

Dreaming

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An Exploratory Study of the Eastern Understanding of *Déjà Rêvé* (Already Dreamed) Experiences in Kerala-Indian Culture

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Surveys have been carried out enquiring about the incidence of déjà vu in several countries but not in India. In this study, a questionnaire was used to query 500 representative subjects in the Indian state of Kerala to ascertain the incidence frequencies of déjà vu experiences, precognitive dreams, and déjà rêvé experiences. The explanations favored for déjà vu experiences were also compared. The study found that déjà vu experiences are highly prevalent among Indians, but people with less education have no scientific knowledge of what these experiences are termed. Men reported déjà vu experiences slightly more frequently than women. The incidence of precognitive dreams is comparable to that in the West. All the participants in the study expressed a positive attitude toward déjà rêvé experiences. Intriguingly, older and more educated people were more likely to report déjà rêvé experiences, whereas Christians reported them less frequently than Hindus. Participants with a higher level of education were more inclined to believe déjà vu is a scientific yet unknown occurrence, and they were less likely to link déjà vu to reincarnation or soul transmigration. The questionnaire used in this study was rather straightforward; however, it might be improved and validated. The current study is restricted to Kerala's geographical areas. In the future, other parts of India could be studied and the results compared with those reported here.

Keywords: déjà vu, *déjà rêvé*, precognition, dreams, India

Déjà vu is a widespread, fascinating, and mysterious human experience. In the past century, the phenomenon of déjà vu attracted considerable interest within the public (as evidenced by literary works of the period, see Sno et al., 1994) and among

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members of the scientific community from a variety of scientific disciplines (Brown, 2004; Sno & Linszen, 1990). Since the mid-19th century, several theories have been proposed to explain the déjà vu phenomenon, ranging from reincarnation and messages from the Gods to perceptual occlusion and delayed neural transmission (Berrios, 1995; Brown, 2004). Some have had an experience that they interpret as being déjà vu, as it generated a bizarre sense of familiarity, whereas others who have never experienced anything similar may have a very vague understanding of the phenomenon in general and have difficulty even imagining what it could be like. There has been very little scientific research on the clinical significance of déjà vu experiences. Some research was done concerning the connection between the déjà vu experience and temporal lobe epilepsy, but researchers seem to be no longer concerned about this, or about déjà vu experiences in different psychiatric populations, or possible neuropsychological changes. Researchers have used retrospective surveys, prospective surveys, and case studies for investigating déjà vu experiences since 1884. Long and short survey questionnaires were used to evaluate the déjà vu state. Neppe (1983) developed both a quantitative (frequency, duration) and a qualitative (emotional intensity, clarity of experience) questionnaire.

In 1898, Bernhard-Leroy conducted a study as part of his medical degree dissertation, and he found that study respondents have reported more frequent and more intense déjà vu experiences when they were younger, especially during their adolescence. Another researcher, Heymans, published the results of two investigations in 1904 and 1906. He made a critical review of Bernhard-Leroy's results and extended the data by questioning the students in his classes, young people between 20 and 25 years. In a total of 88 cases, 14 (16%) had often experienced déjà vu and 41 (47%) had experienced déjà vu occasionally. Much later, Chapman and Mensh (1951) interviewed 220 patients in the hospital and clinics of the Washington University (St. Louis). Among them, 35% of the female and 31% of the male patients were able to recall having had déjà vu experiences. Richardson and Winokur (1967) conducted a similar survey among hospitalized 161 neurological and 301 psychiatric patients and found that 40% and 44% of patients had experiences of déjà vu, respectively. McKellar and Simpson's (1954) study of hypnagogic imagery involved collecting samples from 110 subjects who were students at Aberdeen University in Scotland. Out of the total sample population, they found that 71% had experienced déjà vu.

More recent survey results (Gallup & Newport, 1991; Greeley, 1987; Levin, 1993) have shown that déjà vu is a common occurrence in the general population, with frequencies of incidence ranging from 54.6% to 89%, depending on how the question about déjà vu is phrased and which population is queried. Sno et al. (1994) extended Neppe's Screening and Quality questionnaires and created a standardized scale for investigating déjà vu: Inventory for Déjà vu Experiences Assessment. Research suggests that most of us have had a déjà vu experience at some point in our lives.

New findings in cognitive science research have now provided some new insights into the déjà vu phenomenon, prompting growing interest among scientists (Brown, 2004). Scientifically based perspectives in the areas of cognition and neuroscience, for instance, have considerable potential for explaining and demystifying the déjà vu experience. Despite the increased general interest, very little research has been published on the subject in India. Most of the published literature on déjà

vu is reported from outside India, and Indians have not invested much effort to investing the unusual subjective nature of déjà vu experiences.

Déjà rêvé (French for “already dreamt”) is a type of déjà experience in which the individual has the impression that the source for it can be found in dreams that occurred at some time in the past but were not remembered until the déjà experience is occurring. This frequently results in the person having a conviction of knowing what will occur shortly before it does (precognition). It thus seemed reasonable in this investigation to include questions about precognitive dreams within the study design.

Method

Participants

The investigators collected data from 500 participants (268 men, 232 women) residing in eight districts of Kerala: 281 participants from the northern Kerala districts of Kasaragod, Kannur, Wayanad, and Kozhikode and 219 participants from the southern Kerala districts of Kerala Thiruvananthapuram, Kollam, Alappuzha, and Pathanamthitta. The age distribution was as follows: 18 to 30 years ($N = 170$), 31 to 43 years ($N = 137$), 44 to 56 years ($N = 118$), and 57 to 69 years ($N = 75$). A total of 184 participants were Hindu, 191 Christians, and 125 Muslims. In all, 111 participants had low education (10th standard and below), 240 intermediate (11th class to postgraduation class), and 149 were well educated (postgraduation and above). Socioeconomic status was high for 126 participants, intermediate for 216, and low for 158. Income was divided into three categories: below INR10,000 ($N = 118$), INR11,000 to INR25,000 ($N = 242$), and INR26,000 or more ($N = 140$). In all, 356 participants were married and 144 were unmarried. A total of 355 participants lived with their nuclear family, whereas 145 persons lived in a joint family. In all, 175 participants were living in rural areas, 240 in semiurban areas, and 85 in urban areas.

Measurement Instrument

For this study, a *Déjà Rêvé* (Already Dreamed) Experience Questionnaire was adapted for the Kerala population (see the Appendix). The questionnaire consists of five questions. The questions were asked in an unstructured interview carried out by Boban Eranimos. The frequency of déjà vu experiences was elicited with a 3-point item (“How often have you had déjà vu experiences?”: 1 = *rarely*, 2 = *some-what often*, and 3 = *very often*). The following definition was provided: “A déjà vu experience is one in which you have a sudden feeling of familiarity and recognition of an event or a place while, at the same time, knowing this is impossible. This is often startling and even baffling.” The second question (“How often have you had the feeling that you experienced something in reality that had occurred in a dream and you became aware that this is impossible. This is often startling and even baffling?”) elicited the frequency of precognitive dreams: 1 = *never*, 2 = *sometimes*, 3 = *often*, and 4 = *frequently*. The next question addressed the question of whether déjà vu experiences had arisen from dreams (“When you have déjà vu experiences, do you have the impression that they have arisen from dreams?”) 1 = *never*, 2 = *sometimes*, 3 = *often*, and 4 = *always*. The attitude toward *déjà rêvé* experiences was measured

in a binary way: 1 = *positive attitude (pleasant)* and -1 = *negative attitude (unpleasant)*. Finally, subjective theories of *déjà vu* experiences were elicited (“What source did the subject favor for explaining *déjà vu* experiences?”). The participants were instructed to choose one of five alternatives: reincarnation, transmigration of soul, out-of-body experience, paranormal abilities, and natural but unknown phenomena.

Procedure

The authors developed a *déjà rêvé* survey questionnaire based on Kerala culture. An English translation of the questionnaire was sent to Art Funkhouser for an expert opinion. He evaluated and corrected the questions. After this process, Boban Eranimos translated the questionnaire into Malayalam (the local language of Kerala). In the next step, the investigator conducted a pilot study with 25 participants to test whether participants can understand the meaning of the questions. Based on those results, the investigator adapted the final version of the questionnaire.

The principal investigator selected four field workers who have master’s degrees in psychology. The investigator ensured that the field workers were well acquainted with the local language (Malayalam) to freely interact with the participants. In addition, the investigator conducted a half-day training for all the research assistants on the topic of *déjà rêvé* experiences and familiarized them with the survey questionnaire. During the training, their questions were addressed and clarified. The research assistants then went to various colleges, government and nongovernment organizations and associations, shops, and social, political, and religious groups in their assigned districts. They contacted each person individually for collecting the data. Initially, they established a good rapport with the participants. All the participants received an introduction; that is, *déjà rêvé* phenomena were explained, and possible questions were clarified before the survey was presented. The field workers obtained a verbal consent from each participant.

The data were collected from students, professionals, skilled laborers, and working and nonworking women. Participants with psychiatric illness, major neurological or physical illness, and substance dependence except nicotine and caffeine were excluded from the present study.

SPSS software 16.0 and SAS software 9.4 were used to carry out the data analysis. The ordinal and logistic regressions were computed in SAS with the “LOGISTIC” procedure, which uses a cumulative Logit model. All variables (gender, age group, education, and religion with the two contrasts “Hindu vs. Christian” and “Hindu vs. Muslim”) were entered simultaneously in the regression model to study their associations with the *déjà vu* variables independently.

Results

Déjà vu Experiences

In Table 1, the frequencies of the *déjà vu* experiences are depicted. Most of the participants rarely have these experiences, but a substantial percentage reported that they had had *déjà vu* experiences very often. In the present study, 46.0% of the participants have rarely experienced *déjà vu*, 37.6% have experienced it sometimes, and

Table 1
Frequency of Déjà Vu Experiences (N = 500)

Category	Frequency	Percent
Very often	82	16.4
Somewhat often	188	37.6
Rarely	230	46.0

16.4% of participants have experienced déjà vu phenomena very often. Forty-two surveys have been made throughout the years in the West to determine the incidence of déjà vu in a variety of populations, both in healthy participants and people afflicted with various pathological conditions. Depending on how the déjà vu question was phrased and which population was queried (i.e., which age, which culture, which health condition, etc.), the incidence of déjà vu in the general adult population ranges from 10% to almost 100%, with a mean incidence of 67% (Funkhouser, 2009).

Precognitive Dreaming

Table 2 shows the frequency of precognitive dreams, wherein almost 50% stated that they always or often have had precognitive dreams. Fewer, namely 39.0%, have sometimes experienced precognitive dreams, and 12.2% of the participants said that they had never experienced precognitive dreams in their lifetimes. Precognition is most commonly reported as having arisen from dreams (Ross & Joshi, 1992). Precognitive dreams are dreams that in some way (in detail or symbolically) foretell what is going to happen in the future. These are remembered (and possibly even written down) before the predreamt events occur. The study found that the frequency of precognitive dreams among the easterners is like what is found in the west (Haraldsson, 1985; Schredl, 2009; Van de Castle, 1977).

The frequencies of déjà vu experiences were not related to age, gender, education, or religion (Table 3). Only the gender difference was marginally significant, with men reporting déjà vu experiences slightly more often than women. Similarly, the incidences of precognitive dreams were not related to the sociodemographic variables.

Déjà Rêvé Experiences

In Table 4, the frequencies of the *déjà rêvé* experiences are depicted. Most of the participants reported having had these experiences; a substantial percentage reported that *déjà rêvé* occurred often. In the present study, 22.6% participants have

Table 2
Frequencies of Precognitive Dreams (N = 500)

Category	Frequency	Percent
Always	84	16.8
Often	160	32.0
Sometimes	195	39.0
Never	61	12.2

Table 3
Ordinal Regressions for Déjà vu Frequency and Precognitive Dreams ($N = 500$)

Variable	Frequency of déjà vu			Frequency of precognitive dreams		
	<i>SE</i>	χ^2	<i>p</i>	<i>SE</i>	χ^2	<i>p</i>
Gender (1 = male, 2 = female)	-.0903	3.7	.0558	.0061	0.0	.8924
Age group	.0598	1.6	.2023	.0311	0.5	.4917
Education	-.0371	0.6	.4310	-.0262	0.3	.5650
Hindu vs. Christian	-.0534	1.1	.2917	.0275	0.3	.5871
Hindu vs. Muslim	.0076	0.0	.8846	.0322	0.4	.5266

never experienced, 42.8% have sometimes experienced, 21.0% have often experienced, and the remaining 13.6% have frequently experienced *déjà rêvé*.

Most of the participants reported a positive attitude toward *déjà rêvé* experiences ($N = 400$), whereas 100 participants expressed a negative attitude. Interestingly, *déjà rêvé* experiences were more often reported by older and more highly educated persons, whereas Christians reported *déjà rêvé* less often than Hindus (Table 5). Although age, education, and religion were not related to the attitude toward *déjà rêvé* experiences, women tended to rate *déjà rêvé* experiences as positive more often than men (90.5% vs. 70.9%).

Beliefs About Déjà vu Experiences

In Table 6, the distribution of beliefs regarding déjà vu experiences is depicted. The largest number of the participants thought that a déjà vu experience is a phenomenon that is yet unknown but might be explained by science. Eighty-eight participants attributed déjà vu to reincarnation and 120 to the transmigration of the soul. Out-of-body experiences as possible explanations for déjà vu were mentioned by 89 participants, and 57 thought of déjà vu as a paranormal ability (Table 7).

Participants with high education were more likely to believe déjà vu experiences to be a scientific but unknown phenomenon and less likely to associate déjà vu with reincarnation or transmigration of souls. Men expressed the idea of déjà vu experience being a scientific phenomenon more often than women. All other sociodemographic variables were not related to the beliefs about déjà vu experiences.

Discussion

Overall, the findings indicate that déjà vu is a common experience, as is true within eastern and western cultures (McClenon, 1988, 1990a, 1990b, 1994). There

Table 4
Frequency of Déjà Rêvé Experiences ($N = 500$)

Category	Frequency	Percent
Frequently	68	13.6
Often	105	21.0
Sometimes	214	42.8
Never	113	22.6

Table 5
Ordinal Regression for Déjà Rêvé Frequencies and a Logistic Regression for the Attitude Toward Déjà Rêvé Experiences (N = 500)

Variable	Frequency of <i>déjà rêvé</i>			Attitude toward <i>déjà rêvé</i>		
	SE	χ^2	p	SE	χ^2	p
Gender (1 = male, 2 = female)	.0104	0.1	.8192	.3721	26.3	<.0001
Age group	.0919	4.1	.0438	.0487	0.6	.4455
Education	.1091	5.6	.0175	-.0853	1.8	.1751
Hindu vs. Christian	-.1227	5.8	.0162	.0006	0.0	.9926
Hindu vs. Muslim	-.0541	1.1	.2897	.0175	0.1	.8071

have been numerous subjective evaluations of the déjà vu incidence (Brown, 2004). Most behavioral scientists who comment on the déjà vu experience describe it as both common and universal (Greeley, 1987). The best estimate of déjà vu incidence among adults amounts to 65%, and among students it is even higher, amounting to 79% (Brown, 2004; Funkhouser, 2009: survey results). Westerners have conducted many studies on the frequency of déjà vu experiences, but in eastern cultures, in-depth scientific investigations of the déjà vu experience have not yet been done, and no studies have been conducted in India on the frequency of déjà vu experience, especially among the general public. Indians have generally viewed such events as religious and spiritual or coming from a supernatural realm. The present study bears some resemblance to the studies conducted by western investigators. Interestingly, sociodemographic variables such as age and education were not associated with déjà vu frequency in the present sample. Similarly, déjà vu frequency did not differ between persons with different religious affiliations, indicating that it may well be a universal phenomenon. The marginally significant findings that men reported déjà vu experiences slightly more often warrant further study.

Dreams seem to play a particularly important role in precognitive experiences. Approximately one third of persons interviewed in the United Kingdom and the United States believe that they have experienced a precognitive dream (Haraldsson, 1985; Schredl, 2009; Van de Castle, 1977). Houran and Lange (1998) performed a study to explore the aspects of precognitive dreaming in American university-aged individuals. Their study found that participants who more frequently recalled dreams, believed in paranormality, and had a higher tolerance to ambiguity were significantly more likely to consider their dreams to be evidence of paranormally sourced precognition (Houran & Lange, 1998). There has never been a study in India that looked at the incidence of precognitive dreams in the general population,

Table 6
Beliefs Concerning the Causes of Déjà vu Experiences (N = 500)

Category	Frequency	Percent
Reincarnation	88	17.6
Transmigration of soul	120	24.0
Out-of-body experience	89	17.8
Paranormal abilities	57	11.4
Scientifically accepted but unknown phenomenon	146	29.2

Table 7
 Logistic Regression for a Scientific Belief Regarding Déjà vu Experiences and Reincarnation/Transmigration of the Soul ($N = 500$)

Variable	Scientific belief			Reincarnation/ Transmigration of soul		
	SE	χ^2	p	SE	χ^2	p
Gender (1 = male, 2 = female)	-.1247	4.4	.0367	.0643	1.5	.2281
Age group	.0215	0.1	.7133	-.0453	0.7	.3979
Education	.5323	62.5	<.0001	-.3671	43.0	<.0001
Hindu vs. Christian	-.0566	0.7	.3963	.0006	0.0	.9926
Hindu vs. Muslim	.0604	0.8	.3593	-.0059	0.0	.9213

as far as the authors are aware. The present study found that men reported precognitive dream experiences slightly more often than women.

Regarding *déjà rêvé* experiences, most of the participants reported having had these experiences; a substantial percentage reported that *déjà rêvé* occurred often. Funkhouser and Schredl's 2010 study of students in Germany found that only 4.8% said that they had never had a *déjà rêvé* experience. About 7% of the participants stated that they experience *déjà rêvé* once a week or more often. The great majority fell in between, with the highest percentage occurring for those who claim to have *déjà rêvé* experiences two to four times a year. Up till now, as far as the authors are aware, there has never been a survey that looked at the incidence of *déjà rêvé* in the general population in India. In the present study, most of the participants reported a positive attitude toward *déjà rêvé* experiences, but some expressed a negative attitude. Women tended to rate *déjà rêvé* experiences positive more often than men. *Déjà rêvé* experiences were more often reported by older and more highly educated persons.

One of the most pervasive findings in the *déjà vu* literature is that the incidence decreases with age (Adachi et al., 2001). There also appears to be a positive relationship between the *déjà vu* experience and years of education (Adachi et al., 2003). The present study supports these findings. Adachi et al. (2003) also found that years of education were significantly greater in those who had experienced *déjà vu* compared with those who had not.

The present study also reported that Christians reported *déjà rêvé* less often than Hindus. In Hinduism, the concept of reincarnation is almost as old as Hinduism itself (Bhaskarananda, 2010). Carmichael (1957) has suggested that "it may be that the idea of reincarnation so common in Eastern religions may be based in part on the *déjà vu* experience." Reincarnation is the belief that after the death of the physical body, a portion of our consciousness will continue to exist and be reborn into a new body here on earth. Also present in Hinduism is the concept of the transmigration of souls. Generally speaking, from incarnation to reincarnation, a human soul is said to evolve. It is therefore natural within this view for a human soul to be born again and again, possibly thereby retaining familiarity with some locations.

Many of those interviewed in this investigation believe in reincarnation, transmigration of souls, out-of-body experiences, or paranormal phenomena and linked these to *déjà vu*. Considerable western parapsychological thought has been stimulated by the odd and mysterious existence of the *déjà vu* experience. Parapsychological

interpretations presume that a prior existence or some sort of collective consciousness derives from the current impression of familiarity (Chari, 1964). To support his theory of the transmigration of souls, Ovid (43 BC–17/18 AD) referred to a reminiscence experience that resembles déjà vu (Funkhouser, 1983), Feuchtersleben (1845; translated by Funkhouser, 1983) remarked that the reincarnation explanation of déjà vu has problems: The shifts in fashion and customs strain credibility because it makes it incredibly unlikely to find oneself in the same circumstances and wearing the same apparel as one did in a past life (Holmes, 1891). Sobal and Emmons (1982) discovered that most correlations between belief in déjà vu and belief in “unexplained phenomena” were statistically significant: Extra-sensory perception (.41), precognition (.47), clairvoyance (.37), Loch Ness monster (.29), Sasquatch (.30), ghosts (.31), witches (.24), and astrology (.17).

In India, superstitions abound: People tend to explain unknown phenomena based on spiritual and religious views. Superstitions are usually attributed to a lack of education (Jayapalan, 2005). Ter Keurst (1939) found superstitious belief to be stronger in geographical regions of low socioeconomic status. In India, however, educated people have also been observed following beliefs that may be considered superstitious (The Telegraph India, 2012). Although in terms of education, Indian society is rapidly progressing, there are still many people who are superstitious and have a strong faith in local beliefs, most of which have originated from Indian religious texts and scriptures (e.g., the *Dharmasindhu*, a Sanskrit scripture).

Kerala, however, is India’s most literate state, with a literacy rate of 96.2%, and people’s scientific temper there has improved, with people enquiring scientifically about unexplained phenomena, whereas less educated and elderly people tend to hold traditional beliefs due to ignorance and fear of the unknown. Those who are well educated, and members of the younger generation, know the term *déjà vu*, but most are not well informed about the various scientific explanations for this phenomenon. This study may also be helpful for members of Indian society to get to know more about the déjà vu experiences and thereby encourage further scientific inquiries.

Overall, the present study indicates that déjà vu and *déjà rêvé* experiences are common in India, but the frequency differs from that found in other surveys. The interesting finding is that most of the participants thought that a déjà vu experience is a phenomenon with a cause that is unknown as of now but might be explained by science, and they are less likely to associate déjà vu with paranormal beliefs. In future research, other regions of India should be included; these could then be studied in a similar way and the results compared.

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Appendix

The Questionnaire

Déjà Rêvé (Already Dreamed) Experience Questionnaire Adapted for the Kerala Population (DREQ-KP)

Name

Age

Region:- North, South

Gender: male, female

Religion: Hindu, Christian, Muslim

Education: 10th and below, 11 to post graduation, post graduation and above

Type of family:- nuclear, joint

Marital status: single, married

Family income (Monthly): Below 1,000; 11,000–25000, 26,000 above

Place of residence: rural, semi-urban, urban

Socioeconomic status of the family: low, middle, high

1. How often have you had déjà vu experiences?*

Rarely

Somewhat often

Very often

*A déjà vu experience is one in which you have a sudden feeling of familiarity and recognition of an event or a place while, at the same time, knowing this is impossible. This is often startling and even baffling.

2. How often have you had the feeling that you experienced something in reality that had occurred in your dreams and you became aware that this is impossible (this is often startling and even baffling)?

Never

Sometimes

Often

Frequently

3. When you have déjà vu experiences, do you have the impression that they have arisen from dreams?

Never

Sometimes

Often

Always

4. What is your attitude toward *déjà rêvé* (already dreamt) experiences?

Positive (Pleasant)

Negative (Unpleasant)

5. What source did the subject favor for explaining déjà vu experiences?

Reincarnation

Transmigration of soul

Out-of-body experience

Paranormal abilities

Natural but unknown phenomena