Nightmares and sleep disturbances are thought to play a key role in the development of posttrauma problems. Research efforts have increased in an attempt to understand this association. The present study examined differences in nightmare characteristics, related psychopathology, treatment outcome, and trauma history among trauma-exposed individuals whose nightmares began before a traumatic event and those whose nightmares began after a traumatic event, while controlling for posttraumatic stress disorder status. Individuals whose nightmares began following a trauma experienced more depression and posttraumatic stress symptoms and poorer sleep quality, reported a higher number of traumatic events, and were more likely to report nightmares replicative of or similar to the trauma than those whose nightmares began before the trauma. No other between-groups differences were found for nightmare characteristics or response to treatment. This study is an important step in understanding the nature of nightmares and their relationship to traumatic events and consequences, but additional research is warranted.

**Keywords:** nightmares, trauma, posttraumatic stress disorder, sleep disturbance
whether differences found can be attributed to the nightmares themselves, as studies typically compare individuals with nightmares and trauma and posttraumatic stress disorder (PTSD) with individuals with nightmares but without trauma and PTSD. This study sought to assess differences in nightmare characteristics, psychopathology, and treatment response in a sample of trauma-exposed individuals whose nightmares began either before or following a traumatic event.

To date, many studies have evaluated the dreams of people exposed to trauma; however, few have differentiated between those whose nightmares started before the trauma and those whose nightmares started after the trauma. Van der Kolk, Blitz, Burr, Sherry, and Hartmann (1984) compared 15 combat veterans with PTSD and chronic, frequent nightmares (PTNM) with 10 noncombat veterans without PTSD but with LLNM. All participants completed a semistructured interview. Results indicated that PTNMs tended to occur earlier in the night (between 1 a.m. and 3 a.m.), although this was not a statistically significant difference. Statistically significant differences included that those with PTNMs had more frequent and repetitive nightmares, were more likely to have content that replicated an actual event, and were more likely to be accompanied by gross body movement. Limitations of this study included a lack of evaluation of other types of trauma. Furthermore, it is unclear whether differences were related specifically to the different types of nightmares or to differences in combat experience or the presence of PTSD.

Germain and Nielsen (2003b) compared individuals with LLNMs and no PTSD with trauma-exposed individuals with nightmares and PTSD (PTNMs) and a healthy control group on subjective psychopathology questionnaires and objective laboratory-recorded sleep parameters. Four of the 11 individuals in the LLNM group and one control participant reported a trauma, although they did not meet criteria for current or past PTSD. Nine individuals with PTNMs, 11 individuals with LLNMs, and 12 individuals with no sleep or dream disturbances (control) underwent in-home polysomnography over 2 consecutive nights. Only data from the second night were included in analyses. Results indicated that those with PTNMs reported more distress on all measures than the control group and more depression, nightmare distress, and posttraumatic symptom severity than the LLNM group. The LLNM group differed significantly from the control group on nightmare distress. Polysomnography results indicated that the PTNM group exhibited more nocturnal awakenings, more wake time after sleep onset, and worse sleep efficiency than the control group and more nocturnal awakenings and more wake time after sleep onset than the LLNM group. The two nightmare groups did not differ in periodic limb movements but exhibited more movements than the control group, and there were no differences among the three groups on REM sleep and sleep stage measures. As with the van der Kolk et al. (1984) study, it is unclear whether psychopathology and sleep problems are more closely associated with the trauma, PTSD, or the nightmares.

Thus, there is some evidence of differences in characteristics and related psychopathology for LLNMs and PTNMs, although nightmares have been confounded with trauma exposure and PTSD in previous studies. If such differences do exist, controlling for PTSD and trauma exposure, another important line of inquiry is to determine whether different treatment approaches may be warranted. Research suggests that cognitive–behavioral approaches are effective in diminishing the frequency and intensity of nightmares, as well as related sleep problems and psychopathology (Davis & Wright, 2007; Krakow et al., 2001). Few studies have
examined this efficacy by type of nightmare, however. Van der Kolk and colleagues (1984) found a trend \( (p = .056) \) in that 67% of individuals with PTNMs reported their nightmares responded to various medications compared with 22% of LLNMs. Germain and Nielsen (2003a) examined the effect of a single session of imagery rehearsal therapy on the frequency of nightmares and bad dreams, psychological distress, and objectively measured sleep quality among six individuals with PTNM and PTSD and six LLNM sufferers without PTSD. Treatment led to statistically significant reductions in anxiety and PTSD severity for the PTNM group and in depression for the LLNM group. Effect sizes were large in a number of nonsignificant comparisons, such as retrospective estimation of nightmare frequency, prospective estimations of bad dreams and sleep terrors, anxiety, depression, and nightmare distress. It remains unclear, however, whether differences observed in these studies were due to trauma exposure, PTSD, or the type of nightmares.

The purpose of the present study was to examine differences between trauma-exposed individuals whose nightmares began before a traumatic event (LLNM) and those whose nightmares began after a traumatic event (PTNM) while controlling for PTSD status. Data for this study were drawn from a larger study (Rhudy et al., 2010) of a cognitive–behavioral treatment for nightmares: exposure, relaxation, and rescripting therapy (ERRT; Davis, 2009; Davis & Wright, 2006, 2007). We examined possible differences in three areas: nightmare characteristics (e.g., frequency, severity, number of different nightmares, panic symptoms on wakening, similarity to trauma), psychopathology (e.g., PTSD symptoms, depression, sleep problems), and treatment response. We also explored the trauma histories of each group.

We hypothesized that individuals with PTNMs would exhibit the following characteristics of nightmares compared with those with LLNMs: more frequent and severe nightmares, greater number of different nightmares experienced, shorter duration of nightmare suffering (controlling for participant age), and greater number of panic symptoms on waking from a nightmare. In terms of content, we hypothesized that those with PTNMs would be more likely to report nightmares that are replicative or similar to the traumatic event compared with those with LLNMs.

We also hypothesized that individuals with PTNMs would report greater related psychopathology, including more depression, more frequent and severe PTSD symptoms, poorer sleep quality, greater fear of going to sleep, and feeling more depressed and less rested on waking.

We hypothesized that the LLNM and PTNM groups would differ in treatment response, although the nature of these differences was not specified.

Finally, we compared the trauma histories of individuals in the LLNM and PTNM groups. Specifically, we investigated overall number of traumas, and whether the LLNM group reported more traumatic events before the age of 18 than did the trauma-related nightmare group.

**METHOD**

**Procedure**

All procedures were approved by the university Institutional Review Board. Participants were included in the treatment study if they were at least 18 years old,
had experienced a traumatic event (as defined in Diagnostic and Statistical Manual of Mental Disorders [4th ed., text rev.]; DSM–IV–TR; American Psychiatric Association, 2000), and had experienced at least one nightmare per week for the past 3 months. Participants were excluded if they exhibited apparent psychosis, mental retardation, substance dependence, suicidal ideation, or recent parasuicidal behavior. Participants were recruited through radio ads, fliers, and referrals from therapists in the community. Individuals interested in the study completed a brief phone screen for inclusion and exclusion criteria and were invited to complete a more thorough initial assessment. Participants were randomized to a treatment or waitlist control group, and were assessed at 1 week, 3 months, and 6 months posttreatment. Data from the initial and 6-month assessments were used for the purposes of this study. Participants who indicated that their nightmares began after a trauma were included in the PTNM group, whereas participants who indicated their nightmares began before exposure to trauma were included in the LLNM group.

**Participants**

Four participants indicated that they were unsure when their nightmares began and were excluded from analyses. A total of 54 participants were included in the study, with 75.9% \((n = 41)\) reporting PTNMs and 24.1% \((n = 13)\) reporting LLNMs. With regard to demographic information, participants were 77.8% women \((n = 42)\), 81.5% Caucasian \((n = 44)\), 51.9% married or living with a significant other \((n = 28)\), 70.4% employed or students, with a mean age of 38.28 years \((SD = 12.16)\) and a mean of 14.37 \((SD = 2.45)\) years of schooling. Participants reported a mean of 5.55 \((SD = 2.66, \text{range } 2–10)\) traumas, with the most frequent types of trauma reported being unwanted sexual contact (59.3%), being attacked with a weapon (59.3%), and car accident (57.4%).

**Measures**

A self-report demographic questionnaire was used to obtain information about age, relationship status, years of education, ethnicity, and vocational status.

The Trauma Assessment for Adults: Self-Report Version (TAA; Resnick, Best, Kilpatrick, Freedy, & Falsetti, 1993) assesses lifetime history of potentially traumatic events. The TAA consists of 13 items and includes follow-up questions to assess perceived threat. For the present study, the TAA was modified to include an additional five items to assess for hate crimes. Ages at first and most recent occurrence were determined for multiple incidents of a given type.

The Clinician-Administered PTSD Scale (Blake et al., 1990) is a semistructured clinical interview and was used to determine current and lifetime PTSD diagnoses. It consists of 17 items assessing frequency and severity of PTSD symptoms \((0 = \text{none/never} \text{ to } 4 = \text{daily or almost daily/ extreme})\). The “F1/I2” rule (frequency coded at least 1 and intensity coded at least 2 for the past month) was used to determine symptom presence and diagnosis.

The Modified PTSD Symptom Scale—Self-Report (Resick, Falsetti, Resnick, & Kilpatrick, 1991) is a modification of the PTSD Symptom Scale (Foa, Riggs,
Dancu, & Rothbaum, 1993) developed to assess both frequency and severity of 17 PTSD symptoms corresponding to criteria in *DSM–IV–TR*. Each symptom is rated for frequency on a 4-point Likert scale (0 = *not at all* to 3 = *5 or more times per week*/very much/almost always*) and a 5-point Likert scale for severity (0 = *not at all distressing* to 4 = *extremely distressing*). The internal consistency of the full scale has been reported at levels of .96 and .97 in treatment and community samples, respectively (Falsetti, Resick, Resnick, & Kilpatrick, 1992, as cited in Falsetti, Resnick, Resick, & Kilpatrick, 1993). The total score for symptom frequency and severity was used in the current study.

The Beck Depression Inventory—Second Edition (BDI–II; Beck, Steer, & Brown, 1996) is a 21-item self-report measure of depressive symptomatology. Each item has four optional responses ranging from *not present* to *severe*. The BDI–II yields scores ranging from 0 to 63, with higher scores reflecting greater symptomatology.

The Pittsburgh Sleep Quality Index (PSQI; Buysse, Reynolds, Monk, Berman, & Kupfer, 1989) is a self-report measure designed to assess certain qualities and problems associated with sleep. Participants rate quality of sleep and degree of sleep difficulties for a set period preceding the assessment. A global sleep quality score is obtained by summing the seven component scores, and higher scores reflect poorer sleep quality. The global score may range from 0 to 21. Buysse and colleagues (1989) identified a cutoff score of 5 to distinguish “good” sleepers from “poor” sleepers, with a diagnostic sensitivity of 89.6% and specificity of 86.5%. The present study examined the global sleep quality index.

The Trauma-Related Nightmare Survey (Davis, Wright, & Borntrager, 2001) was used to assess characteristics of chronic nightmares. Likert-type, categorical, and open-ended questions assess the frequency, severity, and duration of nightmares, as well as cognitions, emotions, and behaviors related to nightmares. Davis and Wright (2007) reported convergent validity with daily behavioral records of sleep and nightmares: nights with nightmares (*r* = .82) and number of nightmares (*r* = .81) and the Modified PTSD Symptom Scale—Self-Report nightmare frequency (*r* = .64) and severity (*r* = .45).

### Treatment

ERRT is a cognitive–behavioral treatment for trauma-related nightmares and is described in detail elsewhere (Davis, 2009; Davis & Wright, 2006). ERRT is conducted for 2 hours once a week for 3 consecutive weeks and may be used in either an individual or group format. Treatment consists of psychoeducation about trauma, PTSD, and nightmares, relaxation training, modification of sleep habits, exposure to the nightmare, and rescription of the nightmare based on trauma-related themes. Previous findings demonstrated decreased nightmare frequency, depression, and PTSD symptoms, improvement in sleep quality (Davis & Wright, 2007) as well as physiological indices of nightmare-related fear (Rhudy et al., 2010) following ERRT.
Data Analysis

Chi-square analyses (with Yates continuity correction) were conducted to examine differences between LLNMs and PTNMs on demographic variables, similarity between the nightmare and the traumatic event, current PTSD diagnosis, and childhood trauma (trauma before 18 years of age). Fisher’s exact test of significance was used for chi-square analyses not meeting assumptions because of cell frequency less than 5. General linear model one-way analyses of covariance were conducted to examine the association of type of nightmare with nightmare characteristics, related psychopathology, and treatment response using change scores, while controlling for PTSD diagnosis. Two-tailed tests were used for all analyses.

RESULTS

Preliminary Analyses

As shown in Table 1, analyses indicated that there were no differences between participants with LLNMs and PTNMs on demographic variables. Chi-square analyses for gender, race, and vocation did not meet chi-square assumptions because of low cell frequency in the LLNM group, so Fisher’s exact test of significance was used. PTSD diagnosis did not differ between the PTNM (n = 24, 58.5%) and the LLNM (n = 5, 38.5%) groups, χ²(1, N = 54) = 1.60, ns.

Table 1. Demographics of Study Participants

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Pretrauma nightmares (n = 13)</th>
<th>Posttrauma nightmares (n = 41)</th>
<th>χ² (1)</th>
<th>φ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, n (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3 (23.1)</td>
<td>9 (22.0)</td>
<td>0.00</td>
<td>.01</td>
</tr>
<tr>
<td>Female</td>
<td>10 (76.9)</td>
<td>32 (78.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race, n (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>12 (92.3)</td>
<td>32 (78.00)</td>
<td>0.55</td>
<td>.16</td>
</tr>
<tr>
<td>Not Caucasian</td>
<td>1 (7.7)</td>
<td>9 (22.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship status, n (%)</td>
<td></td>
<td></td>
<td>0.23</td>
<td>-.11</td>
</tr>
<tr>
<td>Married/cohabitating</td>
<td>8 (61.5)</td>
<td>20 (48.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/divorced/widowed</td>
<td>5 (38.5)</td>
<td>21 (51.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment status, n (%)</td>
<td></td>
<td></td>
<td>0.06</td>
<td>.08</td>
</tr>
<tr>
<td>Employed/student</td>
<td>10 (76.9)</td>
<td>28 (68.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed/retired</td>
<td>3 (23.1)</td>
<td>13 (31.7)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean (SD) age (years)        | 39.85 (13.47)                | 37.78 (11.85)                | 0.28   | .01 |
Mean (SD) education (years)  | 15.31 (2.59)                 | 14.07 (2.36)                 | 2.58   | .05 |

Note. Effect sizes for analyses of variance were calculated using partial eta-squared (η²). According to Cohen (1988), .01 = small effect, .06 = medium effect, and .14 = large effect. Effect sizes for chi-square were calculated using phi coefficient (φ). According to Cohen (1988), .10 = small effect, .30 = medium effect, and .50 = large effect.
Nightmare Characteristics

See Table 2 for statistical data for all hypotheses. Controlling for PTSD status, hypotheses regarding nightmare characteristics mostly were not supported as only one difference was found between nightmare groups. The percentages of individuals with LLNMs reporting similarity of their nightmare content to a traumatic

Table 2. Differences Among Lifelong Nightmare Sufferers and Posttrauma Nightmare Sufferers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lifelong Nightmares</th>
<th>Posttrauma nightmares</th>
<th>F (2, 55)</th>
<th>η²p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nightmares characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of nightmares (past week)</td>
<td>13</td>
<td>3.73</td>
<td>3.70</td>
<td>13</td>
</tr>
<tr>
<td>Nights with nightmares (past week)</td>
<td>12</td>
<td>2.29</td>
<td>1.10</td>
<td>12</td>
</tr>
<tr>
<td>Nights with multiple nightmares (past week)</td>
<td>13</td>
<td>0.65</td>
<td>1.07</td>
<td>13</td>
</tr>
<tr>
<td>Severity of nightmares (range: 0–4)</td>
<td>13</td>
<td>2.92</td>
<td>0.64</td>
<td>13</td>
</tr>
<tr>
<td>Panic symptoms on waking (range: 0–13)</td>
<td>13</td>
<td>4.46</td>
<td>1.98</td>
<td>13</td>
</tr>
<tr>
<td>How long having nightmares (months)</td>
<td>12</td>
<td>230.50</td>
<td>164.21</td>
<td>12</td>
</tr>
<tr>
<td>Related psychopathology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression (BDI–II; range: 0–63)</td>
<td>13</td>
<td>14.92</td>
<td>11.52</td>
<td>13</td>
</tr>
<tr>
<td>PTSD symptoms (MPSS; range: 0–119)</td>
<td>12</td>
<td>26.50</td>
<td>27.96</td>
<td>12</td>
</tr>
<tr>
<td>Sleep quality (PSQI; range: 0–21)</td>
<td>13</td>
<td>10.27</td>
<td>4.81</td>
<td>13</td>
</tr>
<tr>
<td>Feeling depressed on waking (range: 0–4)</td>
<td>13</td>
<td>0.85</td>
<td>1.21</td>
<td>13</td>
</tr>
<tr>
<td>Fear of sleep (range: 0–4)</td>
<td>13</td>
<td>1.38</td>
<td>1.44</td>
<td>13</td>
</tr>
<tr>
<td>Restfulness on waking (range: 0–4)</td>
<td>13</td>
<td>1.23</td>
<td>1.01</td>
<td>13</td>
</tr>
<tr>
<td>Treatment response</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in nightmares per week</td>
<td>6</td>
<td>2.25</td>
<td>2.32</td>
<td>6</td>
</tr>
<tr>
<td>Change in nightmares per week</td>
<td>6</td>
<td>1.67</td>
<td>1.03</td>
<td>6</td>
</tr>
<tr>
<td>Change in nightmare severity</td>
<td>6</td>
<td>1.67</td>
<td>1.21</td>
<td>6</td>
</tr>
<tr>
<td>Change in total PTSD symptoms past week (CAPS)</td>
<td>6</td>
<td>27.67</td>
<td>31.15</td>
<td>6</td>
</tr>
<tr>
<td>Change in total PTSD symptoms past month (CAPS)</td>
<td>6</td>
<td>28.00</td>
<td>32.92</td>
<td>6</td>
</tr>
<tr>
<td>Change in total depression</td>
<td>6</td>
<td>0.58</td>
<td>3.38</td>
<td>6</td>
</tr>
<tr>
<td>Change in total sleep quality</td>
<td>6</td>
<td>−0.33</td>
<td>2.16</td>
<td>6</td>
</tr>
<tr>
<td>Trauma exposure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of traumas</td>
<td>12</td>
<td>3.83</td>
<td>2.72</td>
<td>12</td>
</tr>
<tr>
<td>Trauma before age 18</td>
<td>9</td>
<td>69.2</td>
<td>32</td>
<td>9</td>
</tr>
</tbody>
</table>

Note. All Fs reported except for number of traumas are after controlling for posttraumatic stress disorder (PTSD) diagnosis. All variables assessed with the Trauma-Related Nightmare Scale except where specified. BDI–II = Beck Depression Inventory; PSQI = Pittsburgh Sleep Quality Index; MPSS = Modified PTSD Symptom Scale; CAPS = Clinician-Administered PTSD Scale. Effect sizes for analyses of covariances were calculated using partial eta-squared (η²p). According to Cohen (1988), .01 = small effect, .06 = medium effect, and .14 = large effect. Effect sizes for chi-square were calculated using phi coefficient (ϕ). According to Cohen (1988), .10 = small effect, .30 = medium effect, and .50 = large effect.

* p < .05.  ** p < .001.
event were 0% exactly like the trauma, 33% similar to the trauma, and 67%
unrelated to the trauma. For PTNM individuals, the percentages were 33% exactly
like the trauma, 39% similar to the trauma, and 28% unrelated to the trauma. For
the analyses, individuals with replicative, similar, and dissimilar nightmares were
collapsed into two groups: replicative (replicative and similar) and not replicative
dissimilar) because of low cell frequencies. Fisher’s two-tailed test was significant
and indicated that the PTNM group was more likely to report replicative or similar
nightmares than the LLNM group.

Related Psychopathology

Hypotheses regarding related psychopathology were partially supported. The
PTNM group reported greater depression on waking, greater global depression,
greater PTSD symptom severity, and poorer sleep quality. The groups did not
differ, however, on fear of sleep or feeling rested on waking. PTSD diagnosis
contributed to global sleep quality, $F(1, 48) = 10.98, p < .01$, $\eta^2_p = .19$, and PTSD
symptom severity, $F(1, 49) = 4.98, p < .05$, $\eta^2_p = .09$.

Treatment Response

Contrary to the hypothesis, the LLNM and PTNM groups exhibited similar
patterns of response to treatment. Regardless of whether PTSD status was con-
trolled, there were no differences between the PTNM group and the LLNM group
in terms of baseline to 6-month assessment change in nightmares per week, nights
with nightmares per week, nightmare severity, change in total past-week and
past-month PTSD symptoms, depression, or sleep quality.

Trauma Exposure

Chi-square assumptions for cell frequency were not met, so Fisher’s exact test
of significance was used. The LLNM and PTNM groups did not differ with respect
to the number of individuals who experienced a trauma before the age of 18.
However, PTNM sufferers reported significantly more traumas.

DISCUSSION

The present study examined differences between trauma-exposed persons with
LLNMs and trauma-exposed persons with PTNMs. Few studies have investigated
such differences to date, and none have controlled for the influence of PTSD.
Consistent with previous research comparing nightmares between individuals with
and without trauma exposure or PTSD, the present study found that the PTNM
group reported greater psychopathology. Moderate effect sizes were found for
global depression and sleep quality, and large effect sizes were found for PTSD
symptom severity and depression on waking, while controlling for PTSD diagnosis.
It is possible that those who experienced nightmares prior to trauma may have found ways to cope with the sleep disturbances and the lower quality and quantity of sleep; thus, they were less vulnerable to related pathology after experiencing a trauma. This finding is inconsistent, however, with results reported by Mellman, David, Kulick-Bell, Hebding, and Nolan (1995), who found that individuals with sleep disturbances before the traumatic event were more vulnerable to posttrauma problems. Future research is needed to determine whether pretrauma nightmares and sleep problems provide a degree of protection or vulnerability to posttrauma difficulties.

PTSD diagnosis was controlled in each analysis and was found to be significantly associated only with initial global sleep quality and PTSD symptom severity. Given the cross-sectional nature of the present study, it is unclear how sleep quality and PTSD may be associated. Nightmares and poor sleep quality may increase one’s risk for developing PTSD. Indeed, Wang, Wilson, and Mason (1996) suggested that sleep problems often precede other difficulties and may exacerbate symptomatology. Furthermore, prospective studies have found that acute posttrauma nightmares and sleep problems are associated with difficulties, including PTSD, over time (e.g., Koren, Arnon, Lavie, & Klein, 2002). Another possibility is that aspects of PTSD, sleep problems, and nightmares may develop and be maintained in concert with the rest of the PTSD symptoms. More prospective studies are needed to determine when particular symptoms develop posttrauma and how they relate to the development or maintenance of other indices of distress.

In terms of nightmare characteristics, the only difference found between LLNMs and PTNMs was that the PTNM group was more likely to report nightmares similar to or replicative of the trauma. Indeed, whereas no one in the LLNM group reported experiencing replicative nightmares, one third of the PTNM group did. It is interesting that one third of those with LLNMs reported that their nightmares were similar to the traumatic event. This finding provides some evidence that nightmares may change in content following a trauma, as discussed by Hartmann (1998). Longitudinal studies would be helpful in further elucidating the nature and course of nightmares.

We examined the response of individuals to a treatment for chronic nightmares in trauma-exposed persons. Results indicated that despite differences in associated psychopathology, the treatment was successful in treating both types of nightmares in terms of changes in nightmare frequency, severity, PTSD symptoms, depression, and sleep quality. PTSD diagnosis was not associated with change in any variable. This suggests that cognitive–behavioral therapy for nightmares is effective regardless of the type of nightmare or degree of psychopathology and can have generalized effects beyond nightmare symptoms to other areas of psychopathology (e.g., PTSD, depression).

We examined whether there were important differences in the trauma histories between individuals with LLNMs and individuals with PTNMs. Those with PTNMs reported experiencing a greater number of traumas, but the groups did not differ in terms of the length of time they had experienced nightmares or in experiencing trauma before the age of 18. However, future research should further examine this question using differing age ranges, traumas experienced, and the nature and extent of the trauma.
Limitations

Several limitations exist in the present study. Small sample sizes of those reporting LLNMs limited the power to detect differences that may have existed. In addition, trauma was examined as one general variable. Future research should examine whether differences in characteristics of nightmares exist between interpersonal, environmental, or combat-related traumatic experiences. Finally, the present study was part of a larger study evaluating the impact of a treatment designed for chronic nightmares in trauma-exposed persons. As such, participants were required to experience at least one nightmare per week for at least 3 months. Our participants reported a mean duration for nightmares of 16 years. Furthermore, all participants were seeking treatment specifically for nightmares. As such, this was a sample experiencing severe difficulties with nightmares. This degree of severity may be not be representative of trauma-exposed individuals at large; however, that remains to be determined.

Conclusions

Overall, these findings suggest that, although most nightmare characteristics and treatment response do not differ between individuals with LLNMs or PTNMs, individuals who experience LLNMs experience fewer disturbances than individuals with PTNMs. Additional research is warranted to determine whether these findings generalize to other samples and to determine whether experiencing nightmares prior to a trauma may provide some protection against long-term problems.

References


