Memory and Dissociative Tendencies: The Roles of Attentional Context and Word Meaning in a Directed Forgetting Task

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ABSTRACT. Conceptual and methodological approaches from cognitive science have increasingly been applied to research examining the relation between trauma, dissociation and basic cognitive functioning. The current study replicates and extends recent research that examined performance in a directed forgetting task using PTSD and trauma history as the grouping variables (McNally, Metzger, Lasko, Clancy, & Pitman, 1998) to college students who were classified as high or low dissociators based on their performance on the Dissociative Experiences Scale (DES: Bernstein & Putnam, 1986). High and low DES participants' performance was examined under two attentional contexts: a selective attention condition and two new divided attention conditions (based on DePrince & Freyd, 1999). Differences between the groups were revealed when a divided attention version of the task was employed. Consistent with DePrince and Freyd (1999), when divided attention was required, high DES participants recalled fewer trauma and more neutral words than did low DES participants, who showed the opposite pattern. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <http://www.HaworthPress.com> ©2001 by The Haworth Press, Inc. All rights reserved.]*

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The current research was supported in part by the Emotion Research Training Grant, National Institute of Mental Health. The authors wish to thank Richard McNally for providing stimuli, as well as J. Q. Johnson, Eileen Zurbriggen, Lew Goldberg, Kathryn A. Becker and two anonymous reviewers for comments on earlier drafts of this manuscript.

KEYWORDS. Memory, trauma, dissociation, directed forgetting task

Increasing attention has been paid to the relation between traumatic stress and alterations in cognitive functioning. For example, recent studies have examined alterations in memory and attention functioning for those individuals who meet criteria for posttraumatic stress disorder (PTSD) (e.g., McNally, Metzger, Lasko, Clancy & Pitman, 1998; Kaspi, McNally & Amir, 1995; Cassiday, McNally & Zeitlin, 1992; Foa, Feske, Murdock, Kozak & McCarthy, 1991), as well as individuals who vary in dissociative level (e.g., DePrince & Freyd, 1999). The application of cognitive psychological tasks to questions in the traumatic stress literature allow researchers to examine the relation between specific cognitive functions (e.g., attention and memory) and trauma sequelae (e.g., PTSD and dissociation).

One recent study employed a directed forgetting task to compare memory performance, as measured by free recall, across three groups; the groups included individuals diagnosed with PTSD, individuals with a trauma history without PTSD and controls with no trauma history reported (McNally et al., 1998). Participants were shown words drawn from three categories: neutral, trauma and positive. After viewing each word, participants were instructed to either remember or forget that word. McNally et al. (1998) reported no differences across PTSD, trauma, and control groups in their recall for trauma-related words, regardless of the instruction to remember or forget. The PTSD group showed deficits in recall for positive and neutral words for which they were instructed to remember, compared to the non-PTSD groups.

McNally et al. (1998) suggested that their results call into question the long-standing clinical observation that a proportion of individuals who experience trauma can forget the events, given that participants in their sample showed no better or worse recall for trauma-related stimuli. An American Psychological Association (APA) *Monitor* article reporting on McNally et al.'s (1998) findings quoted McNally as stating "This finding flies in the face of a common hypothesis about memory functioning in people reporting psychiatric impairment as a result of having been sexually abused as a child" (APA, December 1998, p. 8).

While McNally et al.'s (1998) results suggest no difference between the PTSD and non-PTSD groups in recall for trauma words, the clinical literature indicates that memory for trauma-related material is often altered. Memory alterations have been reported at two extremes: flashbacks and intrusive memories on the one hand (for review see van der

Kolk, McFarlane & Weisaeth, 1996), and losses in memory for trauma-related material on the other hand (for a review see Freyd, 1996). Although there have been some false allegations of abuse based on faulty memory, and although there is often uncertainty about the veracity of individual alleged memories of trauma (whether recovered or continuous), there is evidence that some individuals have impaired memory for trauma (as cited above) and that trauma survivors have greater general memory impairment than control groups (Bremner, in press; Edwards, Fivush, Anda, Felitti & Nordenberg, in press).

Attentional context may play a role in the seemingly contradictory findings between McNally et al.'s (1998) study and other evidence that trauma survivors have impaired memory for trauma-related information. Most laboratory studies to date have evaluated the cognitive performance of traumatized individuals in tasks requiring selective (or focused) attention, although this may not be explicitly stated in the research reports. This is true of McNally et al.'s (1998) directed forgetting memory task, in which participants were given only one thing to do at a given moment.

Recent work suggests that dissociation may relate to basic attention systems in a way that enables some people able to perform better under divided attention conditions (see DePrince & Freyd, 1999). DePrince and Freyd (1999), in a study comparing the performance of high and low dissociators, found evidence for an interaction between dissociation and attention. Participants completed the Stroop task under two attention conditions: selective and divided. In the selective attention condition, participants received the standard Stroop instructions; they were asked to name the color in which words were printed while ignoring the word meaning. In the divided attention condition, participants were asked to name the color in which the words were printed while simultaneously trying to remember the words for a memory test. Performance was assessed by examining Stroop Interference. DePrince and Freyd (1999) reported that high dissociators performed more poorly (showed more interference) on the Stroop task under selective attention conditions and better (showed less interference) under divided attention conditions when compared to low dissociators who showed the opposite pattern. This finding suggests that attentional context is an important factor to consider in examining the relation between alterations in basic cognitive systems and dissociation.

This research also suggests a relation between dissociation and memory. DePrince and Freyd (1999) examined participants' free recall responses for neutral (e.g., squirrel, baboon) and trauma (e.g., incest,

assault) words. A significant interaction revealed that high dissociators recalled more neutral and fewer trauma words when compared to low dissociators who recalled more trauma and fewer neutral words.

DIRECTED FORGETTING

Directed forgetting is a laboratory task that was developed to examine mechanisms of intentional forgetting (MacLeod, 1999). During the task, participants are presented with lists of words and given instructions to either remember or forget the material. Participants are told that their memory will be tested *only* for words that they were instructed to remember. Subsequent memory is tested for both the "forget" and the "remember" words. The standard directed forgetting effect leads to higher rates of recall for remember compared to forget words (for a review, see MacLeod, 1999).

The directed forgetting task has been employed in two forms. In the "item" method, words appear one at a time with an instruction to remember or forget following each word. In the "list" method, participants view a list of words and are told halfway through the list to remember or forget all previous items. Researchers have suggested that the two forms of directed forgetting tasks lead participants to employ different cognitive mechanisms (e.g., MacLeod, 1999; Basden, Basden & Gargano, 1993). Participants in the item method likely utilize selective rehearsal of the remember words, whereas participants in the list method likely employ inhibition of the forget words (MacLeod, 1999). This view is supported by evidence from recognition tasks. Basden et al. (1993) found that participants show the directed forgetting effect (recognizing more remember than forget words) during a recognition task when the item method is used, but that this difference disappears when the list method is employed. We used the item method of presentation in our replication of McNally et al.'s (1998) methodology.

CURRENT STUDY

Although McNally et al. (1998) compared groups based on PTSD and trauma history status, we used dissociative tendency as the grouping variable. Dissociation has been shown to be significantly related to trauma history (for a review, see Freyd, 1996). Both research and clinical evidence suggest that dissociation is an important construct in disorders following trauma, such as posttraumatic stress disorder (e.g.,

Bremner et al., 1992; Koopman, Classen & Spiegel, 1994) and the dissociative disorders (e.g., Putnam, 1997). In the current study, we examine cognitive correlates of dissociative tendencies and consider the results in the context of the ory-building in the dissociation and traumatic stress literatures.

We recruited participants who scored 20 or above and 10 or below on the Dissociative Experiences Scale (DES), classifying them as high and low DES groups, respectively. Given that we were not diagnosing participants with dissociative disorders, but rather were examining correlates of dissociative processes, we did not use the more stringent cut-off of 30 that has been recommended for diagnostic purposes (e.g., Carlson & Putnam, 1993). Rather, we used a less conservative cut-off of 20, which Carlson and Putnam (1993) suggested is an appropriately high score to warrant further examination in clinical uses of the DES. The low DES cut-off was selected based on previous research suggesting that normal adults score in the range of 0 to 10 (e.g., Carlson and Rosser-Hogan, 1991). In addition, these cut-offs were used in a previous study and yielded interesting findings, such as a significant interaction between DES group (high or low) and recall for neutral and trauma words (DePrince & Freyd, 1999), that we sought to further examine in the current study. In the current study, high and low DES participants were tested in a directed forgetting task that included trauma, neutral, and positive words, as well as both selective and divided attention conditions. A replication of McNally et al.'s (1998) findings for the selective attention condition was predicted; that is, no difference for high and low DES participants' recall of trauma-related words under selective attention conditions was expected. Consistent with DePrince and Freyd (1999), under divided attention conditions, we predicted that high DES participants would show worse recall for the trauma words and better recall for neutral words that they had been instructed to remember relative to low DES participants, who we predicted would show the opposite pattern. Two types of divided attention tasks were included. One task required that the participants make oral responses, while the other required key press responses.

METHOD

Participants

Undergraduate students enrolled in an Introductory Psychology class at the University of Oregon were selected to participate through pre-

screening based on their performance on the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986). Two participants were removed from the study because they were non-native English speakers. Twenty-eight high DES participants (mean DES = 26.8; SD = 4.7) and 28 low DES participants (mean DES = 5.19; SD = 2.8) completed the experiment. In the high DES group, the average age was 19; 14 participants were women. In the low DES group, the mean age was 21; 17 participants were women. Participants were compensated through partial fulfillment of an Introductory Psychology class research requirement.

Materials

Selective and divided attention versions of a directed forgetting task were administered by personal computer. Stimuli were replicated from those used by McNally et al. (1998). Fifty-four words derived from three word groups were used; word types included trauma (e.g., incest), positive (e.g., carefree), and neutral (e.g., cupboard). Each stimulus appeared in lower case at the center of a computer screen one at a time. A list of fifty-four distracter words that were similar in meaning and part of speech were generated for use in a recognition task.

As in McNally et al. (1998), each of the 54 words was randomly assigned to one of three blocks. Each block was paired with an attention condition and counterbalanced across participants (e.g., Block A paired with the selective attention condition, Block B paired with the divided attention color condition, Block C paired with the divided attention number condition, etc.). Participants viewed each block three times, for a total of nine blocks, to match the number of times stimuli were viewed in McNally et al. (1998). Within each block, word order was randomized. The block order was randomized for each participant. At the beginning of each block of stimuli, participants were given instructions for that particular block. Filler words (country names) appeared at the beginning and end of each block in order to prevent primacy and recency effects in free recall.

Participants viewed words under three different attention conditions: selective attention, divided attention with key press, and divided attention with voice response. During the selective attention blocks, participants were told that they would see a word and then receive the instruction to either remember or forget that word. The instruction to remember appeared as "RRRR" in the center of the computer screen; the forget instruction appeared as "FFFF." In the divided attention with key press blocks, the color of the word and instruction (RRRR or FFFF)

changed at ran dom in ter vals be tween red and blue. In the di vided at ten tion with key press blocks, the par tic i pants were in structed to press a key each time the color changed while also fol low ing the in struc tions to read and re mem ber words. In the di vided at ten tion with ver bal re sponse blocks, par tic i pants were asked to count out loud by three's while fol low ing in struc tions to read and re mem ber words. A re search as sis tant was present during the task and re corded the ver bal re sponses made dur ing the count ing in or der to track er rors. Two types of di vided at ten tion con di tions were in cluded to in ves ti gate how dif fer ent types of di vided at ten tion task ma nip u la tions af fect per for mance (e.g., one con di tion re quired ver bal re sponse, an other key press re sponses).

The participants were prescreened using the Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986). The DES is a 28 item self-report measure that has demonstrated good reliability and validity. The DES includes items for which the participant rates how frequently he/she experiences each event. Sample items include, "Some people have the experience of driving a car and suddenly realizing that they don't know what has happened during all or part of the trip" and "Some people have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person."

Procedure

The participants were tested one at a time with an experimenter present; the experimenter was blind to the participant's assignment to the high or low DES group. After giving informed consent, participants were asked to read words that appeared at the center of a computer screen. Each word appeared one at a time and stayed on the monitor for two seconds. Following each word, the participants saw instructions to either remember or forget the word they had just read; the memory instruction appeared for three seconds. The participants were told that their memory would be tested at the end of the experiment *only* for the words that had been followed by the remember (RRRR) instruction.

After viewing the nine blocks of stimuli, the participants were asked to write down all of the words they could remember from the experiment (free recall task). They were instructed to write down words regardless of the remember or forget instructions presented during the experiment. Following the free recall task, the participants were given a recognition test. The words were presented one at a time on the computer screen. Half of the words were taken from the experiment. The

other half were new words, not previously viewed during the experiment, that were matched for word category (i.e., neutral, trauma, positive) and part of speech. The participants were instructed to indicate whether each word had been viewed previously or was new by making a key press. Upon completion of the experiment, participants were told the rationale for the study.

RESULTS

For each participant, we calculated the total number of words recalled for each word category within each of the three attention conditions. The mean number of words correctly recalled as a function of DES group, word category and attention condition are presented in Table 1. In addition, we assessed recognition memory by calculating the total number of words correctly identified as having been viewed during the directed forgetting task (see means in Table 2).

TABLE 1. Means (standard deviation) words correctly recalled in a free recall task across three conditions (selective attention, divided attention with voice response, divided attention with key press). Range of possible correct free recall responses is 0-3.

Selective attention

	Trauma-F	Trauma-R	Neutral-F	Neutral-R	Positive-F	Positive-R
Low DES	.93 (.86)	1.82 (.94)	.71 (.76)	2.00 (.77)	.46 (.51)	1.11 (.96)
High DES	.86 (.89)	1.89 (1.03)	.71 (.85)	1.93 (.94)	.71 (.90)	1.04 (.79)

Divided with voice response

	Trauma-F	Trauma-R	Neutral-F	Neutral-R	Positive-F	Positive-R
Low DES	.39 (.57)	.57 (.79)	.04 (.19)	.25 (.52)	.07 (.26)	.36 (.68)
High DES	.39 (.74)	.64 (.95)	.11 (.42)	.36 (.68)	.21 (.42)	.32 (.77)

Divided with key press

	Trauma-F	Trauma-R	Neutral-F	Neutral-R	Positive-F	Positive-R
Low DES	.50 (.51)	.93 (.81)	.18 (.48)	.50 (.75)	.18 (.39)	.29 (.46)
High DES	.57 (.69)	.54 (.74)	.18 (.39)	.75 (.93)	.43 (.63)	.29 (.53)

TABLE 2. Means (standard deviation) words correctly identified in a recognition task as previously viewed across three conditions (selective attention, divided attention with voice response, divided attention with key press). Range of possible correct recognition responses is 0-3.

	Trauma-F	Trauma-R	Neutral-F	Neutral-R	Positive-F	Positive-R
Selective attention						
Low DES	2.71 (.46)	3.00 (.00)	2.57 (.57)	2.71 (.60)	2.11 (.96)	2.32 (.82)
High DES	2.57 (.50)	2.75 (.65)	2.46 (.84)	2.96 (.19)	2.14 (.97)	2.50 (.69)
Divided with voice response						
Low DES	1.86 (.89)	1.93 (1.05)	1.39 (1.13)	1.75 (.84)	1.57 (1.23)	1.68 (1.12)
High DES	1.68 (.86)	1.64 (1.03)	1.46 (.88)	1.86 (.97)	1.14 (.93)	1.68 (1.06)
Divided with key press						
Low DES	2.43 (.74)	2.64 (.68)	2.11 (.88)	2.39 (.69)	2.00 (.94)	2.07 (.94)
High DES	2.32 (.72)	2.43 (.74)	1.93 (1.09)	2.21 (.88)	1.68 (1.09)	1.96 (1.04)

Experimental Manipulation Check

A manipulation check within the free recall data revealed significant main effects for remember/forget instructions $F(1,54) = 88.452$, $p < .001$, indicating that participants correctly recalled more remember than forget words, as predicted by the standard directed forgetting task. A significant main effect for attention condition ($F(2,108) = 88.853$, $p < .001$) suggested that participants did follow instructions and therefore recalled fewer words from the divided attention conditions. High and low DES groups did not appear to respond to the task instructions differently, as indicated by non-significant interactions for DES by remember/forget instruction and DES by attention condition. Consistent with McNally et al. (1998), no significant group differences were found for free recall of trauma-related words in the selective attention condition.

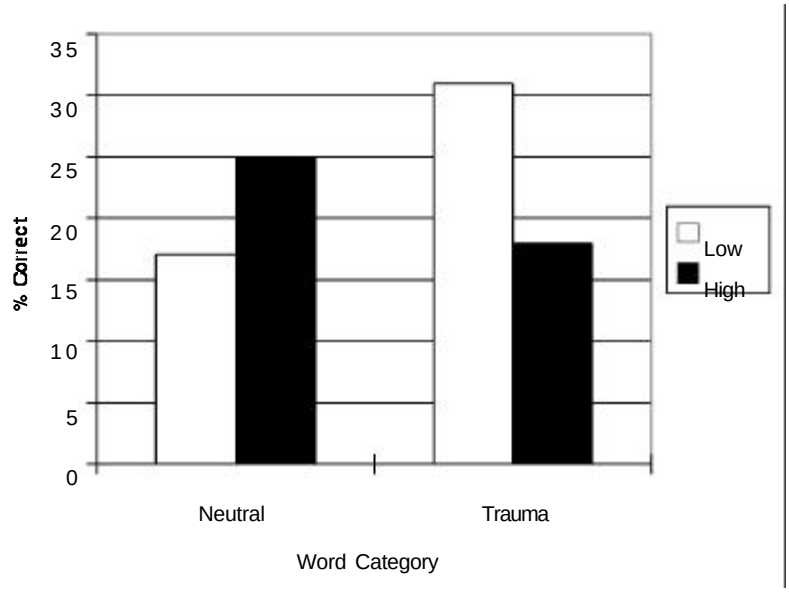
Free Recall Task

In order to test the main prediction that high and low DES participants would differ on recall for trauma and neutral words that they were

instructed to remember under divided attention conditions, a 2 (DES, high or low) 3 2 (word category, trauma-remember or neutral-remember) ANOVA for the divided attention with key press condition was conducted. A significant interaction ($F(1,54) = 5.074$, $p = .028$) revealed that high DES participants recalled fewer trauma words and more neutral words that they were instructed to remember than low DES participants who recalled more trauma and fewer neutral words (see Figure 1). The 2 ((DES, high or low) 3 2 (word category, trauma-forget or neutral-forget) ANOVA for the divided attention with key press condition was not significant.

A 2 (DES, high or low) 3 2 (word category, trauma-remember or neutral-remember) ANOVA examining the divided attention with verbal response condition was not significant. The 2 (DES, high or low) 3 2 (word category, trauma-forget or neutral-forget) ANOVA for the divided attention with verbal response condition was not significant. Free recall data for the forget items suggested that the high and low DES groups did not differ on their memory for words that were followed by the forget instruction.

FIGURE 1. Percent correct free recall for trauma and neutral words viewed during divided attention-key press condition. Significant interaction of DES by word category



To ex am ine whether high and low DES groups di vided their at ten tion with sim i lar ef fort, high and low DES groups were com pared on the num- ber of key presses made dur ing the di vided at ten tion with key press con- di tions. The mean num ber of key presses made by low and high DES par tic i pants was 169 (39 std. dev.) and 176 (35 std. dev.), respectively. An in de pend ent sam ple t-test re vealed that the groups did not dif fer on num ber of key presses, sug gest ing that high and low DES groups used com pa ra ble lev els of ef fort in com plet ing the di vided at ten tion color task.

Recognition Memory

The pre dicted in ter ac tion of DES by word cat e gory within the divided at ten tion con di tions was tested for the rec og ni tion mem ory data. A 2 (word cat e gory; neu tral-re mem ber, trauma-re mem ber) 3 2 (DES; high, low) re peated mea sures ANOVA in the di vided at ten tion with key press con di tion was not sig nif i cant, though the pre dicted pat tern was pres ent. Sim i larly, the 2 (word cat e gory; neu tral-re mem ber, trauma-re mem ber) 3 2 (DES; high, low) re peated mea sures ANOVA in the di vided at ten tion with voice re sponse con di tion was not sig nif i cant.

The to tal num ber of false alarms made dur ing the rec og ni tion task was cal cu lated (see Ta ble 3). False alarms were de fined as words that the par tic- i pants in cor rectly iden ti fied as hav ing been viewed dur ing the ex per i ment (i.e., the par tic i pant in cor rectly rec og nized the word from the pre vi ous lists when the word had not been pre sented ear lier). A 2 (dis so ci a tion; high or low) by 3 (word cat e gory; trauma, neu tral, pos i tive) ANOVA re vealed that high and low DES par tic i pants did not dif fer in the to tal num ber of false alarms made when try ing to iden tify words pre vi ously viewed

DISCUSSION

In the cur rent study, a di vided at ten tion task re quired that par tic i pants make a key press in re sponse to a sec ond ary task, in ad di tion to at tend-

TABLE 3. Mean (stan dard de vi a tion) false alarms made dur ing rec og ni tion task across three word cat e go ries (trauma, neu tral, pos i tive). Range of pos si- ble false alarm re sponses is 0-6.

	Trauma	Neutral	Positive
Low DES	4.50 (3.19)	3.57 (2.79)	4.32 (3.22)
High DES	4.71 (3.62)	2.42 (2.06)	3.82 (2.11)

ing to words on a computer screen. Under this divided attention condition, the high DES participants recalled more neutral and fewer trauma that they had previously been instructed to remember, compared to low DES participants who showed the opposite pattern. This finding, in conjunction with previous studies (e.g., Freyd, Martorella, Alvarado, Hayes, & Christman, 1998; DePrince & Freyd, 1999), suggests that attentional context is a critical factor to be considered when examining the relation between memory function and dissociation. These findings suggest that dissociation may be adaptive in keeping threatening information from awareness under certain circumstances. In particular, attentional context may be a central factor in understanding when dissociative tendencies are most likely to help people keep threatening information from awareness. These results are particularly important for future research in light of the fact that most cognitive studies currently being conducted regarding trauma, dissociation, and PTSD, require participants to utilize selective attention. Many of the cognitive alterations seen following some traumatic events may be best revealed in a divided attention context. Attentional context is also important to consider in terms of ecological validity. Tasks requiring divided attention may more closely approximate the real world. In daily life, individuals frequently have to deal with divided attention demands than selective.

This study adds to the growing evidence that dissociation may provide some protection from threatening information under certain attentional demands. The current findings, in conjunction with Freyd et al. (1998) and DePrince and Freyd (1999), suggest that dissociation may be adaptive under divided attention conditions, but not necessarily under selective attention demands. In addition, this study provides preliminary evidence that whether the individual is actively trying to remember or can ignore the information is another important factor. The interaction of DES by word category for free recall was not significant for words that participants were instructed to forget, but was significant for words that the participants were instructed to remember in the divided attention key press condition. Dissociation appears to have helped block trauma information only under conditions during which the participant is instructed to actively try to remember the threatening information, not under conditions where task demands are such that the participant can ignore the threatening information.

No significant interaction between DES and word category was found when the divided attention task required participants to make a simultaneous verbal response. Task difficulty may explain the difference in performance across the two divided attention conditions. During de

briefing, many participants commented that the divided attention task requiring a verbal response was much more difficult than the other two tasks. It may be the case that divided attention demands can allow dissociation to keep threatening information from awareness given an optimum difficulty level. Tasks that are more difficult than the optimum may not allow for the protective functions of dissociation. Alternatively, the item method of presentation may have led participants to selectively rehearse remember words. Participants' rehearsal strategy may have been disrupted by the requirement that they make verbal responses in counting by threes.

The high and low DES groups did not differ on the number of intrusions that occurred during the recognition task. This finding is pertinent to considerations of memory errors that have been discussed in the literature on trauma (see Freyd & Gleaves, 1996). Dissociative tendency did not appear to increase the likelihood of making errors of commission on a recognition task for words similar in meaning and part of speech in the current study. That is to say, when asked to indicate whether or not they had viewed words previously, high DES participants were no more likely to make errors than low DES participants inerroneously indicating that they had seen words previously, when in fact they had not.

Several limitations in the current study should be taken into consideration. First, the study examines the relation between dissociative tendency and information processing, including processing of trauma words, but does not examine trauma history. Though research strongly supports a link between dissociation and trauma, these findings should be considered only in terms of dissociation and not trauma history. Future studies might examine trauma history and information processing across attentional contexts. Second, while we have assumed that the trauma words would be perceived by participants as threatening information, this was not demonstrated through behavioral or physiological measures. Third, we divided participants into high and low DES groups. While such a division appears to be meaningful in terms of capturing different levels of dissociation, the high DES group does not necessarily represent pathological levels of dissociation. Future studies might employ the DES Taxon (Waller, Putnam, & Carlson, 1996) or use more stringent DES cut-offs to examine pathological levels of dissociation.

Future studies conducted using the directed forgetting task should employ the list presentation method. Given that researchers have suggested the list method encourages participant to adopt an inhibition strategy (e.g., Anderson & Neely, 1996; Basden et al., 1993), this

method may be more interesting in terms of examining how high and low dissociators inhibit information. Future studies that employ the list presentation method will facilitate comparisons to related studies that have also used the list method (e.g., Cloitre, Cancienne, Brodsky, Dulit, & Perry, 1996) and are likely examining inhibition rather than encoding processes. Inhibition is an important mechanism to explore, especially given the clinical observation that trauma survivors often report memory impairment. Anderson (in press) has begun to apply active inhibition models to traumatic memory. In addition, future research might include manipulation of memory strategies by instructing participants to use certain strategies. Likely, participants are studying words by simply repeating the items to themselves, which has been shown to be a relatively ineffective strategy. How might differences between high and low DES groups be altered if more effective memory strategies are invoked?

In summary, an interaction of dissociative tendency by word category for free recall was found under a divided attention condition. In a divided attention task, high DES participants recalled fewer trauma words and more neutral words that they had been instructed to remember than did low DES participants who showed the opposed pattern. Given the established relationship between trauma and dissociation in the literature, this finding is important to considerations of trauma and memory and suggests that dissociation may have adaptive value under certain attentional contexts to help the individual keep threatening information away from explicit awareness (DePrince & Freyd, 1999; Freyd, 1996). These findings suggest that the ability to keep threatening information from awareness is most likely to occur under divided task demands. The role of attentional context will be important for researchers and clinicians to consider when studying traumatized and/or dissociative populations in the laboratory. If future research supports the current findings, the role of attentional context will also be important for clinicians to consider, especially when it is observed in a clinical context that highly dissociative individuals seem to organize their lives to maintain seemingly chaotic environments. What appears chaotic may correspond to an environment that includes divided attention. The maintenance of divided attention environments may enable highly dissociative individuals keep threatening information from awareness.

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RECEIVE: 06/29/00
REVISED: 12/23/00
ACCEPTED: 12/24/00