100.
- Benetti, C., & Kambouropoulos, N. (2006). Affect-regulated indirect effects of trait anxiety and trait resilience on self-esteem. *Personality and Individual Differences*, 41, 341-352.
- Besharat, M. A. (2006). Reliability and validity of the Mental Health Inventory (MHI). *Daneshvar Raftar*, 16, 11-16. [persian]
- Besharat, M. A. (2007). Psychometric properties of a Farsi version of the Resilience Scale. Unpublished research report. Tehran: University of Tehran. [persian]
- Bonanno, G. A. (2004). Loss, trauma, and human resilience. *American Psychologist*, 59, 20-28.
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44, 585-599.
- Carle, A. C., & Chassin, L. (2004). Resilience in a community sample of children of alcoholics: its prevalence and relation internalising symptomatology and positive affect. *Journal of Applied Developmental Psychology*, 25, 577-596.
- Charney, D. S. (2004). Psychobiological mechanisms of resilience and vulnerability: implications for adaptation to extreme stress. *American Journal of Psychiatry*, 161, 195-216.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18, 76-82.
- Garmezy, N. (1985). *Stress-resistant children: the search for protective factors*. In J. E. Stevenson (Ed.), recent research in developmental psychopathology. *Journal of Child Psychology; Psychiatry Book Supplement No. 4* (pp. 213-133). Pergamon: Oxford.
- Goldberg, D. P. (1972). *The detection of psychiatric illness by questionnaire*. Maudsley Monograph, 21, Oxford: Oxford University Press.
- Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., & et al. (1997). The validity of two version of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, 27, 191-197.
- Goldberg, D. P., & Williams, P. (1988). *A users' guide to the General Health Questionnaire*. UK: NFER, Nelson.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58, 307-321.
- Rutter, M. (1985). Resilience in the face of adversity: protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598-611.
- Southwick, S. M., Vythilingam, M., & Charney, D. S. (2005). The psychobiology of depression and resilience to stress: implications for prevention and treatment. *Annual Review of Clinical Psychology*, 1, 255-291.
- Taghavi, M. R. (2001). Assessing reliability and validity of the General Health Questionnaire (GHQ). *Journal of Psychology*, 4, 381-398.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86, 320-333.
- Tedeschi, R. G., Park, C. L., & Calhoun, L. F. (1998). *Posttraumatic growth: positive changes in the aftermath of crisis*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Veit, C. T., & Ware, J. E. (1983). The structure of psychological distress and well-being in general population. *Journal of Consulting and Clinical Psychology*, 51, 730-742.
- Werner, E. E. (1984). Resilient children. *Young Children*, 40, 68-72.
- Zautra, A. J., Johnson, L. M., & Davis, M. C. (2005). Positive affect as a source of resilience for women in chronic pain. *Journal of Consulting and Clinical Psychology*, 73, 212-220.