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ABSTRACT

Research has examined the relationship of characteristics of crisis telephone workers to their performance. The influence and interaction of the characteristics of both the helper and caller on the telephone crisis intervention and outcome were explored for a sample of 59 calls to a crisis center. Data about the telephone helper (age, sex, experience at the Center, and professional/nonprofessional status) and caller (age, sex, problem area, crisis intensity, and repeater/non-repeater status) were obtained. Calls were monitored by trained observers who rated the calls on the Crisis Call Interaction Form and the Crisis Call Outcome Form. Findings revealed an interaction between the repeater status of the caller and the professional status of the helper. Helpers with professional training did not differ from non-professionals in the process and outcome of most calls, thus supporting the use of non-professionals. However, in calls involving repeaters, professional helpers engaged in less climate activity and more problem-solving activity; these calls were more successful on the affective dimension of resolution. The results indicate that repeat callers, dealing with long-term problems and difficulty in interpersonal relationships, benefit from professional helpers experienced in working with such problems. (NRB)

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Effects of Helper and Caller Characteristics  
on the Process and Outcome of Telephone Crisis Intervention

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The effects of certain characteristics of crisis telephone workers on their performance has been examined in several studies.

Knickerbocker and McGee (1971) compared levels of empathy, warmth, and genuineness offered by lay volunteers and professional trainees or practitioners during crisis calls. Nonprofessional volunteers were found to have presented significantly higher levels of empathy and warmth over the telephone than professionals. O'Donnell and George (1977) failed to replicate these results. Their comparative study of volunteer and professional telephone helping suggested that recently trained volunteers, experienced volunteers, and professional workers were equally effective. A study by D'Augelli et al (1978) focused on the influence of experience on verbal behavior during a telephone interaction. Novice volunteers were found to give significantly less advice, to use fewer self-referent pronouns, and allow callers to talk longer than experienced volunteers. Ratings of the effectiveness of both novice and experienced volunteers did not differ.

Earlier studies (Echterling, Hartsough, and Zarle) presented the delineation of a three phase model of telephone crisis intervention. Telephone crisis intervention is an action-oriented helping technique involving three generally overlapping phases of crisis assessment, affect integration and problem solution. Other pre-intervention behaviors are often necessary to eliminate interferences or to establish and maintain conditions necessary for crisis intervention work. These behaviors, however, do not directly contribute to the resolution of the caller's crisis. The purpose of the present study was to explore the influence and possible interaction of the characteristics of both the helper and caller on telephone crisis intervention and outcome.

### Method

Setting. The setting for the study was the Lafayette Crisis Center, a 24-hour-a-day telephone and walk-in crisis intervention service. At the time of the data collection, the number of active telephone workers was about 80. These crisis telephone helpers were volunteers who initially had undergone a 40-hour training program and selection process.

Sample. During a five-week period, 95 crisis telephone calls were sampled in 19 randomly selected evenings. Of these, 36 were calls in which the caller remained silent or hung up before intervention was possible. Consequently, these calls were not used in the data analysis. The telephone helpers answering the remaining 59 calls ranged in age from 18 to 54 years, with a mean of 27.8 and a median of 25.7 years. Male volunteers were helpers on 66% of the calls. The telephone workers' length of experience at the Center ranged from 2 months to over 50 months, with a mean of 14.6 and median of 11.1 months. Twenty percent of the calls were answered by workers who were trainees or practitioners in professional helping services.

The persons making the sample calls to the Center ranged in age from 14 to 61 years, with a mean of 25.0 and a median of 21.8 years. Males initiated 31% of the telephone contacts. The major problem discussed in these crisis calls were divided into 8 groups. The relative percentages of the calls involving these problems were: specific relationship problems, 20%; need for community information, 19%; general interpersonal concerns, 17%; sexual concerns, 14%; general anxiety, 10%; drugs, 7%; suicide, death, and dying, 7%; other, 7%. Each crisis call was rated by the telephone helper on its intensity. The crisis intensity rating of the calls ranged from 0 (no crisis) to 3 (a crisis involving an immed-

ately pressing problem or threatening situation). The mean intensity rating was 1.68 and the modal rating was 2. Repeaters made 44% of the sample calls. The length of the crisis calls ranged from 2 minutes to 85 minutes, with a mean of 25.1 and a median of 16.4 minutes.

Measures. The Crisis Call Interaction Form (Echterling, Hartsough, and Zarle, 1979) is a checklist of possible helper responses to caller statements. The response categories were derived from the model of the process of telephone crisis intervention. A number of helper behaviors have been specified for each process variable (establishment of a helpful climate, assessment of the crisis, affect integration, problem solving) to yield a classification system of 19 behaviors. The form was used during the entire telephone interaction and each statement made by the helper was categorized into one of the 19 helper behavior categories. Thus, by the end of the call, the completed form was a record of what helper behaviors took place, how often, and when they occurred.

The Crisis Call Outcome Form (Echterling, Hartsough, Zarle) is based on crisis theory and research concerning adaptive crisis resolution. Each of the nine items refers to a caller behavior which indicated that a successful resolution of a crisis is taking place. At the end of a crisis call, each item was rated on a dichotomous scale indicating whether the behavior did or did not occur during the telephone interaction.

Factor analysis of the items revealed three components accounting for about 88% of the variance. Composite indices representing the dimensions associated with the first three factors were developed by transforming the outcome data into three factor scores. These scores reflected, first, the affective dimension, and second, the behavioral dimension, and third, the cognitive dimension of crisis

resolution. These factor scores were used as outcome variables in the analysis.

Observers. The multiple-receiver telephone system employed by the Crisis Center made it possible for crisis calls to be monitored. It is a standard operating procedure at the Center to have two volunteers on each call. One volunteer is designated the "helper", who has primary responsibility for the call. The second volunteer is the "silent listener", who serves as a back-up person offering written suggestions, information, and feedback to the helper. The observer was an additional person monitoring the call to collect data. Because of the need to protect the confidentiality of the callers, only active Crisis Center volunteers were selected as observers.

Three volunteers participated in a two-week training program involving reading and discussing the manual, rating tape-recorded roleplays of crisis calls, and rating actual crisis calls. Interrater reliability was computed using Goodman and Kruskal's tau (Goodman and Kruskal, 1963). Training continued until two of the three trainees reached the .90 level of interrater reliability on two successive calls. Only the two observers reaching the criterion level were used to collect data.

Data Collection. Data concerning the age, sex, length of experience at the Crisis Center, and the professional or nonprofessional status of the telephone helper were obtained at the end of the data collection period. The requirement for professional status was to have had at least advanced graduate education and practicum experience in clinical psychology, counselor education, or any related helping profession.

Information concerning several characteristics of the caller was taken from the reports written by telephone helpers following crisis calls. Data on the

caller's age, sex, problem area, crisis intensity, and repeater or non-repeater status were collected. A repeater was a caller who had contacted the Center so frequently or regularly that a file with background information, policies, and suggestions had been developed.

In 19 sessions, each lasting about 4 hours, the observers collected data. While crisis calls were answered in the telephone room, the calls were monitored by observers using supervisor model (equipped for reception only) telephone headsets in a separate room. Most calls were monitored by a single observer, but several interrater reliability checks were made. At those times, two observers monitored the same crisis call, independently completing separate forms. Interrater reliability at the first data collection session was .92 for the Crisis Call Interaction Form and .88 for the Crisis Call Outcome Form. At the ninth session, the interrater reliability was .85 for the interaction form and .78 for the outcome form. And at the eighteenth session, the reliability for the interaction form was .87 and for the outcome form was .88.

Data Analysis. Since the overall number of ratings on the Crisis Call Interaction Form varied greatly across calls, proportions were used in the data analysis.

Stepwise multiple regression procedures (Kerlinger and Pedhazur, 1973) were used to explore the effects of helper and caller variables on the process and outcome.

### Results

With the proportion of climate behaviors as the dependent variable, a significant interaction between the caller's repeater status and the helper's professional status was found ( $F = 4.1287, p < .05$ ). While there were no differences in their behavior with non-repeaters, crisis telephone helpers with some profes-

sional training were involved in less climate activity with repeater callers than were non-professional helpers.

Regressing the proportion of assessment behaviors on helper and caller variables, one problem area was found to be significant. Crisis calls dealing with drug-related concerns tended to involve higher proportions of helper behaviors related to assessment of the crisis ( $F = 4.1119, p < .05$ ).

The intensity of the crisis was found to be significantly related to the proportion of affect behaviors in a call ( $F = 7.5857, p < .01$ ). As the intensity of the caller's crisis increases, the crisis telephone helper is likely to engage in more behaviors related to the discussion or expression of feelings.

When the proportion of problem-solving behaviors was regressed on helper and caller variables, several main effects and interactions were found to be significant. The calls from individuals needing help from community resources ( $F = 3.9204, p < .05$ ) and those from female callers ( $F = 4.2654, p < .05$ ) tended to have greater proportions of problem-solving activity. The professional status of the helper and the helper's length of experience each interacted significantly with the repeater status of the caller. While there was little difference between helpers with nonrepeaters, professionally-trained telephone helpers engaged in a significantly greater amount of problem-solving activity with repeat callers than non-professional helpers ( $F = 30.0096, p < .001$ ). The experience of a helper was found to be positively related to the proportion of problem-solving behaviors when the caller was a repeater, but tended to be negatively related with other callers ( $F = 11.7245, p < .01$ ).

Regressing the affective dimension of resolution on the helper and caller variables, the helper's professional status was found to interact significantly

with the caller's repeater status in predicting outcome ( $F = 5.4133, p < .05$ ).

While professionals differed slightly from non-professionals when working with non-repeaters, the helpers with professional training tended to be more successful with repeat callers.

Multiple regression analyses using the behavioral and cognitive dimensions of resolution as dependent variables were not significant overall in predicting outcome, and therefore, the effects of specific helper and caller variables were not explored.

#### Discussion

The most consistent finding when the process and outcome variables were regressed on helper and caller variables was an interaction between the repeater status of the caller and the professional status of the helper. Helpers with some professional training did not differ from non-professional volunteers in the process and outcome of most crisis calls. However, in calls involving repeaters, the professionally-trained telephone helpers engaged in less climate activity and more problem-solving activity, and these calls were also more successful on the affective dimension of resolution.

Repeaters, those who have contacted the Center consistently and frequently, generally are individuals who are dealing with long-term problems and have difficulties in interpersonal relationships. In other words, they are people whose problems do not fit the crisis concept. Individuals with training in the helping professions have had experience in working with such problems in a helping relationship.

The results support the use of non-professional volunteers in crisis telephone intervention programs, since no differences were found with most callers.

However, the findings also indicate that repeat callers benefit more from professional helpers. A possible program policy is the assignment of a repeat caller to an individual, professionally-trained volunteer for long-term telephone counseling. The advantages of such a policy would include: a greater likelihood of productive interactions, a greater consistency of treatment for the repeat caller, and an elimination of a source of frustration for many volunteers.

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