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Weapon focus in sexual assault memories of prostitutes

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1. Introduction

One aspect of sexual victimization is the inclination for the offender to use a weapon in the course of an attack. In such circumstances, it is thought that the presence of a weapon leads to a different memorial outcome than in similar situations in which no weapon is present. In fact, a robust finding from laboratory research indicates that the presence of a weapon has a detrimental influence on participants' memory (see Steblay, 1992 for a meta-analytic review). However, little is known about the external validity of this effect—the primary issue examined in the present study.

The 'weapon focus' phenomenon is thought to be mediated by two, not necessarily independent, variables: attention and arousal. Considering the former, Loftus, Loftus, and Messo (1987) have demonstrated that the presence of a weapon in a slide sequence results in a narrowing of participants' attention. In their study, participants who viewed a slide sequence with a weapon focused their gaze on the weapon significantly more and for a longer duration than participants who viewed the same sequence without the weapon. This narrowing of attention has been suggested to occur because increases in emotional arousal, the second weapon focus variable, reduce the cues one is able to attend to (see Easterbrook, 1959). Thus, in high-stress situations, such as in a crime scene, one would tend to narrow their focus onto the central aspects of the scene (e.g., the weapon), while ignoring peripheral aspects (e.g., the perpetrator's face). In support of this view, several researchers have found that laboratory participants remember less peripheral details (e.g., of the perpetrator) when a weapon is present than when no weapon is present (Kramer, Buckhout, & Eugenio, 1990; Loftus et al., 1987; Maass & Kohnken, 1989; O'Rourke, Penrod, Cutler, & Stuve, 1989; Pickel, 1998, 1999).

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Nonetheless, one may question the ecological validity of these findings. In fact, concerns about the generalizability of laboratory studies to the real world have been voiced since *early in this century* (e.g., see Stern, 1937; Wigmore, 1909). Prior weapon focus methodologies have primarily employed slide sequences (e.g., Kramer et al., 1990; Loftus et al., 1987; Shaw & Skolnick, 1994) or videotaped events (e.g., O'Rourke et al., 1989; Pickel, 1998, 1999; Wright & Pfeifer, 2000) as stimuli. In what respects does viewing slide sequences or videotapes resemble witnessing or being the victim of a real crime? Probably little, but, of course, this is an empirical question. According to Cutshall and Yuille (1989) (also see Yuille, 1993; Yuille & Cutshall, 1986), the events typically seen in laboratory experiments may not be comparable to many actual criminal events. Clearly, the availability of cues and arousal levels differ between the two contexts. How often does a rapist ask his/her victim to pay close attention to the assault, as is routine in the investigator–participant interaction in most laboratory simulation studies (e.g., see O'Rourke et al., 1989; Pickel, 1998, 1999)? Moreover, the typical laboratory participant may act quite differently than an actual witness or victim of a crime (Cutshall & Yuille, 1989). The personal significance of the event, as well as its consequences, may not be equivalent to what is experienced outside the laboratory. As noted by van der Kolk (1996), “clearly, there is little similarity between viewing a simulated car accident on a TV screen, and being the responsible driver in a car crash in which one’s own children are killed” (p. 279). Although Maass and Kohnken (1989) raised the level of realism in their study by exposing their participants to the threat of a syringe injection, they stated that “at the same time, it is quite obvious that the external validity of the syringe manipulation should be subjected to further empirical testing” (p.407).

It is clear that the majority of the extant weapon focus studies suffer from weak ecological validity. As a consequence, archival and field research are needed in order to assess the validity of the weapon focus effect. As Yuille (1993) has noted regarding investigating eyewitness memory in general, “we should do a combination of controlled, archival, and field research, make comparisons, and then draw conclusions” (p.573; also see Tulving, 1991). Unfortunately, only one prior archival study has dealt with the weapon focus phenomenon. Relying on the reports of the Royal Canadian Mounted Police (RCMP), Tollestrup, Turtle, and Yuille (1994) focused on victims’ and witnesses’ memories of actual robberies. In their study, it was reported that participants who had been subjected to an armed robbery (i.e., the weapon condition) recalled significantly more details concerning the perpetrators’ descriptions than participants who were robbed without the use of a weapon (i.e., the nonweapon condition). This finding is counterintuitive to the weapon focus effect.

Clearly, this is a confusing state of affairs. Indeed, the results from Tollestrup et al.’s (1994) archival study contradict the results from all previous laboratory works. It is quite possible that the concept of weapon focus is a laboratory phenomenon and is thus not applicable to actual criminal events. Consequently, more research is needed, in particular with actual victims, in order to test both the validity and the reliability of the weapon focus phenomenon in the field. To date, there have been no investigations of weapon focus with victims of sexual assault. As such, the objective of the present study was to test the weapon focus phenomenon

in the field by using pre-research highlighting the incidents in sex trade workers. In a previous study, it was anticipated that no weapon focus was observed. Specifically, a larger quantity of details were recalled in the course of their victimization without a weapon. Further research on the age of the victims and the age of the previous research (e.g., see Suengas & Johnson, 1989).

2. Method

2.1. Participants

Participants were 51 female sex trade workers from the downtown east side of Vancouver, British Columbia, Canada, with a mean age of 28.5 years. All participants had been working as prostitutes for at least 6 months. Ninety-four percent of the participants were of a ‘hard’ nature, such as being informed to attend the sex trade without the use of alcohol and that they would be paid for their services.

2.2. Excluded participants

Eight participants were excluded from the study and/or inaudible cassette recordings were not admitted to being under the influence of cocaine at the time of the assault. The purpose of the study was to provide memories of events that were not always the case. The participants were subsequently dropped from the study. 24 participants were included in the final analysis.

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in the field by using prostitutes as participants. This sample was chosen due to the recent research highlighting the astoundingly high prevalence of traumatic events, including sexual assaults, in sex trade workers (see Brannigan & Gibbs Van Brunschot, 1997; Farley, Baral, Kiremire, & Sezkin, 1998; Farley & Barkan, 1998). Considering the field nature of the present study, it was anticipated that the results would support the previous archival research in which no weapon focus was found, as opposed to the results from laboratory simulations. Specifically, a larger quantity of detail was expected by participants exposed to a weapon in the course of their victimization, in comparison to participants who were sexually assaulted without a weapon. Further, this result was expected to hold regardless of the extent of prior retellings or the age of the memories—two variables that have been found to effect memory in previous research (e.g., see Rubin & Kozin, 1984; Scrivner & Safer, 1988; Sinnott, 1986; Suengas & Johnson, 1988).

2. Method

2.1. Participants

Participants were 51 female prostitutes interviewed at a safe house¹ for women located in the downtown east side of Vancouver, BC, Canada. The participants' ages ranged from 19 to 59, with a mean age of 35.19 (S.D. = 7.76) years. On average, participants reported to have been working as prostitutes since the age of 21.39 years (S.D. = 8.67; Min = 11; Max = 45). Ninety-four percent of the sample reported habitually using psychotropic drugs, of which 84% was of a 'hard' nature, such as cocaine, crack cocaine, and heroin. Interested participants were informed to attend the safe house when they were not under the influence of drugs and/or alcohol and that they would be receiving a Can\$25 honorarium for their participation.

2.2. Excluded participants

Eight participants were dropped from the statistical analyses because of incomplete data and/or inaudible cassette tapes. Additionally, seven participants were removed because they admitted to being under the influence of psychoactive drugs (e.g., marijuana, heroin, crack cocaine) at the time of the interview. Finally, although participants were instructed to provide memories of events when they were not under the influence of drugs or alcohol, this was not always the case. In instances in which drug/alcohol memories were provided, they were subsequently dropped from the analyses. Thus, the final sample consisted of 24 participants.

¹ A "safe-house" called Grandma's House was established in downtown Vancouver in order to provide support to women in need.

2.3. Group demographics

Participants were dichotomized into weapon and nonweapon groups, depending on whether or not their sexual victimization, as depicted in their sexual assault memories, included the use of a weapon. During the interviews, if it was not clear that there was a weapon involved, the interviewers were instructed to ask if a weapon was used. Consequently, it was revealed that 16 women were sexually assaulted without the use of a weapon (i.e., the nonweapon group), while 8 women reported the use of either a beer bottle (or some other object), knife, or gun in their sexual assault memories (i.e., the weapon group). On average, those in the nonweapon group reported to have been 35.56 years old (S.D. = 7.20; Min = 24; Max = 48) at the time of the study and 23.84 years old (S.D. = 10.39; Min = 11; Max = 45) when they started working as prostitutes. In terms of their cultural background, 11 women in this group were either Native or Metis while the remaining five were Caucasian. Women in the weapon group reported to have been, on average, 35.88 years old (S.D. = 4.49; Min = 29; Max = 40) at the time of the study, and 21.71 years old (S.D. = 7.63; Min = 12; Max = 36) when they started working in the sex trade. The reported ethnic background of the women in this group was evenly split (i.e., four Natives, four Caucasians). There were no significant differences in terms of age at study or age starting the sex trade across groups [$F(1,22) = .01, P > .90; F(1,21) = .24, P > .60$, respectively].

2.4. Procedure

2.4.1. Interview

As part of a larger study investigating the impact of trauma on memory (see Cooper, 1999; Cooper, Kennedy, & Yuille, 1999), participants were informed that participation in the study required them to provide three autobiographical memories, one of which was a time in which they were sexually assaulted. For the present purposes, only the sexual assault memories were of interest, due to the relatively high prevalence of weapons involved in these events as opposed to in other types of incidents. Sexual assault was defined as having sex with someone against the person's own will through the use of force and/or threats.

All seven female interviewers were thoroughly trained in and utilized the Adult "Step-Wise" Assault Interview protocol (Yuille, 1990). This semistructured interview is routinely used as an investigative tool for victims with allegations of sexual assault and domestic violence (see Yuille, Marxsen, & Cooper, 1999 for review). The main tenet of the protocol is to use a funnel approach to questioning. After developing rapport, the interviewers were trained to begin with the most general form of questioning (i.e., elicit a free narrative) to then proceed to open-ended questions, and to ask specific questions only to resolve any uncertainties. This approach to interviewing (i.e., a focus on an uninterrupted free narrative, and a higher proportion of open-ended questions than specific/closed-ended² questions) has been suggested (e.g., see Fisher, 1995; Jones, 1996) and

² See Fisher and Geiselman (1992) for a discussion of the disadvantages of asking closed-ended questions.

empirically proven to Bent, 1995).

2.4.2. Transcribing, coding

Trained research assistants were instructed to code for details of a chronic intrafamilial sexual assault (i.e., a script) as opposed to specific memories, such as first partitioning the script into Daylen, Porter, Cooper (i.e., person, object, action) units/details consisted of noun and adjective phrases (description of the codified event) transferred to a separate list. All unique details were coded as information to the accusers. Points in the same narrative descriptive details concerning the knife had a red handle' would be coded accordingly.

The scoring sheet was developed. The participants' responses were recalled everything that you asked questions (e.g., "Can you describe the assault?") specific questions (e.g., "Was it in a bedroom?") category. The participant responses were added to the list of questions for each narrative.

Intercoder reliability was established for randomly selected interview transcripts. Intercoder reliability (i.e., $r > .95$, $p < .05$)

³ Instances of script memory were identified from event memories and used to describe the nature, use of tenseless verbs and other details consequently probed for specific details.

⁴ Because it was unclear if the question was coded as or not, it was coded as not.

empirically proven to elicit the most unbiased accounts (e.g., see Porter, Yuille, & Bent, 1995).

groups, depending on sexual assault memories, it is clear that there was a difference in the use of a weapon. In the control group, 11 of 15 participants used a beer bottle (or some other object) as a weapon. In the assault group, 11 of 15 participants used a beer bottle (or some other object) as a weapon. On average, the age of the participants was 38 years old (S.D. = 7.20; Min = 11; Max = 58; cultural background, 11 of 15 were Caucasian, 4 were African American, 1 was Hispanic, 1 was Asian, and 1 was of mixed ethnicity). There were no significant differences in sex across groups.

2.4.2. Transcribing, coding, and scoring

Trained research assistants transcribed all audiocassettes onto computer disks. The coders were instructed to code only for a specific memory in each of the narratives in contrast to coding for details of a “script memory.” For example, it is not uncommon for victims of chronic intrafamilial sexual abuse to have a general recollection of what “used to happen” (i.e., a script) as opposed to, or in conjunction with, details of specific happenings (see King & Yuille, 1987). Because the present research was interested in comparing distinct (i.e., specific) memories, script memories were not coded.³ The coding procedure consisted of first partitioning the statements into single units of information (i.e., for details, see Yuille, Daylen, Porter, Cooper, & Ghani, 1999). In total, six different types of details were coded (i.e., person, object, action, relational, subjective, and conversational details). Generally, the units/details consisted of verb and adverb phrases (for action-orientated phrases) or noun and adjective phrases (for person/object descriptive details; see Cooper, 1999 for a detailed description of the coding procedure). After the statements were partitioned, the details were transferred to a separate scoring sheet and quantified. Disregarding pieces of conversation,⁴ all *unique details* were allocated one point each. A *unique detail* meant that it added new information to the account. For example, if a weapon was mentioned at three different points in the same narrative, only one object detail was allotted. However, if new descriptive details concerning the weapon were reported at a different point(s) (e.g., “the knife had a red handle” . . . “the knife had a rusted blade”), the new unique detail(s) would be coded accordingly.

on memory (see Cooper, 1999). It was found that participation in the study, one of which was a control group, only the sexual assault group. The prevalence of weapons used in the assault was high. Sexual assault was committed through the use of force.

The scoring sheet was divided into sections to represent how the narratives were recalled. The participants’ responses to the free narrative instructions (e.g., “I’d like you to try and recall everything that you can remember, starting from the beginning.”) and to open-ended questions (e.g., “Can you remember anything else?”) formed one category. Responses to specific questions (e.g., “Do you remember what he was wearing?”) constituted a separate category. The participants’ responses to the free narrative instructions and to the open-ended questions were added to the statements in response to specific questioning to form a total score for each narrative.

utilized the Adult “Step-structured interview is a series of questions of sexual assault (see review). The main tenet of the interview is to develop rapport, the interviewer asks specific questions only (i.e., a focus on an unstructured interview than specific/structured questions, 1995; Jones, 1996) and

Intercoder reliability was assessed on the total scores for each memory within each of six randomly selected interviews. Both a Pearson’s r and an intraclass r revealed high intercoder reliability (i.e., $r > .95$, $P < .001$). In addition, an independent samples t test across the two

³ Instances of script memories were indeed elicited. The interviewers and coders were trained in distinguishing script from event memories as the former type have a distinctive linguistic presentation style (e.g., generalized nature, use of tenseless verbs; see Nelson & Gruendel, 1981). However, in such circumstances, the interviewers consequently probed for specific events.

⁴ Because it was unclear if the participants’ reporting of such statements was verbatim, each piece of conversation was coded as one half of a detail.

asking closed-ended questions.

coders did not reveal any mean differences with regards to the total number of details coded [$t(34)=.009, P>.50$].

3. Results

The analyses of the data proceeded in a step-wise fashion. First, mean differences in total details across groups were investigated via a univariate analysis of variance (ANOVA). Second, mean differences in the confounding variables (i.e., previous retellings and age of memories) were analyzed via separate ANOVAs. Third, bivariate Pearson correlations were employed to examine the relation between the quantity of recall (i.e., total number of details) provided and the two possible confounds. If significant, mean differences in total details across groups were reanalyzed via a univariate analysis of covariance (ANCOVA), thereby statistically controlling for the effects(s) of the confounding variables(s). Note that in cases in which the design was unbalanced (i.e., in either the ANOVA or the ANCOVA), homogeneity of variance was first assessed using Levene's test of equality of error variances with corrections made accordingly (see Glass & Hopkins, 1996). Because means may not be the best illustrative measure of central tendency when the standard deviations are large and the sample size is small (see Glass & Hopkins, 1996), medians are also reported.

3.1. Quantity of recall: weapon present vs. weapon absent

As shown in Table 1, those in the "nonweapon" group provided, on average, 38.44 memorial details (M.D.=33.25; S.D.=23.88; range: 12.00–109.00), while participants in the "weapon" group recalled a mean of 55.69 details (M.D.=45.00; S.D.=31.62; range: 22.50–114.00). A Levene's homogenous of variance test was found to be nonsignificant [$F(1,22)=1.39, P>.10$]. Group differences were analyzed via an ANOVA and found to be nonsignificant [$F(1,22)=2.25, P>.10$].

3.2. The influence of previous retellings and age of memory on total details recalled

In terms of previous retellings, only 11/16 in the nonweapon condition and 4/8 participants in the weapon condition provided information on this variable. Based on this

Table 1
"Weapon focus" for sexual assault memories

	Weapon absent				Weapon present			
	Mean	Median	S.D.	<i>n</i>	Mean	Median	S.D.	<i>n</i>
Details	38.44	33.25	23.88	16	55.69	45.00	31.62	8
Retellings	5.50	3.00	5.55	11	52.60	3.00	98.67	4
Years ago	23.73*	25.00	10.54	15	5.42	3.50	5.14	6

* $P<.01$.

subsample, participants recalled their sexual assault memories (Max=17.50), while the nonweapon group, on average, recalled 38.93 memories, on average, see Table 1). In order to assess if an ANOVA was employed of variance [$F(1,13)=1.39$], an unbalanced design, heterogeneity of variance indicated nonsignificant differences. This problem was in the nonweapon group, where the nonweapon group would have been superior to the weapon group in recall their memories. Further, the correlation between the quantity of recall was nonsignificant ($r=.009$) of this variable.

Concerning the age of memories in the nonweapon condition and the weapon condition, participants in the nonweapon condition, on average, recalled memories 5.42 years ago (M.D.=3.50; S.D.=5.14). After homogeneity of variance was assessed [$P>.25$], an ANOVA indicated that the correlation between the quantity of recall and the age of memories was nonsignificant (i.e., $r=-.45, P<.05$) in the above group analysis.

3.3. The influence of age of memory on total details recalled

An ANCOVA was used to control for the possible influence of previous information was available (i.e., previous memories), it was apparent that the nonweapon condition recalled a mean of 38.93 details (M.D.=33.25; S.D.=23.88) and the weapon condition recalled a mean of 55.69 details (M.D.=45.00; S.D.=31.62). Results of the ANCOVA

⁵ Although the mean differences in the quantity of recall and the age of memories were similar. Correlation was nonsignificant result.

number of details coded

st, mean differences in analysis of variance (i.e., previous retellings, bivariate Pearson correlation of recall (i.e., total significant, mean difference analysis of covariance) the confounding variable either the ANOVA or Levene's test of equality (Sass & Hopkins, 1996). central tendency when the (Sass & Hopkins, 1996),

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Median	S.D.	n
45.00	31.62	8
3.00	98.67	4
3.50	5.14	6

subsample, participants in the nonweapon condition reported to have previously retold their sexual assault memories, on average, 5.50 times (M.D.=3.00; S.D.=5.55; Min=0.00; Max=17.50), while those in the weapon condition reported to have previously retold their memories, on average, 52.00 times (M.D.=3.00; S.D.=98.67; Min=2.00; Max=200.00; see Table 1). In order to examine mean differences in terms of previous retellings, an ANOVA was employed. Levene's test was first used, indicating significant heterogeneity of variance [$F(1,13)=24.99, P<.01$], and the consequent Behrens–Fisher problem (i.e., unbalanced design, heterogeneity of variance). However, since the results of the ANOVA indicated nonsignificance [$F(1,13)=2.79, P>.10$] and considering that the Behrens–Fisher problem was in the negative (i.e., liberal) condition, any further analyses on this matter would have been superfluous. In short, those in the weapon condition did not previously recall their memories significantly more so than those in the nonweapon condition.⁵ Further, the correlation between the number of prior retellings and quantity of recall was nonsignificant ($r=-.15, P>.50$), thereby negating the possible confounding influence of this variable.

Concerning the age of the memories, data were available for 15/16 participants in the nonweapon condition and 6/8 participants in the weapon condition. Based on this subsample, participants in the nonweapon and weapon conditions reported to have been sexually assaulted, on average, 23.73 (M.D.=25.00; S.D.=10.54; Min=3.00; Max=43.00) and 5.42 years ago (M.D.=3.50; S.D.=5.14; Min=0.50; Max=15), respectively (see Table 1). After homogeneity of variance was assessed and found to be nonsignificant [$F(1,19)=1.35, P>.25$], an ANOVA indicated that those in the weapon condition were assaulted significantly more recently than those in the nonweapon condition [$F(1,19)=16.19, P<.01$]. The correlation between the quantity of recall and the age of the memories was also significant (i.e., $r=-.45, P<.05$) suggesting that this variable may have acted as a memorial confound in the above group analysis.

3.3. The influence of age of memory on recall across the two weapon conditions

An ANCOVA was employed to examine mean differences in recall across groups while controlling for the possible confounding effects of the age of the memories. In cases in which information was available on both relevant variables (i.e., quantity of recall, age of memories), it was apparent that those in the nonweapon condition provided a mean number of 38.93 details (M.D.=35.50; S.D.=24.63; see Table 2), while participants in the weapon condition recalled a mean number of 54.08 details (M.D.=36.00; S.D.=36.86). A Levene's homogeneous of variance test was found to be nonsignificant [$F(1,19)=3.32, P>.05$]. The results of the ANCOVA revealed no significant differences between groups in terms of

⁵ Although the mean differences on this variable were large, so too were the standard deviations. However, the medians were similar. Compound these factors with a small and unbalanced design, and one is left with a nonsignificant result.

Table 2
 “Weapon focus” for sexual assault memories (covarying age of memories)

	Weapon absent				Weapon present			
	Mean	Median	S.D.	<i>n</i>	Mean	Median	S.D.	<i>n</i>
Details	38.93	35.50	24.63	15	54.63	36.00	36.86	6
EMM	45.29	(S.E.=7.68)			38.19	(S.E.=13.81)		

n.s.

amount of details recalled [$F(1,18)=.16, P>.50$]. Estimated marginal means consisted of 45.29 details (S.E.=7.68) and 38.19 details (S.E.=13.81) for those in the nonweapon and weapon conditions, respectively.

4. Discussion

In contrast to the many laboratory studies which have shown a “weapon focus” effect (e.g., Kramer et al., 1990; Loftus et al., 1987; Maass & Kohnken, 1989; Pickel, 1998, 1999), the present results not only failed to show a significant effect, but it should be highlighted that when no covariate was entered, there was a numerical trend for the pattern of recall to be in the opposite direction (i.e., relatively more recall in the weapon condition). Although the present study did not assess lineup identification accuracy or feature accuracy, as has been routinely rendered in past studies (e.g., Kramer et al., 1990; Loftus et al., 1987; Maass & Kohnken, 1989; O’Rourke et al., 1989), the fact that there was relatively more recall in the weapon condition is counterintuitive to the weapon focus phenomenon.

Quite possibly, the current findings may be a function of the fact that the complexity of actual crime scenes (in terms of both arousal levels and attention) cannot be approximated in the laboratory (see Cutshall & Yuille, 1989; Yuille & Cutshall, 1986). Someone who is being raped at gun point arguably has an array of focal points to choose from as opposed to the typical laboratory participant who is directed to focus his/her attention on a slide sequence or video screen (e.g., see O’Rourke et al., 1989; Pickel, 1998, 1999). Even after reporting on the overall significance of the weapon focus effect in a meta-analysis, Steblay (1992) noted that “it may be argued that real-life crime events include so many stimuli that the hypothesized weapon focus effect becomes irrelevant or insignificant in magnitude” (p.422).

As reviewed earlier, in the one previous archival study in which real crime victims and witnesses were studied, Tollestrup et al. (1994) reported that eyewitnesses to robberies involving weapons recalled significantly more total details than those eyewitnesses involved in weaponless crimes. The present results are more in line with this finding than the laboratory studies discussed above. These findings also lend support to Tollestrup et al.’s conclusion that “the presence of a weapon does not appear to have a detrimental influence on the amount of descriptive information or accuracy of that information provided by actual eyewitnesses” (p.33). Furthermore, the large standard deviations evident in both conditions

suggest that traumatic (Kluft, 1997) mediate (see Cooper, 1999; Daylen, 1998).

In the present study, recalled adds support retellings did not ex Shimizu (1987). How groups) always rema instances of sexual vic the nonweapon cond difference (as shown smaller. This suggest graphical experience those of Sinnott (198

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suggest that traumatic memory is a highly variable phenomenon (see Christianson, 1992; Kluff, 1997) mediated by more than isolated variables such as the presence of a weapon (see Cooper, 1999; Cooper et al., 1999; Cooper, Kennedy, & Yuille, 2000; Yuille & Daylen, 1998).

In the present study, the influence/noninfluence of the covariates on the quantity of detail recalled adds support to previous memory research (e.g., Stern, 1937). The number of prior retellings did not exert a significant influence on long-term recall as demonstrated by Shimizu (1987). However, although the main effects (i.e., memorial differences across groups) always remained null, it was clear that those in the weapon condition provided instances of sexual victimization that occurred significantly more recently than participants in the nonweapon condition. When the age of memory was controlled, the mean memorial difference (as shown by the estimated marginal means; see Table 2) across groups became smaller. This suggests that one would be able to provide more details about an autobiographical experience if tested/interviewed at a more recent time—a finding that parallels those of Sinnott (1986).

Obviously, more archival and field research are needed before any robust conclusion can be drawn. The present study was limited due to a small sample size and confounding variables—the usual field study caveats. Indeed, it is quite possible that a larger sample size and/or a study with memories of similar ages would support a weapon focus pattern as the results of the present ANCOVA suggested. Unfortunately, the present study utilized a rare opportunity to study memories of prostitutes—an opportunity that has come and gone.

Nevertheless, the present research can address at least one of the possible confounds for which the Tollestrup et al. (1994) study has been criticized. Pickel (1998) has suggested that the former researchers’ failure to find a weapon focus effect may have been due to the possibility that the perpetrators brandishing weapons were closer in proximity to the witnesses/victims than those who witnessed weaponless crimes. If one were closer to the perpetrator, then one may have a better opportunity to make a description. The present study did not have such a caveat in so much that all the women were sexually assaulted. The very nature of sexual assault implies relatively similar victim/perpetrator distances. Of course, other caveats such as divergent event durations (see Wells, Wright, & Bradfield, 1999) could have effected the results. It should also be acknowledged that the vast majority of weapon focus investigations have used simulated crimes of short duration (e.g., bank robberies). It may well be that this effect is restricted to crimes of this nature and should not be generalized to crimes of typically longer duration (e.g., sexual assaults). Thus, the present results are only suggestive and should be viewed tentatively. Nevertheless, regarding psychological expert testimony, caution is suggested in applying the results of laboratory weapon focus studies to the real world. The reasons for this are clear. Expert testimony may influence the amount of time juries spend deliberating about a verdict (e.g., see Loftus, 1980). Considering “the basic purpose of any evidence, including the testimony of an expert psychologist, is to facilitate the acquisition of knowledge by the jury, or trier of fact, thus enabling them to reach a final determination” (Loftus, 1980, p. 9), shallow conclusions about the detrimental influence of a weapon on memory by an expert psychologist have the potential to have a serious biasing effect on jury behavior.

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