ABSTRACT
        Because violent crime may produce persistent
stress-related problems for many victims, it is important to
determine what factors best predict development and persistence of
stress-related problems. A study was conducted to examine the extent
to which development and persistence of Posttraumatic Stress Disorder
(PTSD) could be predicted on the basis of the victim's demographic
characteristics, objective indicators of the crime's dangerousness,
the victim's cognitive appraisal of the crime's dangerousness, the
type of crime experienced, and the cumulative impact of crimes
occurring throughout the victim's lifetime. Subjects were 295 women
who had been victims of one or more crimes of rape, attempted rape,
molestation, attempted molestation, other sexual assault, aggravated
assault, robbery, or burglary. Objective and subjective indicators of
dangerousness were reported for subjects' first victimization, most
recent victimization, and worst victimization. For subjects who had
experienced more than one crime, a cumulative lifetime index of
victimization effects was created. Subjects also reported demographic
data and were classified by a clinical psychologist as having had
PTSD, never having had PTSD, currently having PTSD, or currently
PTSD-free. Analysis of data revealed that: (1) developing PTSD could
be predicted by type of crime, objective threat, and cognitive
appraisal of threat; (2) rape appeared to be more stressful than
other crimes and to have more persistent effects; and (3) type of
threat and number of rapes both had a positive cumulative effect on
the probability that PTSD would be developed and sustained. (NB)

ED270681

Predicting the Impact of a Stressful Life Experience:

Criminal Victimization [1]

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I. Statement of Problem

A. Violent crime is a particularly stressful life event that has been shown to produce persistent stress-related problems for many victims (e.g., Kilpatrick, Best, Veronen, Amick, Villeponteaux, & Ruff, 1985).

B. Since individual differences exist among victims in the extent to which persistent crime-related stress problems occur, it is important to determine what factors best predict development and persistence of stress-related problems.

C. According to the general stressful life events literature, the following types of variables might be expected to predict development and persistence of stress-related problems after victimization:

- The victim's demographic characteristics

- Objective indicators of the threat or dangerousness of the victimization incident(s)

- The victim's cognitive appraisals of the extent to which the victimization incident was life threatening or dangerous

D. Some types of crimes appear to be more stressful than others. Kilpatrick et al. (1985) found that completed rape produced more negative effects than other types of sexual assault, aggravated assault, or than robbery. However, that study, and most others, failed to examine the impact of victimization incidents other than those that occurred most recently.

E. It is reasonable to assume that different victimization incidents occurring throughout a victim's lifetime might have a cumulative effect on development and persistence of stress-related disorders. Thus, it is important to identify and study all types of major crime that a victim may have experienced throughout her lifetime and to investigate for potential cumulative effects.

F. The purpose of this study was to examine the extent to which development and persist ace of Post-traumatic Stress Disorder (PTSD) could be predicted on the basis of the victim's demographic characteristics, objective indicators of the crime's dangerousness, the victim's cognitive appraisal of the crime's dangerousness, the type of crime experienced, and the cumulative impact of crimes occurring throughout the victim's lifetime.

II. Summary of Procedures

A. **Subjects:** Subjects were located via a random survey of adult female residents of Charleston County, SC. A total of 391 women were assessed, of whom 295 had been victims of at least one crime during their lives. These 295 crime victims were the subjects for this study.

B. **Criminal Victimization Incidents:** A structured interview screened for the lifetime occurrence of the following types of crime: completed rape, attempted rape, completed molestation, attempted molestation, other sexual assault, aggravated assault, robbery, and burglary. Data were obtained regarding up to three incidents per victim: (1) her <u>first</u> victimization, (2) her <u>most recent</u> victimization, and (3) her <u>worst</u> victimization if this was other than the first or most recent.

C. **Crime Incident Data:** These data were gathered about the first, most recent, and/or worst incident: (1) objective indicators of dangerousness (i.e., Was a weapon present? Did victim sustain a serious physical injury?) and (2) cognitive appraisal of threat or dangerousness (i.e., Did victim think she would be killed or seriously injured during incident?).

D. **Development of Cumulative Lifetime Index Variables:** Most victims had experienced more than one crime and often more than one type of crime. Thus, it was necessary to develop indices capturing possible cumulative effects of victimization over a lifetime.

   1. For each type of crime, separate indices were created by assigning a value of zero if a victim had never experienced that crime, one if she had experienced it once, two if twice, and three if three times. Scores on these variables could range from 0 to 3.

   2. For the weapon present, serious injury sustained, and cognitive appraisal of life threat variables, separate index variables were created by using a similar procedure. Scores on each could range from 0 to 3.

   3. A total lifetime index of objective and subjective danger was created by summing the weapon present, serious injury, and cognitive appraisal of threat index scores, yielding a score ranging from 0 to 9.

E. **Demographic Variables:** Current age, racial status, education, and income.

F. **Post-traumatic Stress Disorder Classification:** Diagnosis of whether victim <u>ever</u> developed PTSD or <u>currently</u> had PTSD was made by a clinical psychologist using a structured interview about mental health problems including DSM-III criteria for PTSD. Victims were then classified into four groups on the basis of these diagnoses: (1) Ever Developed PTSD, (2) Never Developed PTSD, (3) Currently Has PTSD, and (4) Currently PTSD-Free.

G. <u>Data Analyses:</u>

1. Chi-square analyses were used to determine if demographic variables (excluding age) were related to PTSD.

2. Mean scores on all index variables (and the demographic variable of age) were determined for the PTSD groups and evaluated for significance by a series of univariate t tests.

3. Separate discriminate function analyses were done to determine the extent to which predictor variables could be used to classify subjects into the Ever Developed and Current PTSD groups.

III.   **Main Findings**

A. Frequency of Crimes: Total of 547 separate incidents comprised of burglaries (n = 211), completed rapes (n = 101), completed molestations (n = 80), attempted rapes (n = 52), aggravated assaults (n = 42), robberies (n = 26), attempted molestations (n = 19), and other sexual assaults (n = 16).

B. Demographic variables of racial status, education, and income were unrelated to Ever Developed or Current PTSD. Victims having ever developed PTSD were significantly younger than those who never developed PTSD ($\bar{x}$ = 35.9 yrs. vs. 42.7 yrs.). Current PTSD was unrelated to age.

C. Victims who ever developed PTSD had significantly higher scores on the index variables of serious injury, cognitive appraisal of life threat, and objective and subjective danger. Victims having ever developed PTSD had significantly higher scores on the crime index variable of completed rape. All other types of crime indices were unrelated to having ever developed PTSD, as was the index variable of weapon present (see Table 1).

D. Victims with current PTSD had significantly higher scores on the index variables of serious injury, cognitive appraisal of life threat, and objective and subjective danger. Victims with current PTSD had significantly higher scores on the completed rape index, but scores on all other crime indices did not differ significantly from victims without current PTSD (see Table 2).

E. The discriminant function analysis using objective indicators of dangerousness, cognitive appraisal, and type of crime indices was able to classify 79.0% of cases into correct Ever Had PTSD groups. Of actual PTSD cases, 75.6% were correctly classified. Completed rape was the best predictor, followed by cognitive appraisal of threat.

F. The discriminant function analysis using the same predictor variables was able to classify 79.7% of cases into correct Current PTSD groups. Of actual current PTSD cases, 72.7% were correctly classified. Completed rape was the best predictor, followed by having sustained a serious injury.

IV. Conclusions

A. Both current and having ever had PTSD can be predicted on the basis of type of crime (e.g., whether the crime was a completed rape or not), objective threat, and cognitive appraisal of threat.

B. Completed rape appears to be much more stressful than other types of crimes and has more persistent effects.

C. Types of threat and number of completed rapes both had a positive cumulative effect on the probability that PTSD would be developed and sustained.

Reference:

Kilpatrick, D. G., Best, C. L., Veronen, L. J., Amick, A. E., Villeponteaux, L. A., & Ruff, G. A. (1985). Mental health correlates of criminal victimization: A random community survey. Journal of Consulting and Clinical Psychology, 53, 866-973.

For further information on this and other related research projects contact:

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Table 1

Percentage of Lifetime Index Variable and Completed Rape Index Groups

Having Ever Experienced PTSD

	Score Group			
Index Variable	0	1	2	3
Sustained serious injury?	25.9%	69.2%	—	—.
Cognitve appraisal of life threat?	17.8%	44.6%	50.0%	100.0%
Objective and subjective danger?	17.0%	45.6%	43.2%	50.0%
Completed rape?	14.7%	53.1%	90.0%	—

Table 2

Percentage of Lifetime Index Variable and Completed Rape Index Groups

With Current PTSD

	Score Group			
Index Variable	0	1	2	3
Sustained serious injury?	6.4%	30.8%	—	—
Cognitive appraisal of life threat?	4.7%	10.8%	20.0%	—
Objective and subjective danger?	4.4%	10.5%	8.1%	28.6%
Completed rape?	3.9%	16.0%	20.0%	—