Iranians' Beliefs About Dreams: Developing and Validating the My Beliefs About Dreams Questionnaire

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Several different beliefs about the importance of dreams have been recorded from ancient times to the present. In ancient Iranian culture, dreams had a special importance. Similarly, in modern times, Iranians pay much attention to their dreams. The present questionnaire study of several beliefs about dreams describes the beliefs of 486 Iranian university students in Tehran (men = 253; women = 233) from the Tarbiat Modares and Allameh Tabatabai University about their dreams through administering of the My Beliefs About Dream Questionnaire (MBDQ). The two main objectives of the research were to examine the psychometric properties of the MBDQ and to describe the dream beliefs of Iranian college students. Factor analysis of the MBDQ yielded a six-factor solution. In general, the present investigation revealed moderate to high construct validity and reliability of the MBDQ. A wide range of variation in dream beliefs was found among Iranian college students, with religious beliefs having much influence upon them.

Keywords: beliefs, dreams, My Beliefs about Dreams Questionnaire, Iranian culture

Belief is the extent to which a person thinks something is probable (Fishbein, & Raven, 1962), while attitude refers to liking or disliking it (Bem, 1970). Today, both beliefs and attitudes are studied in a diverse range of psychological subjects (King, & DeCicco, 2009). Despite the abundance of research studies about dream content and dream recall, and recent attention to attitudes toward dreams (Schredl, 2013; Schredl, Brenner, & Faul, 2002), empirical investigations aimed at studying laypeople's beliefs about dreams have been scant (Beaulieu-Prévost, Charneau Simard, & Zadra, 2009; Hall, 1996; King, & DeCicco, 2009; Nell, 2014). It seems that researchers have either given little importance to beliefs about dreams, or they have ignored this topic altogether. In spite of this state of affairs, there exists evidence indicating the importance of beliefs about dreams (Ehrnwald, 1966; Kracke, 1993; Tonay, 1993).

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Most research studies have investigated attitudes toward dreams and have shown a moderate but significant association between dream attitudes and frequency in remembering dreams (Cernovsky, 1984; Robbins, & Tanck, 1988; Rochlen, Ligiero, Hill, & Heaton, 1999). It can be said that the only main finding refers to the fact that women in comparison with men have more positive attitudes toward their dreams (Robbins, & Tanck, 1988; Schredl, 2002). However, these investigations are not helpful in determining what beliefs people have about dreams and the role dreams play in their lives (Beaulieu-Prévost et al., 2009; Hall, 1996). We think that people's beliefs about dreams are important because dream beliefs can highlight peoples' sociocultural backgrounds. Also, different dream beliefs may correspond to different personality characteristics. For example, in Hall's study (1996), participants who thought dreams are meaningless tended to be creative, psychologically minded and thinking independently.

Different beliefs about dreams have been recorded from ancient times to the present (Van de Castle, 1994). Even today, different beliefs about dreams exist in different cultures (Lohmann, 2007; Tedlock, 1992; Van de Castle, 1994). In contemporary American culture, much variation of these beliefs is observed (Domino, 1982; Livingston, & Levin, 1991). After surveying dream research studies in Asian countries (Mazandarani, Aguilar–Vafaie, & Domhoff, 2013; Yamanaka, Morita, & Matsumoto, 1982), the present researchers found that none of these studies have systematically investigated dream beliefs.

Although among Iranians the importance of dreams can be easily felt in everyday life affairs, a similar trend is observed regarding the lack of systematic research about dreams. The topic of dreams has been addressed in Iranian literature (Amin, 2005; Komaili, 2008) and in the Islamic religion (Bulkeley, 2008). However, the study of beliefs about dreams, specifically in a cultural context like Tehran, with a population above 10 million inhabitants, has never been performed. In general, anthropological research on Tehran inhabitants is very rare (Daniel, & Mahdi, 2006; Koutlaki, 2010). Traditional practices motivate Iranian people to seek knowledge about interpretation of dreams; as such it can be observed that more than 400 books have been published about dream content and its interpretation (search performed in the National Library of Iran on June 13, 2017). In addition, considering the prominent role of Islam in Iranian culture as a way of life and the fact that Islam gives very much importance to dreams, many religious books can also be found (Majlisi, 1998; Mohaddes Noori, 2001; Nekoonam, 2007; Teflisi, 2006).

To the present many questionnaires and scales have been used to study dream attitudes and beliefs. One of the first measures used was the Attitude Toward Dream Scale, a 16-item test with an agree and disagree answering format, which contained seven items about dream beliefs (Cernovsky, 1984). Some other research studies (Cernovsky, 1987) used the 11th item from the Minnesota Multiphasic Personality Inventory: "A person should try to understand his/her dreams and be guided by or take warning from them." Some other researches (Beaulieu-Prévost, & Zadra, 2005) have used the McGill Sleep and Dreams Questionnaire, which also measures many dimensions of sleep and dreams, including attitudes toward dreams. Domino (1982) developed the Questionnaire About Dreams, a 24-item scale with a 5-point Likert scoring format, which has been utilized by Livingston and Levin (Livingston, & Levin, 1991). Hall (1996) developed a 35-item Dream Belief Questionnaire and identified eight types of dream beliefs. Based on the Domino

(1982) and Cernovsky (1984) scales and some new items, Schredl and his colleagues developed another scale (Schredl, Nürnberg, & Weiler, 1996) and revised it (Schredl, Ciric, Götz, & Wittmann, 2003). This newly developed scale assesses different dimensions of dreams and has been utilized in several studies including that of Beaulieu-Prévost and Zadra (2005). Finally, more recently another measure, the Inventory of Dream Experiences and Attitudes, has been developed by Beaulieu-Prévost et al. (2009), which assesses attitudes about dreams. In the development of this scale, items from other scales, as well as newly developed items, were incorporated. In general, many of these measures are either too short or do not stress dream beliefs. The My Beliefs about Dreams Questionnaire (MBDQ) is sensitively designed for this purpose.

The present research pursued two main objectives: (a) to investigate the construct validity of the MBDQ through factor analytic procedures and (b) to study the different beliefs about dreams in an Iranian population of college students. In the present study, no specific hypotheses are advanced. However, based on informal observations and data, a question is posed regarding a possible high prevalence of religious beliefs about dreams among Iranian college students.

Method

Participants

Data were derived from 241 graduate level college students at Tarbiat Modares University and 245 undergraduate college students at Allameh Tabatabai University (in total 486 students, men = 253 and women = 233; mean age = 24.04 years, $SD = 4.01$, with an age range of 18 to 50 years). Participants received no gift or money for filling out the questionnaire.

Instrument

The Persian version of the MBDQ was developed in this study. In developing the scale used in this study, we used items derived from David H. Hall's Dream Beliefs Questionnaire (DBQ, Hall, 1996). The items of this scale were translated using the standard back-translation procedure recommended to secure accurate translation (Brislin, 1970). This measure assesses various beliefs about dreams. All items follow one single format, and each item begins with the following phrase: "I believe . . ." Each item is scored on a 4-point Likert scale ranging from *strongly agree*, *somewhat agree*, *somewhat disagree*, and *strongly disagree*.

Results

Factor Analysis

For evaluating the construct validity of MBDQ and what dream attitudes participants had, their responses to this questionnaire were analyzed using explor-

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atory factor analysis and further data analysis processes following Henson and Roberts' (2006) methodological procedures. For evaluating gender differences, *t* tests for independent samples were conducted. Then, MBDQ factors extracted were used for classifying participants into different profiles of dream beliefs, and for this purpose, hierarchical cluster analyses were computed.

To begin with, data were analyzed via principal component analysis and a varimax rotation method. The Kaiser-Mayer-Olkin coefficient (.87) was very good, and the Bartlett test of sphericity coefficient was X2approx = 3,342.989, $p < .0001$, indicating that adequate factors can be extracted from the data. Six factors were extracted considering Kaiser-Meyer-Olkin measure and scree plot with eigenvalue of 1. Internal consistencies of whole MBDQ were good (Cronbach's $\alpha = .81$), and for each factor internal consistencies were moderate to high (Cronbach's αs = 0.49 to 0.86). These six factors explained 54.37% of the variance. Eigenvalues, means, standard deviations with corresponding loadings for each one of the factors and items are depicted in Table 1.

Table 2 depicts the correlation coefficients among MBDQ factors. MBDQ factor means and standard deviations of male and female participants are shown in Table 3.

Cluster Analysis

For better understanding of the variation and variability of Iranian beliefs about dreams, a hierarchical cluster analysis was performed, and each one of the extracted factors from the MBDQ was compared to these clusters. For computing cluster analysis, the Ward method and Euclidean distance were used, and the optimal number of clusters was established based on interpretability of clusters and also based on the significant difference between two clusters. The results of this analysis are reported in Table 4.

Discussion

Factor Structure

The present research gives evidence of the wide variability of dream beliefs among Iranians. Exploratory factor analysis of the Persian version of the MBDQ indicates that this instrument might support a six-factor structure in the Iranian context. Some of these factors are similar to factors reported in Hall's study (1996). In what follows, a critical analysis of the six-factor structure of the Persian version of the MBDQ will be addressed.

Factor 1 (Dreams as Carrying a Message): This factor is composed of 10 items that all refer to an underlying construct that dreams carry a message. This message can be from a deceased person or from God, with messages predicting a certain future happening or future happenings in general. The content of this factor reflects the belief that a dream basically tells about the future (prophetic dream). This belief can be traced back to Greek and Roman eras. In those periods of history, it was popularly accepted that at least some dreams may foretell the future of an

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Table 1
My Beliefs About Dream Questionnaire Factors, Items, Eigenvalues, Means (SD), and Loadings

Factors and Items	Eigenvalue	*M* (*SD*)	Load
1. Dreams as Carrying a Message (α = .86)	6.08	2.84 (.58)	
I believe that a dream can carry a message from the spirit world		2.92 (.87)	.81
I believe that a dream can carry a message from someone who has died		2.93 (.87)	.76
I believe that a dream can contain a spiritual or religious message		2.95 (.86)	.72
I believe that a dream can foretell the future		3.09 (.81)	.70
I believe that God can speak through a dream		2.70 (.93)	.67
I believe that a person can leave his or her body during a dream		3.02 (.99)	.63
I believe that a dream can carry a message from another person		2.70 (.87)	.62
I believe that you should change your plans if a dream predicts that something bad will happen		2.07 (.85)	.52
I believe that dreams can give insight into recent and past events		2.77 (.83)	.51
I believe that some dreams are more important than other dreams		3.28 (.81)	.43
2. Dreams as a Source of Creativity (α = .65)	2.24	2.82 (.64)	
I believe that a dream can inspire practical inventions or ideas		2.88 (.82)	.81
I believe that a dream can inspire artistic or other creative ideas		2.86 (.79)	.75
I believe that a problem can be solved through a dream		2.71 (.90)	.50
3. Dreams as Providing Insight About One's Body (α = .65)	1.53	2.19 (.65)	
I believe that a dream can warn a person about a potential illness in their body		2.25 (.89)	.75
I believe that a dream can tell an ill person what is wrong with their body		1.95 (.77)	.71
I believe that a dream can help cure a physical illness or disease		2.37 (.90)	.53
4. Dreams as Revealing One's Psychology (α = .56)	1.35	2.97 (.50)	
I believe that dreams reflect conscious wants and desires		2.92 (.74)	.66
I believe that a dream can reveal unconscious wants and desires		2.96 (.79)	.62
I believe that a dream can reveal a person's true feelings toward someone else		2.75 (.85)	.60
I believe that a dream can reflect a person's anxieties		3.26 (.68)	.59
5. Dreams as Meaningless (α = .51)	1.27	2.05 (.59)	
I believe that dreaming results exclusively from bodily functions or disturbances		2.08 (.80)	.66
I believe that the content of dreams is meaningless		1.76 (.78)	.63
I believe that dreams are based exclusively on recent and past memories		2.30 (.90)	.62
6. Dreams as Essential to Health (α = .49)	1.11	2.96 (.79)	
I believe that dreaming is essential for maintaining a person's physical health		3.06 (1.00)	.73
I believe that dreaming is essential for maintaining a person's mental health		2.85 (.94)	.73

Table 2
Correlation Matrix of My Beliefs About Dream Questionnaire Factors

Factors	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1: Carrying Message					
Factor 2: Source of Creativity	.39**				
Factor 3: Insight About Body	.33**	.39**			
Factor 4: Revealing Psychology	.33**	.39**	.32**		
Factor 5: Meaningless	−.32**	−.16**	.003	−.07	
Factor 6: Necessary to Health	.22**	.24**	.25**	.19**	−.13**

** $p < .01$.

individual. To practice the art of dream interpretation within this belief, soothsayers and many different written records were used (Hunt, 1989). This belief prevailed among Iranians as well, and many books about dream interpretation have been published in Iran throughout these years, with more than 400 book titles regarding dream interpretation found in the National Library of Iran (Search performed June 13, 2017).

Factor 2 (Dreams as Source of Creativity): Three items loaded on this factor. The content of all these three items converge on the idea that dreams can be a source for problem-solving, artistic ideas, and creativity. It is well known in the scientific literature that some artists and scientists have been able to think of very novel ways of conceptualizing or solving a problem after a dream (Epel, 1993; Koulack, 1991). Karen Horney stated that often dreams "represent efforts to solve conflicts in both neurotic or in healthy individuals" (Horney, 1950, p. 349). In one study (Schredl, & Erlacher, 2007), students and online respondents reported their dreams could stimulate new ideas or help them to solve problems in four ways: (a) using dream images for art and work, (b) helping them to solve their problems, (c) giving them the impetus to do something, and (d) containing emotional insights. In addition to abundant narrative evidence (Epel, 1993; Koulack, 1991), empirical evidence also exists in support of the belief that dreams can facilitate problem-solving. For instance, REM sleep (linked with more dreams) is associated with creativity and abstract reasoning necessary for problem-solving (Walker, Liston, Hobson, & Stickgold, 2002).

Factor 3 (Dreams as Providing Insight about One's Body): This factor is composed of three items. The main construct tapped by this factor addresses the power of dreams in conveying information about the health of an individual.

Table 3
My Beliefs About Dream Questionnaire Factor Means and Standard Deviations of Male and Female Participants

Factors	Male (n = 253)	Female (n = 233)	t-test
Factor 1: Carrying Message	2.77 (.64)	2.92 (.50)	2.97**
Factor 2: Source of Creativity	2.83 (.67)	2.80 (.61)	−.55
Factor 3: Insight About Body	2.21 (.65)	2.17 (.66)	−.64
Factor 4: Revealing Psychology	2.96 (.49)	2.99 (.51)	.86
Factor 5: Meaningless	2.05 (.62)	2.05 (.56)	−.004
Factor 6: Necessary to Health	2.92 (.80)	2.99 (.77)	1.07

** $p < .01$.

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Table 4
Mean Scores of Profile 1 and Profile 2 for My Beliefs About Dream Questionnaire Factors

Factors	Profile 1 (n = 277)	Profile 2 (n = 209)	t-test
Factor 1: Carrying Message	2.57 (.55)	3.21 (.38)	−15.05**
Factor 2: Source of Creativity	2.51 (.58)	3.22 (.48)	−14.50**
Factor 3: Insight About Body	2.00 (.58)	2.45 (.66)	−7.96**
Factor 4: Revealing Psychology	2.82 (.48)	3.17 (.47)	−8.01**
Factor 5: Meaningless	2.27 (.53)	1.75 (.54)	10.58**
Factor 6: Necessary to Health	2.63 (.75)	3.38 (.60)	−11.86

** $p < .01$.

Ancient Greeks believed that dreams can be interpreted as indicating something about people's health (Hunt, 1989). Hippocrates used dreams as a tool for diagnosis for the first time (Meier, 1966). In spite of the fact that this belief does not have a scientific origin, it has been supported in a limited way by experimental evidence. For instance, Schneider (1976) wrote about some of his patients that they had dreams which conveyed information about their imminent diseases. Another researcher (Smith, 1986, 1987) investigated the dreams of individuals with heart disease and concluded that many of these patients' dreams may have an alerting function about their health.

Factor 4 (Dreams as Revealing One's Psychology): This factor reflects one of the most popular beliefs about dreams in our sample, composed of four items. These items are about the idea that dreams reflect conscious and unconscious desires and anxieties. This factor is linked with continuity hypothesis of dreaming (Domhoff, 1999; Hall, & Nordby, 1972), which suggests dreams reflect our daytime thoughts, attitudes, concerns and desires. For example, Schredl, Kleinferchner, and Gell (1996) reported that most of their clients believed that daytime problems played an important role in their dreams.

Factor 5 (Dreams as Meaningless): This three-item dimension expresses the idea that dreams do not have a specific meaning. Many researchers (Crick, & Mitchison, 1983; Hadfield, 1954; Hobson, & McCarley, 1977) believe that dreams only represent physiological events without any underlying meaning.

Factor 6 (Dreams as Essential to Health): This factor composed of three items expresses the underlying idea that dreams can be a factor for keeping healthy or even treating a disease. This belief is known to have its origins in ancient Greece and non-Western cultures. There are historical records indicating that ancient Greeks constructed many temples for the treatment of diseases through dreams (Meier, 1966). The patients after a purification ceremony were left in the temple, and their recuperation depended on whether or not they saw a correct dream (Meier, 1966). In some non-Western cultures, special individuals saw dreams that gave them powers for curing or treating others (Mannheim, 1991).

Profiles and Gender Differences

In the process of classifying individual participants, two distinctive profiles were obtained: (a) Convinced Dreamers, which was made up 57.0% of the sample, with 57.9% of women and 56.1% of men belonging to this profile. This profile

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included individuals that in general considered dreams to be meaningful. Individuals that were included in this category interpreted dreams as being meaningful, carrying a message, revealing the biological and psychological state of people, working as a source of creativity, and being necessary to health. (b) Unconvinced Dreamers, which were formed by 43.0% of the total sample, with 42.1% of women and 43.9% of men belonging to this profile. Basically the individuals grouped in this category do not believe that dreams have meaning. Consequently, in comparison with individuals in Profile 1, these participants considered dreams to lack a message and inspirational role, to not reveal biological or psychological state of people, and do not represent a factor related to health. This classification is similar to the argument proposed by Vann and Alperstein (2000) that "Individuals in American society waver between two disparate cultural beliefs about dreams: dreams mean something, or, dreams mean nothing" (p. 111).

In terms of presenting in Profiles 1 and 2, there was no significant difference between our male and female participants [X2 (1) = 0.163, p = .38]. However, Iranian women, more than their male counterparts, believed that dreams carry a message. This pattern has also been obtained in several studies in the United States and Canada (Beaulieu-Prévost, Charneau Simard, & Zadra, 2009; Domino, 1982; Robbins & Tanck, 1988; Schredl, 2000, 2003). Perhaps that is why, in previous research, women showed more interest in dreams and dream interpretation (Schredl, & Piel, 2008).

Two limitations for the present study which limit the power of generalizability of results obtained can be mentioned. First, due to the fact that the main instrument used—the MBDQ—was administered in governmental universities in which its students have bachelor's, master's and doctoral degrees, the sample studied may not be completely representative of the Iranian population. The second limitation refers to the lack of simultaneous administration of other questionnaires, which prevented the present researchers from providing evidence of external criteria.

In conclusion, the findings obtained in the present research can be summarized in three main points: (1) It was shown that the MBDQ has good construct validity and reliability, the Persian version of this questionnaire was initially shown to be composed of six factors, and the constructs tapped by these factors have been found to have counterparts in previous dream research in other countries, and it would then seem not premature to include them for heuristic guidance of future research in Iran; (2) a wide range of variation was found among Iranian college students in their beliefs about dreams, which can be clustered into two profiles, Convinced and Unconvinced; (3) Iranian women, like their American and Canadian counterparts, more than men believe that dreams convey meaning. For future study in this field, it is suggested using MBDQ in other countries to see cross-cultural similarities and differences in dream beliefs. It is also suggested to research about the roots of these similarities and differences.

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