Nightmares and Annihilation Anxiety

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The relation between self-reported frequency of nightmares, as well as a number of saliency measures of the nightmare experience, and a self-report measure of annihilation anxiety was evaluated in two, independent college student populations. A significant positive relation was found between nightmare frequency and salience and annihilation anxiety. Furthermore, these findings were cross-validated across both samples. The results are discussed within the context of object relations and ego psychology theory utilizing an ego boundary model and are consistent with previous research demonstrating boundary impairment in self-reported frequent nightmare subjects.

Nightmares, vivid and terrifying episodes that wake the dreamer, can be so severe that they have been likened to brief psychotic episodes (Fisher, Byrne, Edwards, & Kahn, 1970; Frosch, 1976; Hartmann, 1984). Despite their relatively common occurrence in the general population (Belicki & Belicki, 1982; Levin, 1994), recent evidence suggests that frequent nightmares, usually defined operationally as a lengthy history of at least one attack per month, are pathognomonic of underlying psychological distress.

Numerous investigators have stressed the continuity between frequent nightmares and waking psychopathology, most prominently schizophrenic disorders (Hartmann, 1984; Sullivan, 1962). In both instances, there is overwhelming panic as the individual struggles to ward off feelings of fragmentation and annihilation of the sense of self (Mack, 1969; Stone, 1979; Teixeira, 1984). Mack (1970) noted the nightmare sufferer's inability to

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differentiate external from internal perceptions and emphasized the predominance of childhood themes, particularly of helplessness, in nightmares. Other investigators (Hartmann, Mitchell, Brune, & Greenwald, 1984; Sullivan, 1962) have speculated that frequent childhood nightmares may predict adult schizophrenia. Furthermore, it has been noted that nightmares are more common in psychiatric populations (Berlin, Litovitz, Diaz, & Ahmed, 1984) and often immediately preceed the onset of an acute psychotic episode (Arieti, 1974; Herz & Melville, 1980; Mack, 1969).

Freud (1900) and Jones (1931) understood nightmares to be, like other dreams, disguised representations of unacceptable wishes: incestuous, perverse, egoistic, and sadistic. In 1920, Freud identified traumatic dreams as a variety that was not based on a conflictual wish. Rather, he found these nightmares to involve a mental repetition of a traumatic event, the role of which was to gradually achieve retrospective mastery of the overwhelming affects engendered by the trauma. In any given instance, the nightmare may succeed or fail to various degrees. The presence of nightmares in adults has been related to structural weaknesses and deficits (Fisher et al., 1970; Mack, 1970; Stern, 1988). Mack (1970) in particular emphasized that danger and helplessness were hallmarks of the nightmare dream. He stated that nightmares “regularly lead us to the earliest, most profound, and inescapable anxieties and conflicts to which human beings are subject” (p. 16). Thus, Mack suggested that for adults, nightmares are psychical representations of the early danger situations (abandonment, separation, bodily injury, and annihilation of the self due to psychic fusion with significant others) which are set off anew by current life conflicts, severe trauma, or both.

Based in large part on his extensive clinical observations, Hartmann (1984, 1991) speculated that nightmares emanate from disturbances in the formation and maintenance of representation boundaries in the mind. Hartmann defined boundaries as distinctions between internalized organizations of mental images (e.g., self and other, fantasy and reality) that serve as a source of security, thus protecting the intrapsychic self from potential threats. Hartmann reasoned that although genetic factors may be operative, weak or thin boundaries occur as a result of inconsistent or malignant internalization of early parental objects. Thus, these individuals can be seen to internalize disjointed fragments, or “pockets” of safety (partial representations) from which porous and weakened boundaries develop (Jacobson, 1964). In the absence of optimally delineated self- and object representations, the ego remains fragmented and is unable to provide secure psychic protection to the individual (Sehafer, 1968).

Given the proposed structural deficits in the psychic organization of frequent nightmare sufferers, it is reasonable to speculate that such individuals should be particularly prone to those psychological disturbances most indicative of boundary impairment. Indeed, there is substantial empirical support for these hypotheses. Numerous studies of the personality correlates of nightmare sufferers indicate that such individuals demonstrate elevated
manifest anxiety and general fearfulness (Haynes & Mooney, 1975; Hersen, 1971), heightened concerns with death (Feidman & Hersen, 1967; Hersen, 1971), lower manifest ego-strength (Hersen, 1971; Levin, 1989), greater ego boundary impairment using both self-report questionnaires (Hartmann, Elkin, & Garg, 1991; Levin, 1990; Levin, Galin, & Zywiak, 1991) and Rorschach indices (Hartmann et al., 1984; Levin, 1990), and a higher predominance of primary process mentation accompanied by poor adaptational control (Levin et al., 1991). Furthermore, nightmare sufferers produce MMPI profiles typical of schizophrenics (Hartmann, Russ, Oldfield, Sivan, & Cooper, 1987; Kales et al., 1980) and are more likely than controls to receive a schizophrenia spectrum diagnosis based on semistructured interview data (Hartmann et al., 1987; van der Kolk, Blitz, Burr, Sherry, & Hartmann, 1984).

In a series of studies, Levin (1993; Levin & Raulin, 1991) also found psychometric evidence for a close association between nightmare incidence and propensity for psychosis, particularly on those measures most suggestive of boundary pathology (e.g., perceptual body-image aberration). (See Levin & Fireman, 1993, for a more complete review of the empirical nightmare literature.) Based on a boundary impairment model, Levin (1990, 1993) suggested that the prevalent themes of aggression and violence in nightmares may reflect a heightened level of core anxiety over the annihilation of self due to psychic merging with hitherto independent mental representations. This view is consistent with the views of Kohut (1977), Atwood and Stolorow (1984), Fiss (1986), and Stern (1988). Thus, in discussing self-state dreams (which often have a nightmarish quality), Kohut emphasized “the dreamer’s dread ... of the dissolution of the self” (p. 109). Despite the proliferation of the view that nightmare sufferers are especially prone to specific basic fears regarding the disintegration or annihilation of the self and of the ego functions (i.e., inability to cope), there has been no attempt to directly examine this phenomenon empirically.

The purpose of the present study is to examine these fears more closely in a sample of frequent nightmare subjects as compared to a matched control group without ongoing nightmares, using a psychometric instrument recently designed by Hurvich (1987; Hurvich et al., 1993) to assess the presence of annihilation anxiety (see Appendix). Examples of annihilation anxieties as conceptualized by Hurvich (1987, 1989, 1991; Hurvich et al., 1993) include fears of being overwhelmed or engulfed; of disintegration, merger, and impingement; of loss of needed support and self-cohesion, of catastrophic mentality; of inability to cope; and of concern over survival. According to Hurvich (1991), subjects who are high in annihilation anxiety report

a virtually intolerable anxiety experience, felt and believed to be over psychic survival and accompanied by fears of imminent death or psychological destruction. There is a sense of helplessness in the face of an utterly frightening danger
experienced as having no foreseeable end. It is a danger against which the person feels he or she can take no constructive action and that threatens to overwhelm and disorganize him or her. It may lead to panic, paralysis, and other maladaptive responses rather than to effective or adaptive behavior. (p. 139)

Thus, annihilation anxiety is seen as the most basic danger situation and the prototype of all later anxiety. As such, annihilation anxiety has much in common with earlier psychoanalytic constructs such as Freud’s (1926) traumatic anxiety, Klein’s (1948/1975) psychotic anxiety, Winnicott’s (1962/1965) unthinkable anxiety, Frosch’s (1967) basic anxiety, and Kohut’s (1977) disintegration anxiety. It was predicted that the nightmare group would report higher levels of annihilation anxiety than low-nightmare controls and that these differences should be manifested at the individual item levels as well as overall score. It was further predicted that the nightmares of individuals with high levels of annihilation anxiety would be experienced with greater distress, vividness, and meaningfulness than subjects low on annihilation anxiety. Last, these effects should be independent from overall dream recall frequency.

METHOD

Participants

Participants included 1357 introductory psychology students (787 men, 570 women) who participated in partial fulfillment of their course requirements across two independent samples of data collection. Sample 1 consisted of 724 participants (386 men, 338 women) with a mean age of 18.6. Sample 2 consisted of 633 participants (401 men, 232 women) with a mean age of 19.7. Participants were tested in class as part of a mass screening procedure at the beginning of each of the two semesters. The forms were administered independently along with a number of other questionnaires from other research projects so that participants were unlikely to relate the indices to one another.

Materials and Procedure

Nightmare questionnaire. The nightmare questionnaire (Levin, 1994) is a one-page screening device consisting of five items: (a) nightmare frequency with six categories ranging from “never” to “more than once a week”; (b) overall dream recall frequency with seven categories ranging from “never” to “more than one per night”; and three 7-point Likert-scale rating dimensions of (c) perceived level of nightmare distress (“How disturbed are you by your nightmares?”); (d) nightmare vividness (“How vivid
are your nightmares?"); and (e) nightmare meaningfulness ("How meaningful do you feel your nightmares are?"). As in previous research (Levin, 1990, 1994; Levin & Raulin, 1991), a nightmare was operationally defined as "a scary dream that awakens the dreamer from the latter part of sleep."

**Hurvich Experiences Inventory (HEI).** The HEI is a 30-item self-report questionnaire with a 4-point Likert-type scale ranging from 1 (never) to 4 (very often) that taps overall levels of annihilation anxiety. Examples of items include "I feel I could shatter into bits"; "I have a fear of catastrophe"; and "I have a fear of falling in space." The HEI has been previously administered to over 1,000 participants and has demonstrated high internal consistency (alpha coefficients from .84 to .89) and good discriminative and construct validity (Hurvich, 1987; Hurvich et al., 1993). In an earlier 25-item version (21 of the items being identical with those on the present inventory), the HEI correlated at .66 with Spielberger's (Spielberger, Gorsuch, & Lushene. 1970) trait anxiety, .40 with the Agoraphobia subscale of the Marks and Matthews's (1979) Fear Inventory, and .48 with Chambliss, Caputo, Bright, and Gallagher's (1984) Agoraphobia Cognitions Scale (Hurvich et al., 1993). Agoraphobics scored significantly higher than controls (Eckardt, 1988), and both physically and sexually abused participants showed significantly higher HEI scores than controls who had not reported abuse as children (Jantzen, 1992). Potential scores may range from 30 (lowest) to 120 (highest).

Between-group t tests were conducted on most variables with nightmare group serving as the independent variable except where noted. Two-tailed significance values of p < .05 were adopted to establish statistical robustness. Not all participants completed all the questionnaires, thus accounting for small variances in sample sizes for respective analyses.

**RESULTS**

For both independent samples, participants who indicated frequent nightmares reported significantly higher levels of annihilation anxiety as measured by the HEI than those who reported low nightmare occurrence. As seen in Table 1, these findings are further bolstered by the consistency of the sample means, thus providing some degree of cross-validation for the robustness of the measures. Further, the overall frequency of nightmare responders in both samples was comparable to previously published studies on nightmare occurrence (19% and 29%, respectively; Belicki & Belicki, 1982; Levin, 1994).

In order to examine these results more closely, the data were broken down by sex to determine whether gender mediated the previously mentioned findings. As seen in Table 1, the results supported a ubiquitous relation
between nightmare frequency and annihilation anxiety regardless of sex, with both male and female nightmare participants reporting higher scores on the HEI than low nightmare controls. However, it should be noted that women tended to report greater levels of annihilation anxiety than men, and this difference became stronger as nightmare frequency increased, as evidenced by a significant interaction between sex and nightmare frequency, F = 3.72, p < .05.

Furthermore, these findings were consistently supported on the individual item level with most items significantly discriminating high- and low-nightmare participants. Thus, for Sample 1, 22 of 30 analyses reached significance at the p < .01 or greater, whereas in Sample 2, 26 of 30 analyses reached statistical significance, 24 at the p < .01 level or greater.

As a further check, median splits were performed independently for each sample on the HEI, and between-group t tests were then conducted on the five dream measures: overall dream recall frequency, nightmare frequency, nightmare distress, nightmare vividness, and nightmare meaningfulness. These results as well as the means and standard deviations are presented in Table 2. As can be seen, the pattern of results is highly robust across samples. Although annihilation anxiety is not related to overall dream recall frequency, scores on the HEI significantly discriminated on all other measures relating to the nightmare experience. Of particular interest, the percentage of high HEI scorers reporting frequent nightmares was greater than the percentage of low HEI scorers reporting frequent nightmares in both samples (24% vs. 16% and 32% vs. 24%, respectively).

**DISCUSSION**

The results clearly demonstrate that individuals who self-report frequent nightmares are more prone to levels of annihilation anxiety than participants

\[ *p < .01, **p < .001. \]

\[ \text{Sample 1 (n = 724)} \]
<table>
<thead>
<tr>
<th>High Nightmare</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
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<tbody>
<tr>
<td></td>
<td>54.4</td>
<td>12.4</td>
<td>140</td>
<td>48.2</td>
<td>10.2</td>
<td>584</td>
<td>6.16**</td>
</tr>
<tr>
<td>Men (n = 390)</td>
<td>54.7</td>
<td>11.5</td>
<td>65</td>
<td>46.7</td>
<td>9.6</td>
<td>325</td>
<td>5.91**</td>
</tr>
<tr>
<td>Women (n = 334)</td>
<td>54.1</td>
<td>13.1</td>
<td>334</td>
<td>50.1</td>
<td>10.7</td>
<td>259</td>
<td>2.73*</td>
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<tr>
<td>Sample 2 (n = 633)</td>
<td>55.9</td>
<td>13.6</td>
<td>182</td>
<td>48.9</td>
<td>11.8</td>
<td>451</td>
<td>6.52**</td>
</tr>
<tr>
<td>Men (n = 401)</td>
<td>54.8</td>
<td>14.5</td>
<td>97</td>
<td>47.0</td>
<td>10.9</td>
<td>304</td>
<td>5.68**</td>
</tr>
<tr>
<td>Women (n = 232)</td>
<td>57.2</td>
<td>12.5</td>
<td>85</td>
<td>52.8</td>
<td>12.7</td>
<td>147</td>
<td>2.57*</td>
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</tbody>
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*Item-by-item breakdown of HEI by nightmare groups for both samples are available from Ross Levin on request.
who do not. This conclusion is strengthened by the concordance of findings across two large independent samples as well as the use of a nonclinical population, in which the range of potential pathology would presumably be more restricted than in a bonafide clinical sample. Although it is possible that the usage of the term nightmare, as opposed to a less charged descriptive such as troubling or disturbing dreams, may have pulled selectively for the overreporting of pathology, the consistency of the findings with previous work suggests that the present data are robust. In addition, the complete absence of any relation in either sample between annihilation anxiety and dream recall would suggest that these findings are indeed due to a specific association with nightmares and are not an artifact of greater overall dream recall ability.

As indicated, these data are consistent with previous work on the personality correlates of individuals with frequent nightmares (Hartmann, 1984; Hartmann et al., 1987; Levin, 1989, 1990, 1994; Levin & Fireman, 1993; Levin & Raulin, 1991; Levin et al., 1991). In this regard, Hartmann’s (1991) speculation that “people with frequent nightmares seem to be characterized by thin or permeable boundaries, by fluidity, by merging, in a number of different psychological senses” (p. 17) is particularly germane. Taken together with Levin’s (1990) earlier study demonstrating that nightmare participants evidence significantly greater amounts of boundary disruption as measured by Rorschach indices as well as Levin and Raulin’s (1991) findings regarding the greater prevalence of schizotypal features in these participants, the present study supports the contention that frequent nightmares are

<table>
<thead>
<tr>
<th>TABLE 2</th>
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<tr>
<td>Means and Standard Deviations for Dreaming Measures for High and Low Annihilation Anxiety (AA) Subjects</td>
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<tr>
<th></th>
<th>Sample 1</th>
<th>Sample 2</th>
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<tr>
<td></td>
<td>High AA</td>
<td>Low AA</td>
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<tr>
<td>Dream recall frequency</td>
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<tr>
<td>M</td>
<td>3.56</td>
<td>3.56</td>
</tr>
<tr>
<td>SD</td>
<td>1.54</td>
<td>1.54</td>
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<tr>
<td>Nightmare frequency</td>
<td></td>
<td></td>
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<td>M</td>
<td>2.75*</td>
<td>2.22</td>
</tr>
<tr>
<td>SD</td>
<td>1.15</td>
<td>1.00</td>
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<tr>
<td>Nightmare distress</td>
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<td></td>
</tr>
<tr>
<td>M</td>
<td>2.91*</td>
<td>2.18</td>
</tr>
<tr>
<td>SD</td>
<td>1.71</td>
<td>1.50</td>
</tr>
<tr>
<td>Nightmare vividness</td>
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<td></td>
</tr>
<tr>
<td>M</td>
<td>4.77*</td>
<td>4.37</td>
</tr>
<tr>
<td>SD</td>
<td>1.77</td>
<td>1.98</td>
</tr>
<tr>
<td>Nightmare meaningfulness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3.94*</td>
<td>2.97</td>
</tr>
<tr>
<td>SD</td>
<td>1.80</td>
<td>1.88</td>
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</table>

*p < .001.
related to significant intrapsychic distress involving catastrophic or annihilatory fears. Given the concurrent nature of this work, it is not possible to ascribe causal connections between nightmares and annihilation anxiety or boundary disruption from these findings. A longitudinal study tracking individuals with significant boundary impairment would be necessary in this regard. The clinical literature suggests various interrelations between nightmares and annihilation anxieties. Annihilation anxiety is seen as originally a response to psychic helplessness associated with intolerable need tension which the youngster cannot alleviate, viz., the traumatic moment (Freud, 1926). Freud (1920) hypothesized the original function of all dreams as the attempted mastery of trauma. During the first few years of life, tots are especially prone to traumatic overwhelming. Early on, and at times throughout the life cycle, such overwhelming is experienced primarily in a kinaesthetic, nonlinguistic mode. Often, it is this anxiety that predominates in the nightmare experience (Levin & Fireman, 1993). Both Klein (1932/1960) and Stern (1951) hypothesized that annihilatory fears may be a repetition of childhood nightmares, typical of certain phases of childhood.

According to Levin (1990), “the most salient dimension of the nightmare attack is the sheer force with which the dreamer is suddenly confronted with terrifying emotions and powerful feelings of defenselessness and helplessness” (p. 540). Given the absence of well-delineated psychic boundaries, “the individual is vulnerable to violations both from the external world and from within ... the nightmare is a direct reflection of this psychological helplessness” (p. 540). Much as Freud (1900) viewed the dream as the royal road to the unconscious, the nightmare may be viewed as a reflection of the structural integrity of the ego and the cohesiveness of the self. It is possible that the term nightmare may have pulled for selective pathology.

The present data also provide additional construct validity for the annihilation anxiety concept as well as for the HEI (Hurvich et al., 1993). Indeed, elevated levels of annihilation anxiety as measured by the HEI have been found in previous investigations of clinical subgroups (such as phobics, especially agoraphobia, panic states, borderline and psychotic disorders) theoretically presupposed to be characterized by annihilation fears (Hurvich, 1989; Hurvich et al., 1993).

A number of cautions need to be addressed in interpreting the present data. First and foremost is the reliance on a new scale for measuring annihilation anxiety. Clearly, further research is needed to examine the psychometric properties of the HEI. Second, the use of self-report data for ascertaining nightmare frequency in the absence of more objectively defined criteria (sleep lab awakenings, home dream diaries) is less than optimal. However, it should be noted that Wood and Bootzin (1990) reported a high correlation between self-reported nightmares and extensive home dream diaries, suggesting that these findings are robust. In addition, Levin (1994, Levin & Raulin, 1991) found a high concordance across multiple large samples in rates of nightmare occurrence, suggesting that the present self-report mea-
sure is a reliable and cost-efficient method of data collection for the detection of frequent nightmares, a low base-rate phenomenon. Last, it must be noted that these participants were all relatively high-functioning college students and that these results would need to be replicated using clinical populations. Current investigations are underway to examine this issue more directly.

REFERENCES


**APPENDIX:**

**HURVICH EXPERIENCE INVENTORY—[R]**

Name ________ Age _____ Sex: M ___ F ___ Education ________

After reading each statement, decide which of the following most accurately describes your experience. Then put the number beside the statement. Example:


Do not skip any questions.

1. I feel I could shatter into bits. [Blank]
2. I am very afraid of fear. [Blank]
3. I am not sure who I really am. [Blank]
4. I worry about my survival. [Blank]
5. I feel like I am destroyed as a person. [Blank]
6. Experiencing strong emotions frightens me. [Blank]
7. I am afraid of getting emotionally close to others. [Blank]
8. I feel terror and panic. [Blank]
9. My body feels like it doesn’t belong to me. [Blank]
10. I think about the world coming to an end. [Blank]
11. I had frightening nightmares as a child. [Blank]
12. I feel the dread of dying at any moment. [Blank]
13. I feel I have more than one self. [Blank]
14. I feel intruded on, mentally or physically. [Blank]
15. I keep searching for an identity I don’t quite have. [Blank]
16. I have a fear of catastrophe. [Blank]
17. I need someone to reassure me when I become afraid. [Blank]
18. I worry about my physical health. [Blank]
19. I feel I can’t pull myself together. [Blank]
20. I have frightening dreams (nightmares). [Blank]
21. As a child I was afraid of dying.
22. I have a fear of falling in space.
23. I feel anxious when I am left alone.
24. It's hard to get over something that makes me nervous.
25. I feel like I am being overwhelmed.
26. I fear getting swept up and lost in another person.
27. I fear loss of control of myself.
28. I fear being unable to think or act.
29. I feel I can't cope with things.
30. I fear being abandoned.