

## Research Paper

### Reliability and Factor Structure of Social Paradigm Belief Inventory



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## ABSTRACT

**Objectives** This study aimed to investigate the factor structure and reliability of the Social Paradigm Belief Inventory (SPBI).

**Methods** A total of 381 students of Hakim Sabzevari University were selected by stratified cluster random sampling method and responded to SPBI in 2016. This research is descriptive with a validation method. Exploratory and confirmatory factor analysis were used to investigate factor structure of the instrument, and Cronbach  $\alpha$  and test-retest method were employed for examining the reliability.

**Results** Results of principal component with varimax rotation showed that 4-factorial and 6-factorial solutions explained 30% and 38% of whole variance, respectively. The results of the confirmatory factor analysis showed that the 6-factorial solution was a better indication of the data than 4-factorial solutions and it better fits the data in Iran society. The Cronbach  $\alpha$  value of the instrument was 0.7 and as for the subscales of the instrument, it varied from 0.54 to 0.71 and the correlation coefficient of test-retest was 0.72 that showed acceptable reliability for the instrument.

**Conclusion** Enjoying an acceptable reliability and fitting well with the data in Iran society make the 6-factor SPBI a suitable measure for determining adults' cognitive development for screening or clinical purposes.

## Extended Abstract

### 1. Introduction

Even the most daring pioneering researchers find it difficult to find out if recognition of their growth in adulthood continues through qualitative organizational distinct levels. Another Piaget needed to accurately observe the characteristics of the argument model in adults

when solving problems of everyday life. The seeds of such an attempt have already been planted in a remarkable study; in this study Perry traced the growth of thinking among Harvard students. Perry (1968) quotes that the growth of an adult and dialectical way of thinking implies the recognition of the relativism of all knowledge, which leads to a revolutionary change in intellectual and moral thinking.

Researchers have studied adolescents and adults such as Ericsson, Fisher, Harvey, Hunt and Screwdog, Kitchener

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and King, Kelberg, Levinger and Perry; Researchers are particularly interested in writing models such as Rigel and Basschell that see dialectical thinking as an extension of the operation of ultrasound. Each of these models observes that humans grow in their thinking during their adult life, meaning that intellectual growth is not complete in adolescence. In fact, intellectual growth is a process of life, although its manifestations are very different from the context and the social environment to the context and the social environment, and it depends very much on individual differences. Although there are differences in these models, they all have a common trajectory, which is to follow the path from simplicity and absolutism to complexity and relativism, from objectivity to abstraction, and from regulating external behavior to internal behavioral regulation.

Since the mode of thinking in absolute, relativistic or dialectical way, as previously mentioned, is related to various variables such as identity, role conflict and emotional regulation, etc., it plays an important role in the various aspects of the life of individuals. There are individual, communicative and emotional spheres. Considering that thinking about adult growth theory after formal thinking in adolescence is determined, the cause of people's failures in understanding different issues and their subsequent behavior beyond adolescence can be at the level of their cognitive development. In the adult search.

Because maladaptation usually starts from adolescence and youth, and do not change over time, causing a person's displeasure or interruptions in some of his functions. This involves addressing the stages and stages of cognitive development. The study of the level of cognitive development in people is a tool to quantify and measure it. Such tools

have already been developed to measure cognitive development, but none have Persian version. One of these tools, as discussed earlier, is the Cramer and colleagues' social ideals questionnaire. The purpose of this study is to investigate the factor structure of the Persian version of the social science beliefs questionnaire and to examine the internal consistency of the scale in the Iranian society.

## 2. Method

The present study investigated the factor structure and reliability of SPBI. A total of 381 students of Hakim Sabzevari University filled out the instrument. Exploratory and confirmatory factor analyses were used to investigate the factor structure of the instrument, and Cronbach's alpha and test-retest method were employed for examining the reliability (Table 1).

## 3. Results

Although the internal consistency and the test-retest method for the Likert spectrum have not been measured by Kramer et al., The results of this study are related to the overall reliability of the scale and the subscales of the Likert spectrum questionnaire with the results of Kramer and Associates are consistent with the overall consistency of the scale and sub-scales of the questionnaire. However, contrary to these, there is little difference in the present study between the internal coherence of the elements of relativism and dialectical thinking with other factors. The results of the test-retest method are consistent with the reliability of the questionnaire with the results of Kramer et al. on the existence of a high degree of test-retest reliability on the scale.

**Table 1.** Demographic characteristics of the study sample

Variable		Frequency	Percentage
Gender	Man	189	49.6
	Woman	192	50.4
Marriage	Single	341	89.5
	Married	40	10.5
Education	B.A.	284	74.5
	M.A.	93	24.4
	Ph.D.	4	1

## 4. Discussion

Finally, it can be stated that this questionnaire has a relative reliability and factor analysis is the main factors of the questionnaire, and in general it can be used to recognize cognitive development in adults and to use screening and clinical. Limitations: It should be remembered that due to the limited sample of this study, as well as the use of the self-report tool and with regard to cultural differences, the generalization of results should be made with caution.

It is suggested that this study be conducted on other samples with a greater variety and size, in order to test the repeatability of the results. It is also suggested that future studies be interviewed to complete and compare the results of the questionnaire and also to compare the validity of the structure, the current questionnaire is compared with similar and different questionnaires.

## Ethical Considerations

### Compliance with ethical guideline

All the participants signed the informed consent of the research.

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### Conflict of interest

There is no conflict of interest in this research.

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