Reliability and Validity of the Oxford Happiness Inventory among University Students in Iran

Mohammad Javad Liaghatdar, Ebrahim Jafari, Mohammad Reza Abedi, and Fatemeh Samiee

University of Isfahan, Isfahan, Islamic Republic of Iran

The aim of the present study was to examine the internal reliability, content validity, construct validity, and concurrent validity of the Persian translation/Farsi version of the Oxford Happiness Inventory. The Oxford Happiness Inventory and Fordyce Happiness Inventory were completed by a sample of 727 Iranian university students. Findings confirmed the internal reliability, construct, and concurrent validity of the Oxford Happiness Inventory. Thus, it can be recommended for use as a trait-measure of happiness among Iranian samples.

Keywords: Oxford Happiness Inventory, reliability, validity, developing societies, Iranian universities

El objetivo de este estudio fue examinar la fiabilidad internal, la validez de contenido, la validez de constructo y la validez concurrente de la traducción persa/varsión farsi del Inventario de Felicidad de Oxford (Oxford Happiness Inventory). Una muestra de 727 estudiantes universitarios iraníes completaron el Inventario de Felicidad de Oxford y al Inventario de Felicidad de Fordyce. Los resultados confirmaron la fiabilidad interna, la validez de constructo y la validez concurrente del Inventario de Felicidad de Oxford. Así, puede ser recomendarse para su uso como medida de rasgo de felicidad en muestras iraníes.

Palabras clave: Inventario de Felicidad de Oxford, fiabilidad, validez, sociedades en desarrollo, universidades iraníes

In the UK, Argyle, Martin, and Crossland (1989) developed the 29-item Oxford Happiness Inventory to provide a general measure of happiness. They supposed that happiness depended on frequency and positive effect, or joy, high level of satisfaction over a period of time, and the absence of negative feelings such as depression or anxiety.

Argyle, Martin, and Crossland (1989) reported an internal reliability of .90 using Cronbach's alpha, and a 7-week test-retest reliability of .78. Construct validity was developed, based on three hypothesized components of happiness: the correlation between the Oxford Happiness Inventory and positive affect scale as measured by the Bradburn Balanced Affect Scale (Bradburn, 1963) was .32. The correlation between the Oxford Happiness Inventory and Argyle's Life Satisfaction Index (Argyle, 1987) was .57, and the correlation between the Oxford Happiness Inventory and Beck Depression Inventory (Beck, 1978) was –.52.

In a cross-cultural study, Francis, Brown, Lester, and Philipchalk (1998) examined the reliability and validity of the English version of the Oxford Happiness Inventory among students in the UK, the USA, Australia, and Canada and found that it achieved an alpha coefficient of between .89 and .90 in each sample. Their findings also revealed that happiness correlated positively with extraversion and negatively correlated with neuroticism in each sample, which confirmed the validity of the Oxford Happiness Inventory.

Subsequently Lewis, Francis, and Ziebertz (2002) administered a German translation of the inventory to a sample of 331 German students. Their findings confirmed the internal reliability of the German version and supported the construct validity of the instrument according to which «happiness is a thing called stable extraversion» (Lewis, Francis, & Ziebertz, 2002, p. 212).

Alipour and Nour-bala (1999) translated the inventory into Farsi. Their translation was approved by eight academic members who worked in Iranian universities. Furthermore, the content validity of the Persian/Farsi version of the inventory was endorsed by ten university professors. Internal reliability using Cronbach's alpha in a sample of 101 in Tehran universities was .98, and the 3-week test-retest reliability was .79.

The aim of the present study was to examine the internal reliability, content validity, construct validity, and concurrent validity of the Persian translation/Farsi version of the Oxford Happiness Inventory.

Method

Participants

The Farsi version of the Oxford Happiness Inventory was administered to a sample of undergraduate students (N = 727, 403 female, 324 male), using random stratified sampling of Isfahan universities. These universities included The University of Isfahan, The Isfahan University of Medical Sciences, The Isfahan University of Technology, and The Isfahan University of Arts.

Measures

The Oxford Happiness Inventory (Argyle, et al., 1989) is a 29-item multiple choice instrument. Each item contains four options, constructed to reflect incremental steps defined as: unhappy or mildly depressed, a low level of happiness, a high level of happiness, and mania. The respondents were asked to "pick out the one statement in each group which best describes the way you have been feeling over the past week, including today." Information about internal consistency, reliability, and construct validity of the Persian translation of the instrument is provided by Alipour and Nor-bala (1999).

The Fordyce Happiness Inventory (Eysenck, 1990). This inventory was developed by Eysenck (1990) based on the work of Fordyce (1983). It comprises 45 items and has proved to have a high correlation with the degree of happiness in Abedi's study (2002). The items are divided into 15 sections, each with 3 items. Each of them is related to a cognitive or a behavioral variable. In fact, the Inventory assesses 14 behavioral and cognitive variables. Three items of the inventory measure happiness in general. The variable "expressing feelings" was added as a sixteenth variable. Thus, the inventory measured 15 cognitive and behavioral variables. They were as follows: be more active and keep busy, spend more time socializing, be productive at meaningful work, get better organized, stop worrying, lower expectations and aspirations, develop positive optimistic thinking, be present-oriented, work on a healthy personality, develop an outgoing social personality, be yourself, eliminate negative feelings and problems, close relationships, value happiness, and expressing feeling.

Therefore, the Farsi version of Fordyce Happiness Inventory has 48 items, and the scores range between 0 and 10 (maximum score = 480, minimum = 0).

In a research study, the Farsi version of Fordyce Happiness Inventory was used by Abedi (2002) and its content validity was approved by five university professors. Abedi (2002) found that the Fordyce Inventory was adequate to differentiate depressed and normal students. The validity and reliability of the Farsi version was calculated by Jafari, Abedi, and Liaghatdar (2004). Content validity of the inventory was approved by ten university professors. Internal reliability, using Cronbach's alpha in a sample of university students (n =200) was .92 and an 8-week test- retest reliability in sample of 50 participants was .70 (Jafari et al., 2004).

Data Analysis

The data were analyzed with the SPSS statistical package, using the reliability breakdown, correlation, and factor analysis.

Results

Validity

Content validity of the Farsi version of the Oxford Happiness Inventory was approved by ten academic members who worked in the Departments of Psychology and Counseling in Iranian universities.

Table 1
Rotated Component Matrix

Items	Components					
	1	2	3	4	5	6
1		.66				
2	.54	.55				
3	.78					
4					.62	
5	.67					
6	.63		.43			
7		.32	.54			
8	.58	.39	.55			
9	.50	.327			.324	
10	.37				.57	
11	.36			.42	.66	
12				.78		
13			.73			
14	.53			.48		
15		.37		.38		
16			.61	.45		
17	.74					
18				.49		
19	.33	.60		.37		
20						.98
21		.56	.33		.49	
22		.63				
23		.56				
24	.53	.35				
25			.67			
26		.54				
27		.45			.49	
28			.33			
29		.45	.39			

Principle component factor analysis with varimax rotation was used to determine construct validity, considering Eigenvalues higher than 1. Table 1 displays the significant rotated correlations (higher than .30) for 29 items. Factor analysis revealed that the inventory consisted of six factors. Eigenvalues for the six factors ranged from .94 to 9.17. These six factors explained 33.93% of the variance. They were: Life Satisfaction, Joy, Self-esteem, Calm, Control, and Efficacy. The items and factors are shown in Table 2.

Concurrent validity was established based on the correlation ($r = .73$) between scores of the Oxford Happiness Inventory and those of the Fordyce Happiness Inventory in sample of students ($n = 727$). No significant sex difference was found.

Reliability

Internal reliability using Cronbach's alpha in sample of students ($n =727$) was .92. Then, a sample of 50 students out of the 727 was randomly selected to examine test-retest reliability 6 weeks later, obtaining a reliability coefficient of .73. As items were deleted, alpha, the scale mean, a scale variance, and item-total correlation were calculated.

Discussion

Four main conclusions emerged from the results of this study:

1. The Persian/Farsi version of the Oxford Happiness Inventory had satisfactory levels of internal consistency among undergraduate students from four universities of Isfahan (Iran).
2. There was a correlation between scores on the Persian/Farsi version of the Oxford Happiness Inventory and Fordyce Happiness Inventory in each sample, supporting the concurrent validity of the former.
3. No significant sex difference was found. This result was consistent with the findings of other authors (Argyle & Lu, 1990; Francis et al., 1998; Furham & Berwin, 1990; Lu & Argyle, 1991, 1992, 1993) with samples from the UK, the USA, Australia, and Canada.

Table 2
Factors and Items

Factors	Items
Factor 1: Life Satisfaction	Items: 3, 5, 6, 8, 9, 14, 17, 24
Factor 2: Joy	Items: 1, 2, 19, 21, 22, 23, 26, 29
Factor 3: Self- esteem	Items: 7, 13, 16, 25, 28
Factor 4: Calm	Items: 12, 15, 18
Factor 5: Control	Items: 4, 10, 11, 27
Factor 6: Efficacy	Items: 20

4. Six factors were obtained: Life Satisfaction, Joy, Self-esteem, Calm, Control, and Efficacy. This result was consistent with the findings of Argyle and Crossland (1989) and those of Francis et al. (1998).

Argyle and Crossland (1987) supposed that happiness comprised three main components: the frequency and degree of positive affect or joy; the average level of satisfaction over a period of time; and the absence of negative feelings, such as depression and anxiety.

In general, the Persian/Farsi version of the Oxford Happiness Inventory had suitable validity and reliability among Iranian university students. Thus, the inventory can be recommended for use as a trait-measure in Iranian universities, just as Francis et al. (1998) recommended that the inventory can be used in the UK, USA, Australia, and Canada. Also, Lewis, Francis, and Ziebertz's (2002) study used the inventory among German students. Future research may wish to examine other translations of the Oxford Happiness Inventory, as well as undertaking work with the new version of the measure, the Oxford Happiness Questionnaire (e.g., Cruise, Lewis, & Mc Guckin, 2006; Hills & Argyle, 2002).

References

Abedi, M.R. (2002). Effectiveness of Fordyce cognitive-behavioral training on happiness, anxiety, depression, and social relationship among Isfahan university students. *Proceedings of the fourth research week of the University of Isfahan* (pp. 15-17). Isfahan: The University of Isfahan.

Alipour, A., & Nor-bala, A. (1999). Introductory survey on validity and reliability of Oxford Happiness Inventory in Tehran universities. *Journal of Thought and Behavior, 5,* 55- 63.

Argyle, M. (1987). *The psychology of happiness*. London: Routledge.

Argyle, M., & Crossland, J. (1987). Dimensions of positive emotions. *British Journal of Social Psychology, 26,* 127-137.

Argyle, M., & Lu, L. (1990). The happiness of extraverts. *Personality and Individual Differences, 11,* 1011-1017.

Argyle, M., Martin, M., & Crossland, J. (1989). Happiness as a function of personality and social encounters. In J.P. Forgas & J.M. Innes (Eds.), *Recent advances in social psychology: An international perspective* (pp. 189- 203). Amsterdam: North Holland, Elsevier Science.

Beck, A. (1978). *Beck Depression Inventory*. Philadelphia: Center for Cognitive Therapy.

Bradburn, N.M. (1963). *In pursuit of happiness*. Chicago: National Opinion Research Center of the University of Chicago.

Cruise, S.M., Lewis, C.A., & McGuckin, C. (2006). Internal reliability and temporal stability of the Oxford Happiness Questionnaire short-form: Test-retest data over two weeks. *Social Behavior and Personality*, *34,* 123-126.

Eysenck, M.W. (1990). *Happiness: Fact and myths*. Hove, UK: Erlbaum.

Fordyce, M.W. (1983). A program to increase happiness: Further studies. *Journal of Counselling Psychology, 30,* 483-498.

Francis, L.J., Brown, L.B., Lester, D., & Philipchalk, R. (1998). Happiness as stable extraversion: a cross-cultural of the reliability and validity of the Oxford Happiness Inventory among students in the UK, USA, Australia and Canada. *Personality and Individual Differences, 24,* 167-171.

Furnham, A., & Berwin, C. R. (1990). Personality and happiness. *Personality and Individual Differences, 11,* 1093-1096.

Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, *33,* 1071-1082.

Jafari, E., Abedi, M.R., & Liaghatdar, M.J. (2004). *Investigating the degree of happiness and its related factors in students of the universities in Isfahan*. Isfahan, Iran: The University of Isfahan.

Lewis, C.A., Francis, L.J., & Ziebertz, H.G. (2002). The internal consistency, reliability, and construct validity of the German translation of the Oxford Happiness Inventory. *North American Journal of Psychology*, *4*, 211-220.

Lu, L., & Argyle, M. (1991). Happiness and cooperation. *Personality and Individual Differences, 12,* 1019-1030.

Lu, L., & Argyle, M. (1992). Receiving and giving support: Effects on relationships and well-being. *Counselling Psychology Quarterly, 5,* 123-133.

Lu, L., & Argyle, M. (1993). TV watching, soap opera and happiness. *Kaohsiung Journal of Medical Sciences*, *9*, 501-507.