



General self-efficacy and worry in an Iranian adolescents and youths samples

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Abstract

The purpose of this research study was twofold: to examine the worry and self-efficacy relationships, and investigate whether self-efficacy can explain worry variation in regression model in an Iranian adolescents and youths samples. Participants included 200 adolescents and 200 youths randomly selected from Eghlid town, Fars province, Iran. A demographic questionnaire, the Generalised Self-efficacy Scale and Ahwaz Worry Inventory were used in the study. Resulting data demonstrated that self-efficacy and worry have significant negative correlations coefficients in adolescents and youths. Initiation and persistence subscales of general self-efficacy explained 42 and 45 percent of worry variation in adolescents and youths respectively. General self-efficacy construct and its initiation and persistence subscales have great importance for worry prevention in adolescents and youths. Hence, both self efficacy and worry measures could be supplied for screening and intervention goals at individual and collective levels among them.

Keywords: Self-efficacy, worry, positive psychology, adolescents, youth.

INTRODUCTION

Seligman, founder of Positive Psychology previously addressed to crucial roles of strengths-based characters in healthy educational institutions implicitly (Gable and Haidt, 2005, Seligman and Csikszentmihalyi, 2000, Seligman et al, 2004, Seligman et al, 2006). He pointed out that psychology ignored the positive side of mankind after World War II. Also he proposed the mission of positive psychology as analysis of somewhat in human life that to building the best qualities in life. Thus, it seems man's positive subjective experiences such as self-efficacy have a crucial role in his performance. Because human positive emotions are phenomenological perceptions and in turn subjectively lead to more well-being and decreased pathology such as mental illness and worry. As scholars noted earlier, positive psychology involved two basic individual and collective levels. The individual level of positive psychology encompasses many of characteristics and one of which is self-efficacy. Although, we suggest that self-efficacy construct have an indirect influence on the collective level of positive psychology. Since it includes the civic virtues making by personal will and emerge of the institutions that move individuals toward a better citizenship and peaceful world by positive collective cohesion (Gillham and Seligman, 1999; Seligman and Csikszentmihalyi, 2000; Khodarahimi,

2008). Altogether, current advances in positive psychology movement in western and developed countries exclusively focused on positive components (Seligman et al, 2004; Gable and Haidt, 2005). There are lack of evidences to examine relationships between positive and negative psychological constructs, and then apply them in educational and mental health programs. It would expect that exploration of interconnections between negative and positive constructs in psychology research might have more contribution on human understanding and well-being. In line with the above assumption, present study aimed to examine relationships between self-efficacy and worry as two positive and negative psychological constructs in adolescents and youths in the Eghlid city. Eghlid is a provincial city in the north of Fars province in Iran, between Esfahan and Shiraz, which is officially called Eghlid and Sarhad Chahar Dange, and its whole population estimated about 103,575 and more than 53,201 inhabitants in 2008, and a high proportion of adolescents and youth people. Eghlid is located closely to mountainous chain of the Zagros and is one of the highest cities of Iran at an altitude of 2250 Meters. Its climate is fair, fresh, dry and windy, and some of the top mountains surrounding the city are covered with perpetual snow. The city is mainly agricultural, with relative low indu-

stries, socio-cultural facilities and labor markets, especially for adolescents and youth. It is a historical city and during the Empire Achéménide, its name was 'Azargarta'. Their religion is Shiite division of Islam, and its people almost specified with curiosity, persistence, ritualism, religiosity, sensation seeking, and hospitality. Since the Eghlid is a perfect intact region for psychological investigations, the present study main objective was to examine self-efficacy and worry relationships in adolescents and youth at there, and then to make recommendations for future programs.

Theoretical framework and literature

Self-efficacy conceptualization often was traced in social cognitive theory and educational psychology. Self-efficacy is a positive construct and a subtype of self-constructs, that associated with mindfulness, consciousness, awareness, and will concepts in personality psychology, and humanistic and cognitive traditions. There are various definitions of self-efficacy and its dimensions such as generalized self-efficacy, but all of them included a general success oriented attitude, and only they differed in some specific aspects of the construct. For example, Sherer et al (1982) attributed a success-oriented attitude to past experiences. The most prominent scholar among recent voices calling for a new perspective in self-beliefs has been Bandura (1986), who is called an architect of self-efficacy. Bandura (1994) noted that how people's behaviour could often be better predicted by the beliefs they hold about their own capabilities than by what they were really capable of accomplishing. In his conceptualization, self-efficacy is a mechanism to explain individual behaviour and defined it as a person's perceived capability to perform a behaviour. Bandura suggested that self-efficacy made a difference in how people feel, think and act (Bandura, 1995a, 1995b). In terms of feeling and emotion, a low sense of self-efficacy was associated with affective, mood and cognitive pathology, i.e. worry, anxiety, depression, low self-esteem and pessimistic. Bandura assumed individuals possessed a self-system framework that enables them to exercise a measure of control over their thoughts, feelings, motivation, and actions in environment. This self-system encompassed all of one's cognitive and affective structures and provided reference mechanisms and a set of subfunctions for perceiving, regulating, and evaluating behaviour, which resulted from the interplay between the system and environmental sources of influence. In sum, self-efficacy serves a self-regulatory function by providing individuals with the capability to influence their own cognitive processes and actions and thus alter their environments (Bandura, 1997, 2001).

In other hand, worry was a relatively new research field in psychopathology during recent two decades. Borkovec et al (1983) believed that worry is a part of threat percept-

tion system in human being for reviewing, informing and searching threatening data. They believed worries related to appraisal and problem control across different situations. Mathews (1990) noted that worriness is an unsuccessful attempt for problem-solving that accompanied by mentally rehearsal of threatening events. In his viewpoint, worries shows emotion-focused strategy rather than problem-focused one. Usually worries indicate some unreal and persistent fear about probability of threats in present and future. There were two types of worry: catastrophic and confused. The first was related to frustration in adaptive problem-solving stages and the second one to inability in decision making. Processing model, cognitive control arousal, and worry functioning are prominent theories of worry. In processing model, Borkovec et al (1983) emphasized on the significance of cognitive learning and memory mechanisms in emergence of worry. In cognitive control arousal theory, Barlow (1988, 2002) and Barlow and Durand (1999) insisted on the significance of ambiguity, negative feelings, internal self-ratings and fear cognitive schema in development of worriness. Tallis and Eysenck (1994) offered three functions for worry in their worry function theory. According to them, these functions included: Alarm, prompt, and preparation. Khodarahimi (2004) showed that females have been significantly worrisome in some worry subscales than males. Overall, worry research in recent two decades highlighted the nature, mechanisms and a few their correlate, especially abnormal constructs such as anxiety disorders (Borkovec and Inz, 1990, Borkovec and Roemer, 1995, Laugesen, 2003, Hallowell, 2004, Khodarahimi, 2004, khodarahimi and Nnamdi, 2009). Promising literature demonstrated that psychotherapeutic interventions could heal pathological worries in anxiety disorders among outpatients (Khodarahimi, 2005, khodarahimi and Nnamdi, 2009). Although, it seems that worry would have substantial impact on individual self efficacy but there are a lack of evidence in this area. Based on aforementioned literature in self efficacy and worry, It speculated self-efficacy and worry relationships understanding as two opposite constructs, need to have more investigations and may have implications in both individual and community programs. The first hypothesis of this research study is that self-efficacy and worry have significant relationships among adolescents and youths. The second hypothesis of this project is that self-efficacy and its subscales would explain worry variation in multiple regression models.

METHOD

Participants

Research population involved adolescents (11-19 years old) and youth (20-29 years old) in the Eghlid town, where our university site was located. Participants included 400 adolescents (n=200, F=100, M=100) and youth (n=200, F=100, M=100). Participants were randomly selected from the four different regions across the Eghlid

Table 1. Self efficacy and worry descriptive statistics in total sample

Variables	Mean	Std. Deviation
Initiation	11.78	3.398
Effort	10.72	2.373
Persistence	5.59	1.970
GSES	28.09	5.421
Economic	6.76	3.539
Self-esteem	6.92	2.972
Future	5.08	2.500
Vocational	1.91	1.161
Relations with others	2.67	1.665
Cognitive	4.18	2.469
Insecurity	1.07	1.030
Detailed problems	3.08	1.902
AWI	31.67	12.804

city by simple random procedure. Participation was anonymous and voluntary. After being given brief instructions, the participants reviewed and signed a consent form before completing a demographic questionnaire and two inventories.

Instruments

The demographic questionnaire included birth order of the participant within the family constellation, size of family, number of sister(s) and brother(s), gender, age, level of education, marital status, socioeconomic status, ethnicity, and occupation of parents. The two inventories used were (1) The General Self Efficacy Scale (GSES), and (2) Ahwaz Worry Inventory (AWI).

General Self Efficacy Scale (GSES): The GSES was constructed to measure global confidence in one's coping skills across a wide range of demanding or novelty situations. General self-efficacy is measured by a scale based on the conception of generalized self-efficacy that was proposed by Sherer et al (1982). The generalized self-efficacy conception is based on dispositional optimism with explicit assumptions about the cause of a positive perception on life. Additionally, past experiences which succeed or fail result in a generalized set of expectations that an individual would carry into a new situation. This set of expectations would most likely be manifested in general patterns of behaviour in response to situations about which the individual is unfamiliar (Sherer et al., 1982). The GSES consists of 17 items around three factors: (1) initiative or willingness to initiate behavior (7 items), (2) effort or willingness to expand efforts in completing behavior (7 items), (3) persistence or confrontation in the face of adversity (3 items). A summation of the three factor scores result in the total GSES score. Items are rated on a Likert scale with high a high score on the GSES indicative of high general self-efficacy. The GSES reliability using Cronbach's alpha revealed that total scale alpha at .86, initiative at .74, effort at .75 and persistence at .64 (Woodruff and Cashman, 1993). The GSES validity demonstrated that a GSES measure is more successful in predicting performance in unfamiliar, ambiguous situations, and complex performances (Wang and Richarde; 1988; Higgins; 2001). GSE reliability using Cronbach's alpha in present study was =.83

Ahwaz Worry Inventory (AWI): The AWI was invented by Taghvaei (1997) and consisted of 20 items. The AWI conceptual framework was based on earlier theories of worry psychology (Borkovec et al, 1983; Mathews, 1990; Tallis and Eysenck, 1994). AWI consists of eight factors: (1) economic worry (4 items), (2) self-esteem worry (4 items), (3) future worry (3 items), (4) vocational worry (1 item), (5) worry about relations with others (2 items), (6) cognitive worry (3 items), (7) worry from insecurity (1 item), and (8) worry about detail problems (2 items). The AWI consists of 20 questions with four possible answers that include "always", "often", "sometimes" and "never" with numerical values of 3, 2, 1, and 0 respectively. The AWI concurrent validity with somatic complaints subscale of SCI-90 -R (Derogatis, 1977) and Emotional Control Questionnaire (Roger and Nesselhoever, 1987) was $r=.33$ and $r=.24$. The AWI reliability by test-retest method was estimated $r=.71$. The AWI internal consistency is (alpha) = .89 (Taghvaei, 1997).

Design and Statistical Analysis

First, within a correlational design, the Pearson correlation coefficients between self efficacy and worry was performed, using SPSS 16 for widows, in order to determine two constructs and their subscale correlations in adolescents and youth. Then, we performed multiple stepwise regressions for self efficacy and worry predictors in both groups, and significance level for hypothesis testing was .05.

RESULTS

Initial analysis of data included mean and standard deviation descriptive for self efficacy and worry and their subscales in total sample (Table 1). The first hypothesis of this research is that there are significant relationships between self efficacy, worry and their subscales among adolescents and youths. This was computed among 13 variables in an effort to assess the degree that these quantitative variables were negative and linearly related in both adolescents and youth groups. Participants in this analysis were 200 adolescents and 200 youths and data was analyzed by Pearson correlations coefficients between two general self-efficacy and worry constructs and their subscales among adolescents and youths. This analysis indicated that the GSE and its initiation subscale and worry and its subscales, except vocational subscale, were significantly and linearly related in adolescents. Moreover, this was true for persistence subscale of GSE and worry subscales, except its economic self-esteem, and vocational subscales. While there weren't any significant correlations between the effort subscale of general self efficacy and worry and its subscales in adolescents. A similar trend was observed between general self-efficacy and its initiation subscale with worry and its subscales in youths. Also, the persistence subscale of GSE has a significant negative correlation with worry and its subscales, except insecurity. But there weren't any significant correlations between the effort subscale of general self efficacy and worry and its subscales in youth too (Table 2). Second, we hypothesized that self-efficacy and its subscales would explain worry variation in

Table 2. Self efficacy and worry correlation coefficients among a dolescents and youths.

Groups	Variables	Economic	Self-esteem	Future	Vocational	Relations with others	Cognitive	Insecurity
Adolescents	Initiation	-.302	-.222	-.305	-.067	-.401	-.346	-.221
	Effort	.044	-.055	-.026 ^{**}	-.077	-.047 ^{**}	-.093 ^{**}	-.091 [*]
	Persistence	-.120 ^{**}	-.096 ^{**}	-.232 ^{**}	-.071	-.211 ^{**}	-.240 ^{**}	-.170 ^{**}
	GSES	-.220 ^{**}	-.204 ^{**}	-.291 ^{**}	-.103	-.357 ^{**}	-.351 ^{**}	-.244 ^{**}
Youth	Initiation	-.253 ^{**}	-.336 ^{**}	-.322	-.158 [*]	-.359	-.308	-.316
	Effort	.109 [*]	.116 [*]	.086 ^{**}	-.017 ^{**}	.064 [*]	-.124 ^{**}	-.119
	Persistence	-.141 [*]	-.178 ^{**}	-.325 ^{**}	-.242 ^{**}	-.160 ^{**}	-.249 ^{**}	-.137 ^{**}
	GSES	-.162 [*]	-.225 ^{**}	-.282 ^{**}	-.194 ^{**}	-.255 ^{**}	-.338 ^{**}	-.300 ^{**}

* p 0.05 ** p 0.01.

Table 3. Worry and self efficacy correlations coefficients in total sample

Variables	AW2	AW3	AW4	AW5	AW6	AW7	AW8	AW	GSE1	GSE2	GSE3	GS
AW1	.501	.607 ^{**}	.464 ^{**}	.330 ^{**}	.530 ^{**}	.325 ^{**}	.360 ^{**}	.795 ^{**}	-.277 ^{**}	.070	-.131 ^{**}	-.1
AW2		.573 ^{**}	.338 ^{**}	.377 ^{**}	.433 ^{**}	.306 ^{**}	.458 ^{**}	.758 ^{**}	-.280 ^{**}	.030	-.140 ^{**}	-.2
AW3			.532 ^{**}	.387 ^{**}	.595 ^{**}	.350 ^{**}	.448 ^{**}	.822 ^{**}	-.314 ^{**}	.027	-.282 ^{**}	-.2
AW4				.184 ^{**}	.347 ^{**}	.262 ^{**}	.241 ^{**}	.563 ^{**}	-.116 ^{**}	-.058	-.161 ^{**}	-.1
AW5					.458 ^{**}	.396 ^{**}	.427 ^{**}	.600 ^{**}	-.380 ^{**}	.007 [*]	-.184 ^{**}	-.3
AW6						.504 ^{**}	.515 ^{**}	.781 ^{**}	-.326 ^{**}	-.109 [*]	-.245 ^{**}	-.3
AW7							.307 ^{**}	.541 ^{**}	-.270 ^{**}	-.108 [*]	-.152 ^{**}	-.2
AW8								.657 ^{**}	-.390 ^{**}	-.012	-.212 ^{**}	-.3
AW									-.415 ^{**}	-.005	-.259 ^{**}	-.3
GSE1										.076	.279 ^{**}	.77
GSE2											.310 ^{**}	.60
GSE3												.66

* p 0.05 ** p 0.01.

multiple regression models. Initially before multiple regression analysis, we conducted a correlation coefficients analysis between worry, self-efficacy and their subscales in total sample because of possible multi-collinearity between independent variables because independent variables include

self-efficacy and its three subscales. It indicated that initiation subscale hasn't correlated to the second subscale of general self efficacy but second and third subscales had significant positive correlations coefficients (Table 3). Multiple regressions analysis with stepwise method conducted to

evaluate the general self efficacy and its three subscales predictive roles in worry among adolescents and youth separated. Findings of this study and persistence subscales could be used to

Table 4. Multiple stepwise regressions for self-efficacy and worry prediction in adolescents and youths

Groups	Entered variables	R	R ²	Beta	T	P
Adolescents	Initiation and Persistence Factors	.429	.184			
	Initiation Factor			-.374	-5.618	.0001
	Persistence Factor			-.133	-2.002	.047
Youths	Initiation Factor	.421	.177	-.421	-6.523	.0001
	Initiation and Persistence Factors	.452	.204			
	Initiation and Persistence Factors			-.369	-5.540	.0001
	Persistence Factor			-.172	-2.589	.010

multiple regression models in adolescents. Present findings indicated that there was a significant negative correlation between initiation (Beta=-.374, P=.001) and persistence (Beta=-.133, P=.001) subscales of general self-efficacy with worry, and they explained 42 percent of worry variation in adolescents. Finally, there was a significant negative correlation between initiation (Beta=-.369, P=.0001) and persistence (Beta=-.172, P=.010) subscales of general self-efficacy and worry in youth sample. Thus, consistent with our hypothesis predictions, the multiple stepwise regressions explained 45 percent of worry variation by initiation and persistence of self-efficacy in youths (Table 4).

DISCUSSION

The present study demonstrated that general self-efficacy and worry have significant negative correlations in adolescents and youths. Also, general self-efficacy and its initiation and persistence subscales explained 42 and 45 percent of worry variation in adolescents and youth respectively. These findings are consistent with inherent positive postulations in self-efficacy construct, and they are in line with literature that shown the importance of positive emotions and self-conceptions for a healthy life and the higher level wishes (Csikszentmihalyi, 1997; Seligman, 2002; Seligman and Csikszentmihalyi, 2000; Seligman et al, 2006; Khodarahimi, 2008). Additionally, it was proved that worry could threaten personal peace and disturb individual cognitive functioning (Borkovec et al, 1983; Mathews, 1990; Barlow and Durand, 1999; Barlow, 2002), and then resulting to lack of positive emotions, depression and anxiety, and finally would lenient personal self-confidence and other self aspects. Similarly, these findings indicated a negative significant correlation between general self-efficacy and worry, especially economic and self-esteem worries in youth. In contrast to Fournier et al (1996) findings due to relative higher worry rates in junior and senior high school students, we found stronger relationships between worry and self-efficacy in youths. Based on Laugesen (2003) worry model, we sug-

gest this maybe because of emotional, behavioral and cognitive fluctuations in adolescents' development. While attainment to a more stabilized psychic functions in youth could help to predict worry and self-efficacy relationships among them more straightforwardly. Moreover, most of the self-efficacy previous scholars in academic success, self-perceptions, attitudes and behavior regulations areas explained self-efficacy by a self-regulatory mutual determinant mechanism which named the person, environment and behavior triangle (Sherer et al, 1982; Bandura, 1994, Bandura, 1995a, b, 1997, 2001). Thus, self-efficacy and worry negative correlations in present essay congruent with Bandura predictions (Bandura, 1997, 2001), and we suggest that general self-efficacy as a positive self-regulatory mechanism would prevent cognitive malfunctioning and inappropriate appraisal such as worry. Therefore, practitioners, educational institutions and policy makers could apply general self-efficacy and worry measures for screening purposes and providing a better and more suitable individual and collective interventions among adolescents and youths. However, these findings were limited because of correlational procedures and restricted aged group cohort, i.e. adolescents and youths. Future research would expect to examine general self-efficacy and worry causal relationships within experimental procedures and in different aged groups across cultures with respect to demographical, racial and ethnic backgrounds. Finally, further research trends may wish to focus on other self-efficacy variants and related constructs in self psychology, i.e. collective efficacy, perceived efficacy, self-esteem, self-concept etc, and their roles in worry psychology.

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