

RESEARCH ARTICLE



WILEY

Unveiling the subconscious: How sexual dreams reflect and intensify mental problems

Emmanuel Eroume A. Egom^{1,2} | Teko Blaise Mbah^{3,4} |
Suzanne Adolphine Soppi Ebango^{3,4} | Bernadette Sandrine Lema^{3,4}

¹Hartford HealthCare Heart and Vascular Institute, Southington, Connecticut, USA

²Institut du Savoir Montfort, Ottawa, Ontario, Canada

³Heaven Foundation/Fondation CIEL, Hartford, Connecticut, USA

⁴Harmony Health Physical and Spiritual Wellness Center (Harmony Care), Woodland Medical Centre, Hartford, Connecticut, USA

Correspondence

Emmanuel Eroume A. Egom, MGS
Southington Cardiology, Hartford HealthCare
Heart and Vascular Institute, 462 Queen
Street, Suite 302, Southington, CT 06489-
1801, USA.

Email: egomemmanuel@gmail.com;
connect@heavenfoundationciel.com;
connect@harmonycare.care

Funding information

Heaven Foundation/Fondation CIEL

Abstract

Background: Sexual dreams represent a largely underexplored domain of human experience, particularly concerning their prevalence, frequency, and potential relationship with mental health conditions. Understanding this interplay may provide insights into the psychological and physiological effects of dream content.

Aims: To investigate the prevalence, frequency, and impact of sexual dreams among individuals with and without mental health diagnoses and to evaluate the associations between sexual dream frequency, post-dream symptoms, and mental health status.

Materials & Methods: The SLEEP Study surveyed 301 female-identifying adults in the United States using an online questionnaire. The questionnaire assessed the frequency and content of sexual dreams, as well as post-dream symptoms such as anxiety, increased heart rate, and muscle tension. Logistic regression and Pearson correlation analyses were conducted to examine relationships between sexual dream frequency, mental health diagnoses, and post-dream symptoms.

Results: 99.67% of participants reported experiencing sexual dreams, with 45.2% identifying them as frequent. A significant association was observed between frequent sexual dreams and mental health diagnoses (OR = 1.83, $p = 0.018$). While post-dream symptoms such as anxiety and physical tension were common, their correlations with mental health treatment were weak and not statistically significant ($p = 0.061$).

Discussion: The findings suggest that frequent sexual dreams may serve as a psychological stress indicator, particularly in individuals with mental health conditions. However, the weak correlation between post-dream symptoms and mental health treatment highlights the need for further investigation into the mechanisms underlying these associations.

Conclusion: Frequent sexual dreams could provide valuable insights into psychological stress and mental health. Incorporating dream patterns into mental health assessments may enhance clinical understanding and interventions. Further research involving diverse populations and experimental methodologies is required to these relationships and their broader implications.

KEYWORDS

dream frequency, mental health, psychological stress, sexual dreams, sleep patterns

Emmanuel Eroume A. Egom and Bernadette Sandrine Lema are contributed equally.

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1 | INTRODUCTION

Dreams have long fascinated scholars, psychologists, and laypeople alike, often serving as a window into the subconscious mind.^{1–5} Among the most vivid and emotionally charged types of dreams are sexual dreams, which occur across cultures and demographics.^{1,6–10} While much attention has been devoted to understanding the nature and meaning of sexual dreams, less is known about how they intersect with mental problems.¹ In particular, sexual dreams may serve as a reflection or even an intensification of psychological stress, offering insights into how the mind processes emotions and trauma during sleep.¹

Research on the connections between dreams and mental health has traditionally focused on nightmares, anxiety dreams, and other negative dream states.^{11–14} These studies suggest that individuals with mental health conditions such as anxiety, depression, or post-traumatic stress disorder (PTSD) tend to experience more frequent and vivid dreams, possibly as a result of disrupted sleep cycles and heightened emotional arousal.^{1,11,13–17} However, the role of sexual dreams in mental health remains an underexplored area, despite their potential significance in understanding emotional well-being and distress.¹

Emerging evidence suggests that the frequency and content of sexual dreams may be linked to psychological factors, particularly in individuals who experience mental health conditions.¹ Sexual dreams, characterized by their emotional intensity, may mirror the psychological struggles individuals face during their waking lives.¹ For those with mental health issues, these dreams may not only reflect subconscious desires but also serve as markers of deeper emotional, spiritual, or psychological turmoil.¹ Furthermore, the physical and emotional symptoms experienced upon waking from such dreams—such as anxiety, increased heart rate, and muscle tension—could exacerbate mental problems, creating a feedback loop that reinforces psychological distress.^{1,12,18–20}

This study aims to explore the prevalence and frequency of sexual dreams, and how these experiences correlate with mental health diagnoses and treatments. By examining the relationship between sexual dream patterns and mental health, we seek to shed light on how these dreams might both reflect and intensify underlying psychological conditions. Specifically, we investigate whether individuals with mental health diagnoses are more likely to experience frequent sexual dreams and whether these dreams are associated with heightened physical and emotional symptoms.

Understanding the links between sexual dreams and mental health has important implications for clinical practice.¹ By recognizing these patterns, mental health professionals may gain new insights into their patients'

emotional struggles, potentially offering new avenues for therapeutic intervention. In this context, sexual dreams could serve as a valuable, albeit underrecognized, aspect of mental health assessment and care.

2 | METHODS

2.1 | Study design

The SLEEP study (Sexual Dreams Longitudinal Effects and Emotional and Physical Impact) was a cross-sectional survey-based investigation aimed at exploring the prevalence, frequency, and psychological and physical effects of sexual dreams on individuals' well-being. Conducted under the Heaven Foundation/Fondation CIEL, the study utilized an online questionnaire to collect quantitative and qualitative data on sexual dream experiences and their potential associations with mental health.

2.2 | Participants

The study recruited 301 participants from the USA, all of whom consented to participate. Participants were selected based on several inclusion criteria: they had to be adults, capable of providing informed consent, and willing to complete the comprehensive online survey. Data on age, gender, health status, and other demographic variables were collected to ensure a diverse sample and facilitate correlation analyses between sexual dreams and lifestyle or mental health factors.

2.3 | Mental health diagnoses

Mental health diagnoses were collected through self-reported data from participants. Participants were asked to indicate whether they had ever been diagnosed with a mental health disorder, and if so, to specify the type of disorder. The survey included a list of common mental health conditions, such as anxiety disorders, depression, PTSD, bipolar disorder, and other psychiatric conditions. Participants selected from this list or had the option to provide additional diagnoses that were not listed.

The collected data encompassed a broad spectrum of mental disorders, including but not limited to mood disorders, anxiety disorders, trauma-related disorders, and other psychiatric conditions. Diagnoses were based solely on self-reports, with no verification from case notes, electronic medical records, or healthcare providers. This reliance on self-reported information may introduce some limitations, such as potential inaccuracies in reporting or recall bias.

2.4 | Procedure

Participants were briefed on the study's objectives, procedures, and confidentiality measures before giving informed consent. Once enrolled, participants provided demographic information and proceeded to complete an online questionnaire that focused on:

- *Sexual dream experience*: Questions regarding the occurrence, frequency, and content (e.g., gender of individuals in the dreams).
- *Physical and emotional symptoms*: Items assessing post-dream symptoms, such as anxiety, increased heart rate, sweating, and muscle tension.
- *Daily life impact*: Queries on how sexual dreams affected mood, behavior, and relationships.
- *Health and lifestyle factors*: Data on long-term health conditions, mental health diagnoses, treatments, and various lifestyle factors such as smoking status and relationship history.

2.5 | Measures

Key variables included:

- *Sexual dream frequency*: Categorized into “Rarely (once a year or less),” “Frequently (a few times a month),” and “Very frequently (a few times a week).”
- *Mental health diagnoses*: Collected as binary data (1 = Yes, 0 = No) for various mental health conditions.
- *Physical and emotional symptoms*: Self-reported occurrences of anxiety, increased heart rate, muscle tension, and other symptoms post-dream.
- *Mental health treatment*: Reported treatment types (e.g., medication, therapy) were coded as binary variables (1 = Yes, 0 = No).

2.6 | Data privacy and ethics

All data were anonymized, stored securely on restricted-access servers, and handled according to data protection regulations. Participants could access, modify, or request deletion of their personal data at any time, with the right to withdraw from the study.

2.7 | Data analysis

Descriptive statistics were used to summarize participant demographics and dream characteristics. Pearson correlation coefficients and chi-square tests were employed to examine relationships between dream frequency, mental health conditions, and treatment variables. Logistic regression was utilized to model the

likelihood of frequent sexual dreams based on mental health diagnoses, with statistical significance set at $p < 0.05$.

3 | RESULTS

3.1 | Demographic overview

The sample included 301 participants with a mean age of 39.46 years (SD = 12.30), ranging from 19 to 104 years old, demonstrating significant diversity. The majority identified as “Woman (including Trans Female/Trans Woman)” (90%), whereas a smaller proportion identified as nonbinary. All participants were categorized as female in terms of gender identity.

3.2 | Prevalence of sexual dreams

An overwhelming 99.67% of respondents confirmed having experienced sexual dreams at some point in their lives, making such experiences nearly universal within the sample. A notable 136 participants (45.2%) reported frequent sexual dreams, defined as occurring a few times per month (Table 1).

3.3 | Correlation between anxiety and sexual dreams

Participants who did not report experiencing anxiety were significantly more likely to have infrequent sexual dreams, as evidenced by the positive correlation ($r = 0.176$, $p = 0.002$). This suggests that in the absence of anxiety, sexual dreams were less common, with these individuals typically reporting sexual dreams only on rare occasions, such as once a year or less. The statistical significance ($p = 0.002$) strengthens the reliability of this finding, indicating that the association is unlikely to be due to chance.

In contrast, participants who reported experiencing anxiety were more likely to have frequent or very frequent sexual dreams. Anxiety, a known contributor to disrupted sleep patterns and heightened emotional arousal, appears to increase the occurrence of vivid and emotionally intense dreams, including sexual ones.

3.4 | Mental health treatment and sexual dreams

A positive correlation was identified between receiving mental health treatment, including both medication and therapy, and the frequency of reported sexual dreams ($r = 0.149$, $p = 0.009$). This suggests that individuals

undergoing treatment for mental health conditions are more likely to experience frequent sexual dreams compared to those not receiving such treatments. The positive correlation, although modest, is statistically significant ($p = 0.009$), indicating that the relationship between mental health treatment and frequent sexual dreams is unlikely to be due to chance (Figure 1 and Table 1). This finding highlights the potential influence of therapeutic interventions, particularly medications that affect sleep and dream patterns and increase the frequency of emotionally vivid dreams, including sexual dreams.

Furthermore, the logistic regression analysis reinforced this relationship, showing that individuals with a diagnosed mental health condition are significantly more likely to experience frequent sexual dreams. Specifically, the odds of experiencing frequent sexual dreams (defined as occurring a few times a week) were 1.83 times higher for individuals with a mental health

diagnosis compared to those without. This odds ratio ($p = 0.018$) is statistically significant, underscoring the strong link between mental health conditions and dream frequency. The logistic regression model demonstrated good predictive power, with an accuracy of 75%, meaning that it correctly predicted the likelihood of experiencing frequent sexual dreams in 75% of cases. This suggests that mental health status is a key factor in determining the frequency of sexual dreams, and that individuals with mental health diagnoses, especially those undergoing treatment, are more prone to frequent, emotionally intense dream experiences.

3.5 | Symptoms following sexual dreams

The most commonly reported symptoms experienced by participants following sexual dreams were physical

TABLE 1 Summary of key findings from the SLEEP study on sexual dreams and mental health.

Result category	Finding	Statistical value
Prevalence of sexual dreams	99.67% of participants had experienced sexual dreams	N/A
Frequency of sexual dreams	45.2% reported frequent occurrences (a few times per month)	N/A
Association with mental health diagnoses	Participants with mental health conditions were more likely to experience frequent sexual dreams	OR = 1.83, $p = 0.018$
Post-dream physical symptoms	Increased heart rate reported by 57.38% of participants	N/A
Post-dream emotional symptoms	Anxiety reported by 33.88% of participants	N/A
Correlation between post-dream symptoms and mental health treatment	Weak positive correlation, not statistically significant	$p = 0.061$
Most common symptoms after dreams	Increased heart rate, anxiety, sweating, and muscle tension	N/A

Logistic Regression with Confidence Intervals: Mental Health Diagnosis vs Probability of Frequent Sexual Dreams

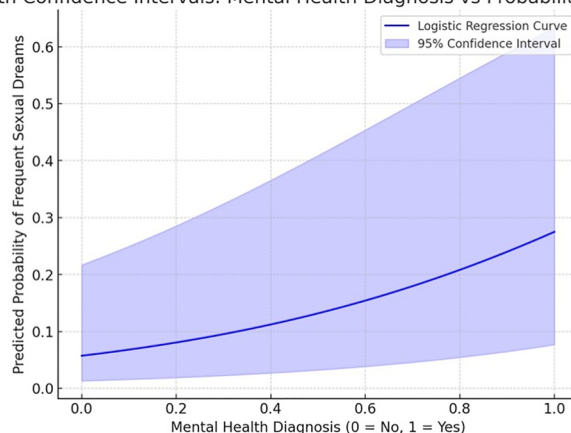


FIGURE 1 Presents the logistic regression curve alongside the 95% confidence intervals. The shaded area represents the range of values within which we are 95% confident the true probability lies, given the presence of a mental health diagnosis. This figure provides a visual representation of the variability and certainty in the model's predictions.

and emotional in nature, reflecting the intense emotional arousal often associated with such dreams. Increased heart rate was the most frequently reported symptom, affecting 57.38% of the respondents. This heightened physiological response is indicative of the body's reaction to the emotional or spiritual intensity or physical engagement during the dream state, where the autonomic nervous system may activate similarly to how it does in real-life emotionally charged situations. Sweating, reported by 34.97% of participants, further suggests that these dreams can elicit a physical stress response, aligning with the kind of heightened emotional and physiological arousal observed in stressful or vivid dream experiences.

Anxiety was also commonly reported, affecting 33.88% of participants post-dream. This finding highlights that sexual dreams, despite being inherently intimate or pleasurable in nature, can trigger emotional and spiritual distress or confusion, especially if the content of the dream conflicts with the individual's values, desires, or current emotional state. The emotional and spiritual intensity of such dreams might leave individuals feeling unsettled upon waking, contributing to feelings of anxiety that could persist throughout the day. Muscle tension, reported by 22.95% of respondents, adds to this picture of a physically intense experience, as it indicates that participants might be experiencing physical stress during sleep, possibly as a reaction to the emotional, spiritual, or physical engagement occurring within the dream.

Interestingly, despite the prevalence of these symptoms, a notable 20.77% of participants reported experiencing no physical or emotional symptoms after their sexual dreams. This suggests that for a substantial minority of individuals, sexual dreams may not elicit significant emotional or physiological responses, and may be processed in a more neutral or emotionally detached manner.

These findings indicate that while sexual dreams often lead to pronounced physical and emotional responses for many individuals, there is variability in how these dreams are processed and experienced.

3.6 | Weak correlations with mental health treatment

Although the data revealed weak positive correlations between experiencing physical or emotional symptoms following sexual dreams and receiving mental health treatment, none of these associations reached statistical significance. This indicates that while there is a slight tendency for individuals who experience post-dream symptoms to also be engaged in mental health treatment, the relationship is not strong enough to suggest a definitive or meaningful connection between the two.

The strongest correlation observed was between anxiety and mental health treatment ($r = 0.11$), indicating a weak positive relationship. This suggests that individuals who reported anxiety following sexual dreams may be marginally more likely to be receiving some form of mental health intervention, such as therapy or medication. However, with a correlation coefficient of only 0.11, this relationship is fairly weak, implying that anxiety post-dream is not a primary factor driving individuals to seek or receive mental health care. Additionally, the chi-square tests for independence did not reveal significant relationships between post-dream symptoms and mental health treatment ($p = 0.061$). This means that any observed differences in symptom occurrence between those receiving treatment and those not receiving treatment could be due to chance rather than a true association.

These findings suggest that, while post-dream symptoms such as anxiety, increased heart rate, sweating, and muscle tension are common among those experiencing frequent sexual dreams, they do not appear to be strong predictors of whether someone is currently undergoing mental health treatment.

4 | DISCUSSION

The findings of this study offer significant insights into the relationship between sexual dreams and mental health, highlighting the intricate connections between frequent sexual dreams and psychological conditions. The data show that individuals with mental health diagnoses are significantly more likely to experience frequent sexual dreams compared to those without such diagnoses, suggesting that sexual dreams may not simply reflect subconscious desires but may also signal heightened emotional or psychological stress.

4.1 | Mental health and dream frequency

Sexual dreams are emotionally charged experiences, and their frequent occurrence among individuals with mental health conditions may be a result of disrupted sleep patterns, increased emotional arousal, or intensified emotional processing during sleep.^{1,14,21–30} Previous research has demonstrated that individuals with mental health conditions such as anxiety, depression, and PTSD tend to experience more vivid or frequent dreams, potentially due to alterations in REM sleep, the stage of sleep most associated with vivid dreaming.^{14,21–30} The significant association found in this study between mental health diagnoses and frequent sexual dreams aligns with this understanding, suggesting that mental problems might amplify the frequency and intensity of such dreams.^{14,21–30}

The emotional impact of sexual dreams is further underscored by the reported physical and emotional symptoms following these experiences.^{31–35} Symptoms such as increased heart rate, anxiety, and muscle tension were commonly reported by participants who experienced frequent sexual dreams. These findings reinforce the notion that sexual dreams are not neutral or benign experiences for everyone but can be tied to emotional distress, particularly for individuals already grappling with mental health conditions.^{31–35}

While our findings suggest a clear association between mental health diagnoses and frequent sexual dreams, an alternative interpretation is that frequent sexual dreams themselves may predispose individuals to developing mental health conditions. It is possible that the emotional intensity and recurring nature of these dreams contribute to psychological strain, particularly if the content is distressing or incongruent with the individual's self-perception. Experiencing frequent sexual dreams may heighten emotional arousal during sleep, which can carry over into waking life, exacerbating stress, anxiety, or feelings of guilt and confusion.^{1,32,33,35} This heightened emotional response may disrupt the individual's emotional equilibrium, increasing their susceptibility to mental health disorders such as anxiety, depression, or even insomnia. Sleep disturbances, often linked to emotionally intense dreams, are a well-documented risk factor for various psychological conditions, further supporting the hypothesis that frequent sexual dreams could act as a precursor to mental problems.^{13–15,18,20,22,26,27,30,31,33,35} Moreover, these dreams could be indicative of unresolved emotional conflicts or subconscious distress that are yet to manifest in conscious thought.¹ The frequent occurrence of such dreams might be an early warning sign of emotional or spiritual dysregulation.¹ If left unaddressed, this emotional imbalance could evolve into more severe mental health conditions over time. This alternative perspective suggests that sexual dreams could not only reflect existing mental health issues but might also contribute to their onset, creating a feedback loop in which psychological distress and dream frequency mutually reinforce one another. Future research should explore this bidirectional relationship, investigating whether frequent sexual dreams could act as a contributing factor in the development of mental health disorders. Longitudinal studies would be particularly useful in determining whether individuals who experience frequent sexual dreams are at greater risk of developing mental health conditions over time.

4.2 | Implications for clinical practice

From a clinical perspective, recognizing the connection between sexual dreams and mental health provides an

additional avenue for exploring patients' emotional well-being. For some individuals, frequent sexual dreams may act as markers of psychological distress, offering mental health professionals a novel point of entry for discussions about underlying emotional conflicts or unresolved psychological issues. Integrating questions about dream frequency and content into mental health assessments could provide a more holistic understanding of a patient's psychological and spiritual landscape, especially for those who may be less forthcoming about their emotional struggles.

The possibility that frequent sexual dreams may predispose individuals to developing mental health conditions also carries significant implications for clinical practice. Clinicians should be attentive to the potential role of these dreams as early indicators of psychological strain, particularly when patients report that the dreams are emotionally intense, recurring, or incongruent with their self-perception. Recognizing that frequent sexual dreams may heighten emotional arousal, disrupt sleep, and exacerbate feelings of guilt, anxiety, or confusion, mental health professionals should incorporate questions about dream frequency and emotional impact into routine assessments.

Addressing these dream patterns therapeutically may also yield benefits. Given that frequent sexual dreams may reflect increased emotional processing or stress, clinicians might consider incorporating dream analysis into therapy sessions. Exploring the content and emotional significance of sexual dreams could reveal deeper psychological issues and offer an opportunity for emotional release or resolution. Furthermore, improving sleep quality and managing emotional regulation through therapeutic interventions may help reduce the frequency and intensity of sexual dreams, contributing to overall mental health improvement.

4.3 | Potential mechanisms

Several mechanisms may explain the relationship between frequent sexual dreams and mental health conditions.^{1,36–47} One potential explanation involves the disruption of REM sleep, which is often observed in individuals with mental health disorders such as anxiety and PTSD.^{1,36–47} REM sleep is crucial for emotional regulation and memory consolidation, and disruptions in this sleep stage could lead to more vivid or emotionally intense dreams, including those with sexual content.^{1,36–47} This is supported by findings that individuals with mental health diagnoses are more likely to experience frequent and vivid dreams.^{1,36–47}

Emotional dysregulation may also play a role. Dreams, particularly intense ones, are thought to be part of the brain's process for managing and processing

emotions.^{29,32,33,35,48} For individuals struggling with mental health conditions, emotional dysregulation during waking hours could carry over into sleep, leading to more frequent or vivid sexual dreams as the brain attempts to cope with unresolved emotional conflicts.^{29,32,33,35,48}

Medications used to treat mental health conditions may further contribute to this relationship.^{49–56} Certain psychotropic medications, such as antidepressants and antipsychotics, are known to alter sleep architecture, particularly REM sleep.^{49–56} These medications may increase the frequency of vivid dreams as a side effect, which could explain the increased occurrence of sexual dreams among individuals receiving both medication and psychological therapy.^{49–56} Additionally, another plausible explanation for the observed association between treatment and frequent sexual dreams is that individuals who have received treatment may represent more severe or complex cases of mental health disorders. These cases are likely to experience heightened emotional arousal and stress, potentially increasing the frequency of vivid and emotionally intense dreams, including sexual dreams. Therefore, the severity of mental health conditions should be considered as a potential contributing factor, further reinforcing the complexity of the relationship between treatment, dream patterns, and emotional well-being.

Additionally, heightened emotional arousal during waking life may contribute to the increased frequency of sexual dreams.^{57–60} The emotional intensity experienced by individuals with anxiety, depression, or PTSD could manifest in their dream content, with sexual dreams serving as a reflection of unresolved emotional needs or conflicts.^{57–60}

4.4 | Limitations and future directions

While this study provides valuable insights into the relationship between sexual dreams and mental health, several limitations should be acknowledged:

1. *Sample composition:* The sample consisted entirely of female-identifying individuals, which limits the generalizability of the findings to other gender identities. Male and nonbinary individuals may experience different patterns of sexual dreams and mental health interactions, and further research is needed to explore these differences.
2. *Cross-sectional design:* The cross-sectional nature of the study limits the ability to establish causal relationships between mental health conditions and sexual dream frequency. It is unclear whether mental health conditions lead to more frequent sexual dreams or if the experience of such dreams contributes to psychological distress.

3. *Self-reported data:* The study relied on self-reported data, which may be subject to recall bias or social desirability effects. Participants may not accurately remember the frequency of their dreams or may underreport certain details due to the sensitive nature of the content.
4. *Symptom assessment:* The grouping of all mental health diagnoses together may have overlooked nuances in how different conditions (e.g., PTSD vs. generalized anxiety disorder) affect dream frequency and content.

Future research directions could address these limitations by:

1. *Diverse samples:* Future studies should include a more diverse sample in terms of gender identity, cultural background, and age to better understand how sexual dreams manifest across different populations.
2. *Longitudinal studies:* Conducting longitudinal research could provide more clarity on the temporal relationship between mental health conditions and sexual dream patterns, helping to determine causality and whether these dreams are precursors or symptoms of psychological distress.
3. *Specific mental health conditions and medications:* Investigating the effects of specific mental health conditions, medications, and therapeutic interventions on dream patterns could offer a more detailed understanding of how these factors influence dream frequency and content.
4. *Therapeutic applications:* Exploring the potential therapeutic benefits of dream analysis in mental health treatment may provide clinicians with new tools for helping patients process emotional distress and resolve psychological conflicts.

5 | CONCLUSION

This study highlights a significant association between frequent sexual dreams and mental health diagnoses, suggesting that these dreams may serve as markers of heightened psychological stress. The findings underscore the potential value of considering dream patterns in mental health assessments, as sexual dreams can reflect and possibly exacerbate emotional distress. Despite the observed associations, the weak correlation between post-dream symptoms and mental health treatment suggests that other factors, such as the severity of mental conditions, may influence these experiences. Future research should further investigate these mechanisms and explore diverse populations to better understand the role of sexual dreams in emotional and psychological health.

AUTHOR CONTRIBUTIONS

Emmanuel Eroume A. Egom: Conceptualization; investigation; funding acquisition; writing—original draft; writing—review and editing; visualization; validation; methodology; software; formal analysis; project administration; resources; supervision; data curation. **Teko Blaise Mbah:** Writing—review and editing; project administration; formal analysis; data curation; resources. **Suzanne Adolphe Soppi Ebango:** Resources; data curation; project administration; formal analysis; writing—review and editing. **Bernadette Sandrine Lema:** Conceptualization; investigation; writing—review and editing; visualization; validation; methodology; software; formal analysis; project administration; resources; data curation.

ACKNOWLEDGMENTS

This study was supported by the Heaven Foundation/Fondation CIEL. We would like to extend our deepest gratitude to all participants for their invaluable contributions to this research. We also acknowledge the dedication of the research team at the Heaven Foundation/Fondation CIEL for their assistance in data collection, analysis, and overall support throughout the study. Additionally, we are grateful for the continued commitment of the Foundation to advancing research in the intersections of health and spirituality.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from Prolific. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from <https://www.prolific.com/> with the permission of Prolific.

ETHICS STATEMENT

Participants were recruited via Prolific (<https://www.prolific.com/>), an online platform that requires compliance with ethical standards for research. The study was conducted in accordance with the ethical guidelines of HarmonyCare/Heaven Foundation-Fondation CIEL and as the research involved minimal risk to participants, formal institutional ethics approval was not required.

ORCID

Emmanuel Eroume A. Egom  <https://orcid.org/0000-0001-7142-5477>

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How to cite this article: Egom EEA, Mbah TB, Ebango SAS, Lema BS. Unveiling the subconscious: how sexual dreams reflect and intensify mental problems. *Sleep Research.* 2024;1-10. <https://doi.org/10.1002/slp2.14>