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The role of perceived social support in crime victimization

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Abstract

There has been extensive research into social support (SS) and trauma, but there remains a paucity of knowledge concerning the dynamics of these factors with respect to victims of crime. This review considers the temporal dimension of SS or perceived social support (PSS) in particular, conceptualizing it as an endogenous, dynamic resource [J. Pers. Soc. Psychol. 61 (1991) 899] that can be depleted by chronic stressors. Based on a discussion of existing research, an explanation is proposed for the inconsistent findings of PSS as a moderator to distress in some cases and a mediator in others. In particular, some researchers have posited that since PSS can deteriorate, it can lose its buffering capacity and thus qualitatively change in its role from a stress moderator to a mediator in the stress–distress relationship. From a review of the literature, it would seem that PSS can act as a moderator of distress in the early stages, but that as the stressors become numerous or chronic PSS turns into a mediator between the stressor and psychological distress. This article applies such a dynamic perspective of PSS to victims of crime and argues that one's perspective of victim status may be well served by taking into account the history of victimization and trauma that these individuals have experienced. It is proposed that a history of chronic exposure to victimization or trauma erodes victims' perceptions of the SS available to them. In turn, these low levels of PSS result in higher levels of distress experienced in the face of subsequent victimization or trauma. The implications of a dynamic perspective of SS and victimization for research and practical interventions for victims of crime are discussed.

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1. Introduction

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It has been established across a variety of studies that social support (SS) plays an important role as a psychosocial resource in protecting physical and psychological health (e.g., Bradley & Cartwright, 2002; Mazie, 1985; Quittner, Glueckauf, & Jackson, 1990; Sander, High, Hannay, & Sherer, 1999). Generally, SS can be defined as “those social interactions or relationships that provide actual assistance or a feeling of attachment to a person or group that is perceived as caring or loving” (Hobfoll & Stephens, 1990, p. 455, emphasis added). Implicit in this definition is the idea that SS is a multifaceted phenomenon, whereby different aspects of SS [e.g., received SS, perceived social support (PSS)] can have differential roles in well-being. Indeed, the heterogeneity of this catchall concept has been identified as one source of inconsistent findings in SS research (see reviews by Heller & Swindle, 1983; Sarason, Sarason, & Pierce, 1990, for discussions of how SS research has evolved over the years and the many SS measures that have been developed and used). Given that PSS has been found most consistently to have a positive impact on well-being (Dolbier & Steinhardt, 2000), the focus of this article’s review of SS will be limited to primarily PSS.

The benefits of SS to crime victims has been convincingly documented, particularly for female and child victims of sexual and physical abuse (e.g., Mitchell & Hodson, 1986; Ruch & Leon, 1986; Thompson, Kaslow, Kingree, Rashid, Puett, Jacobs, & Matthews, 2000). Nevertheless, there remains a dearth of knowledge as to the process by which SS is actually related to psychological functioning in victims of crime. This precludes definite conclusions regarding how SS is instrumental in the protection of victims from the consequences of the traumatic experience. Yet, in light of victim services’ evolving and maturing research base and attendant practice, it is crucial that service providers gain a better understanding of SS and its role in the recovery process. Therefore, there is a pertinent need to clarify the relationship between SS variables and well-being in this population.

The main objective of this article is to explore the role that SS (PSS, in particular) plays in victims of crime. Notably, various studies have shown that one of the strongest predictors of victimization is past victimization (e.g., Acierno, Kilpatrick, & Resnick, 1999), and that victims of chronic or multiple crimes present with higher and more enduring symptomatology, including depression, anxiety, somatization, and posttraumatic stress disorder (PTSD) (e.g., Nishith, Mechanic, & Resick, 2000; Norris & Kaniasty, 1994; Wise, Zierler, Krieger, & Harlow, 2001). Since SS influences people’s adaptation to traumatic events, and if their perceptions of SS and/or ability to effectively utilize SS are influenced by previous traumatic experiences (which is a thesis of this article), it is then vital to take crime victims’ histories into account when considering the importance of SS for them. It is hypothesized that this would help to reveal any cumulative effects that a history of trauma may have had on their SS system, as well as on their current psychological adaptation. Hence, this review aims to delineate the process (mediator or moderator) by which PSS benefits victims of crime under various types of circumstances (e.g., chronic or acute stressor).

To achieve such an aim, this paper comprises two parts. The first part reviews general SS literature to establish the current status of understanding regarding SS. This review takes as its starting point the appeal made by recent SS researchers (Holahan, Moos, Holahan, &

Cronkite, 1999; Lepore, Evans, & Schneider, 1991; Quittner et al., 1990) for a careful consideration of the temporal and contextual factors of SS to enable a better understanding of SS processes. A brief review of exemplary research on SS will then be made, along with a discussion of the relevance of the conservation of resources (COR) and support deterioration deterrence (SDD) models, to depict a more dynamic perspective of SS.

The second part of this paper will highlight the implications of applying the current status of understanding of SS to victims of crime. In particular, the temporal dimension of PSS, victim status (taking into account one's history of victimization), and the PSS–victimization relationship will be the focus of this discussion. Finally, future directions for research and recommendations for interventions for victims of crime will be proposed.

2. The temporal dimension of SS

2.1. Conceptual inconsistencies and limitations

While some researchers have conceptualized SS as having a strong personality component,¹ such that it is expected to be relatively stable over time, others have viewed SS as a perception that is based on experience and is therefore vulnerable to fluctuations over time and subject to recent experience (e.g., Asendorf & Wilpers, 2000; see discussion by Sarason et al., 1990). One problem with prior studies is that researchers sometimes fail to distinguish between these two views in their operational definition and measurement of SS. Although empirical support has been reported for both views, such research has given rise to equivocal findings that are difficult to interpret. This review focuses on the view of SS as a perception based on recent experience and will examine only the studies that have a congruent view.

The lack of a temporal dimension in SS research is closely tied to a preoccupation with the classic main or buffering-effect models. The buffering hypothesis posits that support “buffers” or protects individuals from the potentially adverse consequences of stressful experiences and is primarily beneficial for people under stress. The alternative, main-effect model, purports that SS has a general beneficial effect irrespective of whether people are under stress, through the provision of regular positive experiences and a sense of self-worth and stability in one's social life (Cohen & Wills, 1985). The main weakness of these models is that they depict SS as a static, exogenous variable that is independent of the individual's circumstances (Lepore et al., 1991).

¹ Sarason et al. (1990) proposed an interactional model of support that centers around a personality variable termed “sense of acceptance,” whereby PSS is a function of one's sense of acceptance, the type of stressful situation, and the quality of the current primary relationships. They borrow from traditional attachment theory, which purports that children acquire a general schema for social relationships through their early experience with their primary caregivers (usually parents), and this schema then guides their expectations and perceptions of all close relationships later on in life (including peer and love partner relationships). Sarason et al. adopt this perspective in assuming that the sense of acceptance in adulthood is also deeply rooted in experiences with one's parents in early childhood, thus making PSS a stable personality trait.

In more recent years, the search for specific causal links in the stress process has led some researchers to challenge the widely accepted view of SS as a “buffer.” These researchers contend that such an unquestioning acceptance of this view obscures other possible effects that SS might have on well-being (Lepore et al., 1991; Quittner et al., 1990). Specifically, Lepore et al. (1991) asserted that the effects of stressors on support processes have not been sufficiently investigated. One proposed reason lies in an implicit assumption of this buffering hypothesis of SS as a stable resource that is independent of stress. Consequently, the stressor–support relationship is often not empirically tested. In fact, such an association might be considered undesirable or be suspected of indicating a confounded relationship between the stressor and SS (Cohen & Wills, 1985). Furthermore, although Cohen and Wills (1985) specifically recommended that the independence of the stressor and support measures be empirically established, existing research continues to be plagued by the lack of such confirmatory tests (e.g., Murphy, 1987) or equivocal reports of “buffering effects” when a relationship between stress and support was found (e.g., Comijs, Penninx, Knipscheer, & Tilburg, 1999).

In fact, the dynamics of the stressor–support relationship over time (as the levels of stress and/or SS change) is an area of research worthy of further investigation. Since the assumption of a dynamic relationship while researching this area is inherently incompatible with the basic assumption of a buffering model, an alternative framework is required to provide a possible theoretical account of this stressor–support relationship.

2.2. *Alternative perspective*

There has been an emerging alternative perspective on the role of SS in the relationship between stress and psychological distress, which conceptualizes SS as a “dynamic, endogenous variable that can be affected by certain stressors” (Lepore et al., 1991, p. 899). This makes way for a third, indirect effect or mediator model in the explanation of SS processes. The mediator model posits that SS functions as an intervening variable between stressor and outcome, such that changes in support are a result of the stressor and serve as an underlying process that explains changes in psychological distress (Lepore et al., 1991; Quittner et al., 1990).

A growing body of research (e.g., Lepore et al., 1991; Norris & Kaniasty, 1996; Holahan et al., 1999; Quittner et al., 1990; Thompson et al., 2000) has reported that SS (namely perceptions of available support, PSS) is a potent mediator of the stress–distress relation. These studies found that PSS was eroded by pervasive, chronic stressors, and individuals with lower PSS have presented with higher distress levels. Furthermore, this finding was consistent across a variety of samples, ranging from community-resident adults (Holahan et al., 1999) and college students in crowded living conditions (Lepore et al., 1991), to mothers of handicapped children (Quittner et al., 1990), natural disaster victims (Kaniasty & Norris, 1996), and victims of partner violence (Thompson et al., 2000).

2.3. *Mediators versus moderators*

Although some researchers tend to use the terms “moderator” and “mediator” interchangeably, Baron and Kenny (1986) emphasized the necessity of this differentiation to

enable a better understanding of the relationships amongst factors due to the important conceptual and strategic implications in research. As explained by Baron and Kenny, “moderators” affect the strength or direction of effects or relationships (i.e., they specify the conditions under which the variable exerts its effects). “Mediators,” on the other hand, reveal how these effects come about without telling their strength or direction (i.e., they account for the link between the predictor and outcome variables).

Baron and Kenny (1986) have proposed a specific compendium of analytic procedures to facilitate the most effective use of the moderator–mediator distinction. Briefly, a moderator effect is evidenced by a Significant Moderator (e.g., PSS) \times Predictor (e.g., level of violence) interaction effect on the outcome (e.g., distress) over and above any independent main effects of the moderator and predictor variables (see Fig. 1). In contrast, a mediator effect is tested by a path-analytic model, whereby a significant reduction in the direct predictor–outcome path demonstrates that the given mediator is indeed potent, though neither necessary nor sufficient for an effect to occur (see Fig. 2). Nonetheless, this model also requires that variations in the predictor (e.g., victimization) account for variations in the mediator (e.g., PSS), and that variations in the mediator account for variations in the outcome (e.g., distress).

Although Baron and Kenny’s (1986) recommended statistical techniques have become increasingly applied to psychological research, the prevalence of multidisciplinary research on SS has resulted in the dissemination of research with inadequate statistical analyses. The analytic techniques used to test for moderator effects in earlier studies have failed to follow Baron and Kenny’s recommendations (see discussion by Cleary & Kessler, 1982). Instead, the less preferred or accepted method, analysis of variance (ANOVA), is often used. Whereas the requirement for testing a moderator effect using ANOVA is merely a Stress \times Support interaction, the regression analysis controls for any main effect of stress and of SS (which are treated as continuous variables). This method is preferred because the effect of the reported interaction is then over and above the potentially confounding main effect (Cohen & Wills, 1985).

Indeed, when following Baron and Kenny’s (1986) recommendations, Quittner et al. (1990) found that in the face of chronic parenting stress, PSS played a mediator role. It is noteworthy that the parental stress experienced by the mothers was conceptualized as chronic because they were interviewed at least 1 year after discovering the handicap of their children. Quittner et al. found that the PSS of mothers with handicapped children was eroded by the chronic strain of their circumstances, and lower PSS was associated with higher distress.

Notably, Quittner et al. (1990) also tested for the buffering effects of PSS, but none was found. In explaining this finding, Quittner et al. proposed that SS functions differently between chronic and acute situations; rather than mitigating the impact of stress, PSS is itself

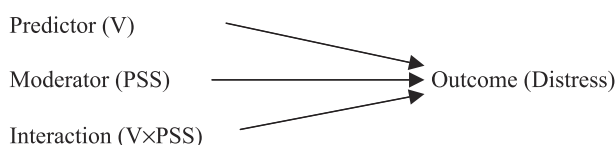


Fig. 1. Diagram depicting a moderator/buffering effect. V = Violence; PSS = perceived social support.

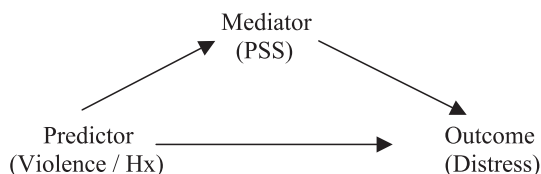


Fig. 2. Diagram depicting a mediator effect of PSS in the relationship between violence or history of victimization and outcome. PSS = Perceived social support; Hx = history of victimization/trauma.

negatively influenced (deteriorated) by ongoing strain. Furthermore, they contended that previous studies had relied heavily on ad hoc scales or measures with questionable psychometric properties, resulting in reports of significant interactions as evidence of buffering effects with a resultant elevation of type I errors.

Likewise, in the 10-year longitudinal study of a community sample by Holahan et al. (1999) ($N=326$), people who had experienced more negative than positive events in the 10-year period reported a decline in quality of family relationships and increased depressive symptomatology at follow-up. Using an integrative structural equation model (Baron & Kenny's, 1986, preferred technique), Holahan et al. found the association between change in life events and depressive symptomatology at follow-up to be completely mediated by change in personal and social (i.e., family support) resources during the 10-year interval. Thus, in the face of the protracted (i.e., chronic) strain of negative events, PSS (measured as “family support” here) was better accounted for as a mediator in the stressor–symptomatology association.

2.4. A conceptual milestone

Of interest, Lepore et al. (1991) demonstrated the dynamic nature of SS and the stressor–support relationship with findings from their longitudinal study, which examined the effects of chronic household crowding on psychological distress. Moderator effects of PSS were found at the 2-month follow-up, but not at the 8-month follow-up—the Stress \times Support interaction effect on distress had disappeared after 8 months (i.e., the buffering effect had diminished). Instead, PSS functioned as a mediator: Crowding was associated with decreases in PSS from 2 to 8 months after occupancy and decreases in PSS were in turn associated with increases in levels of psychological distress during that period.

Thus, the findings of Lepore et al. (1991) suggest that the role of PSS in the stress process can change qualitatively. In agreement with Quittner et al. (1990), and later Holahan et al. (1999), Lepore et al. posited that perceptions of available support may initially function as a buffer at the onset or occurrence of a chronic stressor or under acute stressful conditions. However, the protracted nature of chronic stressors may have insidious effects on one's perceived support (e.g., provider burnout—actual or perceived or recipient's perceptions of obligation or guilt for being a burden), such that it loses its buffering capacity. This deterioration of SS could, in turn, increase psychological distress (i.e., mediator role).

3. SS models

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In order to better contextualize one's perception of SS and victimization history, a short synopsis of the most notable models is provided below. The models were selected due to their representativeness of different aspects of SS, and more specifically their direct relevance to the thesis of this article, which is a consideration of the dynamic nature of PSS in victims of crime. These models have been tested by relevant research and propose cogent explanations of the process by which PSS is related to the psychological functioning of victims of crime. In all, while there are other theories of SS, the below are broadly, yet selectively, representative of our current paradigm.

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3.1. The SDD model (Norris & Kaniasty, 1996)

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Extending the conceptualization of SS by Lepore et al. (1991), the SDD model stipulates that “postdisaster mobilization of received support [RSS] counteracts the deterioration in expectations of support [PSS] often experienced by victims of major stressors” (Norris & Kaniasty, 1996, p. 498, emphasis added). In the long run, this preservation of PSS is believed to benefit victims' psychological health. Of relevance, this model presupposes two key points. Firstly, extreme stressors such as disaster or victimization have the potential to disturb victims' ongoing perceptions of available support (support deterioration hypothesis). Secondly, PSS is hypothesized to serve a protective role (protective appraisal hypothesis): The higher the PSS, the lower the distress would be.

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3.2. The COR theory

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Correspondingly, the COR theory of Hobfoll et al. (Hobfoll, Dunahoo, & Monnier, 1995; Hobfoll & Stephens, 1990) is a significant exception to SS researchers' tendency to overlook the “nature, consequences and determinants of resource change” (Holahan et al., 1999, p. 620, emphasis added). According to this theory, the COR (e.g., SS) is central to the stress process, such that loss is the main driving mechanism underlying stress reactions. This theory is based on the premise that individuals are innately motivated to obtain, retain, and protect their personal and social resources, and that they experience stress when circumstances threaten or diminish these resources. Moreover, just as resources tend to beget resources, resource loss tends to result in further loss, potentially resulting in a resource loss cycle. This can begin immediately and/or have a long-term effect on individuals. Thus, COR theory posits that individuals have a resource threshold that, when substantially overburdened (e.g., by multiple traumas), accelerates the loss cycle. The consequence being a great increase in impact and momentum of psychological effects on the individual.

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3.3. The posttraumatic resource ecology (PRE) model

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In addition, Hobfoll et al. (1995) proposed a PRE model to address the critical function of resource loss in traumatic stress. This model encompasses various socio-

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ecological levels from which people can draw resources, ranging from internal (individual) to increasingly external (family, organization, and community) levels. They hypothesize that when people are dislocated from their social system (e.g., perceive low SS), they are isolated from the available resources from these ecological levels. Thus, they are more vulnerable to ongoing levels of loss and associated psychological distress. Indeed, the findings of Holahan et al. (1999) provide a cogent application of this model. People who experienced an increase in the preponderance of negative over positive events experienced ongoing loss of personal and social resources across 10 years, resulting in heightened symptomatology.

4. SS in victims of crime

At present, research on various kinds of stress suggests that PSS can indeed shift qualitatively between a moderator of stress and a mediator in the stress–distress relationship. One factor that is proposed to influence whether SS acts as a moderator or mediator is the chronicity of the stressor. Nonetheless, other potential factors remain to be investigated by further research. Notwithstanding, the above review has important implications for understanding the SS of victims of crime. For the purpose of discussion, the question of whether PSS is a moderator (buffer) or a mediator in victims of crime will first be considered. Thereafter, the dynamics of SS for this specific demographic will be discussed.

4.1. PSS of victims of crime: mediator or moderator?

As far as victims of crime are concerned, the process by which SS operates to protect them from adverse psychological consequences remains unclear. Although much research has been done on SS, few studies have looked specifically at a victim sample. Those researchers who have considered SS in victims of crime have mostly taken the traditional view of SS as a buffer (e.g., Comijs et al., 1999). However, buffer effects were mostly observed in between-group studies that compared victims with nonvictims (who would presumably report relatively low stress levels) or in studies that found a direct protective effect of PSS and reported it as a “buffering effect,” although no interaction effect was tested for. Therefore, the question remains as to how PSS actually operates, especially when considering within-group effects, across victims who have different histories.

It is contended that matched case-control sample testing (between-group) may find buffering effects because the selection of a control sample usually entails that it is not facing the stressor of interest (i.e., victimization) and is thus essentially less distressed. For this group, SS may be less consequential or relevant and/or tends to be relatively unscathed by the stressors of general life. As such, the protective effect of SS, even if present, will not be detected when compared to the victim group, which tends to be relatively more distressed. Furthermore, since the buffering model implicitly assumes that stressors and SS are independent factors, the stressor–moderator relationship is often not empirically tested, thus

remaining unfalsified. In effect, the Stressor \times Support interaction found in such studies supporting the buffering model may be an artifact of preselected differences in the samples compared. The victim group is more distressed; thus, the protective mechanism of SS will be more significant for these individuals than it would be for those in the comparison group who are not being/have not been victimized.

For example, Kaniasty and Norris (1992) reported that PSS consistently protected both violent and property crime victims against symptoms of depression, anxiety, hostility, and fear. They found a group by PSS interaction (a buffering effect) when they compared the effects of PSS on these victims versus nonvictims. Likewise, Ruch and Leon (1986) reported that for rape survivors (as compared to nonvictims), PSS was a buffer of stress. Although meaningful for the purpose of their studies, these findings regarding the buffering role of PSS remain equivocal because of the sampling problem raised above. In contrast, a more valid test of buffering effects would be to assess within groups differences (i.e., victims only) or only across time (i.e., prospective study with victims), such that distress levels are not preselected into comparison groups. The independence of the stressor and SS should also be verified statistically (Cohen & Wills, 1985). Any protective effects of SS derived can then be more accurately attributed to the protective mechanism of SS in individuals under higher stress (where the stressor is a continuous factor rather than dichotomized, i.e., victim group vs. nonvictim group).

Indeed, researchers have found a direct association between SS and psychological functioning in combat veterans (O'Brien, 1998) and cancer patients (Holland et al., 1999) amongst many other nonvictim populations, such as caregivers for head injured patients (Sander et al., 1999), nurses (Bradley & Cartwright, 2002), and medical practitioners (Mazie, 1985) to name but a few. O'Brien (1998) noted that some Israeli studies of combat stress reaction cases from the Lebanon War showed that PSS had a predictive relationship with PTSD. Benight, Swift, Sanger, Smith, and Zeppelin (1999) also found PSS to be a predictor of distress in disaster survivors, and Holland et al. (1999) found psychological distress to be negatively correlated with PSS in melanoma sufferers.

Cheever and Hardin (1999) found that PSS served a direct protective function in the relationship between adolescents' exposure to traumatic events and their self-assessment of health. Although they did not test the actual function of this third variable (mediator or moderator), they reported a significant regression coefficient demonstrating the direct impact of PSS on adolescents' health.

As discussed earlier, various studies have recognized that perceptions of SS are not always independent of stress but are particularly vulnerable to postevent deterioration (Kaniasty & Norris, 1993; Norris & Kaniasty, 1996). As such, comparing the PSS of nonvictims and victims would arguably be different from comparing PSS across victims, by virtue of their experiences, and especially when their histories of victimization or trauma (Hx) are taken into consideration. Indeed, it is possible that PSS serves as a mediator between the Hx of crime victims and their subsequent functioning, although this postulation remains untested. However, it is necessary to first review the literature on the long-term effects of victimization and other traumas on PSS.

4.2. Long-term effects on PSS: crime victimization

A few studies have looked at the long-term effects of trauma on PSS and its relationship with psychological functioning over time and through multiple traumatic experiences.

In an early cross-sectional study of rape victims, Frank, Turner, and Stewart (1980) reported that while prior sexual victimization did not affect measures of depression, anxiety, or fear, such a history was associated with significant disruption in social functioning in the victim's immediate household within a month of the rape. Although Frank et al. did not test for mediator effects, their findings suggest that a history of past sexual victimization might have an indirect effect on the long-term consequences of trauma by affecting the personal support system of the victim.

Similarly, Mitchell and Hodson's (1983) study of 60 women who sought shelter following domestic abuse found that women who experienced partner violence were at higher risk of experiencing low levels of SS resources (as a direct effect of partner violence). Moreover, they tested for but failed to find any moderator effects of SS on psychological outcomes (in this case operationalized through depression). Mitchell and Hodson (1986) also reported that battered women with high levels of childhood exposure to violence (chronic Hx) reported lower PSS compared to those with less exposure to childhood violence.

In fact, a more recent cross-sectional study of women who were victims of partner violence revealed that victims' PSS operated as a potent mediator of the violence–distress association (Thompson et al., 2000). Findings based on path analysis indicated that low levels of PSS accounted for a substantial amount of the victims' increased distress, such that a large proportion of the effect of abuse on distress was indirectly mediated by PSS.

4.3. Long-term effects on PSS: other stressors

As mentioned above, studies on the effects of criminal victimization and PSS on psychological functioning usually compare between victims and nonvictims (e.g., Ruch & Leon, 1986), even in longitudinal studies (e.g., Norris & Kaniasty, 1994). In contrast, research into the long-term effects of other stressors (e.g., natural disaster) tend to have a design that is more akin to the focus of this review, i.e., within-group (e.g., Norris & Kaniasty, 1996) or across-group design (e.g., Holahan et al., 1999). Notably, to the authors' knowledge, no study has yet studied the effects of victimization on the PSS of victims nor taken a dynamic perspective of victim status (i.e., Hx) and the PSS of crime victims. The studies discussed above and hereafter are among the rare few that have considered the temporal dimension of SS and of the stressors of interest. Therefore, such studies are also instructive for understanding the role of PSS in victims of crime.

Kaniasty and Norris (1993) found that flood victims experienced the impact of the disaster both directly, through the trauma and associated losses, and indirectly, through deterioration of perceived support. As PSS declined, psychological distress increased. This suggests that over time, the erosion of PSS can be one path through which major life

stresses additively exert their adverse effects on subsequent psychological functioning, i.e., a mediator role (see Fig. 2 above).

In fact, Norris and Kaniasty (1996) reported that PSS was an important mediator between scope of exposure and psychological distress in natural disaster survivors. In accordance with their SDD model, they also found that over time (up to 28 months), the scope of exposure to the disaster exerted a lingering adverse effect on psychological distress indirectly through its erosion of PSS. These researchers asserted that such effects also apply to other traumatic events, including multiple crime victimizations, but this possibility remains to be tested (Norris, Byrne, Diaz, & Kaniasty, 2001).

These findings are also in line with the COR theory, which stipulates that as extreme stressors (such as those that comprise one's Hx) draw on resources for prolonged periods, these resources, which are used for resistance against the effects of stress, are depleted (Hobfoll & Stephens, 1990). Furthermore, according to the PRE model (Hobfoll et al., 1995), victims who perceive low levels of SS are isolated from the available resources from within their social system, which would otherwise offset the resource loss cycle. They are thus more vulnerable to ongoing levels of loss and associated psychological distress.

In summary, findings from studies of disasters and chronic life stressors have strongly documented the potential eroding impact of stress on PSS (Kaniasty & Norris, 1993; Norris & Kaniasty, 1996). Hence, we would hypothesize that a history of multiple chronic victimizations/traumatic experiences (Hx) will have a greater impact on one's PSS as well. Specifically, when victims' histories (i.e., a dynamic view of victim status) are taken into consideration, the direct protective mechanism of PSS will be affected. Hx will in turn have an indirect effect on psychological functioning through its enduring deleterious impact on PSS. Therefore, we would expect PSS to be a mediator (rather than a moderator) in the Hx–distress relationship for victims of crime as demonstrated in Fig. 2.

4.4. *The dynamics of PSS in victims of crime*

The dynamic nature of SS as observed in prior research suggests that SS can function as a buffer or a mediator, depending on the temporal and contextual characteristics of the victimization experience. Indeed, the role of SS in the stress process can shift qualitatively. This can be due to characteristics of the crime itself (e.g., personal and sexual crimes such as child sexual abuse) or because of other contextual factors (e.g., the chronicity of the abusive environment in domestic violence) in which the stressor is embedded. Different types of traumatic experiences would also exert a potentially differential impact on an individual's ability to develop and maintain SS as well as their PSS. For instance, victims of child sexual and physical abuse tend to have a disrupted ability to develop healthy relationships, form attachments, and build trust with significant others. Given this, it is expected that such a history will be more potent in eroding one's PSS than, say, a past experience of armed robbery or a natural disaster.

The potential of chronic stressors to deplete PSS and thus indirectly impact psychological well-being highlights the importance of investigating the Hx of victims of crime and the effects that Hx can have on their PSS and consequently on their mental health. If PSS indeed

plays an important protective role for victims of crime in coping with their victimization, then it would be expected that victims whose PSS has deteriorated due to a chronic history of victimization would suffer more adverse effects from subsequent victimization. Furthermore, given that the loss spiral is most likely to occur when preloss resources are already weak (Hobfoll & Lilly, 1993) and when individuals who already have a chronic Hx experience subsequent victimization, then negative psychological consequences to victimization are more likely to be exacerbated.

Classic examples of such victims are those of domestic violence or child sexual abuse. The characteristics of these crimes include their abusive and/or sexual nature, which are believed to directly threaten the integrity and dignity of the victim, and often violates the victim's trust and attachment capacity (Calhoun & Atkeson, 1991; Thompson et al., 2000). The context of these crimes is usually the privacy of the home or within extended family relationships/friendships and the duration is often prolonged. Furthermore, it is also unfortunately common for such victims to have little actual SS, having been abandoned by other family or friends who do not believe them, or simply are at a loss as to how they should face or handle the situation. All in all, such crimes are essentially detrimental to the victims' SS perceptions (which may or may not be accurate reflections of reality). Therefore, unless the victims have compensatory resources with which to cope with both the loss of or damage to their SS and the impact of the subsequent victimization, the COR theory suggests that they will experience a loss spiral resulting in poor psychological adaptation. Compensatory resources that have been found in previous studies include self-efficacy (Benight et al., 1999), optimism (Fleishman et al., 2000), other personality or personality-related factors (e.g., attachment, Asendorf & Wilpers, 2000; view of self, Muller & Lemieux, 2000), and adaptive coping mechanisms (Fleishman et al., 2000; Holahan & Moos, 1990).

The actual process by which PSS changes over time is less clear. Nonetheless, based on existing models and related research at present, a few propositions can be made. COR theory purports that compensatory resources such as those listed above can play a part in the restoration of PSS, the compensation for its loss, or in absorbing the impact of its decline. For example, individuals who are higher on optimism and/or have secure attachments in primary relationships might face the tendency for their PSS to deplete due to the chronicity of a traumatic history, but their confidence and assurance of continued support from significant others can help to deter that decline. Following the SDD model, Norris and Kaniasty (1994,1996) reported that PSS has a mediator role between received SS (RSS) and distress. This suggests that changes in RSS has an impact on PSS, e.g., through provider burnout, depletion of tangible resources (Lepore et al., 1991). Indeed, it is worth noting again that changes in perceptions of available support can occur due to accurate or distorted reflections of actual support. Furthermore, according to the PRE model, individuals who perceive low SS may also demonstrate little support-seeking behaviors, thus isolating themselves from any support that is available, potentially resulting in a further decline in PSS levels. It is also possible that specific characteristics of a victimization setting may directly affect the victim's PSS, (e.g., in a situation where an abusive partner isolates the victim and denigrates the victim's sense of dignity and worth, this may affect the their perception of support or love from others). Other factors potentially related to PSS changes include satisfaction with SS,

network size, and the discrepancy between PSS and RSS—but these remain to be tested explicitly in future research.

4.5. Future directions and recommendations

In view of all this, directions for future research, as well as recommendations for victims' services, can be derived.

Future research in SS needs to heed the assertion of Sarason et al. (1990) that an understanding of SS in the present will profit from an analysis of the past. Having a better appreciation of how SS research has developed over the decades and of the alternative models that have emerged with improved and refined instrumentation and analytic techniques is essential for this field of research to progress. Notably, further methodological and statistical refinements in this field of research, such as those recommended above, are required. Clearly, a key research question involves differentiating across and when stressors erode SS and when they are buffered by it.

These points are of particular pertinence when applied to victims of crime. Given that prior victimization is such a potent predictor of revictimization (Acierno et al., 1999), studying the effects of an isolated victimization experience on victims' SS and well-being will provide an incomplete picture of their functioning. If research on victims of crime is to better inform policies and the services provided to victims, then the focus of research needs to involve a more realistic, dynamic perspective of these individuals' experiences. Amidst other factors of interest, the victimization and trauma history of the victim, as well as the individual's fluctuating perceptions of available support, need to be considered together.

For victims' services, the depletable nature of victims' SS given their experience and the adverse consequences of this are of great relevance. If PSS can function as a mediator in the victimization–distress relationship (where victimization is conceptualized dynamically), then this mediator can be a target of intervention (Banyard, Williams, & Siegal, 2001). Indeed, “if mediating variables that are amenable to intervention can be identified, we can be much more hopeful” (Roche, Rintz, & Hunter, 1999, p. 185) when it comes to facilitating victims' recovery. Regardless of whether these beliefs are accurate or mistaken reflections of actual SS, the declining levels of PSS indirectly make these victims less resilient to the psychological consequences of their life experiences (including subsequent victimization), resulting in poorer functioning. Therefore, an informed professional judgement of the accuracy of the victim's PSS can be helpful for making treatment decisions. For example, where victims' perceptions of available SS are mistaken or distorted, interventions should include components to modify these beliefs and psychotherapists may employ cognitive–behavioural therapeutic techniques (e.g., Socratic questioning as part of cognitive challenging, providing corrective information through exposure) to help deter the negative impact of depleted PSS. On the other hand, where the victim's perceptions of poor support accurately reflect the actual support received or available to them, other interventions such as family therapy or other behavioral interventions (e.g., social skills training) might be warranted to increase support-seeking behaviors. The actual provision of support (RSS) could deter PSS deterioration and in turn lead to improved mental health (Norris & Kaniasty, 1996).

There is also some recent research that suggests that if SS is perceived as negative by the victim (i.e., criticism from friends, family, etc), it is as unhelpful as no SS at all (Bolton, Glenn, Orsillo, Roemer, & Litz, 2003) and may even account for a large percentage of the difference in prevalence found between males and females who go on to develop PTSD (Andrews, Brewin, & Rose, 2003). This is also a promising area of research, which may have direct relevance to the current article.

In conclusion, although there remains a paucity of knowledge as far as a dynamic perspective of SS and victim status is concerned, findings from SS research in general have been instructive. The postulations offered in this review have been based on the current understanding of SS in general. As such, they are open to verification and further discussion, as more theory-driven methodologically sophisticated research is undertaken into the role of SS for victims of crime.

5. Uncited reference

Benight et al., 2000

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References

- Acierno, R., Kilpatrick, D. G., & Resnick, H. S. (1999). Posttraumatic stress disorder in adults relative to criminal victimization: Prevalence, risk factors and comorbidity. In P. A. Saigh, & D. J. Bremner (Eds.), *Posttraumatic stress disorder: A comprehensive text*. USA: Allyn and Bacon.
- Andrews, B., Brewin, C. R., & Rose, S. (2003). Gender, social support and PTSD in victims of violent crime. *Journal of Traumatic Stress, 16*, 421–427.
- Asendorf, J. B., & Wilpers, S. (2000). Attachment security and available support: Closely linked relationship qualities. *Journal of Social and Personal Relationships, 17*, 115–138.
- Banyard, V. L., Williams, L. M., & Siegel, J. A. (2001). The long-term mental health consequences of child sexual abuse: An exploratory study of the impact of multiple traumas in a sample of women. *Journal of Traumatic Stress, 14*, 697–715.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Benight, C. C., Freyaldenhoven, R. W., Hughes, J., Ruiz, J. M., Zoschke, T. A., & Lovallo, W. R. (2000). Coping self-efficacy and psychological distress following the Oklahoma city bombing. *Journal of Applied Social Psychology, 30*, 1331–1344.
- Bolton, E. E., Glenn, D. M., Orsillo, S., Roemer, L., & Litz, B. T. (2003). The relationship between self-disclosure and symptoms of posttraumatic stress disorder in peacekeepers deployed to Somalia. *Journal of Traumatic Stress, 16*, 203–210.

- Bradley, J. R., & Cartwright, S. (2002). Social support, job stress, health, and job satisfaction among nurses in the United Kingdom. *International Journal of Stress Management*, 9, 163–182. 540
541
- Calhoun, K. H., & Atkeson, B. H. (1991). *Treatment of rape victims: Facilitating psychosocial adjustment*. USA: Pergamon. 542
543
- Cheever, K. H., & Hardin, S. B. (1999). Effects of traumatic events, social support, and self-efficacy on adolescents' self-health assessments. *Western Journal of Nursing Research*, 21, 673–684. 544
545
- Cleary, P. D., & Kessler, R. C. (1982). The estimation and interpretation of modifier effects. *Journal of Health and Social Behavior*, 23, 159–168. 546
547
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357. 548
549
- Comijs, H. C., Penninx, B. W. J. H., Knipscheer, K. P. M., & Tilburg, W. T. (1999). Psychological distress in victims of elder mistreatment: The effects of social support and coping. *Journal of Gerontology*, 54B, 240–245. 550
551
- Dolbier, C. L., & Steinhardt, M. A. (2000). The development and validation of the sense of support scale. (electronic version). *Behavioral Medicine*, 25, 167–179. 552
553
- Fleishman, J. A., Sherbourne, C. D., Crystal, S., Collins, R. L., Marshall, G. N., Kelly, M., Bozzette, S. A., Shapiro, M. F., & Hays, R. D. (2000). Coping, conflictual social interactions, social support, and mood among HIV-infected persons. (electronic version). *American Journal of Community Psychology*, 28, 421. 554
555
556
- Frank, E., Turner, S. M., & Stewart, B. D. (1980). Initial responses to rape: The impact of factors within the rape situation. *Journal of Behavioral Assessment*, 2(1), 39–53. 557
558
- Heller, K., & Swindle, R. W. (1983). Social networks, perceived social support, and coping with stress. In R. D. Felner, L. A. Jason, J. N. Moritsugu, & S. S. Farber (Eds.), *Preventive psychology: Theory, research and practice*. New York: Pergamon. 559
560
561
- Hobfoll, S. E., Dunahoo, C. A., & Monnier, J. (1995). Conservation of resources and traumatic stress. In J. R. Freedy, & S. E. Hobfoll (Eds.), *Traumatic stress: From theory to practice*. New York: Plenum. 562
563
- Hobfoll, S. E., & Lilly, R. (1993). Resource conservation as a strategy for community psychology. *Journal of Community Psychology*, 21, 128–148. 564
565
- Hobfoll, S. E., & Stephens, M. A. P. (1990). Social support during extreme stress: Consequences and intervention. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view*. New York: Wiley. 566
567
568
- Holahan, C. J., & Moos, R. H. (1990). Life stressors, resistance factors, and improved psychological functioning: An extension of the stress resistance paradigm. *Journal of Personality and Social Psychology*, 58, 909–917. 569
570
- Holahan, C. J., Moos, R. H., Holahan, C. K., & Cronkite, R. C. (1999). Resource loss, resource gain, and depressive symptoms: A 10-year model. *Journal of Personality and Social Psychology*, 77, 620–629. 571
572
- Holland, J. C., Passik, S., Kash, K. M., Russak, S. M., Gronert, M. K., Sison, A., Lederberg, M., Fox, B., & Baider, L. (1999). The role of religious and spiritual beliefs in coping with malignant melanoma. *Psycho-Oncology*, 8, 14–26. 573
574
575
- Kaniasty, K., & Norris, F. H. (1992). Social support and victims of crime: Matching event, support and outcome. *American Journal of Community Psychology*, 20, 211–241. 576
577
- Kaniasty, K., & Norris, F. H. (1993). A test of the support deterioration model in the context of natural disaster. *Journal of Personality and Social Psychology*, 64, 395–408. 578
579
- Lepore, S. J., Evans, G. W., & Schneider, M. L. (1991). Dynamic role of social support in the link between chronic stress and psychological distress. *Journal of Personality and Social Psychology*, 61, 899–909. 580
581
- Mazie, B. (1985). Job stress, psychological health, and social support of family practice residents. *Journal of Medical Education*, 60, 935–941. 582
583
- Mitchell, R. E., & Hodson, C. A. (1983). Coping with domestic violence: Social support and psychological health among battered women. *American Journal of Community Psychology*, 11, 629–654. 584
585
- Mitchell, R. E., & Hodson, C. A. (1986). Coping and social support among battered women: An ecological perspective. In S. E. Hobfoll (Ed.), *Stress, social support & women*. USA: Hemisphere Publishing. 586
587
- Muller, R. T., & Lemieux, K. E. (2000). Social support, attachment, and psychopathology in high risk formerly maltreated adults. *Child Abuse & Neglect*, 24, 883–900. 588
589

- Murphy, S. A. (1987). Self-efficacy and social support: Mediators of stress on mental health following a natural disaster. *Western Journal of Nursing Research*, 9, 58–86. 590
591
- Nishith, P., Mechanic, M. B., & Resick, P. A. (2000). Prior interpersonal trauma: The contribution to current PTSD symptoms in female rape victims. *Journal of Abnormal Psychology*, 109(1), 20–25. 592
593
- Norris, F., Byrne, C. M., Diaz, E., & Kaniasty, K. (2001). *50,000 disaster victims speak: An empirical review of the empirical literature, 1981–2001*. Report prepared for the National Center for PTSD and the Center for Mental Health Services. 594
595
596
- Norris, F. H., & Kaniasty, K. (1994). Psychological distress following crime victimization in the general population: Cross-sectional, longitudinal, and prospective analyses. *Journal of Consulting and Clinical Psychology*, 62, 111–123. 597
598
599
- Norris, F. H., & Kaniasty, K. (1996). Received and perceived social support in times of stress: A test of the support deterioration deterrence model. *Journal of Personality and Social Psychology*, 71, 498–511. 600
601
- O'Brien, L. S. (1998). *Traumatic events and mental health*. London: Cambridge University Press. 602
- Quittner, A. L., Gluekauf, R. L., & Jackson, D. N. (1990). Chronic parenting stress: Moderating versus mediating effects of social support. *Journal of Personality and Social Psychology*, 59, 1266–1278. 603
604
- Roche, D. N., Rintz, M. G., & Hunter, M. A. (1999). Adult attachment: A mediator between child sexual abuse and later psychological adjustment. *Journal of Interpersonal Violence*, 14, 184–207. 605
606
- Ruch, L. O., & Leon, J. J. (1986). The victim of rape and the role of life change, coping, and social support during the rape trauma syndrome. In S. E. Hobfoll (Ed.), *Stress, social support & women*. USA: Hemisphere Publishing. 607
608
609
- Sander, A. M., High Jr., W. M., Hannay, H. J., & Sherer, M. (1999). Predictors of psychological health in caregivers of patients with closed head injury. *Brain Injury*, 11, 235–249. 610
611
- Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). Traditional views of social support and their impact on assessment. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view*. New York: Wiley. 612
613
614
- Thompson, M. P., Kaslow, N. J., Kingree, J. B., Rashid, A., Puett, R., Jacobs, D., & Matthews, A. (2000). Partner violence, social support, and distress among inner-city African-American women. (electronic version). *American Journal of Community Psychology*, 28, 127. 615
616
617