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# Validity and Reliability Assessment of the Persian Version of the Dream Sharing Questionnaire

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#### Abstract

A questionnaire was administered to 142 people to determine if they share their dreams with others, who they share their dreams with, for what purpose they do it, and in what social contexts dreams are shared. Respondents were also asked some questions about remembering and sharing dreams, details of dreams, regular sleep, people they shared their dreams with, the purpose of sharing dreams, feelings after awakening, attitude toward dreams, creativity and problem-solving after sharing dreams, lies about dreams, and other people's views toward dream sharing. The sampling was performed in two stages. A total of 142 individuals were selected for the preliminary administration of questionnaires to calculate Cronbach's alpha, and 12 individuals were selected for the panel group to validate the instrument. The content validity index and content validity ratio values were acceptable for most items, except for two, which were replaced with others. The value of Cronbach's alpha was higher than 0.7 for all questions, indicating their acceptance. The findings of the current investigation suggest that the adaptation of this questionnaire is a valid and reliable instrument that can be used for target populations in further studies.

Keywords: Dream Sharing Questionnaire, Reliability, Validity

## Background

The intricate nature of sleep has captured the interest of scholars, who have only recently begun comprehending its complexities. Approximately 33% of one's lifespan is allocated to sleeping, so the necessity of rest is apparent [1]. The rudimentary tenets of sleep are readily understandable, encompassing the physiological response following the onset of slumber and intricate mechanisms that regulate the onset and cessation of sleep [2].

The human body undergoes four distinct stages of sleep during the course of a night's rest. The first three sleep phases are classified as non-rapid eye movement (NREM), and the ultimate stage is called rapid eye movement (REM) sleep. Each stage is associated with a different depth of sleep and specific patterns in brain waves and muscle

activity in the body [3]. Our body cycles through all of the stages of sleep four to six times each night, going through one about once every 90 to 120 min. The progression of sleep cycles is subject to various factors, such as age, gender, and recent sleep behavior, which can influence the observed patterns [4].

It is purported that around 80% of dreams transpire during the REM phase of sleep, while the remaining 20% arise during the NREM phase [5]. Although most dreams take place during REM sleep, the purpose of REM sleep is not fully understood [6]. Frequently recurring dreams, which occur at 90-min intervals, can only be accessed if the dreamer recollects them upon awakening [7]. Dreaming is widely acknowledged to be a wholly subjective

phenomenon [8]. The majority of our dream experiences occur in a colorized state as opposed to a monochromatic representation, and humans also utilize the full spectrum of sensory perception in dreams, encompassing the five senses. However, human beings typically rely on their visual faculties for perception, followed by auditory, tactile, and olfactory stimuli, with gustatory stimuli being the least used [9].

Dream sharing refers to the act of recording or exchanging discussions pertaining to both nocturnal and imaginative musings with other individuals. A fundamental objective of dream sharing is the interpretation of dreams. Despite the inherently personal nature of dreams, they are frequently disclosed to intimate partners, family members, acquaintances, and colleagues in a common social setting as a part of everyday social interaction, with the primary purpose of entertainment [10]. Actually, problems in sharing dreams sometimes occur as the potential dream sharer faces difficulty finding the proper context for the speech event, choice of audience, and discourse frame. Additionally, the social rules of dream sharing vary among cultures; in some regions, for instance, depending on their culture, they do not share good dreams [11].

#### **Objectives**

This study aimed to assess the validity and reliability of the Persian version of the Dream Sharing Questionnaire in Iran.

#### Materials and Methods

The study employed a convenience sampling technique to select participants, comprised of students attending governmental and nongovernmental universities located in Mashhad, Iran.

This study used two validity indices, including the content validity index (CVI) and the content validity

ratio (CVR). The CVR examines the necessity of an item in the questionnaire, and the CVI considers the simplicity of an item, the relationship between the item and the entire questionnaire, and the clarity of the item [12,13]. In order to collect data related to these two indicators (CVI and CVR), a panel group is used, which usually has between 5-15 participants [14]. In this study, the panel group included 12 people.

The CVR value depends on the number of participants in the panel group. According to the number of participants in the panel group in this study (12 people), the minimum validity ratio is 0.56, which means that if the CVR score of an item is less than 0.56, the item should be removed [14]. If the optimal CVI level, regardless of the number of people in the panel group, is less than 0.70, the item will be removed, if it is between 0.70 and 0.79, the item will need modifications, and if it is higher than 0.79, it will be approved [15,16].

Cronbach quantified reliability by proposing a coefficient. The theoretical range of this coefficient is from 0 to 1 [16]. When the value of  $\alpha$  is in close proximity to 0, the quantified responses are deemed to possess a considerably low degree of reliability. Conversely, when  $\alpha$  approaches 1, the responses are regarded as highly reliable. A widely accepted practice in the field is to regard answers as reliable when  $\alpha$  surpasses a threshold of 0.7 [17].

Sampling was conducted in two stages. In the first stage, 142 people were selected for the preliminary implementation of the questionnaire to calculate Cronbach's alpha. In the second stage, 12 people were selected for the panel group to calculate the content validity of the questionnaire.

#### Results

The items of the questionnaire are shown in Table 1. As can be seen in the table, the items were divided into different dimensions, each of which was divided into several questions/items.

Table 1. Dimensions of the questionnaire and its items

Dimensions of the questionnaire	Items/Questions			
Remembering and sharing dreams	How often do you remember your dreams?			
	How often do you share your dreams with others?			
	Dream of deceased people			
	Sexual content			
Dream details	Strange dreams			
	Recurrent dreams			
	Nightmare			
	Others			
	Regular sleep at night			
Regular sleep	Irregular sleep at night			
	Variable sleep time throughout the day			
	Spouse or lover			
	Parents			
People with whom dreams are shared	Siblings			
Toopie with whom dround are stated	Friends			
	Colleagues			
	Relatives			

Table1 continue	
The purpose of sharing dreams	Dispelling the dream spell Laughter, Excitement/Fun Consolation/Reassurance/Empathy Dream interpretation Understanding the meaning of dreams Increasing intimacy Stress reduction/positive reaction
Feelings after waking up	Happiness Anxiety Heartbeat Sorrow Anger Jealousy
Others' views toward sharing dreams	In my family, sharing dreams is normal.  At my workplace, sharing dreams is common.  People around me welcome hearing about my dreams.
Attitude toward dreams	Dreams are the separation of the soul from the body.  Dreams are special symbols for me.  Dreams are a tool for spiritual discovery.  Many dreams are meaningless.  Dreams have a message for me that must be interpreted.  Dreams are related to my unconscious and psychological complexes.  Dreams are influenced by the emotions that I have been dealing with during the day.  Dreams occur due to nerve stimulation and have no purpose or message.  Dreams are a way to connect to the divine world.
Creativity and problem-solving after sharing dreams	Sharing dreams with others makes me understand the problem better.  When I tell others about my dreams, they get to know the newer aspects of the subject.
Telling lies about dreams	To impress others, I may lie and say that I have had their dreams.  I may describe a false dream to sympathize with others.  I don't consider telling false dreams a bad thing.

As delineated in Table 2, the computed CVR values for each item exceed 0.56, which signifies the vitality and essentiality of the items included in the scale. The total CVR score calculated for the 22 items shows the agreement of all panel members on the necessity of the respective items in the instrument. Furthermore,

the attained CVI, which exceeds 0.79, denotes a satisfactory correlation between the items included in the questionnaire and its intended objective.

After correcting some options, CVI and CVR values were measured again, which are shown in the table below (Table 3).

Table 2. Calculation of the content validity index and content validity ratio

Dimensions of the	Items/Questions		CVI	CVR	Result	
questionnaire		Simplicity	Communication	Clarity	CVK	Result
	How often do you remember your	1	1	1	0.83	Appropriate
Remembering and	dreams?	•	•	•	0.05	пррторище
sharing dreams	How often do you share your dreams	1	1	1	0.66	Appropriate
	with others?					11 1
	Dream of deceased people	1	1	1	1	Appropriate
	Sexual content	1	1	1	1	Appropriate
Oream details	Strange dreams	1	1	1	1	Appropriate
	Recurrent dreams	0.91	1	0.83	0.83	Appropriate
	Nightmare	1	1	0.91	1	Appropriate
	Others	1	1	1	1	Appropriate
	Regular sleep at night	1	1	1	1	Appropriate
Regular sleep	Irregular sleep at night	1	1	1	1	Appropriate
	Variable sleep time throughout the day	1	1	1	0.66	Appropriate
	Spouse or lover	1	1	1	1	Appropriate
	Parents	1	1	1	0.83	Appropriate
People with whom	Siblings	1	1	1	0.83	Appropriate
dreams are shared	Friends	1	1	1	1	Appropriate
	Colleagues	1	1	1	0.66	Appropriate
	Relatives	0.91	0.66	0.83	0.5	Rejected
	Dispelling the dream spell	1	1	1	1	Appropriate
	Laughter/Excitement/Fun	1	1	1	1	Appropriate
The purpose of sharing	Consolation/Reassurance/Empathy	1	1	1	0.83	Appropriate
lreams	Dream Interpretation	1	1	1	1	Appropriate
ireams	Understanding the meaning of dreams	1	1	1	1	Appropriate
	Increasing intimacy	0.91	1	1	0.83	Appropriate
	Stress reduction/positive reaction	0.91	0	0.83	0.66	Appropriate
	Happiness	1	1	1	1	Appropriate
	Anxiety	1	1	1	1	Appropriate
Feelings after waking up	Heartbeat	1	1	1	1	Appropriate
comes arter wanting up	Sorrow	1	1	1	0.83	Appropriate
	Anger	1	1	1	0.66	Appropriate
	Jealousy	0.91	0.66	0.83	0.5	Rejected

Table2 Continue						
	In my family, sharing dreams is normal.	0.91	0.58	0.66	0.33	Rejected
Others' views toward sharing dreams	At my workplace, sharing dreams is common.	0.91	0.58	0.66	0.16	Rejected
, and the second	People around me welcome hearing about my dreams.	0.91	0.91	1	0.33	Rejected
	Dreams are the separation of the soul from the body.	1	1	1	0.83	Appropriate
	Dreams are special symbols for me.	0.75	0.83	0.83	0.66	Appropriate
	Dreams are a tool for spiritual discovery.	0.83	1	0.91	1	Appropriate
	Many dreams are meaningless.	1	1	1	1	Appropriate
	Dreams have a message for me that must be interpreted.	1	1	1	1	Appropriate
Attitude toward dreams	Dreams are related to my unconscious and psychological complexes.	1	1	1	0.83	Modification
	Dreams are influenced by the emotions that I have been dealing with during the day.	0.83	1	0.75	0.66	Appropriate
	Dreams occur due to nerve stimulation and have no purpose or message.	1	1	1	1	Appropriate
	Dreams are a way to connect to the divine world.	1	1	1	0.83	modification
Creativity and problem- solving after sharing	Sharing dreams with others makes me understand the problem better. When I tell others about my dreams,	0.75	0.58	0.83	0.33	Rejected
dreams	they get to know the newer aspects of the subject.	0.83	0.58	0.83	0.5	Rejected
	I may describe a false dream to sympathize with others.	1	1	1	1	Appropriate
Telling lies about dreams	I don't consider telling false dreams a bad thing.	1	1	1	1	Appropriate
	To impress others, I may lie and say that I have had their dreams.	1	1	1	0.83	Appropriate

Table 3. Modification of items and recalculation of the content validity index and ratio

Phrase	CVI			CVR	Result
Dreams are a way to communicate with the spiritual world.	0.91	1	0.91	1	Appropriate
Dreams are related to the unconscious, and we are unaware of that part of the mind.	0.91	1	1	0.83	Appropriate

Table 4. Calculation of Cronbach's alpha

Dimensions of the questionnaire	Items/Questions	Cronbach's alpha
Remembering and sharing dreams	1-2	0.846
Dream details	3-4-5-6-7-8	0.772
Regular sleep	9-10-11	0.888
People with whom dreams are shared	12-13-14-15-16	0.896
The purpose of sharing dreams	17-18-19-20-21-22-23	0.832
Feelings after waking up	2-25-26-27-28	0.810
Attitudes toward dreams	29-30-31-32-33-34-35-36-37	0.937
Telling lies about dreams	38-39-40	0.894
The whole questionnaire	The whole questionnaire	0.917

As can be seen in Table 4, the items have a Cronbach's alpha above 0.7, meaning that the questionnaire is acceptable.

## Discussion

The present findings identified a number of factors associated with dream-sharing, including dream recall and sharing, dream details, regular sleep, people with whom dreams are shared, the purpose of sharing dreams, feelings after waking up, others' views toward sharing dreams, attitude toward dreams, creativity and problem-solving after sharing dreams, and telling lies about dreams.

The present study represents a pioneering endeavor in Iran, as it aimed to assess the reliability and validity of the Persian version of the Dream Sharing questionnaire. The outcomes of the investigation revealed that the act of dream sharing is widely practiced, with approximately 45.5% of dreams being shared, and that personality traits are correlated with the frequency of dream sharing. In fact, participants described dreams to entertain, share, and elicit responses. Some investigations considered dream sharing a strategy [18]. In other words, dream sharing is a social interaction, the intended result of which is self-expression [10].

Sharing dreams is a social interaction, and dream narration is more than just reporting the content of a dream. Sharing dreams helps bring people closer together. On the other hand, individuals can share their dreams, or specific dreams, with people they know well or who they would like to know better only in a similar context.

As mentioned before, for an item to be valid, its CVI and CVR must have acceptable values. Some items (such as interpreting dreams for relatives, feelings of jealousy after waking up, the views of family, workplace, and relatives on sharing dreams, sharing dreams to solve problems, and when I tell others about my dreams, they get to know the newer aspects of the subject) were excluded from the study because the CVR and CVI values were not favorable. A strong positive correlation was observed between the frequency of dream recall and the frequency of dream sharing. As it was said, if the CVI value is between 0.7 and 0.79, the item must be corrected. In our study, two items (dreams are a way to connect to the divine world, and dreams are related to my unconscious and psychological complexes) got a lower score than 0.7, and thus they were modified (dreams are a way to communicate with the spiritual world, and dreams are related to the unconscious, and we are unaware of that part of the mind).

The lowest Cronbach's alpha for reliability is 0.7 [19]. In this study, Cronbach's alpha was above 0.75 for all items, representing the proper level of internal consistency of the questionnaire.

#### Conclusions

The current study aimed to assess the validity and reliability of the Persian Edition of the Dream Sharing Questionnaire. Based on the findings, it can be concluded that all the items and the entire questionnaire have good validity and reliability. Therefore, the authors can use this questionnaire as a reliable and valid tool.

## Compliance with ethical guidelines

All ethical principles were considered in the present study. The participants were informed about the research participants and procedure. This research was registered with the code of ethics IRAJAUMS. REC. 1397.002. Informed consent was obtained from the participants, and they were assured of the confidentiality of their information.

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#### Authors' contributions

This study was conducted with he collaboration of all authors. All authors read and approved the final manuscript.

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#### **Conflicts of Interest**

The authors reported no conflict of interest.

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