

## Patience and Mental Health in Iranian Students

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Received: June 20, 2014; Revised: August 22, 2014; Accepted: March 8, 2015

**Background:** While the role of some personality traits has been comprehensively explored, scientific study of others, such as patience has been neglected. Psychologists have paid scant attention to patience as a personality trait, character strength or virtue.

**Objectives:** The current study examined the relationship between patience and life satisfaction, mental health, and personality.

**Materials and Methods:** A sample of 252 Iranian college students (129 females and 123 males) completed the 3-factor patience scale, satisfaction with life scale, general health questionnaire, anxiety and depression scales and mini international personality item pool-big five.

**Results:** The three types of patience (interpersonal, life hardship, and daily hassles) were associated with higher levels of life satisfaction and lower levels of depression, anxiety and psychological dysfunction. Patience also showed moderate relationship with the Big-Five factors of personality. After controlling the personality factors, patience managed to explain additional unique variance in life satisfaction and mental health indicators.

**Conclusions:** Patience is a unique predictor of mental well-being. It is suggested that long-term patience is more important for depression and general health, whereas short-term patience is more beneficial for hedonic well-being.

**Keywords:** Mental Health; Personal Satisfaction; Personality; Virtues

### 1. Background

To make adaptive choices, people should sometimes exhibit patience, forgoing immediate benefits to acquiring more valuable future rewards. Humans account for future consequences when making temporal decisions, whereas many animal species wait only a few seconds for delayed benefits. The extreme differences between humans and nonhumans seem to provide powerful evidence that patience is uniquely a human trait (1).

A major focus of attention in psychology is on the determinants and consequences of well-being. Personality traits and character strengths are the strongest and most consistent predictors of well-being (2). There is also evidence of a genetic link between personality and well-being (3). While the role of some personality traits such as gratitude, are comprehensively explored, scientific study of others such as patience are neglected. Patience is commonly said to be a virtue, but not commonly included in the contemporary discussions of the good life. Psychologists pay scant attention to this virtue, although they study it under related guises such as gratification delay (4).

In recent years, a 3-Factor Patience Scale (3-FPS) was designed to measure three types of patience: interpersonal, life hardship and daily hassles patience (5, 6). Life hardship represents patience toward long-term goals or hard-

ships (e.g., chronic illness) while daily hassles represents patience toward frustrating situations in daily life (e.g., traffic jams). The three types of patience differentially relate to well-being and personality. Interpersonal patience, for example, has a strong correlation with agreeableness, but life hardship and daily hassles patience have moderate correlations. However, it is not clear whether these relationships would hold across cultures in the same way.

To establish the generalizability of patience as a unique predictor of mental well-being, it is important to show its cross-cultural consistency.

### 2. Objectives

The current study aimed to examine the relationship between patience and mental health, subjective well-being and personality factors, in an Iranian population. Although all three types of patience are expected to correlate with higher levels of mental health and well-being, no hypothesis was made regarding the strength of these relationships.

### 3. Materials and Methods

Participants were 252 student volunteers from the University of Tehran, Iran. The age range of these 123 female

and 129 male subjects was from 19 to 45, with a mean of 23.43 and a standard deviation of 3.45. The Persian versions of the following measures were administered; they have been previously used in the Iranian samples (except the patience scale) and had proven to be valid.

### 3.1. Measures

#### 3.1.1. 3-Factor Patience Scale

This 11 item scale is designed to measure three types of patience: interpersonal (I am patient with other people), life hardship (I am able to wait-out tough times), and daily hassles patience (in general waiting in lines does not bother me). The 3-FPS has internal consistency reliability, convergent validity and high test-retest reliability (5, 6). In the current study, items were translated into Persian and the adequacy of translations was confirmed by having the Persian version of questionnaire items translated back into English. Similar to the original 3-FPS (6) the Persian scale, in the current study, had a three-factor structure, consisting of interpersonal patience ( $\alpha = 0.74$ ,  $M = 3.55$ ,  $SD = 0.75$ ), long-term life hardships patience ( $\alpha = 0.81$ ,  $M = 3.37$ ,  $SD = 0.93$ ), and short-term daily hassles patience ( $\alpha = 0.64$ ,  $M = 3.19$ ,  $SD = 0.91$ ). Cronbach's alpha was 0.82 for the 3-FPS ( $M = 3.39$ ;  $SD = 0.67$ ).

#### 3.1.2. Satisfaction With Life Scale

This five-item widely used measure of life satisfaction was used to measure the cognitive aspect of subjective well-being (7). The Persian version of this scale has convergent validity and test-retest and internal reliability, with coefficient alpha at 0.83 (8).

#### 3.1.3. General Health Questionnaire

Evidence of relative psychological dysfunction was obtained with the widely-used GHQ-12. This well-validated scale is a self-report instrument of psychological components of ill-health. The GHQ-12 focuses on breaks in the normal function, rather than upon lifelong traits (9). The Persian version of the GHQ-12 has high level of internal

reliability (with coefficient alpha at 0.87) and convergent validity with global quality of life scores (10).

#### 3.1.4. Anxiety and Depression Scales

The Costello and Comrey's (11) scales assess depression (14 items) and anxiety (9 items) as traits rather than states. Illustrating depression is the self-report, "I feel sad and depressed." Indicative of anxiety is the statement that "I'm a restless and tense person". Cronbach's alphas for the Persian versions of depression and anxiety scales are 0.90 and 0.84, respectively (12).

#### 3.1.5. Mini International Personality Item Pool-Big Five

The Big-Five factors of personality (openness, conscientiousness, extraversion, agreeableness, and emotional stability) were measured using the 20-item, self-report Mini International Personality Item Pool-Big Five (13). Coefficient alphas of the Persian versions of these five factors ranged from 0.59 to 0.73 (14).

The current study used a cross-sectional design and a convenience non-random sampling method. Data were collected using self-administered questionnaires delivered to the students in person during the 2011 - 2012 academic year. Participants responded to the questionnaires in various group sizes. Participation was voluntary and in conformity with institutional ethical guidelines. The data were analyzed using descriptive and inferential statistics including correlation, regression, and factor analyses by the SPSS software, version. 16 (SPSS Inc., Chicago, IL, USA).

## 4. Results

Table 1 provides bivariate correlations of patience to the study variables. Patience was positively correlated with the Big-Five and life satisfaction, and negatively correlated with depression, anxiety, and the GHQ. There were no gender differences in patience. With the effects of the Big Five controlled, the 3 FPS still significantly predicted life satisfaction ( $\beta = 0.22$ ,  $P < 0.01$ ), depression ( $\beta = -0.29$ ,  $P < 0.01$ ), anxiety ( $\beta = -0.38$ ,  $P < 0.01$ ), and general health ( $\beta = -0.16$ ,  $P < 0.01$ ).

**Table 1.** Correlations of Patience to the Study Variables

Variables	Patience			
	Interpersonal	Life Hardship	Daily Hassles	Total
Extroversion	0.08	0.15 <sup>a</sup>	0.15 <sup>a</sup>	0.15 <sup>a</sup>
Agreeableness	0.32 <sup>b</sup>	0.20 <sup>b</sup>	0.08	0.27 <sup>b</sup>
Conscientiousness	0.27 <sup>b</sup>	0.26 <sup>b</sup>	0.12	0.29 <sup>b</sup>
Emotional stability	0.29	0.31 <sup>b</sup>	0.21 <sup>b</sup>	0.35 <sup>b</sup>
Openness	0.22 <sup>b</sup>	0.19 <sup>b</sup>	0.08	0.21 <sup>b</sup>
Life satisfaction	0.23	0.28 <sup>b</sup>	0.27 <sup>b</sup>	0.33 <sup>b</sup>
Anxiety	-0.48 <sup>b</sup>	-0.50 <sup>b</sup>	-0.39 <sup>b</sup>	-0.58 <sup>b</sup>
Depression	-0.37 <sup>b</sup>	-0.45 <sup>b</sup>	-0.30 <sup>b</sup>	-0.47 <sup>b</sup>
General health	-0.33 <sup>b</sup>	-0.40 <sup>b</sup>	-0.23 <sup>b</sup>	-0.40 <sup>b</sup>
Gender <sup>c</sup>	0.04	0.01	-0.09	-0.01

<sup>a</sup>  $P < 0.05$ .

<sup>b</sup>  $P < 0.01$ .

<sup>c</sup> Gender coded 0 = female, 1 = male

**Table 2.** Regressions Predicting Mental Health Indicators From Three Patience Factors <sup>a</sup>

Patience	Well-Being Indicator			
	Anxiety	Depression	General Health	Life Satisfaction
<b>Interpersonal</b>	-0.29 <sup>b</sup>	-0.15 <sup>c</sup>	-0.15 <sup>c</sup>	0.90
<b>Life hardship</b>	-0.22 <sup>b</sup>	-0.30 <sup>b</sup>	-0.27 <sup>b</sup>	0.16 <sup>c</sup>
<b>Daily hassles</b>	-0.21 <sup>b</sup>	-0.14 <sup>c</sup>	-0.08	0.18 <sup>b</sup>
<b>R</b>	0.34	0.23	0.18	0.35

<sup>a</sup> Values in the table are beta coefficients.

<sup>b</sup> P < 0.01.

<sup>c</sup> P < 0.05.

A series of regression were applied to assess discriminant validity of the three factors of patience (Table 2). Interpersonal patience was the strongest predictor of anxiety. Life hardship was the strongest predictor of depression, as well as general health. Daily hassles was the strongest predictor of life satisfaction, closely followed by life hardship.

## 5. Discussion

The results of the current study, as predicted, showed that patience is associated with higher levels of mental health and subjective well-being, which is consistent with what had been found previously (6). The present study, therefore, provided a cross-cultural confirmation to conclude that patience can predict mental health and positive functioning. The three-dimensions of patience differentially relate to well-being and personality. Life hardship patience was a better predictor of depression and GHQ, showing that long-term patience may affect depression and general health. Daily hassles patience was a better predictor of life satisfaction, suggesting that short-term patience is more beneficial for hedonic well-being and interpersonal patience can predict anxiety better. The three-dimension factor structure of the patience scale also appears to exhibit external validity, where interpersonal patience was more strongly related to the interpersonal factor from the Big-Five, agreeableness.

To help people overcome life hardship or daily hassles, they should be equipped with mechanisms designed to promote, for example, avoidance of forgoing immediate benefits to acquiring more valuable future rewards where there is a choice. The important question is that what neurological structures and processes underlie patience. One possibility is asymmetrical cortical activity. Individuals who are approach motivated have higher baseline activation of the left prefrontal cortex than the right prefrontal cortex, whereas persons who are avoidance motivated have higher baseline activation of the right prefrontal cortex than the left prefrontal cortex (15-17). Moreover, not achieving or delay of a goal can be threatening one's self-esteem. There are ways of dealing with such threats. It is possible to ignore, or utilize attentional shifting away from the cause of the stress (avoidance). Thus, while delayed in traffic one may simply think

about last night's volleyball game (18). Another way is emotion reappraisal (5) and such ability, among others, is linked to right hemisphere dominance (19). Given these findings, prefrontal asymmetries might be considered as a possible neurological substrate of patience. Further research that directly examines the relationship between prefrontal asymmetries and patience is needed. The main limitation of the study concerns the sample. Future research should examine greater diversity among individuals, as well as studying other cultures. Such research will further test the cross-cultural generalizability of these results.

## Acknowledgements

The authors would like to thank the volunteer students who participated in this project.

## Authors' Contributions

Naser Aghababaei: study design, performing statistical analysis, manuscript drafting, and revising. Mohammad Taghi Tabik: study design, clinical data collection, performing parts of the statistical analysis, and manuscript critically revision for important intellectual content. Both authors read and approved the final manuscript.

## Conflict of Interest

None declared.

## Funding/Support

None declared.

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