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Procedia - Social and Behavioral Sciences 84 (2013) 177 – 181

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**Procedia**  
Social and Behavioral Sciences

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3rd World Conference on Psychology, Counselling and Guidance (WCPCG-2012)  
**The Validity and Reliability of the Turkish Version of the  
Integrative Self-knowledge Scale**

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**Abstract**

The aim of this research is to examine the validity and reliability of the Turkish version of the Integrative self-knowledge Scale (ISKS; Ghorbani, Watson, & Hargis, 2008). Participants were 396 university students (277 were female and 119 were male) from Sakarya University. The results of confirmatory factor analysis indicated that the three dimensional model was well fitted and Chi-Square value ( $\chi^2=108.38$ ,  $df=49$ ,  $p=0.00$ ) which was calculated for the adaptation of the model was found to be significant. The goodness of fit index values of the model were RMSEA=.055, NFI=.97, CFI=.98, IFI=.98, RFI=.96, GFI=.96, and SRMR=.041. The internal consistency coefficients of three subscales were .74, .77, and .83, respectively. The overall internal consistency coefficient of the scale was .86. The corrected item-total correlations of ISKS ranged from .37 to .67. Overall findings demonstrated that this scale had high validity and reliability scores and that it may be used as a valid and reliable instrument in order to assess self-knowledge levels of individuals.

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Selection and peer-review under responsibility of Prof. Dr. Huseyin Uzunboylu &amp; Dr. Mukaddes Demirok, Near East University, Cyprus

*Keywords: self-knowledge, integrative self-knowledge, confirmatory factor analysis, scale adaptation;*

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**1. Introduction***Knowledge is to understand To understand who you are... Yunus Emre, (?1238-?1320).*

Self-knowledge is an ideal of individual functioning both in psychological research and practice, and cross-culturally in diverse religious and philosophical traditions (Ghorbani, Watson, 2004). Quotations about self-knowledge have been expressed by philosophers, statesman, politicians, authors and mystics. Written at the Entrance to the famous Temple of Apollo 'Know yourself!' at Delphi. *THALES* said that 'The most difficult thing in life is to know yourself'. Moreover in sufism, KNOW THYSELF is defined as "Knowledge is knowing yourself, and then you will possibly comprehend Lord. In sufi axiom 'He who knows himself, knows his lord' represents the approach of sufism (Arden, 1998). Rumi also says; 'journey from yourself towards yourself.' Knowing your internal unknown self or we can describe it as understanding your self-knowledge." in his *Mesnevi*. Furthermore, great mystical poet Yunus Emre stated in his poetry that "There is a self inside me, within myself" and "Knowledge is to understand To understand who you are..."

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Self-Knowledge is defined not only as an opportunity but also a challenge for the research and practice of contemporary psychology. Self-knowledge is a very crucial subject for psychology area, since it is thought to participate importantly in the social life of every individual. Furthermore, while its usefulness or veridicality?? is sometimes challenged, there is little argument with the notion that self-knowledge is both highly available and easily accessible (Markus, 1983). Interest in self-knowledge has been increased in the research and practice of contemporary psychology (Brown & Ryan 2003; Ghorbani, Watson, Bing, Davison, & LeBreton, 2003; Ghorbani, et al., 2008). The “realization of potentials and the development of human strengths must focus heavily on self-reflective capacities” can be promoted by self-knowledge. (Caprara, & Cervone, 2003, p. 67 cited in, Ghorbani, et al., 2008). Moreover, understanding of self-knowledge seems significant to the construction of a positive psychology that accentuates the dynamics of human psychological flourishing (Ghorbani, et al., 2008).

Integrative self-knowledge was generally stated as an adaptive and empowering attempt of the self to understand its experience across time to achieve desired results. Underlying in this definition was the assumption that a self seeks to carry on a coherent life story by attempting to integrate the present into a seamless narrative that moves from the past toward a hoped-for future (McAdams, 1999). Hence, both present- and past-oriented self-knowledge were combined without demanding that they load on impermanently distinct factors. In addition, some statements were used to emphasize an orientation of the self toward the future. (Ghorbani, et al., 2008). As an integrative, adaptive, and dynamic psychological process, self-knowledge acts across time. Self-knowledge is an integrative process because it tries to shape the experiences and attributes of the self into an essential synthesis. Self knowledge is adaptive because it is a self-regulatory process that enhances the well-being of the self. Self-knowledge is dynamic because the self must react to frequently changing situations. Frequently changing situations mean that while self-knowledge includes an awareness of present experience, it also constructs a relationship between present and past experiences (Ghorbani, et al., 2003).

Mental health implications, for instance greater self-esteem, autonomy, subjective well-being, subjective vitality, basic need satisfaction, self-determination, and constructive thinking were found related positively with Integrative self-knowledge. It also anticipated negatively to lower levels of depression, anxiety, perceived stress, obsessiveness, and social anxiety (Ghorbani, et al., 2008). ISKS has a positive relationship with all five self-reported Big Five measures. The higher score in ISKS indicates that a person is more extroverted, agreeable, conscientiousness, emotionally stable, and open to experience (Tahmasb, Ghorbani, & Watson, 2008).

### 1.1 *Integrative Self-knowledge Scale (ISKS; Ghorbani, Watson, & Hargis ,2008).*

Integrative Self-Knowledge Scale records efforts of the individual to integrate past, present, and desired future self-experience. This is a self-report scale with 12 items rated on a 5-point scale (0— largely untrue, 4— largely true). Factor analysis has indicated the presence of both an overall self-knowledge factor and three distinct subscales; past and future oriented, present oriented, and present and past oriented self- experience. The three factors with eigenvalues above 1.0 explained approximately 49% of the variance. Maximal loadings of all items on a factor were greater than .45 with minimal cross-loadings. Self-knowledge based upon past and future-oriented self experience was evident in such statements as, expressed “By thinking deeply about myself, I can discover what I really want in life and how I might get it what I have learned about myself in the past has helped me to respond better to difficult situations”. A processing of present self- experience was exemplified in the reverse scored assertion, “Often, I am unaware of my thoughts and feelings as they are happening, and only later get some idea about what I may really have been experiencing.” Present- and past-oriented statements, “In some situations, I almost never can understand why I have behaved in particular ways, so I usually don’t even try.” The overall internal consistency reliability coefficients varied between .74 and .84. In concurrent validity the ISKS was found related positively to self-esteem ( $r=.56$ ), subjective well-being ( $r=.29$ ), autonomy ( $r=.46$ ), competency ( $r=.53$ ), relatedness ( $r=.37$ ), subjective vitality ( $r=.50$ ), awareness to self ( $r=.37$ ), and negatively to social anxiety ( $r=-.39$ ), rumination ( $r=-.19$ ), perceived stress ( $r=-.51$ ), depression ( $r=-.44$ ), and anxiety ( $r=-.55$ ). Confirmatory factor analysis results suggested that the three-factor solution fit the data obtained. Specifically, the root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), and comparative fit index (CFI) statistics were .06, .96, and .92, respectively.

Given the critical role of self-knowledge in adaptive functioning, it is important to measure this construct as a valid and reliable way (Ghorbani, et al., 2008). Thus the aim of this research is to adapt Integrative Self-knowledge Scale to Turkish and to examine its psychometric properties.

## **2. Method**

### *2.1. Participants*

Participants were 396 university students (277 were female, 119 were male) from Sakarya University, Turkey.

### *2.2. Procedure*

Primarily the ISKS was translated into Turkish by five academicians. After that the Turkish form was back-translated into English and examined the consistency between the Turkish and English forms. Turkish form has reviewed by seven academicians from educational sciences department. Finally they discussed the Turkish form and along with some corrections this scale was prepared for validity and reliability analyses. In this study exploratory factor analysis was performed to examine the factor structure of the scale according to the data obtained from the Turkish students and confirmatory factor analysis was executed to confirm the original scale's structure in Turkish culture. As reliability analysis internal consistency coefficients and the item-total correlations were examined. Data were analyzed by LISREL 8.54 and SPSS 13.0.

## **3. Results**

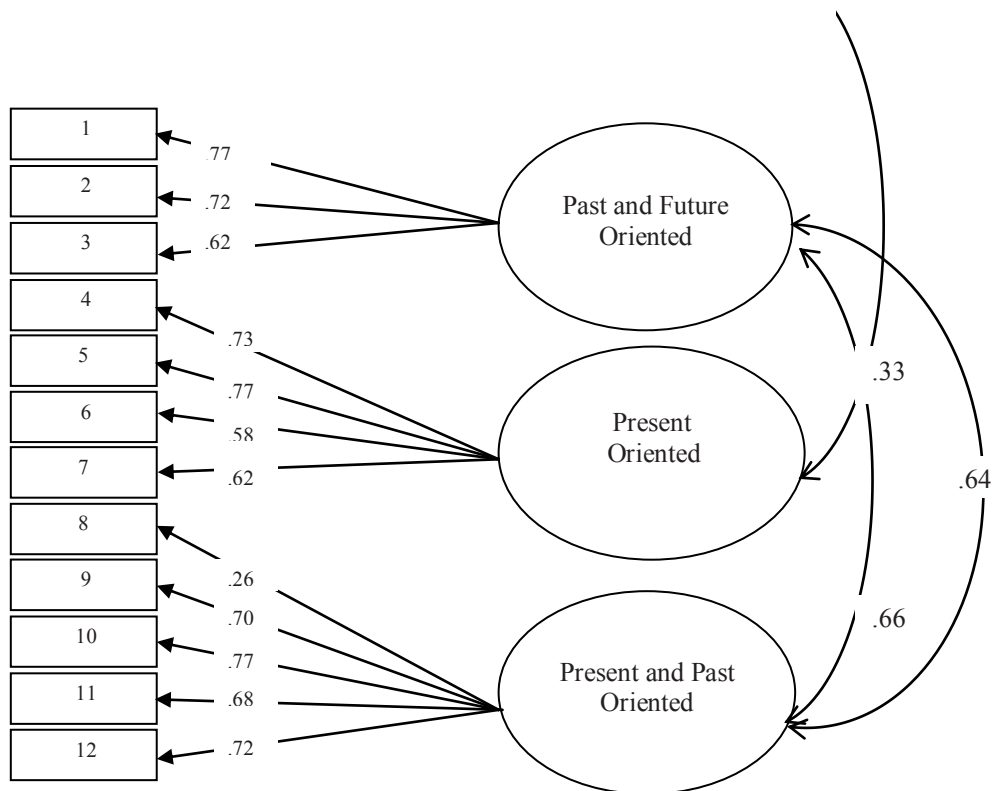
### *3.1. Language equivalence*

Language equivalence study demonstrated that correlations between Turkish and English forms of ISKS were high (.86). And three subscales were .72, .76, and .78.

### *3.2. Construct Validity*

The results of confirmatory factor analysis indicated that the model was well fitted and Chi-Square value ( $\chi^2=108.38$ ,  $df=49$ ,  $p=0.00$ ) which was calculated for the adaptation of the model was found to be significant. The goodness of fit index values of the model were RMSEA=.055, NFI=.97, CFI=.98, IFI=.98, RFI=.96, GFI=.96, and SRMR=.041.

Figure 1 ; Path Diagram and Factor Loading for the ISKS



3.3. Reliability

The internal consistency coefficients of three subscales were .74, .77, and .83, respectively. The overall internal consistency coefficient of the scale was .86. The corrected item-total correlations of ISKS ranged from .37 to .67. The test-retest reliability coefficient was .89 for the overall scale and for three subscales were .71, .85, .83.

Table 1 - ISKS Item- Total Correlation

Item	r	Item	r	Item	r
1	.46	5	.61	9	.59
2	.42	6	.41	10	.66
3	.37	7	.48	11	.57
4	.59	8	.67	12	.63

#### 4. Discussion

The purpose of this study was to translate the ISKS into Turkish and examine its psychometric properties. The results of language equivalency showed that the correlations between the Turkish and English forms were high. These results confirm that the Turkish and English forms of the ISKS might be regarded equivalent. The results of confirmatory factor analysis indicated that the model was well fit. Thus, it can be said that the structural model of the ISKS which consists of three factors was well fit to the Turkish culture. Overall, findings demonstrated that this scale had high validity and reliability scores (Büyüköztürk, 2004; Tabachnick & Fidell, 1996; Tezbaşaran, 1996) and that it may be used as an efficient instrument in order to assess integrative self-knowledge. However, further studies that will use the ISKS are important for its measurement force.

#### References

- Arden, J.B. (1998). *Science, theology, and consciousness: the search for unity*. Westport : Praeger Publishing Company.
- Brown, K. W., & Ryan, R. M. (2003). The benefit of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Büyüköztürk, Ş. (2004). *Veri analizi el kitabı*. Ankara: Pegem A Yayıncılık.
- Ghorbani, N., Watson, P. J., Bing, M. N., Davison, H. K., & LeBreton, D. (2003). Two facets of self-knowledge: Cross-cultural development of measures in Iran and the United States. *Genetic, Social, and General Psychology Monographs*, 129, 238–268.
- Ghorbani, N., Watson, P. J. (2004). Two facets of Self-Knowledge, the Five-Factor model, and promotions among Iranian managers. *Social Behavior and Personality*. 32(8). 769-776.
- Ghorbani, N., Watson, P. J., & Hargis, M. B. (2008). Integrative self-knowledge scale: correlations and incremental validity of a cross-cultural measure developed in Iran and the United States. *Journal of Psychology*, 142, 395–412.
- McAdams. D. P. (1999). Personal narratives and the life story. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 478-500). New York: Guilford.
- Markus, H.R. (1983). Self-knowledge: An expanded view. *Jou. of Personality*, 51: 543-565.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. New York: HarperCollins College Publishers.
- Tahmasb, A. M., Ghorbani, N., & Watson, P. J. (2008). Relationships between self- and peer-reported integrative self-knowledge and the big five factors in Iran. *Current Psychology*, 27, 169-176.
- Tezbaşaran, A. A. (1996). *Likert tipi ölçek geliştirme kılavuzu*. Ankara: Türk Psikologlar Derneği Yayınları.