Dreams, Nightmares, and Schizotypal Personality Organization

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To explore the relationship between nightmares and schizotypy, 935 college students completed a nightmare questionnaire, three schizotypy scales, and the Beck Depression Inventory. High scorers (3 standard deviations or more above the mean) on the Magical Ideation and Perceptual Aberration Scales reported that their nightmares were more salient, but not more frequent, than low scorers (less than .5 standard deviations above the mean). In contrast, anhedonics reported fewer frequent nightmares and less subjective distress from them. However, a significant relationship between nightmares and the Beck depression inventory was also found, suggesting that nightmare frequency may be associated with general psychological distress and not be specific to schizotypal symptomatology. As in previous research, findings were more dramatic for females than males.

Within the past 15 years, considerable attention has focused on the personality of the nightmare sufferer and the possible relationship between frequent nightmares and schizotypal personality organization (i.e., Hartmann, 1984; Kales et al., 1980; Levin, 1987). Nightmares, vivid and terrifying episodes that wake the dreamer, can be so severe that they have been likened to brief psychotic episodes (Detre & Jarecki, 1971; Fischer, Byrne, Edwards, & Kahn, 1970; Hartmann, 1984; Mack, 1970). The nightmare (Detre & Jarecki, 1971; Mack, 1970; Sullivan, 1962) is often immediately precede the onset of a psychotic episode (Arieti, 1974). Frequent nightmare sufferers produce MMPI profiles typical of schizophrenics (Hartmann et al., 1981, 1987; Kales et al., 1980) and are more likely than controls to receive a schizophrenia spectrum diagnosis based on interview data (Hartmann et al., 1981, 1987; Van der Kolk, Blitz, Burr, Sherry, & Hartmann, 1984). Hartmann (1984) also reports a greater incidence of mental illness in family members of his nightmare sufferers as compared to controls.

In a preliminary study of 669 undergraduates (Levin & Raulin, 1988), a relationship was found between nightmare frequency and scores on three of four measures of schizotypal signs (intense ambivalence, perceptual aberration, somatic symptoms, but not for physical anhedonia). However, this pilot study did not address a number of issues. The first was whether schizotypal organization is predictive of nightmares specifically or, rather, is indicative of overall dream recall frequency. The second was whether the aforementioned relationship between schizotypal organization and nightmare frequency is mediated by the degree of subjective distress from the nightmares. The third was whether the observed relationship is specific to schizotypal psychopathology or if higher nightmare frequencies are associated with other types of psychological distress. The current study is designed to address all three of these issues.

Method

Subjects

Subjects included 459 male and 476 female undergraduates at a major state university who completed the schizotypy scales, the Beck Depression Inventory, and a nightmare questionnaire as part of the requirements for an Introductory Psychology Course.

Table 1 presents the results of separate one-way ANOVAs for males and females for the three schizotypy scales (Physical Anhedonia, Perceptual Aberration, and Magical Ideation) and the Beck Depression Inventory. Separate analyses were conducted on each of the six dream variables. As in previous research (Levin & Raulin, 1988), the results were more dramatic for females than for males, although the direction of differences are consistent across sexes. As predicted, anhedonics reported significantly fewer dreams and nightmares and found them less distressful, vivid, and personally relevant. This replicated the Levin and Raulin (1988) study and is consistent with numerous previous studies that have found that anhedonic subjects are less responsive to stimulation (Simons, 1981, 1982). This is in sharp contrast to the other scales, where the differences, when significant, were always in the direction of high scoring subjects reporting more nightmares and greater distress from the nightmares. It should also be noted that, although the absolute frequency of nightmares was not elevated in high scorers on the Perceptual Aberration and Magical Ideation Scales, nightmares were generally experienced in a more distressing, vivid, and personally meaningful manner by these subjects. In addition, subjects scoring high on the Beck Depression Inventory reported an increase in both the frequency and experiential qualities of nightmares, although this was not accompanied by any overall increase in dream recall.

Discussion

The results are interesting in a number of ways. First, the previous finding that nightmare frequency and several schizotypic signs are positively related was not replicated. This may be partially due to the use of different schizotypy scales in the present study, although two scales, Perceptual Aberration and Physical Anhedonia, were used in both studies. However, the degree of saliency of the nightmares did prove to be highly discriminating between the experimental and control subjects, a finding that supports Belicki and Parry's (1987) contention that it is the level of nightmare distress that may be a better predictor of pathology.
characterizes a discernible subgroup of schizotypes characterized primarily by anhedonia. Subjects reported fewer dreams and nightmares and were less affected by them. This supports the argument (Propper et al., 1987) that anhedonia characterizes a discernible subgroup of schizotypes characterized primarily by negative symptomatology. Anhedonics generally report greater social withdrawal (Chapman, Edell, & Chapman, 1980) and show less psychophysiological responsivity to external stimulation (Simons, 1981, 1982). The current study suggests that anhedonics may also be less responsive to the internal stimulation that leads to dreams and nightmares. This is particularly interesting in that the direction of observed differences in the anhedonic and depressed groups were opposite, in spite of the fact that an apparently identical criteria (pleasure deficit) helps to define each group. The depressives seem to be more distressed and more intensely focused on internal events than the anhedonics, a hypothesis manifested in the present study by significantly greater attentiveness to their psychological activities. Clearly the difference between a chronic pleasure deficit (anhedonia) and an acute deficit (depression) has considerable clinical utility.

It is particularly noteworthy that the two dimensions that relate to the psychological experience of nightmares, namely, level of perceived distress and the degree of meaningfulness attributed to these dreams, were significantly elevated in all of the groups except the anhedonics. Thus, it may well be that the degree of perceived distress is not a function solely of an increased frequency of nightmares, but of a greater subjective sensitivity to these low base rate events when they occur. The present data suggest that this seems to be true for subjects suffering from a variety of psychological symptoms and this relationship may not be specific to the schizotypal spectrum as previously hypothesized.

Dreams have long been regarded as invaluable data pertaining to the internal dynamics of individuals. Given its disruptive nature, the nightmare seems to reflect well the psychic turmoil characteristic of individuals experiencing psychological distress. The current data are consistent with the notion that dreams and especially nightmares may be a particularly fruitful area in which to explore the inner conflict inherent in psychiatric disorders.

### Table 1

**Relationship of Dreaming and Nightmares to Schizotypy and Depression in College Students**

<table>
<thead>
<tr>
<th>DREAM VARIABLES</th>
<th>SCALE</th>
<th>SCALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Anhedonia</td>
<td>p = .03</td>
<td>less</td>
</tr>
<tr>
<td>Perceptual Aberration</td>
<td>p = .26</td>
<td>more</td>
</tr>
<tr>
<td>Magical Ideation</td>
<td>p = .0005</td>
<td>more</td>
</tr>
<tr>
<td>Beck Depression</td>
<td>p = .40</td>
<td></td>
</tr>
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</table>

**FEMALE COLLEGE SUBJECTS**

<table>
<thead>
<tr>
<th>Dream Recall Frequency</th>
<th>p = .26</th>
<th>p = .43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nightmare Frequency</td>
<td>p = .16</td>
<td>p = .19</td>
</tr>
<tr>
<td>Age of Onset of Nightmares</td>
<td>p = .70</td>
<td>p = .74</td>
</tr>
<tr>
<td>Distress Level of Nightmares</td>
<td>p = .41</td>
<td>p = .18</td>
</tr>
<tr>
<td>Vividness of Nightmares</td>
<td>p = .05</td>
<td>p = .28</td>
</tr>
<tr>
<td>Meaningfulness of Nightmares</td>
<td>p = .03</td>
<td>p = .003</td>
</tr>
</tbody>
</table>

**MALE COLLEGE SUBJECTS**

<table>
<thead>
<tr>
<th>Dream Recall Frequency</th>
<th>p = .30</th>
<th>p = .78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nightmare Frequency</td>
<td>p = .02</td>
<td>p = .96</td>
</tr>
<tr>
<td>Age of Onset of Nightmares</td>
<td>p = .72</td>
<td>p = .36</td>
</tr>
<tr>
<td>Distress Level of Nightmares</td>
<td>p = .03</td>
<td>p = .004</td>
</tr>
<tr>
<td>Vividness of Nightmares</td>
<td>p = .02</td>
<td>p = .20</td>
</tr>
<tr>
<td>Meaningfulness of Nightmares</td>
<td>p = .01</td>
<td>p = .004</td>
</tr>
</tbody>
</table>

**NOTE:** For significant results the direction indicated ("more" or "less") reflects the mean of the high scoring subjects relative to the subjects scoring within the normal range.

Secondly, in sharp contrast to the pattern observed for the other scales, anhedonic subjects reported fewer dreams and nightmares and were less affected by them. This supports the argument (Propper et al., 1987) that anhedonia characterizes a discernible subgroup of schizotypes characterized primarily by

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**References**


Nightmares and Schizotypy


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