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The development and Validation of Children Interest list (Case study: Isfahan-Age: 6 to 12)

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Abstract

The main purpose of the present study was to development, determines validity and reliability a first children Interest Inventory (CII). The statistical population of this research includes Isfahanian children that were in age 6 to 12. Research population consisted of all male and female children ages 6-12 living in the city of Isfahan. To create the questionnaire and determining its validity and reliability, 200 Isfahanian children, both male and female and aged 6-12 years of old were selected in three stages. In this research, Strong Interest Inventory was used for collecting data. Reliability of the CII was determined by chronbach's Alpha and test retest method. The internal reliability coefficient with chronbach,s Alpha method ranged from .41 to .86. Also retesting reliability was 0.69 to 0.98. Finally taken together, these finding provide support for the reliability and validity of the CII when used with children in grade 25&40. The 80-item AII is a first questionnaire that capable to be used as an instrument to measure children's interest for research activities performed for counseling and guidance.

Keywords: Reliability, Validity, CII, Children, Interest

Introduction

According to the meta-modern theories on counseling, learning is deemed as a lifelong process i.e. in order to match with the life course, everyone has to have awareness of his/her development functions so that he/she can develop a more desirable plan for life (Abedi, Sadeghi & Sadeghi, in press). Payton & Mc Mahon on and (1999, as cited in Zonker, 2006) introduced “life career developmental learning” concept for emphasizing on the interconnections between life-long learning and career development. As Savickas (2005) argues, one’s concern regarding his/her future career is considered as the first and foremost dimension of the career development adaptability resulting in self-awareness of career developmental functions and academic/career resolvers. Furthermore, one of the career

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development adaptability competencies is curiosity which refers to one's interest in his/her future career preferences. Developing career obsession and curiosity must be initiated at the early ages providing the children with awareness of his/her abilities and interests (Lent & Brown, 2005).

Career development counseling provides some information that helps a person to achieve self-awareness in his/her life, compare his abilities and skills with the real world and opportunities available to him/her, exploring his/her real position in the world and plan for achieving that position. This is why some have interpreted career development trend as life trend (Kidd, 2006). According to the Oxford Dictionary, career is defined as "a pathway which everybody goes through it during his/her life" (Savicakas, 2002 as cited in Zonker, 2006). Career signifies an evolutionary social movement starting at the birth and even before it continuing until the end of the life. Hence, Savickas (2002, as cited in Samiei, 2012) claims "life is career" i.e. career route is in fact the life route.

Accordingly, this term finds its true meaning when self-awareness, discovery and planning start at the birth. As Super (1980) argues, career maturity is subject to complete fulfillment of the functions pertaining to each career development stages where the greater emphasize is given to recognizing the skills, abilities, values, personality attributes and interests.

According to the career developmental model, the career developmental learning must be a lifetime process, hence, career counseling requirements must be satisfied during all life stages (Hilly, 1982, Jellesso and Foytz, 2001, Sharf, 2002 as cited in Zonker,2006)

From the very start of career development counseling literature, the researchers have developed different instruments for accurate measuring the personal attributes. Some researchers and theorists such as Holland (1997), Strong (1927), Tracey (2002) as cited in Tracey, 2002) have worked towards measuring the interests. Career interests act as one of the strongest and most stable sections of individual differences and the most frequent instrument for matching the individuals with their surrounding environment (Hogan, 1996, as cited in Tracey, 2002). In a number of studies, interests have been introduced as one of the key themes facilitating self-recognition. Strong (1948) has defined interest as the intrinsic tendency towards the existence of one object or its movement within which four attributes namely, attention, feeling, tendency and activity are embedded (Lent and Brown, 2005). Barak (1987) believes dealing with the interests tends to be more important than personality and abilities. Strong (1943) also argues that when the individuals possess the abilities and interests required for performing a function, they will do it well. Conversely, in the case of the lack of the needed ability and interest in the subject area, they will not perform it well and they may not receive the support needed, as well.

The combination of these two variables (ability and interest) acts as a predictive indicator for career success.Generally, the career development counselors tend to measure career interests using various instruments including the Holland's well-known hexagonal model (1997), Tracey's circular-order model (1996) and Strong interest inventory (Tracey& Roundes,199S, Strong et al,2004 as cited in Cater and Foad,2010).

The most recent version of Strong Interest Inventory (2004) has been translated by Haqshenes (2008) and its conformity with the original and its validity and reliability were evaluated in one study where its norms tables were produced based on a population of school students selected from Isfahan city. The normative form consists of 290 items organized in six sections. Since the Strong Interest Inventory is too lengthy, Sadeqi (2011) created its shortened form based on a statistical population of guidance school third-year and high school first-year students. The normative form of this questionnaire named Isfahan-Strong

Interest Questionnaire covers 90 items classified in 6 sections. Its results are presented quite similar to the original questionnaire i.e. on three main subject areas including general occupational themes, basic interest scales and personal styles scales.

Although the disadvantages of the original questionnaire (i.e. too lengthy and complex content of the questions) have been resolved in the shortened version, the statistical population involved in producing it has been limited to the third-year guidance school and first-year high school students in the city of Isfahan not applicable for assessing the children's career interests. Hence, if the children's interests are to be assessed, this instrument and its normative data table would not be appropriate for children of age group of 6-12 years. Taking this into account, the main goal of the present study was creating a career interest measuring questionnaire for children 6-12 years of old and assessing its validity and reliability.

Method and instrument:

The present study was normative from testing type. To analyze the statistical resulting data, SPSS16 software was used. Descriptive statistics including mean scores and standard deviations tables as well as inferential statistics including factor analysis and correlation analysis were among the used statistical methods. From among the available instruments, Strong Interest Inventory was used for developing the children's career interest inventory. Research population consisted of all male and female children ages 6-12 living in the city of Isfahan. To create the questionnaire and determining its validity and reliability, 200 Isfahanian children, both male and female and aged 6-12 years of old were selected in three stages. In the city of Isfahan (Strong Interest Inventory's items are responded by the parents). In the first stage, the items of the initial form were created (to do so, some main changes were made in the original form based on age group and environmental conditions). In the second stage, a sample of 100 respondents (50 for comparing the newly developed form's internal consistency with the Strong Interest inventory and 50 for comparing its internal consistency interview) was selected. In the third stage, to assess its reliability, a sample of 100 respondents (50 respondents by re-test method and 50 respondents by Cronbach's alpha method) was used. In the third and final stage, 100 were selected for assessing its reliability (50 for the test-retest method and 50 for Cronbach alpha's coefficient method).

Instruments: Strong interest inventory (Donnay et al, 2005)

The scale consists of 290 items which is categorized into 6 subsets. The participants are to rate their interest on a scale ranging from "strongly interested", "interested", "indifferent", "disinterested", to "strongly disinterested". Donnay et al (2005, as cited in HaghShenas, 2006) reported that the reliability of general occupational themes was between 0. 91 to 0. 92 using Cronbach alpha formula, and between 0. 80 to 0. 92 using test-retest method with two to seven weeks interval. The correlation between general occupational themes and Holland interest inventory scores was reported to be between 0. 72 and 0. 79. Also, the reliability of basic interest scales was shown to be between 0. 77 and 0. 91 using test-retest method, and between 0. 81 and 0. 92 using Cronbach alpha formula. The reliability of personal style scales was reported to be between 0. 77 and 0. 86 using test-retest method with two to seven weeks interval, and between 0. 82 to 0. 86 using Cronbach alpha formula. Concurrent validity of the inventory has been examined via finding its correlation with Myers-Briggs test. The results showed that there was relationship between realism with work style and leadership. There was also correlation between artistic interests and education environments. HaghShenas (2006) conducted a study to examine the reliability and validity of Strong scales in Iran. The reliability of general occupational themes was reported to be between 0. 86 and 0. 91 using

test-retest method with two weeks interval, and between 0. 88 and 0. 92 using Cronbach alpha formula. The validity of general occupational themes was examined via comparing the correlation between long version scales and short version scales, which yielded validity coefficients between0. 74 and 0. 91. With regard to the obtained values, the reliability and validity of Strong scales are confirmed.

Findings:

To create children's career interest inventory, Strong Interest Inventory and interview was used.

Validation: The validity of the developed children inventory was assessed going through two stages. Firstly, the items of the children's interest inventory were created based on Strong Interest Inventory. To assess its content validity, five counseling professors were involved. They were asked to meticulously appraise the items twice rating them based on 4-point Likert-scale choosing one of the following options: completely suitable, suitable, unsuitable and completely unsuitable. The items rated as unsuitable and completely unsuitable by the professors were omitted from the questionnaire. In this stage, some items were deleted, some were replaced or some changes were made in the content of the items. Secondly, to carry out assessment based on external reference, the results obtained from the questionnaire were compared to those of the interviews with the children's parents. To do so, the parents were firstly asked to fill out the questionnaire. Afterwards, career counselors conducted interview with them on their children's interests. The results of the questionnaire and the interviews were found to be highly correlated so that in all cases, the interests scores gained from the questionnaire and interviews were similar with the results of some combinations of the interests only being different in some cases e.g. the inconsistency found between the results of social, artistic and investigative scales of the questionnaire and the results of social, artistic and investigative sections of the interviews.

Validity assessment:

The validity of the questionnaire's scales was assessed in two ways: internal consistency method (Cronbach's alpha) and test- retest method with time interval of two weeks. To calculate the validity of the scales using internal consistency estimates, the questionnaire was given to a sample of 50 respondents. As is evident from table 1 data, the reliability coefficients of the general occupational themes ranged from 0.54 to 0.83 for Cronbach's alpha and from 0.48 to 0.91 for re-test method with time interval. In sum, the results of the study revealed that general occupational themes scale enjoyed a high reliability while personal styles scales were of a medium to high reliability.

Table1: General Occupational Themes (internal consistency and alpha coefficient) and test-retest reliability

Reliability	test-retest co	Alpha co
realistic	0.910	0.544
Investigative	0. 890	0.606
Artistic	0.705	0.754
social	0.480	0.701
Enterprise	0.807	0.830
Conventional	0.661	0.594

Conclusion:

The main purpose of the present study was to development, determines validity and reliability a first children Interest Inventory (CII). The statistical population of this research includes Isfahanian children that were in age 6 to 12. Research population consisted of all male and female children ages 6-12 living in the city of Isfahan. To create the questionnaire and determining its validity and reliability, 200 Isfahanian children, both male and female and aged 6-12 years of old were selected in three stages. In this research, Strong Interest Inventory was used for collecting data. Reliability of the CII was determined by chronbach's Alpha and test retest method. The internal reliability coefficient with chronbach,s Alpha method ranged from .41 to .86. Also retesting reliability was 0.69 to 0.98. Finally taken together, these finding provide support for the reliability and validity of the CII when used with children in grade 25&40.Satisfying this goal can be regarded as a great step taken towards assisting with designing children's career decision making by interests assessment.

Over the years, the career counselors have tried to assess career interests using various instruments including Holland's six-hexagonal model (1997) and Tracey's circular order model (1996) and Strong interest inventory (Tracey & Rounds, 1996). Since its emergence, there have been a lot of revisions to Strong Interest Inventory with its most recent version introduced in 2004. This inventory consists of 290 items (Strong et al, 2004 as cited in Cater and Foad, 2010). Although there are some strong instruments for interest assessment, none of them is appropriate and applicable for measuring children's interests. In addition, there is a lack of research on this subject area hence, there are some challenges in using the available instruments for the children age group (e.g. the questionnaires are too lengthy and their inappropriate content not applicable for the children group). Accordingly, following multiple stages and using the available highly used interest instruments such as Strong Interest Inventory, a questionnaire was specifically developed for children which contains 80 items organized in three sections including "my child (from the viewpoint of the parent)", "your child from the viewpoint of the others" and "your child from the viewpoint of the school". To the best of the researcher knowledge, this is the very first questionnaire specifically built for assessing the children's interests.

The reliability of the scales was assessed in two ways: internal consistency (Cronbach's alpha) and test-retest with time interval of two weeks. The reliability coefficients of the general occupational themes ranged from 0.54 to 0.83 for Cronbach's alpha method and from 0.48 to 0.91 for re-test method with time interval. In sum, the results of the study revealed that general occupational themes scales enjoyed a high reliability while personal styles scales were of a medium to high reliability.

In his study, Haqshenas (2005) calculated the reliability of Strong Interest Inventory's scales in two ways i.e. internal consistency (Cronbach's alpha) and re-test estimates. The reliability estimates for the general occupational themes scales were found to be in the range of %88-%92 and %0.81-%0.91 in the internal consistency and re-test methods, respectively. Hence, it can be claimed that the reliability of the general themes was medium to high. In another study, Sadeghi (2010) appraised the reliability of the scales of the short version of Isfahan-Strong Interest Inventory using two methods i.e. internal consistency and re-test the results of which yielded a reliability of 0/50-0.81 and 0.39-0.96 for general occupational themes scale in the former and latter methods, respectively. Hence, it can be inferred that the reliability of general occupational theme is medium to high. Similarly, Donnay et al (2005) estimated the

reliability of the general occupational themes as much as 0.90-0.92 using Cronbach's alpha and as much as 0.85-0.90 using test-retest method.

By comparing the results of reliability obtained in the present research to those of aforementioned studies, it can be inferred that the obtained reliability values on general occupational themes scales are similar to those obtained by Haqshenas (2005) , Sadeghi (2010) and Donnay et al (2004).

The validity of the CII was assessed following two stages. Firstly, the items of the children's interest questionnaire were created based on Strong Interest Inventory. To assess its content validity, five counseling professors were involved. They were asked to meticulously appraise the items twice rating them based on 4-point Likert-scale choosing one of the following options: completely suitable, suitable, unsuitable and completely unsuitable. The items rated as unsuitable and completely unsuitable by the professors were omitted from the questionnaire. In this stage, some items were deleted, some were replaced or some changes were made in the content of the items. Secondly, to carry out assessment based on external reference, the results obtained from the questionnaire were compared to those of the interviews with the children's parents. To do so, the parents were firstly asked to fill out the questionnaire. Afterwards, career counselors conducted interview with them on their children's interests. The results of the questionnaire and the interviews were found to be highly correlated so that in all cases, the interests scores gained from the questionnaire and interviews were similar with the results of some combinations of the interests only being different in some cases e.g. the inconsistency found between the results of social, artistic and investigative scales of the questionnaire and the results of social, artistic and investigative sections of the interviews.

References:

Barak, A. (1981). Vocational interest: A cognitive view. *Journal of vocational Behavior,* 19, 1-14.

Cotter E. W., & Fouad. N. A. (2010). The Relationship between Subjective Well-Being and Vocational Personality Type. *Journal of Career Assessment.* 19 (1). 51-60

Donnay, D. A., Thompson, R. C., Morris, M. L., & Schaubhut, N. A. (2005). *Manual for strong interest inventory*. Palo Alto, CA: Counseling Psychology Press.

Fouad, A. M. Mohler, J. C. (2004). Cultural Validity of Holland Theory and the Strong Interest Inventory for Five Racial – Ethnic Groups. *Journal of career assessment*, 12, 423.

HaghShenas, L. (2006). *Adaptation, standardization and examination of reliability and validity of Strong interest scales in high school students in Isfahan*. Unpublished MA thesis, Faculty of psychology and educational sciences, Isfahan university, Iran.

HaghShenas, L., Abedi, M., & Baghban, I. (2010). *A rating and interpretation guide for Strong interest inventory*. Isfahan: Neveshteh

Holland, J. (1997). Making Vocational Choice. The theory of Vocational Personality and Work Environment (3RD-ED). Odessa: psychological assessment resource.

Lent, R. W, Brown, S. D & Hackett, G. (2005). Social cognitive career theory. Ind. Brown (Ed) Career choice and development (4th Ed. PP. 255-311) Sanfroncisco, jossy-Bass.

Sadeghi , H. Abedi , M. Baghban , I. Fatehizade ,M. (2012) "The development and Validation of the short form of Strong Interest Inventory in Iranian (Isfahan) guidance/high school students" published in IJCRB February Edition 2012–IJCRB.Vole .3, No.10

Sadeghi, H. Abedi, M (2011). Adaptation, standardization and examination of reliability and validity of short form of Strong interest scales(SII-SH) in guidance/high school students in Isfahan. Unpublished MA thesis, Faculty of psychology and educational sciences, Isfahan University, Iran

Savikas, M. L. (1999). The Psychology of interests. in M. L. Savikas & A. R. Spokane (Eds), *Vocational interests* (PP. 19-50). Palo Alto, CA: Davies- Black.

Super, D. E (1980). A life Spine, Life Space, Approach to Career Development. *Journal of vocational behavior*. 16, 282-289.

Tracy, T. J. G, & Rounds, T. (1996). An Examination of the structure of Roe's Eight interest fields. *Journal of Vocational Behavior*, 44, 279-296.

Tracy, T. J. G. (2002). Personal Globe Inventory: Measurement of the spherical model of interest and competence beliefs (Monograph). *Journal of vocational behavior*, 60, 113-172.

Tracy, T. J. G. (2010). Development of An Abbreviated Personal Globe Inventory using item response theory: the PGI short form. *Journal of vocational behavior.* 331-340.

Zunker, V. (2006). *Career counseling: a holistic approach*. Yousefi and Abedi (Trans.). (2009). Isfahan: JahadDaneshgahi.