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ACQUISITIONS

STUDIES OF CRIMINAL VICTIMIZATION:

- I. Evaluation of Victim Services
- II. The Social Psychological Effects of Victimization

EXECUTIVE SUMMARY

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TABLE OF CONTENTS

	<u>Page</u>
TABLE OF CONTENTS.....	i
ACKNOWLEDGEMENTS.....	ii
ABSTRACT.....	iii
PRECIS OF CONCLUSIONS AND RECOMMENDATIONS.....	1
INTRODUCTION.....	2
Study Objectives and Methods.....	4
EVALUATION OF VICTIM SERVICES.....	4
Major Findings.....	6
Discussion.....	9
SOCIAL PSYCHOLOGICAL EFFECTS OF VICTIMIZATION.....	9
Major Findings.....	13
Discussion.....	15
CONCLUSIONS AND RECOMMENDATIONS.....	15
Conclusions.....	16
Recommendations.....	
REFERENCES.....	
APPENDIX (DESCRIPTION OF SCALES AND MEASURES).....	

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ABSTRACT

This research project consisted of two studies: (1) an evaluation of victim services and (2) a study of the social psychological effects of victimization. The evaluation assessed the extent to which victim assistance services are effective in both alleviating the problems of victims and in helping police and prosecutors perform their duties. A quasi-experimental design compared victims in Tucson, Arizona who received crisis intervention services (n=109), delayed services (n=114), and no services (n=100) through a comprehensive interview administered at two points in time (one month after the crime and four to six months later). The interview included measures of psychological, social, financial and physical impact. The impact of victim assistance services on the police and prosecutors was assessed through a series of surveys and group interviews. Process data were also collected, mainly through interviews and observations of victim assistance program staff. The study of the social psychological effects of victimization was conducted on the same data set and involved a detailed analysis of victim reactions, culminating in multivariate models of the victimization experience.

The evaluation found that the provision of services, both crisis intervention and delayed services, assists victims in a variety of ways, but that there was only slight evidence that services help to reduce the victim's emotional trauma. The overwhelming majority of police and prosecutors valued the victim assistance services and felt that such services helped them in the performance of their duties. Despite these positive views, neither police nor prosecutors used the services to their capacity.

The study of social psychological effects found that within one month of the crime, most victims showed high levels of distress on all five measures. Four to six months later, symptoms of distress, other than fear, had abated considerably. Multivariate analysis indicated that distress was more pronounced among victims of intrusive crimes (e.g., rape) and those who had experienced higher levels of stress in the year prior to victimization. Recommendations are made for the improvement of victim assistance and for further research.

PRECIS OF CONCLUSIONS AND RECOMMENDATIONS

The conclusions of the evaluation with respect to the effectiveness of victim services are summarized as follows:

- The provision of services, both crisis intervention and delayed services, assists victims in a variety of ways. However, there was only slight evidence that services help to reduce emotional trauma.
- Police and prosecutors feel that the victim assistance services are helpful to victims and are of considerable aid to them in their work.
- Despite the positive views that police and prosecutors hold toward the Victim/Witness Program, they do not use the services to their capacity, particularly the crisis intervention services.
- The cost of victim assistance services, especially, the volunteer-laden crisis intervention services, are relatively low.
- Volunteers can be effective counselors and can be integrated successfully into a victim assistance program.

A summary of the conclusions with respect to the social psychological effects of victimization are as follows:

- Psychological distress is the central, dominant reaction of crime victims, and it is determined in its initial, most troubling stages, mainly by the severity of the crime and prior life stress.
- The psychological distress of victims differs according to the severity of the crime, but the differences are of degree rather than type.

The following recommendations are based on the results of this research:

- Jurisdictions without victim services should strongly consider the establishment of such services. Victim assistance programs which are already operating should seriously consider the addition of a crisis intervention component.
- Victim assistance programs, especially those with crisis intervention components, should address the problem of under-utilization.
- Because most victims suffer from some level of psychological distress, all should have the opportunity to receive some degree of attention and support.
- Practitioners should be made aware of the powerful effect of prior life stress on the distress of victims. They should understand that by knowing about the nature of victimization and the victim's prior life stress, they can identify fairly accurately the level of psychological distress the victims will suffer.

We further recommend the following research efforts:

- More research needs to be conducted on how to reduce the psychological distress of crime victims.
- There is a need for research that will identify and test promising mechanisms for increasing the utilization of victim services.
- More comprehensive studies of victimization need to be conducted with large, varied samples which include measurement of social/contextual variables.
- More research should be conducted on the roots and dynamics of the psychological distress construct and on the development of scales for measuring the impact of victimization.

* * * *

INTRODUCTION

During the last decade, we have witnessed a growing awareness of the psychological, social, financial, and physical costs borne by victims of crime. Researchers, clinicians and criminal justice officials are increasingly cognizant that many individuals endure a wide range of problems as a direct and indirect result of the victimization, problems ranging in intensity from minor nuisances to major turmoils.

Once labeled as the "forgotten" persons in the criminal justice system (Ash, 1972; MacDonald, 1976), victims are emerging as individuals who deserve and require more careful consideration from the criminal justice system and mental health profession. The federal government has committed considerable resources to improve the plight of victims by supporting programs to aid those victimized by crime. In addition, research is now being conducted which will increase our understanding of the problems suffered by victims and how their suffering can be alleviated.

This report presents the findings from two interrelated studies: (1) an evaluation of victim services, and (2) a study of the social psychological effects of victimization. The latter study was an outgrowth of the evaluation. In the course of conducting a comprehensive evaluation of victim services, extensive data were collected on the social psychological reactions of over 250 victims of crime. Upon completion of the evaluation, this sizable data set was further analyzed to determine more precisely the nature and effects of criminal victimization.

The evaluation study sought to assess the effectiveness of victim services. Beginning in the early 1970s, a wide variety of victim assistance services have established to serve the diverse needs of victims and to reduce the negative impact of crime. A particularly promising approach to helping victims is the provision of crisis intervention -- on-scene counseling of the victim (Bard and Sangrey, 1979; Burgess and Holmstrom, 1979). Yet, there is a dearth of information on the effectiveness of these programs. Does providing service alleviate the trauma experienced by victims? Which type of services are most helpful? How effective is crisis intervention in alleviating victim trauma? To answer these and other questions, we compared crisis intervention services, delayed services, and no services in Tucson, Arizona, where the Pima County Victim/Witness Program provides both emergency on-scene crisis intervention services (mainly through a single mobile unit) and delayed services to crime victims 24 hours a day, 7 days a week.

The study of the social psychological effects of victimization sought to identify the broad determinants and dynamics of the victimization experience. Past victim research has suggested that the level of victim distress is a function of the severity and intrusiveness of the crime (Bard and Ellison, 1974; Friedman, et al., 1982). It now appears that the victim's reaction may also be influenced by events in the history (e.g., prior life stress) and the environment (e.g., social support) of the victim (Ruch and Chandler, 1983). These and other issues were addressed through a series of multivariate analyses applied to the Tucson victim data set.

Study Objectives and Methods

The main objectives of the evaluation of victim services were the following:

- (1) To assess the impact of two types of victim services -- crisis intervention services and delayed services -- on the psychological, social, financial, and physical state of crime victims.
- (2) To assess the efficacy of victim services as viewed by police and prosecutors.
- (3) To document the structure and functions of victim assistance services as practiced by the Pima County (Tucson, Arizona) Victim/Witness Advocate Program.

The impact of victim services on crime victims was assessed through the administration of a comprehensive interview to 323 victims about one month after the crime, and again (n=258) approximately four to six months later. The sampled included victims of sexual assault, domestic assault, assault, robbery, and burglary. Using a quasi-experimental design, three conditions of victim services were compared at the two points in time: victims who received (1) crisis intervention services (n=109), (2) delayed services (n=114), or (3) no formal services (n=100). The effects of the victim services as viewed by police and prosecutors were assessed through a survey and group interviews. The documentation of the Victim/Witness Advocate Program was conducted through observations of, and interviews with, program staff.

The victim reactions measured by the interview included psychological scales of fear, anxiety, and stress, as well as questions about social/behavioral adjustment and financial costs. All measures, except financial costs, used a four-point response scale where 4=very much so, 3=a fair amount, 2=a little, and 1=not at all. In addition, victims were asked about their views of the victim services program and criminal justice officials.

The study of the social psychological effects of victimization had the following central objectives:

- (1) To determine the influence of type of crime on the nature and severity of the victimization experience.
- (2) To determine the influence of the victim's socio-demographic characteristics on the nature and severity of the victimization experience.
- (3) To explore the conceptual dynamics of the victimization experience through the application of multivariate models.

This study also used the scales of fear, anxiety, and stress as dependent measures, but two other scales were constructed from interview items; measures of dismay and social adjustment. In addition, six other measures of independent and intervening variables were also constructed from interview items for use in the more extensive analysis of victimization effects: (1) intrusiveness of the crime, (2) severity of the crime, (3) stressful life events, (4) past year problems, (5) informal social support, and (6) amount of victim services.

For further information on the scales and measures, see the Appendix of this report. Details on the measures and their development may be found in the two full final reports: (1) Evaluation of Victim Services (Smith, Cook, and Harrell, 1985), and (2) The Social Psychological Effects of Victimization (Harrell, Smith, and Cook, 1985).

EVALUATION OF VICTIM SERVICES

Major Findings

Emotional/behavioral effects. Of all the emotional effects examined, anxiety emerged as the strongest emotion associated with victimization. At the time of the first interview, victims scored an average of 2.95 -- close to "a fair amount," very nearly a three on a four-point scale -- a high score. By the time of the second interview, the average score dropped substantially to 1.94. Although this reduction was a substantial one, the anxiety score was still fairly high.

At the initial interview, the anxiety level of the crisis intervention group exceeded that of the other two groups ($F=3.86$, $p<.05$). The anxiety of all groups declined considerably by the time of the follow-up interview, erasing the differences among the groups ($F=1.14$, $p=.18$). To test whether the reduction in anxiety was greatest in the crisis intervention group, change scores (difference between initial and follow-up score) were analyzed by analysis of variance. The reduction in anxiety was no greater in the crisis intervention group than in the other two groups ($F=2.65$, $p=.07$).

The mean score of all victims on the fear scale at the time of the first interview was 2.22, between "a little," and "a fair amount," a level that remained virtually unchanged several months later ($\bar{x}=2.20$). The victims receiving crisis intervention services appeared slightly more fearful than the other groups at the time of the initial interview, but the difference is not quite significant ($F=2.69$, $p=.07$). In analyzing the follow-up data by analysis of variance, the effect of treatment group seemed to be much the same as in the initial interview (with the crisis intervention group scoring highest), although again, the differences did not reach statistical significance ($F=2.05$, $p=.13$). There was virtually no change in fear scores from the first to the second interview. In essence, the victims retained their fears over a six-month period, and the crisis intervention group maintained the highest position, followed by the delayed services group, then by the victims who received no services.

Victims receiving services were more stressed at the time of the initial interview than those who received no services ($F=11.04$, $p=.001$). In a manner similar to the anxiety level, the levels of stress in all three groups dropped greatly by the time of the second interview. By the time of the follow-up interview, the delayed services group had the highest stress score, followed by the crisis intervention group and the group receiving no services. These differences were not statistically significant, but the results of the F test indicated some potential effect ($F=1.80$, $p=.15$). Change score analysis showed that the stress level of the victims who received services dropped the most ($F=4.46$, $p<.01$), with the crisis intervention group showing the steepest drop.

Because the victimization experience affects not only one's emotional state, but can also disrupt the victim's pattern of routine behavior -- social activities, performance at work, interactions with family members, etc. -- we asked several questions about these routine activities and how they had been affected by the crime or incident (using the same four-point response scale described above). Shortly after the incident, victims expressed the most problems with going about their usual daily activities, with the mean falling

between "a little" and (2) "a fair amount." Problems at work, reduction in social activities, and problems with spouse (or boy/girlfriend) were the next most troubling consequences.

Separate analyses of variance were conducted on the two sets of data to test the potential effects of services on victims' normal activities. At the time of the initial interview, statistically significant differences were found only in the most problematic area (difficulties with daily activities). Interestingly, it was the delayed services group that expressed the most difficulty in going about their usual daily activities, with the crisis intervention group claiming slightly less of a problem in this area.

Victims' satisfaction with assistance received. The large majority of victims in both the crisis intervention and delayed services groups held positive views of the Victim/Witness Program. When asked whether the Victim/Witness Program representatives listened to their concerns, the response was overwhelmingly positive among those who received crisis and delayed services: 98% in each group replied that the program personnel "took the time to listen to their story," while only 2% stated that they "rushed them through it" (n=99 for crisis service sample; n=111 for delayed service sample). Both groups of victims frequently reported that the Victim/Witness counselors helped them. A full 89% of those who received crisis services responded favorably when asked if the Victim/Witness Program helped (n=106; three stated "don't know"), while 86% of those who received delayed services said the program helped (n=104; 10 replied "don't know").

Victims also generally praised the police as helpful and said that family and friends were also supportive. Despite the many sources of assistance provided to victims, many desired more services.

Police and county attorney views of the Victim/Witness Program. The results of both the survey and the group interviews showed that police officers in Tucson hold very favorable opinions of the Victim/Witness Program. They believe the program helps them and victims; want the program available to them; and want more crisis units available. Yet, the crisis unit is consistently under-utilized. From program statistics, observations and interviews with program staff, it is clear the mobile 24-hour crisis unit spends much of the time simply waiting for calls. Reasons for under-utilization might include "saving" the unit for more serious calls; disbelief that one unit can possibly be sufficient for the entire county, leading to concern that the unit will not be able to respond promptly; and previous experiences of the police when their request for services was denied because the unit was busy, leading to the perception that they are always busy. We further found that officers are unlikely to request the assistance of Victim/Witness counselors in most burglary and many robbery cases (even though the program states they are eager to accept more of these cases). Especially in burglary cases, officers do not believe that the victims are upset and need counseling and, again, they want to "save" the Victim/Witness Program for more "appropriate" cases such as sexual and domestic assault.

Deputy county attorneys share with police officers favorable (or very favorable) views about the Victim/Witness Program and the help it provides to victims and prosecutors. Yet, many prosecutors also do not frequently refer victims to the program.

Program costs. According to the program statistics, 4,384 citizens were assisted by the program in 1982 and 4,188 in 1983. The total program budget for the 1982-83 fiscal year was \$239,216. Thus, according to the program statistics, the average cost per citizen served was between \$54.56 and \$57.12. However, it should be noted that less than one-third of the cases were actually crime victims. Family and neighborhood disputes comprised over half of all the cases. The remaining cases (19%) were death notifications and assistance with public welfare cases and mentally ill citizens.

Our on-site analysts' tally of caseload were for the first 10 months of 1983 (actually January through October for crisis intervention cases, and only April through October for cases referred from the County Attorney and other, non-police agencies). Based on these tallies, the total projected caseload for 1983 was 3,908 citizens served. Applying the same annual program costs (\$239,216) to the ISA tally results in an estimated average cost per citizen served of \$61.21, slightly higher, but not markedly so, than the program figures. Although we cannot identify the average cost per case precisely, we can say it is between \$54 and \$62 per case. Similar analyses showed the average cost per crisis intervention case to be between \$31 and \$37. It seems safe to say that these costs are not exorbitant. Moreover, when viewed in comparison to other services provided to citizens by the criminal justice system, the costs of providing assistance to crime victims and others in need appear relatively low.

Discussion

In considering the question of the impact of victim services we must recognize its many facets. We looked for effects in three broad areas: (1) several areas of emotional and behavioral adjustment, especially as measured by the psychological scales; (2) victims' own claims about how they perceived the victim assistance services; and (3) the attitudes of the police and county attorneys toward the victim program (since the services were intended to help not only the victim but the criminal justice system as well). The research found effects in each area, but, in the emotional domain they were not what had been hypothesized. However, there is little doubt that the degree of non-equivalence among the groups, especially with regard to their level of emotional trauma, contributed to the crisis intervention group yielding a higher level of emotional trauma (at least initially) than the other two groups. As the design evolved, it was thought that the calling in of crisis intervention counselors by police officers was very nearly a chance event; because so many apparently upset victims (of assault, rape, etc.) were not provided crisis intervention services, it appeared that the group assignment process would yield highly similar groups. In many respects they were similar, and on the chief identifiable difference (type of victimization) the effect was shown to be relatively independent of, and separable from, the effects of services. But it now became apparent that the police called in the victim assistance crisis unit for the most severely traumatized victims; the assignment process was not the near-random event it originally seemed to be. We hasten to add, however, that to the extent that these selection differences were operating, the effects were confined primarily to the emotional adjustment measures, and do not appreciably hinder the other comparisons among the groups. And, as discussed above, a good deal of valid information was generated by the emotional adjustment analysis.

Beyond the probable selection differences among the groups, there is another possible explanation for initially higher levels of anxiety, fear, and stress in the crisis intervention group. It should be remembered that the crisis counseling experience does not attempt to suppress the victim's emotional response to the crime; indeed, victims are encouraged to vent and accept their emotions, that there is nothing wrong with feeling bad. Thus, it may well be that one should not expect reduced levels of emotional trauma from victims receiving crisis intervention, but rather look to behavioral and attitudinal adjustment in the first few weeks, with improvement in emotional states to follow later on. Moreover, despite the fact that the victims receiving crisis intervention services were initially the most emotionally traumatized group, they adjusted behaviorally as well as (sometimes better than) the delayed services group and the victims who received no services.

When we asked the victims themselves about their views of the service, the evidence was unequivocal: there is no doubt that nearly all the victims who received services from the program felt very positive about it. Moreover, the program was given high marks on specifics as well -- response time was short, assistance time was long; valued assistance was rendered in the form of both emotional support and concrete services. Although victims who received crisis intervention and delayed services both gave high marks to the victim counselors, crisis services were consistently rated higher: victims seemed to reserve their deepest appreciation for the crisis intervention counselors.

Overall, police and prosecutors were very favorable about the Victim/Witness Advocate Program. They believe it helps victims and witnesses in ways that the criminal justice system and officials cannot, believe the program counselors are competent and responsive to the needs of victims and officials, and believe the program is a valuable addition to the criminal justice system. Yet, each week there are many cases, seemingly appropriate for victim services, which are not referred to the program. The most glaring example of this situation is the chronic under-utilization of the mobile crisis intervention unit by the police.

Given the almost total discretion of officers to call the unit (or not) and their concern about saving the unit, three avenues appear promising to reduce their under-utilization of the Victim/Witness Program. First, further training, education, and improved communications might change the misperceptions now commonly held among officers. But change is not easily introduced in police departments. Wilson (1978) and Goldstein (1977) have both touched on this problem in their writings about police administration. Goldstein has suggested that if improved practices are to be introduced, new systems of incentives should be designed. He added that police departments should make greater use of task forces and conferences (brief meetings of officers) to implement desired changes. Wilson has emphasized the "gross, imprecise" effects of a police administrator's actions on the officer's behavior on the beat. However, perhaps this problem is most effectively addressed as one which is a combined effect of the particular nature of the police department (as described above) and the general phenomenon of resistance to change that has been documented in the organizational behavior literature for decades (Dunnette, 1976). According to the latter perspective, individuals are especially resistant to new practices when they have not participated in the decision to implement the new practices. Such lack of participation not only leaves them with a sense of having little control, but also does not allow management to utilize constructive input from the individuals with regard to how the new practices can be best implemented.

A second avenue to pursue in increasing police usage would be to add another mobile unit or several units or at least provide a back-up unit. As long as officers believe it is impractical to have one unit available, it is likely they will continue to save the unit for what they perceive as the neediest cases. Because this perception was so strong and consistent among officers, attempting to convince them to call the single unit available more often may prove impossible.

A third (and potentially more volatile) way to increase police referral would be to reduce their discretion to summon the Victim/Witness Program. Although an order to use the Victim/Witness Program in certain cases or an automatic referral by police dispatcher may cause problems, lesser steps might be initiated more easily. For example, officers could be instructed to call the Victim/Witness Program (or have the dispatcher do so) in any case he feels is appropriate, to see if they are busy, rather than automatically assuming they are too busy to handle all but the most serious matters. Or, for certain crime types (e.g., sexual assault, robbery, domestic assault, other assaults), the dispatcher might check to see if the Victim/Witness Program is busy and automatically relay that information to the officer. Information that the unit is available may encourage an officer to request services, or at a minimum, remind him that the victim may need assistance and the Victim/Witness Program is "out there" and is not busy.

SOCIAL PSYCHOLOGICAL EFFECTS OF VICTIMIZATION

Major Findings

Effects of type of crime. Two sets of analyses were conducted to determine the relationship between the type of crime and the social psychological reactions of victims. First, analyses of variance (F tests) were conducted on the five measures of psychological distress (anxiety, fear, stress, dismay, and social adjustment) to test the significance of differences among victims of sexual assault (n=45), domestic assault (n=61), assault (n=58), robbery (n=34), and burglary (n=37). Approximately one month after the crime, there were significant differences in the levels of all distress scales by type of victimization. On all five scales, victims of rape were most distressed, followed by victims of domestic assault and assault, with robbery and burglary victims the least distressed -- although even these last groups exhibited substantial anxiety. Four to six months later, there were significant differences only on fear and social adjustment. The second type of analyses was a test of the Bard-Elison hypothesis that a victim's psychological distress is a function of the intrusiveness or degree of personal violation of the crime. The strength of the bivariate correlation (R) between the intrusiveness index and the measure of psychological distress served as an indicator of the extent to which there was a linear relationship between the two indices.

The results are shown in Tables 1 and 2. Two weeks to one month after the crime, there were significant differences in the levels of all distress scales across the types of victimization. Generally, the intensity of the distress symptoms declines monotonically across the types of crimes from rape to domestic assault, to other assault to burglary and robbery.

When the intrusiveness of the crime is compared among the four types of crimes, Bard and Ellison's hypothesis is supported; that is, there is a significant linear relationship between psychological distress in all areas and the intrusiveness of the crime. Thus, the more violent and intrusive the crime, the greater the trauma. On the other hand, the differences among the victims (by crime type) are quantitative, not qualitative; they are reflections of degree, rather than reflections of different emotional experiences among victims.

Effects of sociodemographic characteristics. The effects of eight socio-demographic characteristics -- sex, age, race, marital status, children, employment, income, and education -- on the five measures of psychological distress were tested first through individual bivariate tests, then through application of the Automatic Interaction Detector (AID) analysis. This latter procedure identifies the sociodemographic characteristics of portions of the population exhibiting the maximal difference in group means on a given dependent measure.

Both of these analyses found that across all symptom measures, the level of psychological distress was clearly higher among women than men. Beyond the male/female differences, demographic differences in victim distress are less noticeable. There was a consistent tendency for younger women to experience higher levels of distress than older women. In part, this is due to the younger age of female rape victims, victims who exhibit very high levels of distress. In addition, younger women are less likely to be settled in an established family

TABLE 1
 Psychological Distress Among
 Victims by Type of Victimization
 About One Month After the Crime:
 Burglary and Robbery Combined

	Rape (n=45)	Domestic Assault (n=61)	Other Assault (n=58)	Burglary/Robbery (n=71)	Significance of Test Statistic	
Fear	2.6	2.2	2.3	2.0	* p<.001	** p<.001
Anxiety	3.2	3.0	2.9	2.7	p<.001	p<.001
Stress	2.3	2.3	2.0	1.8	p<.001	p<.001
Dismay	2.7	2.5	2.3	2.0	p<.001	p<.001
Adjust	2.6	2.0	2.2	1.8	p<.001	p<.001

TABLE 2
 Psychological Distress Among
 Victims by Type of Victimization
 About Six Months After the Initial Interview:
 Burglary and Robbery Combined

	Rape (n=45)	Domestic Assault (n=61)	Other Assault (n=58)	Burglary/Robbery (n=71)	Significance of Test Statistic	
Fear	2.7	2.2	2.2	1.9	* p<.001	** p<.001
Anxiety	2.1	2.0	1.9	1.9	ns	p<.05
Stress	1.4	1.4	1.3	1.2	ns	p<.05
Dismay	1.9	1.8	1.8	1.7	ns	p<.05
Adjust	1.9	1.6	1.6	1.3	p<.001	p<.001

*For differences in means (Burglary and robbery separated for these analyses)

**For linear relationship

setting, factors which could contribute to feelings of isolation and the intensity of reaction to victimization.

The significance of the association between sex and age and psychological distress declines as the post-victimization time increases. There are, instead, indications that income and education become increasingly important in differentiating victims who are doing well from those who are not. Generally, the findings suggest that victims with higher incomes and/or education, that is, those with greater socioeconomic resource, show the strongest recovery from victimization, although higher income women continue to report feelings of dismay and anxiety.

Multivariate models of victimization. The LISREL (linear structural relationships program) analytic procedure was used to examine psychological distress as a function of the victimization experience, previous life stress, and social support. This procedure was applied separately to the two data sets (one month after the crime and four to six months later) to generate two multivariate models.

The best-fitting model of victimization one month after the crime is shown in Figure 1.

The oval symbols represent latent constructs -- the unmeasured theoretical constructs we tested. The rectangular symbols represent the manifest variables used to measure the latent constructs. The numbers above the arrows leading from the latent constructs to the manifest variables reflect factor loadings; the number above the arrow linking the two latent factors represents the regression coefficient of psychological distress on the other latent constructs. The numbers on the curved lines between latent constructs represent the correlations between factors. The number at the end of the jagged line directed into the endogenous latent construct (psychological distress) represents the error variance of the model (the proportion of variation in psychological distress not accounted for by variation in the latent endogenous factors). The power of the model is indicated by the root mean square residual of .04 and the R-squared value of .466.

The model results suggest a significant and strong link between the severity of the crime and psychological distress as indicated by the standardized coefficient of .328. However, the link between stress during the past year and psychological distress is even stronger (.472). In examining the factor loadings, it is apparent that serious problems -- financial, social, emotional, or physical -- were the type of stressors that contributed the most to the stress construct. Interestingly, the relationship between social support and psychological distress was weak and insignificant.

The existence of an underlying construct of psychological distress that manifests itself in symptoms of fear, anxiety, stress, dismay, and social adjustment problems is strongly supported. The factor loadings of the distress scales on the distress latent construct ranged from .637 to .793. Overall, the scales explained 84% of the variance in the psychological distress factor.

In the multivariate model of victim reactions four to six months later, psychological distress again emerges as a unitary underlying construct, and prior life stress remains a strong determinant of psychological distress. But

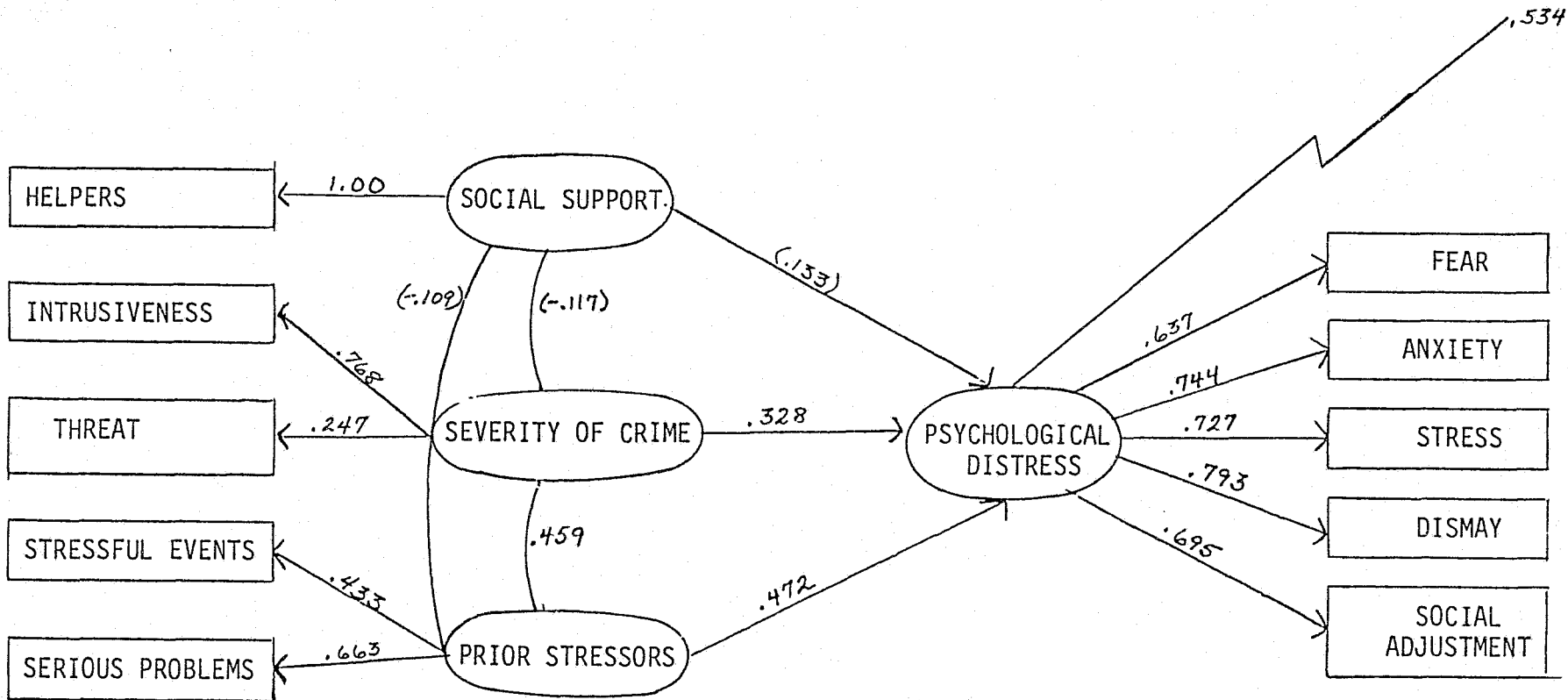


FIGURE 1. Psychological Distress About a Month After Victimization as a Function of The Crime, Prior Stress, and Social Support

$R^2 = .466$
 Root Mean Square = .04

the severity of the crime is no longer independently related to distress. And although the model is still relatively robust (R-squared value of .21), much less variance is explained than by the one month model.

Discussion

This research focused intensely on the psychological distress afflicting crime victims. And despite the many different analytic techniques applied to the data set, all the analyses were driven by the same large question: What explains the differences in psychological trauma among victims? Not surprisingly, we found that the type of crime, its level of intrusiveness and violation, has considerable impact on the level of victim distress. On the average, rape victims are more traumatized than other assault victims who are more traumatized than robbery or burglary victims. Yet, while differences in psychological distress were found across the groups of victims, the analyses indicated that they are differences of degree rather than type; that criminal victimization causes a generalized psychological reaction that is common to most victims regardless of the crime. Moreover, there were also considerable individual differences in psychological distress among victims. For example, although rape victims were more distressed on the average than victims of burglary, we found some burglary victims who were just as distressed as rape victims. These findings suggest that we broaden our concern and attention beyond the victims of sexual assault to include the victims of other major crimes. This is not to deny that rape victims require special attention -- they certainly do -- but that similar concern should be extended to other victims as well.

The most significant set of findings to emerge from this research came from the multivariate models. These findings may be summarized as follows.

First, the findings strongly suggest the existence of an underlying construct of psychological distress which is the central, dominant reaction of individuals to criminal victimization. It is the reaction from which most victims, regardless of crime, suffer and which is manifested in several ways depending on the victim's circumstances and personality. Second, the model underscores the importance of viewing victimization effects in their socio-psychological context. People are not victimized in isolation from other life events. In particular, the amount of stress the individual has experienced prior to the crime strongly influences the degree of psychological distress occurring after the crime. Third, a victim's level of psychological distress is predominantly determined (certainly during the initial troubled period) by only two sets of variables: (1) severity of the crime, and (2) prior life stressors. Thus, if we know the offense and its circumstances, along with the level of stress experienced by the victim during the past year, we can predict quite accurately the level of psychological distress they will endure following victimization. Fourth, social support from family and friends does not appear to be very effective in allaying psychological distress, although because more severe crimes elicit more social support, the effects of social support may be masked by the overwhelming needs of more traumatized victims. Fifth, the amount of assistance received from formal victim services does not appear to be very effective in reducing psychological distress.

Taken together, the findings from our model indicated that the distress suffered by crime victims is overwhelmingly determined by the severity of the crime and the victim's previous life stress. Although family, friends, and

formal victim services doubtless help the victim in some ways (certainly the victim believes this), they do not appear to be able to appreciably reduce the level of distress.

CONCLUSIONS AND RECOMMENDATIONS

In the course of this 2-1/2 year research effort, a sizable amount of varied data drawn from numerous sources was gathered, sifted, and analyzed. The findings yielded by this research provide a picture of victimization and victim assistance that is complex and dotted with the unexpected. Although our study was conducted in Tucson, Arizona, and the results are most directly applicable to victims and programs similar to those in Tucson, the findings have implications for cities and criminal justice agencies across the nation.

Conclusions

Our conclusions with respect to the effectiveness of victim services are as follows:

- The provision of services, both crisis intervention and delayed services, assists victims in a variety of ways. However, there was only slight evidence that services help to reduce emotional trauma.

The Victim/Witness Advocate Program helps victims in many ways, from providing emotional support to transportation. The victims who are assisted by the program are overwhelmingly positive about the value of the services, especially the crisis intervention services. Despite the victims' feelings that the program helped them considerably, the measures of emotional trauma did not indicate any substantial effects. There were indications, however, that program services, especially crisis intervention, helped victims in their behavioral adjustment; i.e., adjustment to daily routines of life and work.

- Police and prosecutors feel that the victim assistance services are helpful to victims and are of considerable aid to them in their work.

The police and deputy county attorneys (prosecutors) value the work of the victim/witness program, both for its assistance to victims and for helping them with their jobs. The police have special praise for the crisis intervention units. Both police and prosecutors feel the Victim/Witness staff are skilled and fulfill several useful functions; most want more counselors available.

- Despite the positive views that police and prosecutors hold toward the Victim/Witness Program, they do not use the services to their capacity, particularly the crisis intervention services.

Our research indicated that there are many victims who are in need of, and would like, assistance, but they are not being referred by police or prosecutors. Reasons for the under-utilization of the crisis unit by police stem largely from their perceptions (mostly erroneous) that the single unit cannot respond to more calls. It is suggested that these perceptions are difficult to alter because of organizational processes in police departments which hinder the communication and execution of changes in police officer behavior.

- The cost of victim assistance services, especially the volunteer-laden crisis intervention services, are relatively low.

Costs per citizen served are estimated between \$54 and \$62. Costs for the crisis intervention component are estimated at only \$31 to \$37 per citizen served, mainly because almost all of the crisis counselors are volunteers.

- Volunteers can be effective counselors and can be integrated successfully into a victim assistance program.

The Tucson Victim/Witness Advocate Program maintains, through careful selection and training, a very competent cadre of dedicated volunteers who have provided helpful crisis counseling for several years, virtually without negative incident. There seems no reason why such a cadre cannot be established in any metropolitan area.

With respect to the social-psychological effects of victimization, our conclusions are the following:

- Psychological distress is the central, dominant reaction of crime victims, and it is determined in its initial, most troubling stages, mainly by the severity of the crime and prior life stress.

Our multivariate analysis identified psychological distress as the underlying emotional dimension of victimization. It is manifested in several ways - fear, anxiety, stress, etc. -- depending on the victim's circumstances and personality. The level of distress is determined predominantly by only two sets of variables: (1) severity of the crime, and (2) prior life stress.

- The psychological distress of victims differs according to the severity of the crime, but the differences are of degree rather than type.

Generally, the more violent and intrusive the crime, the greater was the psychological distress suffered by the victim. However, the differences in distress among the victims by type of victimization (crime) were found to be quantitative, not qualitative. Thus, while victims of sexual assault tended to exhibit the highest levels of psychological distress, many victims of other less intrusive crimes were also quite traumatized.

Recommendations

Based upon the findings of this research, we recommend the following:

- Jurisdictions without victim services should strongly consider the establishment of such services. Victim assistance programs which are already operating should seriously consider the addition of a crisis intervention component.

The provision of any government services must be weighed against the availability of funds, and victim services are no exception. However, based on our analysis of program impact and benefits, and the comparative cost of services, we believe victim assistance services deserve strong consideration from all jurisdictions. Crisis intervention services provide a much valued benefit (immediate counseling) at relatively low cost; thus, existing programs should seriously consider adding such a component.

- Victim assistance programs, especially those with crisis intervention components, should address the problem of under-utilization.

In order for victims to be referred to victim assistance programs, criminal justice agencies must continually educate their people about the needs for, and the availability of, services for victims. When addressing police agencies, this educational process should be shaped by a clear understanding of the special organizational characteristics of police departments. In the establishment of crisis intervention services, programs should also consider the use of multiple mobile units and other arrangements which may improve the utilization of services.

- Because most victims suffer from some level of psychological distress, all should have the opportunity to receive some degree of attention and support.

The existence of the construct of psychological distress common to crime victims, together with the similarities in reactions across crime type ("difference of degree") argue for attention to the needs of a broader range of crime victims. It is unlikely that all crime victims require assistance during the post-crime period. But police officers, prosecutors, victim counselors -- and family and friends -- should be alert, to a greater degree than in the past, to the likelihood that most victims will experience some level of psychological distress, particularly during the first several weeks after the crime. Of course, priorities should be set: the brutality of sexual assault demands an immediate and thorough response from officials and victim assistance services that is not appropriate to most burglary victims. But our statement about the victim distress reactions also applies to the helping response: it should be a difference of degree rather than of type. Yet, because our research found little evidence that either social support or formal victim assistance services have beneficial impact on the victim's level of psychological distress, there remains some question about what form that attention should take.

- Practitioners should be made aware of the powerful effect of prior life stress on the distress of victims. They should understand that by knowing about the nature of victimization and the victim's prior life stress, they can identify fairly accurately the level of psychological distress the victims will suffer.

The fact that only two sets of variables -- prior life stress and the severity of the crime -- account for the larger proportion of subsequent psychological distress has significant implications for identifying those victims most in need of assistance. For many individuals in a position to identify distressed victims, the severity of the crime already serves to trigger the call for assistance. But few are aware of the equally powerful effect of prior life stress: it is as though the crime is the spark that ignites the smoldering coals of life stress. It would seem, therefore, that if a police officer or victim assistance advocate were to ask the victim (or a family member) a few simple questions about the presence of prior stressors, they would significantly improve their ability to identify victims who are most likely to experience substantial distress during the next several weeks and months. Although this topic deserves more investigation, we believe the evidence is

sufficiently strong that information about the role of prior life stress should be disseminated broadly to all those in a position to identify and assist victims in need.

We further recommend the following research efforts.

- More research needs to be conducted on how to reduce the psychological distress of crime victims.

We know more about the distress caused by victimization than we know about how to treat it. Our evaluation found only slight evidence that crisis intervention helps relieve psychological distress. Other research has also failed to identify successful strategies that succeed in reducing victim trauma. We also found that social support does not significantly reduce victim distress. We did find that as time passes after the crime, victims tend to recover from their psychological distress. Is time the only cure or can we accelerate the recovery process? More systematic research and evaluation needs to be conducted on ways in which the victim's distress can be reduced.

- There is a need for research that will identify and test promising mechanisms for increasing the utilization of victim services.

Our research indicates that many victims in need of assistance do not receive it mainly because criminal justice agencies, particularly the police, are not referring them. We encourage the support of a research and demonstration project that would first identify promising approaches, then test their effectiveness within an evaluation framework. The results of such an effort should help to increase greatly the number of victims who receive needed assistance.

- More comprehensive studies of victimization need to be conducted with large, varied samples which include measurement of social/contextual variables.

The results of this research demonstrate the advantages -- both practical and theoretical -- of using multivariate techniques as a means of illuminating the roots and dynamics of victimization. We think that the identification of the central underlying construct of psychological distress, along with some of its determinants and symptoms, marks an important advance in our knowledge of the victimization experience. But this study was conducted as an exploratory effort on a data set originally collected as part of our evaluation of victimization services. As a consequence, neither the sample nor the battery of measures were ideally suited to a multivariate investigation of the victimization experience. Future research should employ larger samples (a minimum of at least 500 victims) and a broader set of variables that includes measures of pre-existing stressors and resources and immediate social supports, along with a broadened set of psychological scales. In addition to the scales used in this research, the psychological measures should include anger and hostility and locus of control. This research would not only generate an expanded, more valid body of information on victimization, but would integrate the information into a coherent theoretical framework that provides a comprehensive, more complete depiction of the causes and dynamics of the victimization experience.

- More research should be conducted on the roots and dynamics of the psychological distress construct and on the development of scales for measuring the impact of victimization.

The unitary construct of psychological distress has emerged as the underlying reaction to victimization. Although we have learned something of its determinants, we know little about its dynamics. Is it the principal product of a classically conditioned fear response formed at the time of the incident and generalized to associated stimuli? Or does it function as a combination of conditioned response and more cognitive perceptions about environmental contingencies? What explains the variation in the maintenance and decay of different distress symptoms? We suggest that our ignorance of these basic processes is not unrelated to our inability to relieve the psychological distress of victims, and that we are not likely to make advances in the latter until we begin to make inroads in the former.

Finally, we recommend that additional work be done on the development and refinement of psychological scales for measuring the victimization experience. It is our view that the victim field would be well served by the development of standardized scales specifically oriented toward victimization. These scales would be much shorter and more focused on the symptoms of victimization than the standardized scales currently available. As such, they would be considerably more sensitive, efficient, and interpretable than scales developed mainly for use with clinical populations. The scales used in this research are a step toward such a battery. The next stage would involve the administration of these scales, along with other measures, to several sizable samples of victims and diverse groups from the general population, followed by factor analysis and the establishment of norms. The development of these scales would substantially improve our ability to conduct much needed research on the victimization experience.

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APPENDIX

DESCRIPTION OF SCALES AND MEASURES

DESCRIPTION OF SCALES AND MEASURES

The scales and variables used in the research are briefly described below. For further, more detailed information on the measures, consult the full final reports of the two studies: (1) Evaluation of Victim Services (Smith, Cook, & Harrell, 1985) and (2) The Social Psychological Effects of Victimization (Harrell, Smith, & Cook, 1985).

- Fear. The fear scale consists of 12 items from the 120-item Modified Fear Survey III (Veronen and Kilpatrick, 1980). The items were selected from the larger group on the basis of their apparent relevance to aspects of the victimization experience. For example, respondents were asked whether they are disturbed by potentially frightening situations or things such as guns, violence on television, strangers, etc. A four-point scale was used to evaluate the level of fear where 1 = not at all, 2 = a little, 3 = a fair amount, and 4 = very much so; the responses were averaged across items.
- Anxiety. The State portion of the State-Trait Anxiety Inventory (Spielberger, Gorsuch and Lushene, 1970) was modified in three ways for use in the interview. One of the 19 items, judged to be awkward and lengthy, was deleted, leaving 18 items. The frame of reference was shifted from "how are you feeling 'at this moment'" to "how have you felt 'since the crime or incident'." The wording of the two middle response categories was changed: "a little" replaced "somewhat"; "a fair amount" replaced "moderately so." This change provided a consistent set of responses across scales (1 to 4). The anxiety score was the average of the items answered.
- Stress. The stress scale consisted of 9 items that focus on the physical manifestations of tension such as headaches, feeling faint or dizzy, pains in the chest or heart, etc. Again, the scale score is the average of the responses (coded 1 to 4) to these items.
- Dismay. The dismay scale consisted of 8 items designed to reflect feelings of unhappiness among victims. It should not be construed as an indication of serious depression. Victims are asked if they have felt sad, angry, dissatisfied, or guilty since the crime. The scale score is the average of the items (coded 1 to 4).
- Social Adjustment. The victim's ability to return to his or her normal daily activities is measured by the average score (1 to 4) on 6 items. Victims are asked whether they are cutting down on social activities or cutting themselves off from friends. The intent was to measure behavioral aspects of post-crime distress.

The scales were constructed by carefully selecting items related to specific psychological constructs and then subjecting them to tests for internal consistency. All scales exhibited good reliability with Cronbach's alphas of .69 or better.

Variables used to measure victim stress include the intrusiveness of the crime, the severity of the offense, the number of stressful life events in the year before the crime, the existence of serious problems in the previous year,

and prior violent victimization.

- Intrusiveness of the Crime. Following the hypothesis of Bard and Ellison (1974), the types of crimes were ranked on a continuum from those with the highest level of personal violation to those with a lesser degree of violation. The following rankings were assigned: rape = 4, domestic assault = 3, other assault = 2, and robbery or burglary = 1. In some analyses, the scale ranged from 5 (rape) to 1, treating robbery as 2 and burglary as 1.
- Severity of the Crime. Elements of the victimization experience believed to increase the intensity or seriousness of the crime, regardless of the type of crime, are physical injury, use of a weapon, and victimization by a non-stranger. A single indicator of severity was created by adding a point for each of these reported by a particular victim. Scores ranged from 0 to 3.
- Stressful Life Events. To evaluate the amount of stress the victim experienced in the year prior to victimization, 7 items were selected from the Holmes-Rahe Life Stress Scale. These items all reflected specific negative events: death of a spouse, a major illness, divorce, separation, death of a relative, death of a friend, breaking up with boy/girlfriend. The total number reported by the victim is used as the level of stress measure.
- Past-Year Problems. A second indicator of the level of stress in the prior year was included to reflect problems other than the seven specific events in the preceding scale. Victims were asked how things had gone in the past year in four areas: financially, physically, socially, and emotionally. Responses ranged from 1 = very well to 5 = very badly. For each area in which the victim said things had gone 4 = not very well or 5 = very badly, a point was added to the score on this measure. The resulting scale has values 0 to 4, which indicate the level of past year stress perceived by the victim.
- Informal Social Support. Respondents were asked whether they received help from family members, friends, or coworkers after telling them about the crime. One point was added to the score for each source of help reported (range of 0 to 3).
- Victim Assistance Services. Respondents were asked about the type of services provided by crisis intervention or other programs. Choices included transportation, legal aid, referral services, advice, listening, and medical advice. One point was added for each service received.