

## Once A Nightmare, Always A Nightmare?

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### Abstract

While counterintuitive, there is evidence that some nightmares may serve a beneficial function. The theory behind this idea is presented within the context of a continuity hypothesis of dreaming where the negative emotions presented in a nightmare can lead to psychosocial development, just as some negative experiences do so during wake. The theoretical presentation is accompanied by a selected review of the most relevant studies and how the theory might be incorporated into psychotherapy when nightmares are not the presenting complaint.

Keywords: dreams, nightmares, function, stress, anxiety, coping, psychotherapy.

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### Theory

The subjective emotional valence of any given dream can theoretically fall anywhere along an infinite range of values that range from the most pleasant to the most horrifying. When considering the portion of this spectrum that lies between the midpoint and the most horrifying dreams, there is a point at which many would say the dream would become disturbing enough to classify it as a nightmare. Most would additionally require an arousal associated with immediate recall in such a definition, with other disturbing dreams simply labeled as "bad dreams" (Zadra & Donderi, 2000). However, it could also be argued that this definition is too restrictive and a dream with even a small amount of unpleasantness, with or without an arousal, remembered at any time delay or not explicitly remembered at all, can be classified as a nightmare.

Such an approach would expand the concept of a nightmare to include other potentially beneficial emotional events. During waking, such emotionally unpleasant experiences would be readily acknowledged as important for psychosocial development. It is therefore reasonable to postulate that they will serve a similar function during sleep. The idea that dreams are a kind of extension of waking cognition has become known as the Continuity Hypothesis of Dreaming (reviewed by Schredl, 2002). This hypothesis reflects the dominant opinion among dream researchers regarding the thematic generation of dreams and has supplanted Freudian dream theory (Domhoff, 2003). This hypothesis forms the basis for theories that one of the functions of dreaming is to regulate emotions (e.g., Cartwright, 2005). However, these theories do not focus specifically on nightmares. If dreaming serves multiple functions, as is likely the case, then nightmares may constitute the manifestation of a distinct function.

In terms of emotional regulation, stressors—regardless of valence—can be thought of as evoking an alteration in an organism's baseline level of functioning (McEwen, 2000; Seyle, 1956). Nightmares are commonly found to occur following stressful events. For example, using a daily nightmare survey within a prospective design, participants who were living in the San Francisco Bay area during the 1989 earthquake were compared to participants who were not living in the area. The participants who had experienced this 7.1 Richter magnitude earthquake reported a significantly higher frequency of nightmares compared to the control group (Wood, Bootzin, Rosenhan, Nolen-Hoeksema, & Jourden, 1992). Given this association between nightmares and stress, it is reasonable to conclude that nightmares are the specific type of dream that serves a mood regulatory or coping function (Picchioni et al., 2002).

At first glance, it is counterintuitive to suspect that nightmares could in any way serve a beneficial function. It is critical to emphasize that the word is used in this context according to the more broad definition of a nightmare. Situations where the nightmare is so terrifying as to become the stressor itself may not apply as well to this theory. Still, an unpleasant dream that just about everyone would label as a nightmare might benefit the individual in some way even if it falls just below this extreme point on the continuum. There are at least three potential mechanisms by which nightmares could operate to benefit the individual.

The incorporation of a specific stressor into the dream could help the individual adapt to it. This effect would become particularly pronounced through repeated exposures and could be compared to systematic desensitization. A similar idea is in fact incorporated into a Disruption-Avoidance-Adaptation model of dream function (Wright & Koulack, 1987). In this model, stressors are initially incorporated into dreams in an attempt to master this challenge to the individual's baseline level of functioning. This process results in the potential disruption of the other recuperative functions of sleep and so is alternated with avoidance, which ultimately leads to adaptation and a return to baseline. Thus, exposure to nightmares could be likened to the obviously unpleasant process of systematic desensitization employed during therapeutic interventions for phobias.

Nightmares may also represent a form of emotional problem solving. Dreaming represents an unusually unique opportunity to explore and evaluate potential solutions to a problem without the risk of adverse consequences. In an instance where a solution considered during dreaming results in negative emotional consequences in the form of a nightmare, such a solution might be appropriately left untried in waking. Alternatively, some individuals may be able to create effective solutions to stressful problems during a nightmare and generalize these solutions to reality.

Nightmares may also prepare an individual for negative emotional experiences that are unavoidable. Such preparation would result in an improved adaptation to the situation above and beyond experiencing it for the first time. This idea has been formulated into a Threat Simulation Theory of dreaming (Revonsuo, 2000). A strength of this theory is this function could apply to nightmares regardless of whether they are explicitly recalled. A limitation of this theory is it is only intended to apply to life threatening situations. While rehearsal in the form of a nightmare would certainly benefit the individual in such situations, it is also likely that they could aid in the rehearsal of emotionally salient situations that are not crucial to survival.

#### Evidence

Nightmares and general coping. Consistent with the continuity hypothesis, if nightmares serve a beneficial function, they should be correlated with other waking coping mechanisms. In other words, if you exert a great amount of effort during the day to regulate your emotional fluctuations, this should carry over into cognitive activity during sleep. To address this prediction, a large sample of undergraduate students ( $n = 412$ ) were given a set of questionnaires designed to assess nightmare intensity and waking coping strategies (Picchioni et al., 2002).

The Nightmare Distress Questionnaire (Belicki, 1992) was used to assess nightmare intensity. This questionnaire is designed to measure the waking suffering associated with the nightmare but can also be conceptualized as measuring the varying intensity of the nightmare that leads to waking suffering. The Ways of Coping Questionnaire (Folkman & Lazarus, 1988) was used to assess waking coping by asking respondents to describe a recent stressful event and indicate the extent to which they used various coping strategies in response to that event. Several other questionnaires were also administered to address the relationship between nightmares and stress.

Participants were partitioned into low, medium, and high nightmare intensity groups. As expected, there was a systematic increase in waking coping as nightmare intensity increased. One potential critique of this study is that it did not assess whether any of the measured coping strategies were successful. However, this study purposely did not seek to collect such information as it was mainly interested in the intensity or vigor of waking coping. Given the relationship between nightmares and stress, another potential critique of this study is nightmares and coping were simply co-varying with stress. A simultaneous multiple regression analysis was performed where nightmare intensity was the criterion variable and coping scores along with other measures included in the study to assess daily and life stressors were entered in a single step. The results indicated that both life stressors and coping explained a significant amount of unique variance in the overall model. Given this unique relationship between nightmares and coping, these two phenomena may be related because they serve similar functions (Hicks, Chancellor, & Clark, 1987).

Nightmares and dissociative coping. While the previous study investigated various coping strategies, other research has focused specifically on the relationship between nightmares and dissociative coping (Agargun et al., 2003). Nightmare frequency was assessed with a simple self-administered questionnaire where the respondents ( $n = 292$ ) rated the frequency on a three-point Likert scale. The Dissociative Experiences Scale (Bernstein & Putnam, 1986) was used to assess the frequency of dissociative coping strategies. This questionnaire attempts to represent several types of dissociative experiences, including those that could be experienced outside of the normal range of psychopathology.

Participants were separated into those who experienced nightmares "never", "sometimes", and "often". Similar to the previous study, there was a systematic increase in dissociative experiences as nightmare frequency increased. This study was conducted in relation to childhood trauma and the results were interpreted in the context of nightmares serving a similar adaptive coping mechanism in response to these traumatic events as compared to dissociative experiences. Further support for this notion comes from another study that demonstrated a positive correlation between nightmare frequency as well as nightmare intensity and fantasy proneness (Levin & Fireman, 2001-2002). The authors suggested that such imaginative involvement may serve as an escape from confronting traumatic experiences and this could easily be compared to dissociative experiences.

### Nightmares and Relationships

In a study that included survey instruments that could have a bearing on whether nightmares are associated with successful outcomes, a positive correlation was discovered between nightmares and dyadic satisfaction. The study used a group of women ( $n = 29$ ) who were married or in a cohabitating relationship (Kroth, Roeder, Gonzales, Tran, & Orzech, 2005). The KJP Dream Inventory (Kroth, Gilbert, Guichard, & Quatman, 1999) was used to measure the frequency of dream subtypes including nightmares as well as other qualitative aspects of dreams. The Dyadic Adjustment Scale (Spanier, 1976) was used to measure satisfaction of an intimate relationship. Despite predictions in the opposite direction, this study demonstrated positive correlations between nightmares as well as repetitive traumatic dreams and dyadic satisfaction. The conclusion of this study links the negative affect associated with dreaming of losing an intimate partner with beneficial effects on waking emotional functioning.

Potential Applications

### Differentiating nightmares

While further research is undoubtedly needed, there are some ways where this research could have immediate implications for working with patients who report nightmares. Clinicians should be able to differentiate the best approach based on client report, the working diagnosis, and the parameters of the nightmare. If the presenting complaint is the nightmare itself, this may necessitate treatment that provides

an expedited means of eliminating the nightmare rather than incorporating the negative affect into therapy. This would be particularly true in the context of Post-Traumatic Stress Disorder where the nightmare is a recapitulation of the trauma, is present for a prolonged period of time with little variation, and co-occurs with numerous other debilitating symptoms. Such nightmares should be treated as another type of memory intrusion within the disorder. These situations would best lend themselves to imagery rehearsal therapy to control or eliminate the nightmare (see for example Krakow et al., 2001). The exploration of other issues should also precede a psychotherapeutic approach to addressing the nightmare. This would include ensuring that the patient complies with proper sleep hygiene practices and that the nightmare is not a manifestation of another sleep disorder such as obstructive sleep apnea.

In contrast, clients that present with affective disorders or a range of anxiety disorders may benefit from examination of the nightmare, which is not a key symptom. This would be particularly true if the nightmares are relatively infrequent, if the negative emotions and themes they present could provide insight into the client's distress, and the client agrees with an exploratory rationale for examining them. The clinician must be cautious to ensure that such examination does not exacerbate current levels of distress (e.g., discussing a morbid nightmare in the context of depression may result in suicidal ideation). Additionally, in the event that the themes presented in the nightmares are explored and the initial presenting complaints are resolved but the nightmares are still present and become the primary complaint, subsequent steps should be taken to ameliorate them.

#### Incorporation Into the Therapeutic Process

It should be emphasized to the client that they should explore the negative feelings associated with their nightmares just as they would with negative feelings during wake. The client may find it useful to write out the nightmare with the clinician and explore each aspect of the dream. Clients should also be encouraged to keep a journal by their bedside and use it immediately after waking to improve their recall of the nightmare. The difference between this process and dream interpretation should also be emphasized. The client needs to understand that while the clinician is there to facilitate the process, it is ultimately the client's responsibility to reflect on the relevance and significance of the dream. The clinician may act as a detective in this context, by piecing together evidence from the nightmare and making connections with the complaints, personality, and reactions of the client. This approach should be complemented by an affective component, in which the client actively explores their emotional reaction to aspects of the nightmare as well as the emotions that may be present or dormant when awake. The specific process and integration into a treatment plan would vary based on the orientation of the clinician and the needs of the client.

#### Advantages for the Therapeutic Process

While the conceptualization of nightmares as an extension of waking negative emotions is useful, it should also be realized that there may be specific advantages to exploring the themes they present. When clients describe their feelings associated with a distressful event, they do so in isolation from the proprioceptive signals that were present at the time of the event. One approach to address this limitation of standard psychotherapy is to ask the client to physically act out the event under consideration. This approach results in a more realistic reenactment and nightmares may provide a similar advantage. In this way, nightmares may bring underlying concerns to light that would have otherwise gone unnoticed and may lead to a greater understanding of those concerns. This is again a situation where dreaming represents a unique opportunity to explore feelings in ways that are not possible during wake.

#### Future Research

Prospective research that specifically aims at assessing the utility of working with nightmares in the context of other psychopathologies is warranted. Preliminary steps would include the development of a more standardized outline as to how nightmares should be addressed throughout the course of therapy. Subsequent steps should incorporate symptom measures that pertain to the presenting complaint such as standardized clinical interviews and questionnaires. These assessment tools may indicate that waking symptoms improve over time if nightmares are addressed when they present with other affective or anxiety disorders. This would shed more light on the possibility that nightmares in fact represent a successful coping strategy.

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