Distress, Suicidal Thoughts, and Social Support Among Homeless Adults*

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Influences on psychological distress and suicidal thoughts are evaluated with a sample of 218 sheltered homeless adults. Levels of distress and suicidal thoughts are much higher than in the general population, and are comparable to those found by Rossi (1989). Perceived social support lessens distress and suicidal thoughts directly and also buffers homeless persons from the distress associated with traumatic experiences. There is little indication of a mediating (intervening) role of social support. Distress and suicidal thoughts are also associated with increased health problems; homeless history and sociodemographic characteristics are less important as predictors. Distress itself increases suicidal thoughts— directly, and also in interaction with low levels of social support. We conclude that distress among homeless persons is explained by the same types of influences as those that account for distress among the general population—the gravity of homeless persons' economic situation does not preclude sensitivity to the benefits of social support.

Homeless persons suffer from much higher levels of psychological distress and suicidal thinking than do persons with homes, but studies of the homeless have given little attention to explaining variation in these feelings. Adverse life events, usually associated with greater distress, are overabundant among homeless persons, while social supports, usually associated with less distress, are in relatively short supply (Schutt and Garrett 1992). What remains unclear is whether or not these variables have the same effects on distress among the homeless as in the general population. In fact, the only multivariate study of this question suggests that social support loses its protective value in the face of such high levels of adverse events: "Homelessness represents a condition so devastating that personal ties are almost ineffectual." (La Gory, Ritchey, and Mullis 1990:99).

In this paper we investigate the prevalence and correlates of distress and suicidal thinking among homeless persons sampled from three Boston shelters. We replicate in part La Gory et al.'s (1990) analysis by testing the independent and mediating effects of social support in the stressor-distress relationship, albeit with a somewhat different mix of control variables. We extend their analysis by testing a buffering model of the social support effect (Ensel and Linn 1991). We also extend previous work by attempting to explain suicidal thoughts, one of the most stark expressions of distress, using the same models as are used in the analysis of distress.

DISTRESS AND ITS SOURCES

Serious psychological distress, including clinical depression, suicidal thinking, and suicide attempts, are between two and five times more common among homeless adult individuals than among housed adults. Estimates of the prevalence of these problems among the homeless range as high as three-quarters for serious distress and one-tenth for recent suicidal thoughts (Burt and Cohen 1989; Gelberg and Linn 1989; Koegel and Burnam 1992; Koegel, Burnam, and Farr 1988; La Gory et al. 1990; Ritchey et al. 1990; Robertson 1986; Rossi 1989).

The few studies that have examined correlates of psychological distress among homeless persons reproduce only some of the usual findings from general population studies (Barnett and Gotlib 1988:119; Lin, Dean, and Ensel 1986; Mirowsky and Ross 1989). Adverse life events are associated with psychological distress in the general population; the same is true among homeless persons (Ensel 1986; La Gory et al. 1990). Indicators of physical disability and self-perceived ill health are associated with psychological distress among both housed and homeless persons (Gelberg and Linn 1989; Kaplan et al. 1987; La Gory et al. 1990; Tausig 1986). Other variables associated with distress for both the general and homeless populations are prior psychiatric hospitalization (Gelberg and Linn 1989; La Gory et al. 1990; Weissman et al. 1977), substance abuse (Gelberg and Linn 1989; Susser, Conover, and Struening 1989), and lower levels of economic resources (Robins and Regier 1991; Rossi 1989).

In contrast, demographic correlates of distress among homeless persons do not replicate consistently those found in the general population. While psychological distress in the general population is more common among women, minorities, and young adults (Elpern and Karp 1984; Mirowsky and Ross 1989; Mirowsky and Ross 1992; Radloff and Locke 1986; but see Nolen-Hoeksema 1987), none of these characteristics has been associated with distress in homeless populations (Gelberg and Linn 1989; La Gory et al. 1990; Robertson 1986).

Findings also diverge on studies of the general and homeless populations with respect to social support. Social support often buffers the depressive effect of adverse life events in the general population, but the only two studies that have examined the relationship of social support to distress among the homeless indicate that it at best has only a weak positive effect. However, one of these studies (Gelberg and Linn 1989) presents only bivariate associations, while the other (La Gory et al. 1990) fails to test for a buffering (interactive) role of social support, uses a questionable composite social support measure, and neglects the problem of suicidality.

METHODOLOGY

Homeless adult individuals were selected randomly in 1990 from the bed lists of three large Boston shelters. These shelters were open to all homeless adults, and provided basic health care services and case management in addition to food and sleeping accommodations. Eighty percent of those asked to participate signed a consent form, yielding a final sample of 218; participants received a small honorarium after an interview by trained graduate assistants.

Measurement

Psychological distress was measured with a slightly modified version of the Center for Epidemiological Studies Depression Scale (Radloff 1977; Rossi 1989; Susser, Conover, and Streuning 1990). Respondents were asked how often during the past week they had experienced a range of affective and vegetative depressive symptoms: loss of appetite, being tired and worn out, feeling depressed, feeling unhappy about the course of one's life, being discouraged and worried about the future, and feeling lonely. Responses were scored on a scale ranging from one (never) to three (most of the time) and then averaged after arithmetic adjustments to compensate for the use of six rather than the original 20 CES-D items (as detailed by Rossi 1989:150), and the use of three rather than the original four response choices. Cronbach's alpha for the abbreviated CES-D was .81 (Radloff obtained an alpha of .85 in a general population sample and .90 in a sample of psychiatric in-patients (see also Ensel 1986; Meschede 1992).

Suicidal thoughts were measured with responses to one question selected from Veit and Ware's (1983) Mental Health Index: "During the past month, did you think about taking your life?" (1 = No, never; 6 = Yes, constantly).

We used Cohen and Syme's (1985) Interpersonal Support Evaluation List (ISEL) to measure respondents' perception of having social support—a critical step in the process by which contact with others can mitigate feelings of personal distress (Pearlin et al. 1981). The ISEL is comprised of 38 statements about the perception of having social support available for such circumstances as feeling lonely or being stranded 10 miles away.

Measures of adverse events and control variables are summarized in Table 1. Control variables were selected from those found in

previous studies to influence distress in either the general or the homeless population. They are organized conceptually into four categories (cf. La Gory et al. 1990): sociodemographic variables, health conditions, homeless experience, and economic resources. Several additional variables were included as control variables in preliminary analyses—time homeless, every stay with family or friends since becoming homeless, employment status, and marital status—but these variables had no relationship to either distress or suicidal thoughts at any point, and so are not included in the analyses reported here.

TABLE 1. Coding and Descriptive Statistics for Adverse Events and Control Variables

Sources	Questions	Mean	Standard	Coding	Alpha
Cohen and Syme 1985	Interpersonal Support Evaluation List (ISEL)	1.4	1.1	1 = Lo − 4 = Hi	.90
Schutt and Garrett 1992	*Stressors*				
	Child Trauma	.7	.8	0 = No, 4 = Multiple	
	Robbed/Assaulted	1.7	.9	1 = No, 2 = Yes	
	Legal Problems	.8	.4	0 = No, 1 = Yes	
McLellan et al. 1980	*Alcohol Abuse* Addiction Severity Index	1.7	1.0	0 = Lo − 4 = Hi	.60
McLellan et al. 1980	*Drug Abuse* Addiction Severity Index	1.7	1.2	0 = Lo − 3 = Hi	.67
Schutt and Garrett 1992	Prior or current psychiatric treatment or any psychiatric medication	.2	.4	0 = Lo − 3 = Hi	
Schutt and Garrett 1992	Physical Illness[1]	2.1	.6	0 = Lo − 4 = Hi	.66
Litz et al. 1991	*Nightmares* Reliving Life-Threatening Event (one symptom of PTSD)	1.7	1.0	1 = No − 4 = Yes	
NIMH 1978	Shelter Satisfaction[2]	2.4	.5	1 = Low − 4 = Hi	.81
	Economic Resources				
	Financial Benefits	.6	.5	0 = No, 1 = Yes	
	Difficult to Afford Things	2.9	1.5	1 = Never − 4 = Always	
	Sociodemographics				
	Minority	1.7	.5	1 = White, 2 = Minority	
Aiken and West 1991; Robins and Regier 1991	Age-Mean Age (Age-Mean Age)[2]	.0 151.7	12.4 201.8		
	Female	1.2	.4	1 = Male, 2 = Female	
	Education	2.9	1.0	1 = 8 Yrs. − 5 = Advanced	

Notes.

[1] Physical health compared to others your age; Satisfaction with physical ability to do what you want; No physical health problems right now; Hospitalized or seen by doctor for physical health problem in last year.

[2] Satisfaction with its state of repair, amount of room, furnishings, staff, amount of privacy, security, other residents, convenience to stores, health care, help with getting a job.

Analysis

We use a multiple regression analysis to identify the independent relations of social support and adverse life events with psychological distress and suicidal thoughts, and to determine whether social support mediates or buffers the distress-inducing effects of adverse life events. The mediation model, also termed the "additive effect buffering model," will be supported if the addition of social support to the regression analysis reduces the effects of the stressors (Wheaton 1985). The buffering model, also termed the "interactive effect buffering model," will be supported if the addition of stressor-social support product terms to the regressions contributes significantly to the explanation of distress and suicidal thoughts (Wheaton 1985). (We use the centered form of product terms recommended by Aiken and West [1991].) We include distress in the prediction equation for suicidal thoughts in a separate step, and test for an interaction effect involving social support and distress.

FINDINGS

The sample was similar to many samples of homeless persons in terms of median age (35), gender (20% women), minority representation (66%), and education (67% had completed high school). (Also see Table 1.) Adverse life events (stressors) were common. Over half (52%) reported childhood trauma, 41 percent had been assaulted or robbed since

becoming homeless, and 25 percent had a legal problem. Many respondents reported health problems: almost half (47%) reported some indications of a drinking problem, and almost one-third (31%) acknowledged some drug use; over one-third (37%) reported traumatic nightmares and 24 percent had been in a psychiatric hospital or treated as psychiatric outpatients. Two-thirds (65%) were receiving some type of financial benefits, and one-third (35%) reported that it was often difficult for them to afford things.

The distribution of reports of psychiatric distress using the abbreviated CES-D was similar to that reported in Rossi's (1989) study of Chicago's homeless (Table 2), and were elevated in comparison to the general population, as indicated by the results of the national Health and Nutrition Examination Survey (HANES) (after making adjustments for the use of the full CES-D in the HANES, as described earlier). Suicidal thoughts, reported by 13 percent of the sample in the past month, were about as common as in Rossi's Chicago homeless sample.

Regression Analysis of Distress

In the first regression equation—Specification 1 in Table 3—the stressors and the control variables explained 36 percent of the variance in distress. Only one sociodemographic variable had a significant independent effect: distress was higher among Blacks and Hispanics than among Whites. None of the stressors were independently significant, but distress was associated independently with

TABLE 2. Feelings of Distress. Comparative CES-D Scores (Item and Total) for Boston and Chicago Homeless Samples and National HANES Survey

	Mean Score		
	Boston (Schutt)	Chicago (Rossi)	National (HANES)
Poor Appetite	.55	.56	.30
Tired/Worn out	.81	.78	.60
Depressed	1.19	1.07	.45
Unhappy	1.54	1.45	.20
Worried about Future	1.46	1.41	.89
Lonely	1.36	1.11	.38
Total	6.90	6.39	2.82
N	213	346	3,011
Adjusted CES-D score	20.67	19.20	8.50

Notes.

[1] Chicago and HANES data adapted from Rossi (1989:149–50).

[2] Total CES-D scores were calculated for Boston and Chicago by multiplying total score by 3.33 to compensate for the use of six out of the full 20 items in the HANES survey (on which scale scores varied from 0–60). Adjusted CES-D scores were calculated for Boston and Chicago by multiplying by .9 to compensate for slightly higher total score on the six items used, compared to the complete scale used in the HANES survey.

TABLE 3. Regression Analysis of Psychological Distress

Specification	b(Beta)	
	1	2
Sociodemographics		
Female	.01 (.01)	.04 (.03)
Minority	.18 (.18)**	.17 (.17)**
Age-Mean (Age)	.03E1 (.07)	.02E1 (.04)
(Age-M(Age))**2	− .02E–6 (− .07)	− .01E–6 (− .06)
Education	.03 (.06)	.04 (.08)
Stressors		
Child Trauma	.04 (.06)	.02 (.03)
Assault	.05 (.09)	.01 (.03)
Legal Problem	.12 (.10)	.12 (.11)
Health		
Alcohol Problem	.00 (.01)	.02 (.05)
Drug Problem	.06 (.15)*	.07 (.17)**
Nightmares	.13 (.26)***	.12 (.23)***
Psychological Treatment	.17 (.14)*	.14 (.12)
Physical Health	− .19 (− .22)**	− .19 (− .22)***
Homeless Experience		
Shelter Satisfaction	− .14 (− .15)*	− .11 (− .11)*
Economic Resources		
Monetary Benefits	.12 (.12)	.09 (.09)
Difficult to Afford	.02 (.07)	.02 (.05)
Social Support		− .27 (− .31)***
Assault × Social Support		− .13 (− .12)*
R^2	.41	.50
Adjusted R^2	.36	.45
N = 193		

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

four health problem indicators: drug problems, nightmares, psychiatric treatment, and physical illness. Those who were less satisfied with the shelter they were staying in were also more distressed, but neither economic resource indicator had an independent effect.

The addition of social support to the regression equation increased the variance explained by 8 percent (specification not shown). There were only slight changes in the coefficients of the other variables, indicating that social support had an additive effect, but did not play a mediating (intervening) role. Of the three (centered) product terms involving social support and the stressors, one had a significant effect when entered by itself in the regression equation (Specification 2): those who had been assaulted were less distressed if they had higher levels of social support. The addition of this interaction term increased the explained variance by only one percent. (The interaction between social support and legal problems was also significant when entered by itself; if two or three interaction terms were entered simultaneously, none was significant.)

Regression Analysis of Suicidal Thoughts

Prior to the introduction of social support, the independent variables explained only 15 percent of the variance in suicidal thoughts (7% after adjustment for the number of predictors). (See Specification 1 in Table 4). One of the stressors, child trauma, was associated with more suicidal thoughts; the only other independent predictor of suicidal thoughts was difficulty affording things. Social support had a strong negative association with suicidal thoughts; when it was added to the equation (Specification 2), the variance explained rose to 23 percent. Again, social support's effect was additive, not intervening: the effect of childhood trauma was not altered by the inclusion of social support in the equation. Social support did not have any significant interaction effects with the stressors.

Distress itself had a strong direct effect on suicidal thoughts and also an interaction effect with social support. Inclusion of distress and the (centered) product term with social support added 17 percent to the variance explained in suicidal thoughts, and

TABLE 4. Regression Analysis of Suicidal Thoughts

Specification	b(Beta)		
	1	2	3
Sociodemographics			
Female	−.36 (−.11)	−.28 (−.10)	−.28 (−.10)
Minority	.16 (.07)	.13 (.05)	−.14 (−.06)
Age-Mean (Age)	−.03E1 (−.03)	−.04E1 (−.04)	−.05E1 (−.06)
(Age-M(Age))**2	.03E−6 (.06)	.04E−6 (.07)	.02E−6 (.04)
Education	.06 (.05)	.07 (.06)	.01 (.01)
Stressors			
Child Trauma	.29 (.18)*	.24 (.15)*	.10 (.07)
Assaulted	.07 (.05)	.01 (.01)	−.09 (−.07)
Legal Problem	−.03 (−.01)	−.01 (−.00)	.18 (.07)
Health			
Alcohol Problem	−.03 (−.03)	.00 (.00)	.05 (.04)
Drug Problem	.00 (.00)	.03 (.03)	.01 (.01)
Nightmares	.16 (.14)	.14 (.12)	.01 (.01)
Psychological Treatment	.17 (.06)	.12 (.04)	−.04 (−.01)
Physical Health	−.17 (−.08)	−.13 (−.07)	.08 (.04)
Homeless Experience			
Shelter Satisfaction	−.07 (.03)	−.02 (.01)	.03 (.01)
Economic Resources			
Monetary Benefits	−.07 (−.03)	−.11 (−.04)	−.09 (−.04)
Difficult to Afford	.13 (.17)*	.10 (.14)	.02 (.03)
Social Support		−.63 (−.31)*	−.36 (−.19)**
Distress			.86 (.38)***
Distress × Social Support			−1.20 (−.33)***
R^2	.15	.23	.40
Adjusted R^2	.07	.16	.33
	N = 191		N = 189

* $p \leq = .05$; ** $p \leq .01$; *** $p \leq .001$.

accounted for the effects of childhood trauma and financial benefits (Specification 3 in Table 4). Those who were more distressed but also had more social support were much less likely to have had suicidal thoughts than if they had had less social support. Social support thus played a buffering role for those who already were more distressed.

DISCUSSION

We found a very high level of psychological distress in this homeless sample in comparison with that in the general population. However, psychological distress among these sheltered homeless adults was similar in several of its correlates to distress in the general population. Health problems and being a member of a minority ethnic group were both associated with more distress, and social support with less distress. Adverse life stressors had no independent effect, although shelter satisfaction, conceptualized by La Gory et al. (1990) as an indicator of daily hassles, was associated with less distress. Suicidal thoughts were not explained as well by the independent variables as was distress, but one of the stressors, childhood trauma, had a significant effect.

Social support was a particularly important influence for distress and suicidality: those who felt they had more social support were considerably less distressed and suicidal, and those who perceived themselves as lacking social support were particularly prone to the distress-inducing effects of specific adverse life events. In addition, social support interacted with distress in explaining suicidal thinking: distressed individuals who had higher levels of social support were less likely to have had suicidal thoughts than were distressed individuals with less social support. This interaction effect heightens our appreciation of the role of social support not only as beneficial in itself but also as an emotional

buffer for homeless persons, and suggests more generally that social support may be useful, not just in diminishing the deleterious emotional effects of adverse life events, but also in lessening the possibly destructive sequelae of distress itself.

Our failure to find effects of sociodemographic variables is consistent with other studies of homeless persons, and we suspect that this may have to do with the composition and circumstances of the homeless population. Although men, for example, report lower levels of distress in the general population, those few men who become homeless may have fewer of the traits (e.g., self-sufficiency, independence, and competence) that are thought to be protective for men in the general population (e.g., Elpern and Karp 1984). Furthermore, variation in economic resources among homeless persons may be so truncated that having more such resources might still not produce the usual psychological benefit.

CONCLUSIONS

The potentially beneficial effects of social support on mental health cannot be properly identified or understood without testing for the different ways in which social support may have an influence (Wheaton 1985). Our analysis represents the first test of both buffering and mediating models of the social support role with a sample of homeless individuals, and our findings suggest that this multivariate, multiple model strategy is worthwhile. We found both an independent effect of social support and an interactive buffering role, but little evidence of a mediating, intervening role.

Our findings are thus generally consistent with other studies of social support and distress among the general population, and discrepant with La Gory et al.'s (1990) conclusions about homeless persons. We do not find support for a belief that homeless persons' necessary attention to lower order needs, in Maslow's (1954) hierarchy, obviates their benefiting from social support, a "higher order" concern. In this respect, our conclusions parallel those of Snow and Anderson (1987:1365), whose ethnographic study of "identity work" among the homeless indicates that homeless persons' need for self-esteem is not necessarily contingent on the prior satisfaction of physiological and safety needs.

But interpretation of our findings must remain tentative until additional research is conducted in which both buffering (interactive) and mediating (intervening) roles of social support are tested for different dimensions of social support using both objective (documented) and perceived measures. It is possible that homeless individuals perceive contacts with others as less supportive than do others in the general population. Although our use of a perceived social support index represents what Turner (1992:219) suggests is the "best lever" for estimating the mental health effects of social support—and does not confound different aspects of social support in one measure (cf., La Gory et al. 1990)—the role of social support cannot be understood fully without also measuring offered and received support and social contacts. Future research should test for any differences in the way in which homeless persons interpret social support, and should determine whether or not objective support has any beneficial influence on distress levels in the absence of the perception of support.

Future research on suicidality among homeless persons should also include multi-item measures with a high demonstrated reliability (e.g., Beck, Brown, and Steer 1989; Beels et al. 1984). Our inability to explain much of the variance in suicidal thinking in our sample could have been a consequence of our use of a one-question measure. Although the CES-D is widely accepted as a highly reliable measure of psychological distress, it is not itself a valid indicator of serious and persistent depression. Future studies should attempt to test our findings with more clinically-based measures.

In addition to recognizing the need for further research on the role of social support, we believe that more attention should be given to the role of substance abuse problems—in particular, to our finding that drug problems were associated with higher levels of distress, while drinking problems themselves were not consequential. (cf., La Gory et al. 1990). Further, the association of nightmares—one symptom of post-traumatic stress disorder—with distress is also suggestive. Although this indicator is relatively crude (a full self-report inventory of PTSD symptoms includes between 20 and 102 items (Litz et al. 1991)), this finding, together with the observed importance of childhood trauma on suicidal thoughts and adult assault in interaction with social support, suggests

that future studies need to consider the role of trauma and post-traumatic stress disorders as potential influences on distress.

As well, improved measures of additional stressors and psychological states should be included in future research. Some of our self-report measures, particularly those concerning health and health care, should be supplemented with evidence obtained from observers or case records. Similarly, both drug abuse and alcohol abuse should be measured in ways less subject to (under) reporting bias. Future research should also include additional variables (such as psychological mastery) found to be related to levels of distress (La Gory et al. 1990; Mirowsky and Ross 1989).

The difficulty of sampling homeless persons makes it unlikely that any single study will yield broadly generalizable results about the questions on which we have focused. Generalizability will instead be increased through the cumulation of findings from limited samples. It is particularly important to sample homeless persons who do not use shelters and thus are exposed to circumstances most likely to elicit high levels of distress and suicidal thinking. Homeless mothers and their children are a distinct population in which the factors increasing psychological distress and suicidality may differ. But the comparability of our results with those obtained in general population studies lead us to suspect that the origins of distress are similar across a wide range of populations. Residential stability itself is only one of the influences on mental health, and homeless persons may be best understood within the same theoretical framework used to explain the behavior and feelings of others.

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