

# Creative individuals experience more nightmares and lucid dreams: A cognitive inquiry

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**Summary.** Lucid Dream is simply dreaming while knowing that one is dreaming (APA) and nightmare is a frightening or otherwise disturbing dream in which fear, sadness, despair, disgust, or some combination thereof forms the emotional content (APA). The ability to lucid dream and experiencing nightmares may be intertwined with an individual's creativity level. The present research paper seeks to understand and evaluate the effect and interactions lucid dreams and nightmares have on an individual's creativity level. Seventy-six participants belonging to the age group of 19 years to 30 years were included in the study. The participants were divided into two groups based on their frequency of recalling dreams. A quantitative research approach was employed and the data was collected with the help of questionnaires and psychological tests. Creativity was found to have an influence on various aspects and types of dreams experienced by an individual. Future studies in this area may help in uncovering unexplored territory of dreams.

**Keywords:** Cognition, creativity, creative potential, lucid dreams, nightmares

## 1. Introduction

Dreams are an important part of our life. They are known to play crucial roles across various cultures (Schredl, 2018). Many of the tools that early humans used, may have been influenced by their dreams (Coolidge, 2022). The emergence of writing in Mesopotamia on clay tablets around 3200 BC has been credited to the Sumerians (The Archaeologist, 2025), and the Upper Paleolithic cave art (e.g., Chauvet Cave ~ 30,000 BC) (Petrognani, 2015) are examples of early symbolic activity. The dream researcher Robert L. Van De Castle (1994), thus, stated, "The cultural paths of these ancient civilizations were lit, not by electricity, but by the internal illumination provided by dreams."

Girindrasekhar Bose described dreams as peculiar thought processes during the sleeping state (Bose, 1930), and the American Psychological Association (APA) defined them as "a physiologically and psychologically conscious state that occurs during sleep and is often characterized by a rich array of endogenous sensory, motor, emotional, and other experiences." The Vedas view dreams as the reflection of the individual—the dream world is distinct yet connected intricately with the waking life. The Mandukya Upanishad (700 BC) provides two theories on dreams: the first one states that they are a means of wish fulfillment, while the other one suggests the soul's journey theory, where the soul of the dreamer leaves the body and gathers experiences right up to the point they are awakened, which is similar to a Chinese belief.

There have been differences in the eastern and western perspectives of dreams. According to Indian tradition

(Swapna Adhyaya—a chapter in Virat Samhita & Swapna Shastra written approximately around the 6th century CE by Varāhamihira), it is believed that if one dreams of a snake, then a son will be born to the family; however, in Freudian psychoanalysis, snakes represent the male reproductive organ and are thus connected with the dreamer's sexual power (Bose, 1930). Nonetheless, both made considerable effort in interpreting and understanding the significance of dreams according to their culture. In his book, *The Interpretation of Dreams*, Sigmund Freud (1899) suggested that dreams provide a doorway to the individual's psyche and an outlet for their desires. This notion is especially relevant for sexual dreams, as they often go against the existing social norms and therefore are often presented in the form of various symbols. It is intriguing to note that contrary to Freud's beliefs, Schredl et al. (2019) reported that erotic dreams are experienced predominantly by individuals who indulge excessively in sexual thoughts and fantasies.

In *Madness and Civilization* (Foucault, 1961/2006), he explored how dreams occupy fundamental space in the formation of imagination and subjectivity. According to Renaissance philosopher Marsilio Ficino, the soul is free from the physical being to achieve a greater, spiritual state (Kiosoglou, 2025). Many artists have reported having drawn inspiration from their dreams. The famous surrealist Salvador Dali described his paintings as "hand-painted dream photographs" (Dali, 2013). Dreams are also known to frequently contribute to literature; two of the main scenes of Frankenstein were dreamed by Mary Shelley (Glance, 1996), and R. L. Stevenson got some ideas for Dr. Jekyll and Mr. Hyde from his dreams (Singh & Chakrabarti, 2008). Rabindranath Tagore reportedly crafted some of his creations influenced by his dreams (Nag, 2024). Numerous filmmakers have scenes or even entire films inspired by their dreams (Pagel, Kwiatkowski, & Broyles, 1999). Various professional musicians have reported using their dreams in the making of at least one of their compositions (Orjuela et al., 2024). The self-taught mathematical genius Srinivasa Ramanujan credited Goddess Mahalakshmi with having unfolded scrolls in his dreams that helped him acquire solutions to many complex numerical problems (Merrotsky, 2020).

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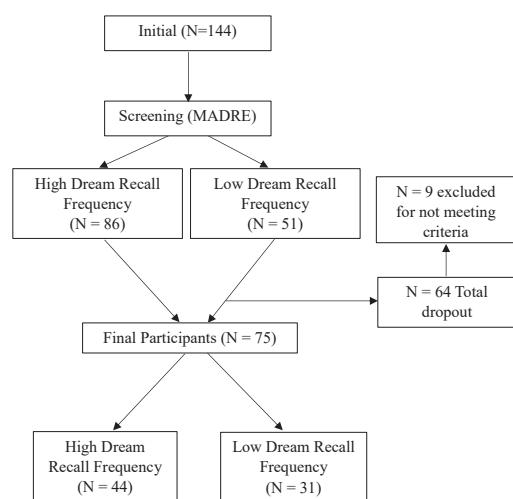
When posed with problems that have a personal significance, heightened dream creativity may induce out-of-the-box thinking (Barrett, 2017). This effect may be driven by both bottom-up processes that facilitate dream recall through awakening and increased top-down processes, which support increased awareness and short-term memory stability of dream content (Ruby et al. 2022). Similarly, Vallat et al. (2022) found that higher levels of creativity are associated with higher levels of dream recall. Study by Austin (1971, as cited in Schredl & Montasser, 1996) using a REM awakening design, reported that divergent style creative thinkers are better dream recallers than those with the convergent style. Dream recall frequency, or the ability of individuals to remember their dreams upon awakening, is found to be affected by several psychological factors, such as creativity, openness to experience (Schredl, 2004), attention (Blain et al., 2022), and stress (Cartwright, 1979), among others.

According to Hartmann (1996), the dominant emotion as experienced by an individual is contextualized in dreams. As a result, someone who experienced a traumatic event is more likely to have nightmares. There is evidence that dream recall increases in the presence of naturally occurring stress, lending support to the general dream theories—that increased dreaming helps individuals adapt to emotional difficulties during periods of heightened stress (Duke & Davidson, 2002). For instance, during the COVID-19 pandemic, when stress levels of many individuals were very high, dream recall rates were found to have increased across continents compared to the pre-pandemic era (Frankl et al., 2021; Solomonova et al., 2021). However, there are a few studies that are suggestive of stress decreasing dream recall (Kaminer & Lavie, 1991; Kennedy et al., 2022).

Neuroscientific investigations using EEG and the Competitive Attention Task have examined the role of the attention mechanism in dream recall. Vallat et al. (2017) reported that high dream recallers exhibit increased bottom-up processing, which may foster attention during wakefulness—while heightened top-down processing may foster dream recall by increasing awareness and short-term memory consolidation of dream content.

The present study seeks to evaluate the relationship of various aspects of dreams, including nightmares, lucid dreaming, and dream recall frequency, with creativity, cognitive functions, perceived stress, and sexual desire.

Sample Design



## 2. Methodology

### 2.1. Objectives

The primary aim of this research is to evaluate the relationship between creativity and dream recall frequency. The detailed summary of the methodology used to conduct the research will be explained in this chapter.

This study seeks to –

- (i) To understand the interactions of dream recall frequency, different kinds of dreams, such as, nightmares, lucid dreams and cognitive emotional factors like perceived stress, sexual desire, problem solving, spatial memory and mental rotation
- (ii) To study how these factors may differ between the groups of creative people.

### 2.2. Participants

Seventy-five participants belonging to the age group of 19-30 years (mean age = 21.91, S.D. = 4.718), of which, 31 were low dream recallers (frequency of recalling dreams being less than once a year) and 44 were high dream recallers (frequency of recalling dreams being several times a month) were selected through purposive sampling. Initially, 144 participants belonging to the age group of 18-30 years (mean age = 24 years) were selected and among them, 92 were female and 52 were male, of which 55 participants dropped out due to timing conflicts and 9 participants were excluded as they were unable to recall their dreams (frequency of recalling dreams being 'never'). Thus, the final sample included 75 participants out of which 49 participants were single and 26 participants were in a relationship. The socio-demographic variables of the participants – age, educational qualification, domicile, along with their addiction history were collected, which showed no significant difference between the two groups.

### 2.3. Procedure

The participants were screened by assessing them on the Mannheim Dream Questionnaire (MADRE) based on their dream recall frequency (DRF) and inclusion criteria. Informed consents were obtained and data collection only began after ensuring that participants understood the purpose of the study, confidentiality measures and the data obtained will solely be used for research purpose. Quantitative research methodology was employed in the research process. Data was collected through questionnaires provided either by Google forms or, printed copies, depending on the preference of the participants. The participants were seated in an isolated room or at a safe distance from others while performing the tasks, to minimize distractions. Prior to the administration of the tasks, clear instructions and demonstrations were provided to them, where necessary, so they do not face any challenges.

### 2.4. Materials

The participants were assessed using Google forms and printouts of questionnaires were also provided, when required. The MADRE ( $r = .85$ ) questionnaire was developed to assess the different aspects of dreams (Schredl et al., 2014). The questionnaire consists a total of 21 items including dream recall frequency, emotional tone and intensity of

**Table 1.** Internal Consistency Reliability as measured by Cronbach's alpha coefficient of the subscales of The Perceived Stress Scale.

Domain	Internal Consistency Reliability
Total PSS-10	.79
Perceived helplessness subscale	.88
Perceived efficacy subscale	.79

dreams, information about nightmares, lucid dreams, attitude towards dreams and influence of dreams in the daily lives of an individual.

After screening the following scales were provided to the individuals:

- (a) The Perceived Stress Scale (Cohen et. al., 1988) or PSS-10 is a self-administered questionnaire which was developed to assess an individual's perception of stress in their life. Table 1 demonstrates an internal consistency reliability of the total PSS-10 along with its subscales as obtained in a study on the family caregiver population of people with schizophrenia in China (Xiao et. al., 2023). The concurrent validity of the scale has collectively indicated a moderate to strong correlation (Lee, 2012).
- (b) Sexual Desire Inventory-2 (Spector et. al., 1996) or SDI-2 was developed to assess the sexual desire of individuals. The internal consistency, as measured by Cronbach alpha coefficients is given in table 2.
- (c) Biographical Inventory of Creative Behaviors (Batey, 2007) or BICB scale was developed to assess everyday creativity on a broad range of domains. Various researches have shown the scale to have a good concurrent validity. Individuals who scored higher in BICB also score higher in different questionnaires such as, Creative Achievement Questionnaire ( $r = .37$ ; Silvia et. al., 2012) and divergent thinking fluency ( $r = .21$ , Batey et. al., 2010). The internal consistency of the scale, us-

**Table 2.** Internal Consistency Reliability as measured by Cronbach's alpha coefficient of the Sexual Desire Inventory-2 (Spector et. al., 1996).

Domain	Internal Consistency Reliability
Dyadic scale	.86
Solitary scale	.96

ing Cronbach's alpha coefficient was found to be high ( $\alpha = .86$ ) (Silvia et. al., 2021).

Apart from the questionnaires, the participants were asked to perform the following tasks:

- (a) Divergent Creativity Task (Olson et. al., 2021) is a brief and easy to understand task to assess an individual's verbal creativity. The test-retest reliability was found to be high for the test ( $r = .73$ ,  $p < .001$ ) and another study yielded in positive correlation across the measures of divergent creativity (flexibility:  $r = .34$ ; originality:  $r = .32$ ; fluency:  $r = .22$ ) (Olson et. al., 2021).
- (b) The Psychology Experiment Building Language or PEBL (Mueller & Piper, 2014) is an open-source software program that is used by researchers to design and run various psychological experiments. PEBL was employed to administer the following tasks:
  - Corsi Block Test (Corsi, 1972): It is a psychological test that is used to assess the visuo-spatial short-term working memory of an individual. The reliability of the test falls between  $r = .81$  and  $r = .89$ , depending on which form of the test is used.
  - Tower of Hanoi (Lucas, 1883): This task is used to assess an individual's problem-solving skills. The internal consistency as measured by Cronbach alpha is found to be high ( $\alpha = .90$ ) (Humes et. al., 1997).
  - Mental Rotation task (Shepard & Metzler, 1971): This is a task that assesses an individual's reaction time and accuracy.

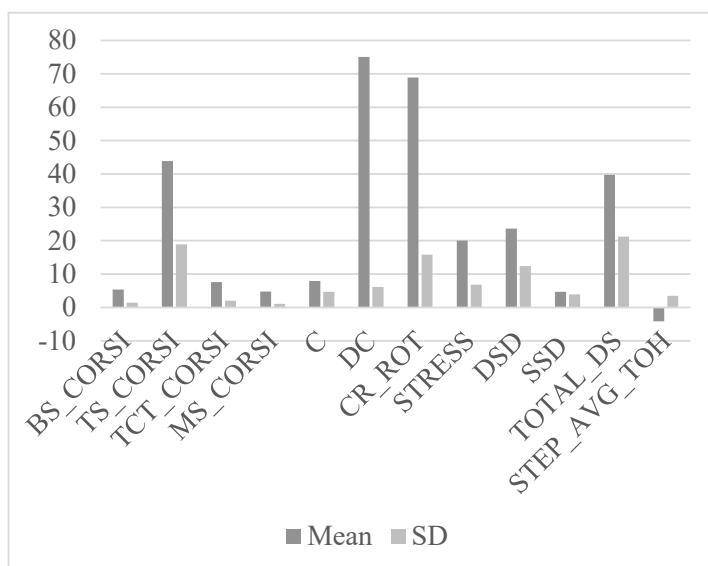
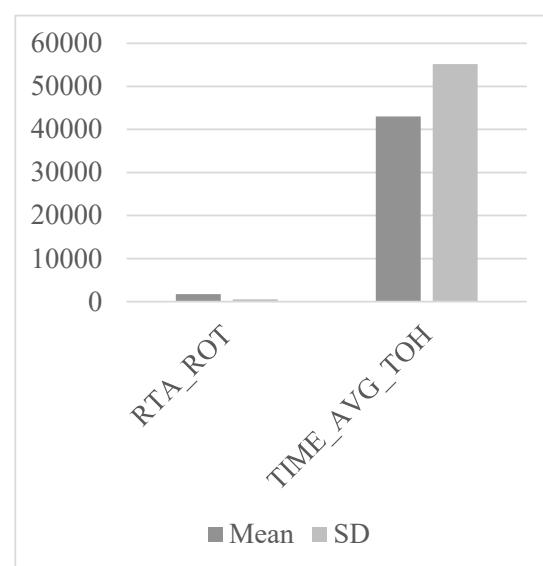


Figure 1: Descriptive Statistics.



Finally, after the data collection process, statistical analysis was done by using the IBM SPSS Statistics software, version 20.

## 2.5. Statistical Analysis

As almost all the variables did not follow normality, thus Independent-Samples Kruskal-Wallis and Mann Whitney U-Test were conducted. As there are considerable number of variables, FDR correction was done for each IV separately, using the Benjamini-Hochberg method to control for Type-I error. Spearman correlation analysis was done to understand the relationship between the variables.

## 3. Results

The relationship between dreams and creativity was evaluated. The descriptive statistics are representing the mean and SD of each of the variables is provided on Figure 1.

The tests of normality conducted on the dependent variables (Table 3) revealed that only the reaction time average of the mental rotation task, perceived stress, dyadic sexual desire and the total sexual desire was found to be normal.

The significant differences between the groups, conducted by the Kruskal-Wallis and Mann Whitney U-Test is shown in Table 4. There is a significant difference in divergent creativity across the groups of 'overall emotional tone of dreams' ( $F[2, 75] = 14.961, p = .001$ ). The mean rank of divergent creativity was 42.46 for negative emotional tone, 42.43 for neutral emotional tone and 16.81 for positive emotional tone. Pairwise comparisons indicated that the mean rank for divergent creativity of positive emotional tone was significantly lower than that of negative and neutral emotional tone ( $p = .01$ ) (Figure 2).

Significant difference was found in divergent creativity across the groups of 'frequency of nightmares experienced during childhood' ( $F[2, 75] = 6.039, p = .049$ ). The mean rank of divergent creativity was 42.18 for low frequency of nightmares during childhood, 36.00 for high frequency of nightmares and 25.65 for those who never experienced nightmares during childhood. Pairwise comparisons indicated that the mean rank for divergent creativity of those who experienced low frequency of nightmares during their childhood was significantly higher than those who never experienced them ( $p = .046$ ) (Figure 3).

There was a significant difference in overall creative behaviour of individuals across the groups of 'frequency of lucid dreams experience' ( $F[2, 75] = 9.102, p = .011$ ). The

Table 3. Tests of Normality.

Kalmogorov-Smirnov			
	Statistic	df	Sig.
Corsi (Block Span)	.281	75	.000
Corsi (Test Score)	.221	75	.000
Corsi (Total Correct Trial)	.206	75	.000
Corsi (Memory Span)	.205	75	.000
Overall Creative Behaviour	.131	75	.003
Divergent Creativity	.171	75	.000
Rotation (Correct Responses)	.114	75	.016
Rotation (Reaction Time Average)	.091	75	.196*
Perceived Stress	.052	75	.200*
Dyadic Sexual Desire	.091	75	.200*
Solitary Sexual Desire	.185	75	.000
Total Sexual Desire	.080	75	.200*
Tower of Hanoi (Total Step Average)	.214	75	.000
Tower of Hanoi (Total Time Average)	.313	75	.000

mean rank of overall creative behaviour was 31.44 for low frequency of lucid dreams, 49.92 for high frequency of lucid dreaming and 37.00 for those who never experienced lucid dreams. Pairwise comparisons indicated that the mean rank for overall creative behaviours of those who had a high frequency of lucid dreams was significantly higher than those who had a lower frequency ( $p = .008$ ) (Figure 4).

A significant difference was found in the average of total time taken to complete Tower of Hanoi across the groups of 'frequency of lucid dreams experienced' ( $F[2, 75] = 7.949, p = .019$ ). The mean rank of total time average to complete the tower of Hanoi task was 30.00 for low frequency of lucid dreams, 43.95 for high frequency of lucid dreams and 44.59 for those who never experienced lucid dreams. Pairwise comparisons indicated that the mean rank for total time average to complete the tower of Hanoi task of those who had a low frequency of lucid dreams was significantly lower than those who had never experienced them ( $p = .045$ ) (Figure 5).

Table 4. Group Difference.

Groups	U	Adjusted p-value (FDR corrected)	Effect Size
Neutral emotional tone of dreams & Positive emotional tone of dreams	3.631	<.001	.4 (medium effect)
Positive emotional tone of dreams & Negative emotional tone of dreams	3.498	<.001	.4 (medium effect)
Never experiencing nightmares during childhood & Low frequency of nightmares during childhood	-2.422	.046	.3 (medium effect)
Low frequency of lucid dreams & High frequency of lucid dreams	-3.006	.003	.3 (medium effect)
Low frequency of lucid dreams & Never experiencing any lucid dreams	2.432	.045	.3 (medium effect)
Low frequency of current nightmares & Never experiencing nightmares	-2.422	.046	.3 (medium effect)
Positive emotional tone of dreams & Negative emotional tone of dreams	2.563	.010	.3 (medium effect)
Overall creative behaviour & Dream recall frequency	.891	.373	.1 (small effect)
Divergent creativity & Dream recall frequency	-.432	.666	.04 (small effect)

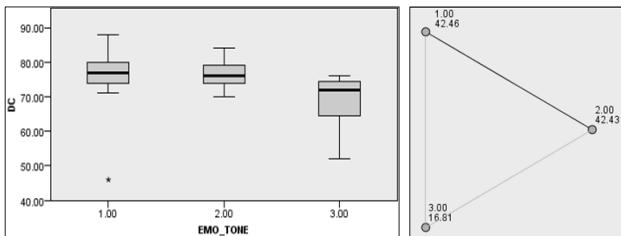


Figure 2: Independent-Samples Kruskal-Wallis Test in Divergent Creativity across the Overall Emotional Tone.

Significant difference was found in perceived stress across the groups of 'frequency of nightmares experienced recently' ( $F[2, 75] = 5.994, p = .050$ ). The mean rank of perceived stress was 33.62 for low frequency of nightmares, 47.52 for high frequency of nightmares and 39.67 for those who did not experience nightmares recently. Pairwise comparisons indicated that the mean rank for perceived stress of those who experienced low frequency of nightmares was significantly lower than those who experienced high frequency of nightmares in recent times ( $p = .044$ ) (Figure 6).

A significant difference was observed in perceived stress across the groups of 'overall emotional tone of dreams' ( $F[2, 75] = 6.670, p = .036$ ). The mean rank of perceived stress was 43.37 for negative emotional tone, 38.86 for neutral emotional tone and 24.54 for positive emotional tone. Pairwise comparisons indicated that the mean rank for perceived stress of negative emotional tone was significantly higher than that of positive emotional tone ( $p = .31$ ) (Figure 7). But no significant difference was observed in either divergent creativity or overall creative behaviour across the groups of dream recall frequency.

A Spearman correlation coefficient was computed to assess the linear relationship between the variables and it is presented in table 5. As already evident from Mann Whitney U test, here also a negative correlation between divergent creativity and the overall emotional tone of dreams was found, as experienced by individuals, ( $r = -.296, r^2 = .09, p = .010$ ). This suggests that when an individual has a higher level of divergent creativity, they tend to experience a negative emotional tone of dreams. Similarly, overall emotional tone was significantly correlated with perceived stress ( $r = -.280, r^2 = .08, p = .015$ ) This finding suggests that those who experience a negative emotional tone of dreams have a higher sense of perceived stress. Frequency of dreams helping individuals in identifying and solving one's problems is also positively correlated with their frequency of experiencing lucid dreams ( $r = .243, r^2 = .06, p = .036$ ) and

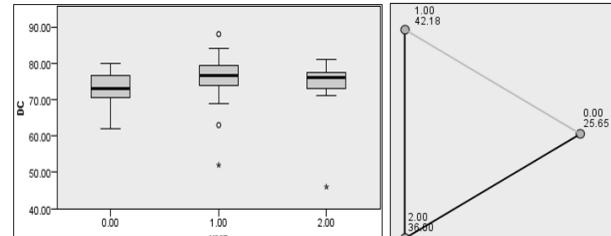


Figure 3: Independent-Samples Kruskal-Wallis Test in Divergent Creativity across the Frequency of Nightmares Experienced During Childhood.

the intensity of their current nightmares ( $r = .285, r^2 = .08, p = .013$ ). This finding suggests that the more an individual experiences lucid dreams and distressing nightmares (currently), the more they tend to identify and solve their problems and vice versa. The tendency of an individual to record their dreams was found to be positively correlated with dreams helping the individual in problems solving ( $r = .227, r^2 = .05, p = .050$ ) and dreams providing them with creative ideas ( $r = .283, r^2 = .08, p = .014$ ). This suggests that the more a person receives guidance in problem solving and creativity from dreams, the more is their tendency to record their dreams. The frequency of one experiencing nightmare is also found to be positively correlated with dreams facilitating problem solving ( $r = .425, r^2 = .18, p = .000$ ) and in providing creative ideas ( $r = .248, p = .032$ ). This suggests that the more a person is facilitated in problem solving and creativity through dreams the more they experience nightmares as well. Finally, the ability of literature to help an individual in interpreting dreams is also found to be significantly correlated with them finding creative ideas from dreams ( $r = .244, r^2 = .06, p = .035$ ). This suggests that the more one is facilitated in understanding dreams through dream interpretation, the more they were able to find creative ideas through them.

#### 4. Discussion

The present study investigated the relationship between the various aspects of dreaming, including dream recall frequency, with individuals' cognitive functions, stress levels, and sexual desire. Furthermore, we explored how these associations may vary among individuals having high creative potential. In line with the hypothesis, creativity correlated significantly with the overall emotional tone of dreams, the frequency of lucid dreaming, and childhood nightmares.

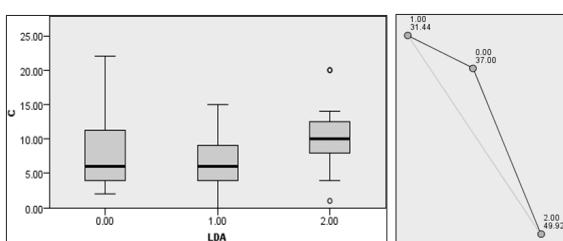


Figure 4: Independent-Samples Kruskal-Wallis Test in Overall Creative Behaviours across the Frequency of Lucid Dreaming.

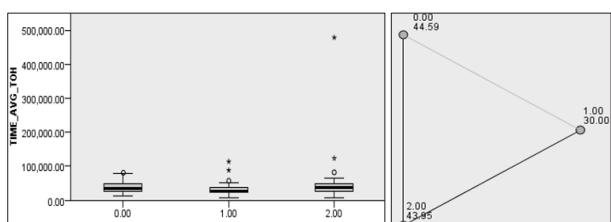


Figure 5: Independent-Samples Kruskal-Wallis Test in Total Time Average on Tower of Hanoi across the Frequency of Lucid Dreams.

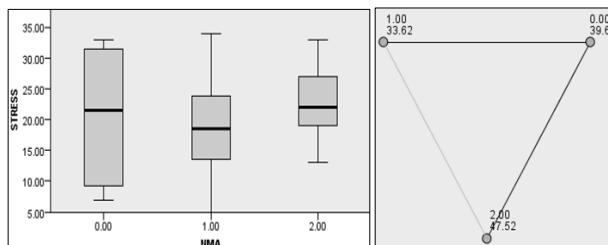


Figure 6: Independent-Samples Kruskal-Wallis Test in Perceived Stress across the Frequency of Nightmares Experienced Recently.

### Creativity and Dream Recall

Creative people tend to be more intrigued by extraordinary mental processes like dreams (Brand et al., 2011), and when facilitated by them, they record their dreams. Schredl et al. (2014) found a positive correlation between dream recall frequency and dream recording. Schredl & Goritz (2019) also observed a strong association between frequency of recording dreams and individuals' general attitude towards them—findings that align with the present study. The more someone tries to understand the processes of dreaming and dream interpretation with the help of literature, the more likely they are to recall them and use them in a creative way.

### Creativity and Lucid Dreams

Lucid dreaming is a unique state wherein individuals are consciously aware and actively engage with their dreams. This awareness is particularly favourable for creative individuals; it offers them the freedom to be the director of their dreams and facilitates the formation of connections beyond the constraints of logic. Consequently, frequent experiences of lucid dreams are associated with higher overall creative behaviour among participants. Previous studies also reported similar findings: the solutions to waking-life problems have often been presented in the dreams of lucid dreamers (Lacaux et al., 2019; Blagrove & Hartnell, 2000). Therefore, individuals unlock new insights into the problem space and enhance their cognitive flexibility while lucid dreaming.

Notably, never experiencing any lucid dreams is associated with a greater total time average in completing the Tower of Hanoi task. Therefore, non-lucid dreamers tend to have a lower efficiency in problem-solving tasks. This may suggest that having the ability to lucid dream—irrespective

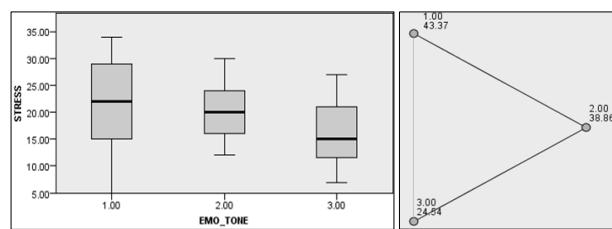


Figure 7: Independent-Samples Kruskal-Wallis Test in Perceived Stress across the emotional tone of dreams.

of the frequency of experiencing them—helps in improving one's problem-solving skills and creativity. This observation is also reported by Zink & Pietrowsky (2013), when they stated that even individuals who experience infrequent lucid dreams may have the ability to induce a richer dream structure, higher dream recall frequency, and greater creativity.

Dream intensity was found to be positively correlated with creativity. This finding is congruent with previous research—individuals who experience more vivid dreams and exert more control over them are prone to be more creative (Yu, 2020). Albert et al. (2014) concluded that not all creative people are likely to be lucid dreamers—but when an individual believes that they are creative, they are more susceptible to lucid dreaming. Another study suggested that the insight we employ to solve our problems in the dream state may mirror the cognitive processes needed in waking life—making lucid dreamers more adept at solving problems through insight than non-lucid dreamers (Bourke & Shaw, 2014). Therefore, lucid dreams serve as a form of simulation—offering us creative outlets for managing our waking life challenges.

### Creativity and Nightmares

According to our findings, experiencing emotionally negative dreams is associated with higher levels of divergent creativity. As we previously noted, the cognitive processes required in waking life are also active in dreams. Consequently, emotionally negative dreams—even nightmares—may produce a “eureka” moment, tapping into our creativity and aiding in problem-solving. In this context, Krippner & Combs (2002) applied the “butterfly effect”—the idea that minor alterations can trigger a cascade of reactions leading to a drastic change. This event can be revolutionary in the dream state, providing the individual with the opportunity

Table 5. Correlations.

Variables	r	p	r <sup>2</sup>
Divergent creativity AND overall emotional tone	-.296	.010	.09
Overall emotional tone AND perceived stress	-.280	.015	.08
Frequency of dreams helping in problem solving AND Lucid dreams frequency	.243	.036	.06
Frequency of dreams helping in problem solving AND Intensity of current nightmares	.285	.013	.08
Frequency of dreams helping in problem solving AND Frequency of recording dreams	.227	.050	.05
Frequency of recording dreams AND Frequency of dreams providing creative ideas	.283	.014	.08
Frequency of dreams helping in problem solving AND Nightmare frequency	.425	.000	.18
Frequency of dreams providing creative ideas AND Nightmare frequency	.248	.032	.06
Ability of literature in helping in dream interpretation AND Frequency of dreams providing creative ideas	.244	.035	.06

to discover a previously undetectable stimulus, such as a memory or emotion. Another concept is that of “stochastic resonance” - observed in biological nerve cells and in electronic systems, where the addition of a slight tremble or “noise” strengthens the detection of weak signals (Moss & Wiesenfeld, 1995, as cited in Krippner et al., 2014). However, such processing may often result in nightmares when affect regulation fails (Krippner et al., 2014). Therefore, in alignment with our findings, unpleasant dreams are effective in processing distressing stimuli, which helps in overcoming challenges in real-life situations. In another study, it was observed that those individuals who frequently have nightmares tend to be excessively sensitive, i.e., either perceptually (sensitive to bright lights or loud noises) or emotionally (empathetic) or both (Hartmann, 1991 as cited in Carr & Nielsen, 2017). And, it should be noted that Beck described highly sensitive individuals as “royal advisors” of society, such as therapists, artists, etc. (Hartmann, 1991, as cited in Carr & Nielsen, 2017). Hence, individuals who are highly sensitive tend to have enriched creative potential and problem-solving abilities, which may make them prone to experiencing frequent nightmares.

Our findings suggested that elevated perceived stress is associated with an increased frequency of nightmares and a generally negative emotional tone of dreams. Exposure to multiple stressors may heighten cognitive rumination, resulting in experiencing more nightmares. In alignment with our findings, Schredl et al. (2019) reported that numerous stressors in life may cause frequent nightmares. Therefore, stress is a key contributor to nightmare occurrences. In a study on nurses, Garcia et al. (2021) found that greater levels of stress resulted in high-intensity nightmares, and vice versa. This finding proposes that nightmares and stress occur in a bidirectional fashion. Nevertheless, having several nightmares is not equivalent to a higher dream recall frequency (Duval et al., 2013), indicating that nightmare prevalence and the ability to recall dreams may have distinct mechanisms.

Summarizing, the present findings reveal the complex interactions between dreams and domains such as creativity, stress, and cognitive processes. The association between divergent creativity and frequent childhood nightmares is one of the study's particularly fascinating findings—it calls for additional exploration into the developmental and psychological mechanisms that might underlie the relationship. A larger sample size and thematic analysis of dream content may prove advantageous for future studies—enhancing the data by uncovering refined dimensions of emotional processing and perhaps even finding expressions of latent sexual desire. Furthermore, documenting the sleep schedules and quality of sleep may offer comprehensive insights into how the sleep structure and circadian rhythms influence our dream world. Altogether, these findings contribute extensively to the advancement of our growing understanding of dream dynamics—discovering more about the hidden and unreachable realm—and how these processes may vary from individual to individual.

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