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## Relations of autonomy and adjustment in Iranian college students: a cross-culture study of self-determination theory

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### Abstract

The objective of this study was to examine the relationships of autonomy with adjustment among Iranian samples. Two hundred and fifteen (215) Iranian college students were tested using the Self-Determination Scale to measure autonomy and, the General Health Questionnaire to measure adjustment. Negative correlations were found between autonomy and depression ( $r = -.30$ ), anxiety ( $r = -.27$ ), somatic symptoms ( $r = -.21$ ), and social dysfunction ( $r = -.18$ ). The results are discussed in terms of the Iranian context and culture.

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*Keywords:* Self-determination; autonomy; adjustment; Iranian college students.

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### 1. Introduction

Self-determination theory is an approach to human motivation and personality that uses traditional empirical methods while employing an organismic metatheory that highlights the importance of humans' evolved inner resources for personality development and behavioral self-regulation (Ryan & Deci, 2000a, 2000b). Self-determination theory has proposed that individuals have three innate, psychological needs (Baard, Deci, & Ryan, 2004; Williams, Lynch, McGregor, Ryan, Sharp, & Deci, 2006): the needs for competence, autonomy, and relatedness that appear to be essential for facilitating self-motivation and effective functioning (Ryan & Deci, 2000b; Baard, *et al.*, 2004). They facilitate adjustment because need satisfaction provides the necessary support for human growth and development (Ryan, 1995 cited in Baard, 2002). In contrast, thwarted satisfaction of the needs will undermine motivation and can have maladaptive consequences" (Baard, 1994; Ryan, Sheldon, Kasser, & Deci, 1996; Sheldon, Ryan, & Reis, 1996 cited in Baard, 2002).

According to self-determination theory, the need for competence refers to a tendency to feel effectiveness in one's ongoing interactions with the social environment and to experience opportunities to express one's capacities (Chirkov, Ryan, & Willness, 2005). The need for relatedness concerns establishing a sense of mutual respect and reliance with others (Baumeister & Leary, 1995) and the need for autonomy concerns experiencing choice and feeling one as the initiator of one's own action (Chirkov & Ryan, 2001). Autonomy within self-determination theory is defined as the capacity for self-endorsed action based on integrative and reflective awareness (Ryan, 2005).

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According to the self-determination theory, the opposite of autonomy is not dependence but rather heteronomy. Autonomy involves experiencing a sense of choice and volition as one behaves in a way that is congruent with deeply-held values. Heteronomy, in contrast, refers to one's actions being experienced as controlled by forces that are alien to the self or that compel one to behave in specific ways regardless of one's values or interests (Chirkov, Ryan, Kim, & Kaplan, 2003). People often experience a lack of autonomy when pressured to do something they do not believe in, or to follow social norms with which they do not identify (Chirkov, *et al.*, 2003).

Several studies have demonstrated that opportunities to experience autonomy are critical to well-being (Ryan & Deci, 2000b, Chirkov & Ryan, 2001; Chirkov, *et al.*, 2005). These studies argue that people are naturally prone to self-organize action and that the sense of choice, congruence, and initiative that characterizes autonomy is a necessary aspect of healthy functioning. Environments that controllingly regulate behavior disrupt this primary propensity (Ryan & Deci, 2000a, 2000b), and, accordingly, have a deleterious impact on self-motivation and well-being (Chirkov & Ryan, 2001). Specifically, controlling environments undermine intrinsic motivation (Ryan & Deci, 2000a, 2000b) and the internalization and integration of extrinsically-motivated behavior are associated with more distress and less positive affect (Deci, Ryan, Gagne, Leone, Usunov, & Kornazheva, 2001).

Self-determination theory (Ryan & Deci, 2000b) argues that basic psychological needs for autonomy, competence, and relatedness can be identified across all cultures and these basic needs interact with social contexts to produce variations in human behavior and well-being. Although there has been little adjustment concerning the cross-cultural relevance of relatedness and competence needs, the idea that there is a basic need for autonomy remains controversial. That is, many theorists (e.g. Iyengar & Lepper, 1999; Oishi, 2000) assume that autonomy represents a Western individualistic value and therefore is not a basic need that has general relevance for functional significance across cultures.

The focus of this investigation was to assess the relationships between autonomy and adjustment in culture of Iran, characterized as collectivistic in nature (Ali & Amirshahi, 2002; Alavi & McCormick, 2003; Ghorbani, Bing, Watson, Davidson & LeBerton, 2003; Mortazavi, 2006). In collectivistic cultures, the priority given to the needs, norms and goals of one's group or collective (Chirkov, *et al.*, 2003).

## 2. Method

### 2.1. Participants

The participants were 215 undergraduate students (115 women and 100 men) selected randomly from general psychology classes at college of Education and Psychology in Shiraz University. The ages of students ranged from 18 to 49 ( $M=23.4$ ,  $SD=5.9$ ). The students' majors were special education, educational administration, elementary education, and clinical psychology.

### 2.2. Questionnaires

To estimate the relationship between autonomy and adjustment of the participants, two questionnaires, the Self-Determination Scale (Sheldon & Deci, 1996) and the General Health Questionnaire (Goldberg & Hillier, 1979), were administered. The Self-Determination Scale was used to assess autonomy. It is a short, 10-item scale with two 5-item subscales. The first subscale (called here Self-Awareness) is awareness of oneself, i.e., being more aware of one's feelings and sense of self, and the second subscale (Perceived Choice) is perceived choice in one's actions. The subscales can either be used separately or combined into an overall score. Respondents were instructed to read the pairs of statements, one pair a time, and think about which statement within the pair seemed more true to them at this point in their life. They indicated the degree to which statement A feels true, relative to the degree that statement B feels true, on the 5-point scale with anchors of 1: only A feels true and 5: only B feels true. One item in self-awareness, for example, is "A. My emotions sometimes seem alien to me. B. My emotions always seem to belong to me"; one item in perceived choice, for example, is "A. I do what I do because it interests me. B. I do what I do because I have to."

With the kind permission of Dr. Edward L. Deci this scale was translated into Persian (Farsi), and a back-translation procedure was applied to assure the content of the scale remained similar in the two languages. In this study, test-retest reliability scores taken over thirty days (using 30 subjects) for Self-awareness, Perceived Choice, and Total score were .83, .74, and .83, respectively.

To assess the validity of the Self-Determination Scale, correlations between each item, the total scores of that subscale and the overall scores of the scale were computed. Correlations between items of Self-awareness with the Total Self-awareness score were positive and the range was .45 to .70. Correlations between items of Perceived Choice with the Total scores of that subscale were positive and the range was .43 to .70. Correlations between subscales of Self-awareness and Perceived-Choice with the overall score of Self-Determination Scale were .69 and .71, respectively. In addition, the negative relationships between scores of Self-Determination Scale and four types of adjustment symptoms support our measure's validity (see Table 1).

The General Health Questionnaire (Goldberg & Hillier, 1979) is a 28-item questionnaire assessing the extent to which the participant's experience the presence of four types of psychiatric or adjustment symptoms of Depression, Anxiety, Somatic symptoms, and Social Dysfunction. A number of studies have used the symptoms of Depression and Anxiety as index of adjustment (e.g. Baard, *et al.*, 2004).

Participants report recent symptom frequencies for 28 items (7 for each scale) using a 4-point Likert type, 1: Not at all and 4: Much more than usual. Psychometric properties of the scale are satisfactory, with alpha and split-half reliabilities being reported as .87 and .95, respectively (Goldberg & Williams, 1988). Concurrent validity for the subscales has been described as their significant associations with independent psychiatric assessments using the Clinical Interview Schedule (Goldberg, Cooper, Eastwood, Kedward, & Shepherd, 1970). Reliability and validity of this questionnaire for use in Iran have been previously assessed; internal consistency using Cronbach's alpha was .90, split-half reliability was .93, and test-retest reliability was .70 (Taghavi, 2002).

### 3. Results

Pearson coefficient correlation between the Self-determination subscales and age, sex, autonomy and four types of adjustment symptoms are presented in Table 1.

Table 1 Pearson correlations for autonomy and adjustment

Scale	Pearson			Participants	
	Autonomy	Self awareness	Perceived Choice	M	SD
Depression	-.30**	-.26**	-.17*	9.85	4.25
Anxiety	-.27**	-.19**	-.20**	12.03	4.47
Somatic Symptoms	-.21**	-.17*	-.13	11.74	4.08
Social dysfunction	-.18**	-.15*	-.12	13.68	3.14

\*\* p < .01    \* p < .05

Scores on Autonomy, Self-awareness, and Perceived Choice were negatively correlated with four types of adjustment, and the range was -.12 to -.30. All of the correlation coefficients were significant, with the exception of Perceived Choice with Somatic Symptoms and Social Dysfunction.

To compare the combined relationship of Depression, Anxiety, Somatic Symptoms, and Social Dysfunction with scores for Self-awareness and Perceived Choice, four multiple regression analysis were done. In each regression, scores for Self-awareness and Perceived Choice as predictor variables were entered into the equation simultaneously. Results indicated that Self-awareness and Perceived Choice accounted for significant variance in Depression ( $R^2=.09$ ) and Anxiety ( $R^2=.07$ ) scores (see Table 2). For Depression, the standardized coefficient for Self-awareness was -.25 and the standardized coefficient for Perceived Choice was -.15. For anxiety, the standardized coefficient for Perceived Choice was -.19 and the standardized coefficient of Self-awareness was -.17. For Somatic Symptoms and Social Dysfunction, the standardized coefficient for Self-awareness was significant ( $\beta = -.16$ , and  $\beta = -.14$ , respectively). However, Perceived Choice showed no significant relations with Somatic Symptoms and Social Dysfunction (see Table 2).

Table 2 Summary of four multiple regression analysis

Dependent variables	Independent variables	B	SEB	<i>Beta</i>	<i>P</i>	<i>R</i>	<i>R</i> <sup>2</sup>
Depression	Self-Awareness	-.29	.07	-.25	.0001	.31	.097
	Perceived choice	-.16	.06	-.15	.01		
Anxiety	Self-Awareness	-.216	.08	-.17	.01	.27	.07
	Perceived choice	-.210	.07	-.19	.005		
Somatic Symptoms	Self-Awareness	-.18	.07	-.16	.02	.21	.04
	Perceived choice	-.125	.06	-.127	.06		
Social Dysfunction	Self-Awareness	-.12	.06	-.14	.04	.18	.03
	Perceived choice	-.08	.05	-.10	.12		

#### 4. Discussion

The major goal of this study was to examine the relationships of autonomy and adjustment. As the analysis indicated, the correlations between autonomy with depression, anxiety, somatic symptoms and social dysfunction were negative (although not high). The findings that relate autonomy to adjustment variables are consistent with results of previous studies (e.g., Black & Deci, 2000; Chirkov & Ryan, 2001; Chirkov, *et al.*, 2003; Baard, *et al.*, 2004; Chirkov, *et al.*, 2005; Williams, *et al.*, 2006). The results of this study support the self-determination theory concept of autonomy; Self-determination theory's position regarding autonomy as a basic human need (Chirkov, *et al.*, 2003). Although some have argued that autonomy is functionally significant only within a few Western nations (Oishi, 2000), results from this study suggest otherwise. Autonomy, as self-determination theory defines, is distinct from individualism and independence. Autonomy is defined in terms of volition and self-endorsement of behaviors and practices (Deci *et al.*, 2001). As Chirkov and colleagues have stated, such volitional experience may be among the universal conditions for healthy human functioning, despite the highly varied nature of cultural practice that people may engage (Chirkov, *et al.*, 2005). For example, one can be autonomously reliant on others for guidance and support (La Guardia, Ryan, Couchman, & Deci, 2000), or one can experience conforming to society's tradition and group norms without a feeling of pressure (Chirkov, *et al.*, 2003).

Knowledge concerning the nutrients essential for positive experience and, in turn, for enhanced well-being has broad significance. The results of this study could be useful for parents and educators concerned with conditions that promote adjustment, as well as to psychotherapists and health professionals because autonomy is perhaps the critical variable in producing maintained change (Williams, *et al.*, 2006).

Methodological limitations merit consideration in interpreting the findings of this research. First, participants were selected solely from education and psychology classes. Generalizability should be tested in wider range of college students. Second, this study cannot establish clear causal relations between autonomy and adjustment, because autonomy was not manipulated.

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