The Use of Tolerance for Ambiguity and Empathic Listening Skills to Predict Conscientious Crisis Intervention Volunteers

Spring 1979

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THE USE OF TOLERANCE FOR AMBIGUITY
AND EMPATHIC LISTENING SKILLS TO PREDICT
CONSCIENTIOUS CRISIS INTERVENTION VOLUNTEERS

BY

LOIS MURPHY
B.A., University of Michigan, 1973

THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Science: Psychology
in the Graduate Studies Program of the College of
Social Sciences of University of Central Florida
at Orlando, Florida

Spring Quarter
1979
Abstract

It was hypothesized that the personality variable Tolerance for Ambiguity and empathic listening skills would significantly differentiate conscientious from nonconscientious crisis intervention volunteers. A group of 20 conscientious and a group of 20 nonconscientious volunteers from a local crisis intervention center were given a test of Tolerance for Ambiguity and a test of empathic listening skills that measured Interest, Understanding, and Response-ability. Results of $t$-tests between the groups and correlations between the variables indicated that Tolerance for Ambiguity was not a significant differentiator between the two groups. However, it was found that conscientious volunteers had significantly higher levels of Interest and Understanding. They did not differ in Response-ability. This study suggests that interest in clients and an understanding of their problems may be salient factors motivating crisis intervention volunteers. It was concluded that Interest and Understanding are relevant variables in crisis intervention volunteers. It is suggested that they be utilized in the screening of potential volunteers and in the planning of crisis intervention training.
ACKNOWLEDGEMENTS

The author would like to thank the staff and volunteers of We Care Inc. Crisis Intervention Center, Orlando, Florida for their help and participation in this study.

Special thanks are also due to Dr. Sandra Guest and Dr. John McGuire for their time and invaluable assistance in the planning and writing of this paper.
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INTRODUCTION

Telephone hotline crisis intervention and suicide prevention centers have, in the past ten years, become an important part of mental health services. Most are staffed to a large extent by volunteers and paraprofessionals. With the increase in demand for community mental health services and increasing difficulty in obtaining adequate funding, the need to train and utilize volunteers and paraprofessionals to provide crisis intervention services will no doubt continue. Obviously, as with other kinds of mental health delivery systems the service provided by crisis intervention centers must be effective in benefiting the clients and not harming them. It is essential that centers have well trained, competent volunteers who will provide reliable service. Research has been done to determine what skills are necessary to effectively help a person in a crisis (McGee, 1974; Knickerbocker, 1973; Libow & Doty, 1976; France, 1975) as well as measuring different performance variables (Bleach & Claiborn, 1974; Fowler & McGee, 1973; Knickerbocker & McGee, 1973; McGee, 1974) and evaluating the outcome of crisis counseling (Slaikeu, Tulkin & Speer, 1975; Auerbach & Kilman, 1977; Knickerbocker, 1973; Knickerbocker & McGee, 1973).
However, little research has been done to try to determine what characteristics differentiate volunteers who become involved and provide reliable service from those who are unreliable or drop out. Crisis centers generally run on low budgets, and are increasingly being required to show cost efficiency and accountability. Moreover, volunteers generally do not receive any incentive other than their feelings of satisfaction and accomplishment. Therefore it would seem important for crisis centers to be able to identify those people who are most likely to achieve a sense of satisfaction and become and remain involved. Two studies (McGee, 1974; Evans, 1976) have been done to see if the MMPI or the CPI positively correlate with volunteers' length of service. McGee (1974) found that the D scale on the MMPI and one scale on the CPI were significantly correlated with volunteers' length of service. However, it was not possible to find reliable cutoff points, or use these scores reliably in decision-making. His conclusion was that "neither the MMPI nor the CPI measure any psychological trait that relates to length of service or personal involvement in crisis center work" (p. 161).

On the other hand, Evans developed an empirical scale, the Hotline Perseverance Scale, which was derived from four of the standard MMPI scales and which was found to discriminate between conscientious and nonconscientious
volunteers. A regression equation correctly identified 90% of the conscientious and 96% of the nonconscientious workers. However, he offered no theoretical justification or explanation for his results in terms of personality characteristics of the volunteers.

**Tolerance for Ambiguity**

One personality variable that has been correlated with several counselor characteristics and measures of performance, but has not been directly researched in relation to crisis intervention, is tolerance for ambiguity (Brams, 1961; Gruberg, 1969; Jones, 1974). In general this construct has been defined as the ability to be flexible, cope with novel situations, and be comfortable operating without a rigid structure to refer to. In order to show the relationship of this construct to crisis intervention, it will be necessary to examine the theory and definition of tolerance for ambiguity and the theory and purpose of crisis intervention.

Frenkel-Brunswik (1949) relates tolerance of ambiguity to an inability to accept both negative and positive features in the same person or situation. At the far end of the scale are those who require closure on everything—it must be black or white, completely accepted or completely rejected. People who are highly intolerant of ambiguity are hypothesized to shut out aspects of reality
that might challenge their perceptions. Frenkel-Brunswik explains this in psychoanalytic terms, relating it to incomplete mastery of aggressive feelings towards parents who were perceived as all-powerful, and repression of all unacceptable feelings. She says that people who are intolerant of ambiguity cannot accept ambivalent feelings (love/hate towards the same person) or conflicting emotions, or see things in two or more ways.

Budner (1962) says that intolerance of ambiguity is the "tendency to perceive ambiguous situations as a threat," and tolerance for ambiguity is the "tendency to perceive ambiguous situations as desirable." He defines ambiguous situations as those which "... cannot be adequately structured or categorized by the individual because of the lack of sufficient cues" (p. 30). There are three types of ambiguous situations:

1. Novel situations--where there are no familiar cues the person can use to define and structure the situation.

2. Complex situations--where the person is overloaded by excessive data.

3. Insoluble situations--where the cues are contradictory and different elements suggest different definitions or structures.

Budner correlated intolerance of ambiguity with conventionality, belief in a divine power, attendance at
religious services, dogmatism about religious beliefs, authoritarianism, and idealization of and submission to parents. According to Budner, people who are uncomfortable with ambiguity react by feeling anxious and threatened by something they do not know how to define or structure. They repress or deny the situation or the ambiguity by avoiding the problem or making a decision, or by changing or redefining the situation, either constructively or destructively (Budner, 1962).

Bardin (1955) contends that ambiguity is an important part of the counseling relationship. There is a relatively free flow of feelings, motivations, and emotions. Because people interpret ambiguous stimuli in terms of their own experiences and perceptions, the therapist can learn much about the clients' defenses, conflicts, irrational feelings, and the way they structure relationships. Both psychoanalytic and nondirective therapy techniques are based on the ambiguity of the therapeutic relationship. The psychoanalyst uses transference and interpretation of transference to show clients how they are distorting their perceptions of the therapist. The therapist must therefore keep the situation ambiguous so that the clients do not have anything concrete on which to base their perceptions. The nondirective client-centered therapist's philosophy is that people are inherently motivated towards self-growth, that the client knows best what his problem
is, and with some help can figure out how to solve it. Therefore, the nondirective therapist does not define the situation, except to make it comfortable and encourage communication, and lets the client lead the conversation and choose what (s)he would like to talk about.

Tolerance for ambiguity has been correlated with several different counselor characteristics. Brams (1961) found that tolerance for ambiguity correlated positively with the level of the counselor's communication skills. Gruberg (1969) found that tolerance for ambiguity correlated positively with a nondirective counseling style. Trained judges listened to taped interview protocols and ranked the counselors' leads as directive or nondirective. Leads classified as nondirective included: acceptance, clarification, reflection, and silence. Leads classified as directive include advising, approval, diagnosis, direct questioning and evaluation. Gruberg found that a nondirective counseling style correlated positively with tolerance for ambiguity, and that these counselors were more effective in:

1. Responding to client feeling cues, and feelings and behavior.
2. Meaningful communication with the client.
3. Using a more appropriate level of terminology.
4. Encouraging the client to talk more, and take more responsibility for the course of the
5. Avoiding imposition of values.

Jones (1974) correlated counselors' tolerance for ambiguity with ratings on Carkhuff's Empathic Understanding and Respect scales. Jones had three judges rate graduate counseling education students on three of Carkhuff's interpersonal helping skills scales (empathic understanding, genuineness and respect). He found that empathic understanding and respect were positively and significantly correlated with tolerance for ambiguity ($r = .45$, $r = .44$, respectively; $p's < .05$). He stated:

The significant correlations between tolerance for ambiguity and empathic understanding and respect support earlier theoretical statements (Bardin, 1955; Stone & Shertzer, 1963) and research findings (Brams, 1961; Gruberg, 1969) that high tolerance for ambiguity is characteristic of effective counselors. Data from the present investigation suggest that counselors offering high levels of empathic understanding and respect do not feel the need to structure the stimulus field in the counseling situation (e.g., via questions). For those counselors the ambiguity of interpersonal relationships is more likely to present a challenge rather than a threat. (p. 19)

**Crisis Intervention**

Caplan (as cited in Ewing, 1978) defines a crisis as a situation where a person's normal coping and problem-solving mechanisms do not work. People need to maintain some kind of physical and emotional equilibrium and develop certain skills and methods of dealing with
events that disturb this balance. However, sometimes problems occur that are not resolved by normal means. If people cannot either redefine the problem so normal methods do work, or learn new methods of resolving the problem, they will feel more and more anxious, threatened and disorganized. The short-term goal of crisis intervention is to help the clients regain equilibrium, and regain their pre-crisis level of functioning: The longer range goal is to help the clients acquire new coping and problem-solving skills, so they will have more control over their environment, and will be able to avoid future crises. Crisis intervention volunteers, whether over the phone or in person, must quickly establish a relationship characterized by a high trust level and open communication with the client. Such individuals are required to listen and to offer support, and to give the client confidence that the problem will eventually be resolved. The client needs to ventilate, and express feelings, and have those feelings validated. The crisis worker has to see the problem from the client's point of view (most people in a crisis are feeling very alienated, and believe that no one understands how they feel) and empathically communicate this understanding. However, because clients are in a crisis, and in a very disorganized state, the crisis worker also has to be active and directive, and help them define the problem and formulate their goals. The
clients need to receive accurate feedback and confrontation on their maladaptive behaviors, and clarification and reinforcement of positive behaviors. Concrete decisions and plans need to be made as to what steps the client is going to take to resolve the problem. New problem-solving skills and ways of looking at things may need to be taught. However, this must all be done from the client's perspective with reference to the client's definition of the problem. As one of the goals of crisis intervention is to help the clients regain control over their lives, the clients must feel that any decisions that are made are theirs, and not made solely by the crisis worker (Specter & Claiborn, 1973).

Listening Skills

Although crisis intervention is not generally viewed as therapy, some of the counseling skills that have been correlated with high tolerance for ambiguity appear to be necessary in effective crisis intervention. The first step in crisis intervention, as well as in counseling, is establishing rapport and opening communication, and encouraging the client to express his feelings. Egan (1975) states that the first step in the helping process is attending to the client. "Mere attending does not in itself help the client, but unless the counselor attends both physically and psychologically to the person in need,
he will not be able to help him" (p. 34). Attending and giving full attention to the clients shows respect and valuing of the clients. This reinforces them, and gives the counselor social influence over them, because they perceive the counselor as interested and caring. Attending also helps the counselor discriminate and understand the client's direct and indirect messages. The counselor then has to respond to the client in ways that will facilitate self-exploration. The client needs to define the problem, and discuss what brought about the problem, feelings about it, possible solutions, new behaviors, etc.

One of the major ways that counselors and crisis workers communicate understanding and encourage self-exploration is by being empathic, and responding empathically. Empathy has been defined as the ability to perceive phenomena as the client perceives it, to see the world as (s)he sees it, and to communicate this understanding (Egan, 1975). Truax and Carkhuff (1967) cite research showing the importance of empathy in facilitating improvement versus deterioration and encouraging client self-exploration. Whitehorn and Betz (as cited by Truax & Carkhuff, 1967) compared seven psychiatrists who had an improvement rate of 75% among their schizophrenic patients, with seven psychiatrists whose improvement rate with schizophrenics was 27%. They found that
the differences appeared to be in their attitudinal approach to the helping relationship. The successful therapists were warm and attempted to understand their patients in a personal, immediate, idiosyncratic way; by contrast the less successful therapists tended to relate to the patient in a more impersonal manner, focusing on psychopathology and a more external kind of understanding. (p. 81)

Truax and Carkhuff (1967) compared hospitalized patients who showed improvement on personality test measures with those who deteriorated. He found that the improved patients received consistently higher levels of accurate empathy from their therapists. Truax (Truax & Carkhuff, 1967) found that the relationship between accurate empathy and outcome held true for outpatients as well.

Another very important part of both counseling and crisis intervention is the facilitation of self-exploration. Truax and Carkhuff (1967) cite several research experiments showing that "successful" therapy patients engaged in deeper levels of self-exploration than "unsuccessful" patients. Truax and Carkhuff (1967) also did a study correlating accurate empathy and nonpossessive warmth with levels of self-exploration. They had therapists, during the session, move from high to low and back to high levels of empathy, and found that levels of self-exploration changed accordingly.

Listening and responding skills are especially important in telephone crisis intervention because the communication medium (the telephone) only transmits aural
data. Gray, Nida and Coonfield (1976) investigated skills necessary for effective crisis intervention. They stated that the client must perceive the volunteer as "... both nonthreatening and potentially helpful," and that empathy is "an a priori step in making contact with the caller" (p. 199). They also said that "the primary or most significant communicative behavior of telephone crisis workers is listening, while empathy allows the listener to understand the internal frame of reference of the caller" (p. 200). The authors broke down empathic listening into three dimensions, understanding, interest, and response-ability and developed the Human Empathic Listening Test (H.E.L.T.) to measure these three variables.

Understanding involves listening and comprehending the clients' verbal, affective and underlying message, and understanding their internal frames of reference. Interest is being genuinely concerned for and caring about the caller, and wanting to be of help. This involvement with the clients is necessary for the clients to feel that the volunteer genuinely accepts them, and can be trusted and confided in. Response-ability is the volunteer's ability to communicate his understanding and interest. Understanding and having interest in a client are not significant if they cannot be communicated to the clients.
Tolerance for ambiguity appears to play an important part in crisis intervention. First is the relationship of intolerance of ambiguity to the state of being in a crisis. As stated earlier, Budner (1972) defines an ambiguous situation as one that a person cannot adequately define or structure because cues are too novel, complex or contradictory. This is comparable to Caplan's (as cited in Ewing, 1978) definition of a crisis as a situation where a person's usual coping and problem-solving skills do not work. People fall into crises because they cannot cope with ambiguous situations. Therefore, the crisis worker has to help the client deal with the ambiguity of the situation. A crisis develops because of a person's response to a situation, not because of the situation itself. The person is in conflict and cannot reach a decision or develop appropriate and effective responses to the problem (Ewing, 1978). The crisis worker's goal is to help the client develop more adaptive responses. Such responses will be different for each person and each problem. The workers have no set structure to work by. They listen, relate to the client's perspective, and respond accordingly. A person in a crisis is reaching out, and is usually extremely confused. Strong emotions, and perhaps strong dependency, may be generated for the
period of the crisis. Crisis workers have to respond to and handle very intense short-term relationships. Crisis workers are also working in situations where they often do not receive much feedback on the outcome of their efforts, and thus volunteers have no direct means of measuring their success.

Several variables that appear to be important in counselor effectiveness have been correlated with tolerance for ambiguity. These include empathy and respect for a client and ability to communicate with and respond to the client. Previous research cited above concluded that tolerance for ambiguity may be an important personality variable in counseling effectiveness. The measures of counselor effectiveness that have been correlated with tolerance for ambiguity also appear to be important in crisis intervention. Therefore tolerance for ambiguity may also be an important personality characteristic in effective crisis intervention volunteers. Tolerance for ambiguity may also differentiate volunteers who are comfortable doing crisis intervention and receive enough satisfaction to stay with it, from whose who drop out. People who are not comfortable in ambiguous situations will be anxious and uncomfortable in crisis intervention, and probably will not work very long.

The specific hypotheses to be tested in this paper are:
1. Tolerance for ambiguity (TFA) will be higher in conscientious volunteers (those who remain beyond eight weeks) than in nonconscientious volunteers (those who drop out within the first eight weeks after training). TFA will be measured using the Complexity scale of the Omnibus Personality Inventory, as based on the work of Gruberg (1969) and Jones (1974).

2. Tolerance for Ambiguity will relate to the quality of a volunteer's empathic listening skills, as measured by the H.E.L.T. This test measures Interest, Understanding and Response-ability dimensions of listening skills (Gray, Nida & Coonfield, 1976).

3. Crisis center volunteers' MMPI profiles will differentiate volunteers who drop out during the first eight weeks after training from those who remain as volunteers. This hypothesis will be tested based on the work of Evans (1976).
METHOD

Subjects

The subjects consisted of 40 volunteers from the We Care, Inc. Crisis Intervention Center, Orlando, Florida. Group I (Nonconscientious volunteers: NC) consisted of 20 volunteers who completed training but terminated service in eight weeks or less and completed less than 32 hours of service. Group II (Conscientious volunteers: C) consisted of 20 volunteers who worked at least one shift a week for more than eight weeks, and completed at least 32 hours of service. The NC group included 16 female and 4 male subjects, with an age range of 21 years to 56 years. The C group included 16 female and 4 male subjects, with an age range of 18 years to 57 years. In order to select a sample, all 30-40 people who completed training within the last year and then dropped out were contacted. In order to keep the sample as unbiased as possible, an attempt was made to obtain the cooperation of as many of these people as possible. After the sample of nonconscientious volunteers was selected, a random sample of volunteers who had been active for more than eight weeks was selected, matched for sex. The overall age range for all subjects was 18-57. The male sample was matched for age range. The female sample could not be, because of the
larger size of the sample.

Materials

A. MMPI Data (Hathaway & McKinley, 1951): All We Care volunteers are routinely administered the Minnesota Multiphasic Personality Inventory (MMPI) before beginning service as a screening device. The subjects’ MMPI profiles were analyzed in accordance with the Evans (1976) formula for discriminating conscientious from nonconscientious volunteers. Evans empirically developed a Hotline Perseverance Scale (HPS) of 20 items from the MMPI. He used it, along with the L, Hs, Pt, and Hs (K corrected) scales to derive an equation that differentiates conscientious from nonconscientious volunteers \[ (.531)L + (.667Hs) + (.237)Pt + (-.433)(Hs+.5K) + (-2.559HPS) \]. Evans found that a cutoff of -21.00 correctly identified 90% of the conscientious volunteers and 96% of the volunteers who were not conscientious.

B. Human Empathic Listening Skills Test: As indicated earlier, empathy and listening skills are important core skills in the counseling process. These skills appear to be particularly important in establishing a rapport with a client, and in facilitating self-exploration by the caller-helpee. The subjects’ listening skills were measured with the Human Empathic Listening Test (H.E.L.T.) (Gray, Nida & Coonfield, 1976). This test was specifically
developed for use in crisis intervention centers. It measures three parts of empathic listening: Understanding: both the verbal and underlying or affective message; Interest: in the client and helping him or her, which is an important part of empathic listening and being able to concentrate and tune in to the client's phenomenological world, and essential for crisis intervention where many of the clients feel no one cares what happens to them and that they have no support; Response-ability: or being able to respond to the caller in a way that conveys understanding and interest and facilitates self-exploration. The ability to verbally respond effectively is especially important in telephone work where the crisis worker cannot respond in any other way.

The test consists of a series of taped vignettes of crisis calls. The subjects listen and answer written questions. The test appears to be most appropriate for testing telephone skills, because it recreates the limited verbal stimuli volunteers receive over the telephone. It was validated with a "known groups" method. Undergraduate communications students, beginning graduate counseling students with no formal experience, and experienced hotline workers were given the test. It was expected that these groups would differ significantly in their listening and response skills. Experienced hotline workers were expected to have the highest scores, the beginning
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graduate students with theoretical background but no experience the middle scores, and the undergraduate communications majors with no theoretical background or experience the lowest scores. There was a significant difference in the expected direction which established the test's construct validity.

Reliability of the H.E.L.T. was tested using a split half design. The reliability coefficients were:

<table>
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<tr>
<th></th>
<th>Understanding</th>
<th>Interest</th>
<th>Response-ability</th>
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<tbody>
<tr>
<td>Undergraduate</td>
<td>.50</td>
<td>.84</td>
<td>.47</td>
</tr>
<tr>
<td>Graduate</td>
<td>.64</td>
<td>.82</td>
<td>.66</td>
</tr>
<tr>
<td>Volunteer</td>
<td>.29</td>
<td>.88</td>
<td>.40</td>
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The authors attribute the low reliability scores on the Understanding and Response-ability to the small number of items on the sub-parts and the small number of people in the groups.

C. Tolerance for Ambiguity: Tolerance for Ambiguity was measured using the Complexity scale of the Omnibus Personality Inventory (OPI) (Heist & Yonge, 1968). The complexity scale is defined as a measure of experimental and flexible orientation rather than a fixed way of viewing and organizing phenomena. High scores are tolerant of ambiguities and uncertainties: they are fond of novel situations and ideas. (p. 4)

Heist and Yonge (1968) did not define high scores numerically. Gruberg (1969) in his previously discussed study,
used this test as a measure of TFA. He concluded that

This experiment appears to support the construct validity of the complexity scale of the Omnibus Personality Inventory, since the theoretical predictions of this investigation involved the construct tolerance of ambiguity and the hypotheses generated from these predictions were upheld in these findings. (p. 123)

Lawrence Jones (1974) also used the complexity scale of the OPI to measure TFA, and found it correlated with Carkhuff's Empathy and Respect scales.

The internal consistency of the complexity scale of the OPI is $r = 0.76$, using the Kuder-Richardson KR 21 formula. The test-retest reliability was $r = 0.93$ with a 3-4 week interval between testing.

**Procedure**

Subjects were contacted by telephone and asked to participate in research investigating personality characteristics of people who have participated in training for crisis intervention work. If they had further questions, they were told that we were interested in why people go through training. They were encouraged to take the tests on the basis that the research would be helpful to *We Care* in evaluating its training. If they agreed to participate, they were given the H.E.L.T. and the complexity scale of the OPI in a group setting. Three testing dates were arranged by the examiner, and subjects were asked to come to whichever administration was most convenient. If there
were any subjects who were willing to participate but could not attend any of the test administrations, an effort was made to test them on an individual basis. The subjects were told that the OPI complexity scale is a measure of flexibility and enjoyment of novel situations, and that the H.E.L.T. was a measure of listening and responding skills. Their MMPI profiles were obtained from the *We Care* files. At the time of testing subjects were asked to sign a release form (see Appendix C) indicating that they understood the purpose of the research and what would be required of them as subjects, and guaranteeing their anonymity. Subjects who requested information about their test results or experiment results in general, were given feedback on an individual basis by the experimenter.
RESULTS

Differences Between Conscientious and Nonconscientious Volunteers

The mean scores for Interest, Understanding, Response-ability, Tolerance for Ambiguity, Hotline Perseverance, and age for both the conscientious and nonconscientious volunteers are reported in Table 1. A t-test was performed on the data.

Two listening skills variables revealed significant differences between the two experimental groups. Conscientious subjects on both the Interest and Understanding subscales of the H.E.L.T. \[t(38)=2.496, \ p<.05; \ t(38)=2.039, \ p<.05\]. Mean scores for the Response-ability, Tolerance for Ambiguity, and Evans' Hotline Perseverance variables revealed no significant differences between the conscientious and nonconscientious treatment groups.

Correlations Between Variables

Multiple correlations were performed in order to analyze for significant relationships between Interest, Understanding, Response-ability, Tolerance for Ambiguity, Hotline Perseverance and age. There were three significant correlations between the experimental variables (see Table 2). Interest and Response-ability were positively
TABLE 1
MEANS OF SIX VARIABLES FOR CONSCIENTIOUS AND NONCONSCIENTIOUS VOLUNTEERS

<table>
<thead>
<tr>
<th></th>
<th>Interest</th>
<th>Understanding</th>
<th>Responsability</th>
<th>Tolerance for Ambiguity</th>
<th>Hotline Perseverance</th>
<th>Age</th>
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<tbody>
<tr>
<td>Conscientious</td>
<td>11.9</td>
<td>11</td>
<td>8.9</td>
<td>16.05</td>
<td>-17.83</td>
<td>38.2</td>
</tr>
<tr>
<td>Nonconscientious</td>
<td>10.8</td>
<td>9.3</td>
<td>8.85</td>
<td>16.5</td>
<td>-19.71</td>
<td>31.95</td>
</tr>
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### Table 2

**Intercorrelations of Six Variables**

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<td>.39*</td>
<td>.51**</td>
<td>.15</td>
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<td>.24</td>
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<tr>
<td>Understanding</td>
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<td>.18</td>
<td>.09</td>
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*significant where $p < .05$

**significant where $p < .01$
and significantly correlated \([r(34)=.51, p<.01]\). Interest and Understanding were also positively and significantly correlated with one another \([r(34)=.39, p<.05]\). Finally, Response-ability and Tolerance for Ambiguity were positively and significantly correlated \([r(34)=.36, p<.05]\).
DISCUSSION

Of the three original hypotheses, hypothesis number two, that tolerance for ambiguity would correlate with listening skills, was partially supported. Hypothesis number three, that Evans' Hotline Perseverance formula would differentiate conscientious from nonconscientious volunteers, and hypothesis number one, that tolerance for ambiguity would differentiate these two groups, were not validated.

Tolerance for Ambiguity

Tolerance for Ambiguity (TFA) was essentially the same for the conscientious and nonconscientious groups. TFA did not correlate with age \( r(34)=.13 \).

The overall mean for TFA in this experiment was slightly higher than the test norms (\( M=16.28; \ M=15.3 \)). However, this may be because the norms were established fifteen years ago using college freshmen.

One factor that may have confounded the results was the loss of subjects in the nonconscientious group. Those nonconscientious volunteers who appeared to be the most defensive and uncomfortable in a psychological testing situation (i.e., they refused to participate) may also have been the least tolerant for ambiguity. However, on the
basis of this experiment, it appears that tolerance for ambiguity is not a significant factor in determining whether individuals trained to become hotline volunteers will terminate prematurely or remain as long-term crisis workers.

TFA correlated significantly with the Response-ability \( [r(34)=.36, \ p \ .05] \). It did not correlate with Interest or Understanding subscales of the H.E.L.T. \( [r(34)=.15; r(34)=.18] \). This would indicate that while people who are high in TFA may respond more empathically to clients than people low in TFA, they do not evidence a high level of interest in or caring for others or an increased ability to understand or comprehend the communication of another. These latter variables, as indicated above, were the only variables investigated which significantly differentiated conscientious from nonconscientious volunteers. The failure to obtain a significant relationship between the Interest and Understanding dimensions and TFA in the present study is inconsistent with the findings of Jones (1974) discussed earlier. Jones had judges trained in the use of Carkhuff's scales rate tape-recorded protocols of practicum students' counseling sessions. He found a significant positive correlation between Carkhuff's accurate empathy and respect scales and TFA. However, he does not state what criteria were used in rating the subjects on the scales.
Gruberg (1969) also used the same OPI measures of TFA, and correlated it with nondirective versus directive counseling leads. Excerpts from counseling sessions were rated, and responses of acceptance, clarification, reflection, and silence were defined as nondirective. In both Gruberg's counseling leads and the Response-ability part of the H.E.L.T., the desired response is one that communicates understanding, but is basically nondirective and open-ended and allows the client to define the course of the interview. People who have little tolerance for ambiguity are likely to respond to ambiguous stimuli or an open-ended situation (such as a counseling interview) by attempting to structure and define the situation (Gruberg, 1969). People who are highly tolerant of ambiguity may be more comfortable responding noncommittally to a situation that they do not have enough data to structure or define, and letting the situation develop on its own (i.e., allowing the client to define the structure of the counseling situation).

Gruberg's measure and the Response-ability subscale of the H.E.L.T. both measure the type of response the counselor makes. Thus a person who is high in TFA may be able to respond "correctly" (i.e., nondirectively) in a counseling situation but not necessarily have a high level of interest or understanding.

Nida, Gray and Coonfield (1978) correlated the
subscales on the H.E.L.T. with Carkhuff's accurate empathy, respect and genuineness scales. They found that while overall scores on the two measures correlated significantly \( r = .46, p < .01 \), and all three of Carkhuff's scales correlated with Response-ability \( r = .43, r = .56, r = .51, p < .01 \), for accurate empathy, respect, and genuineness respectively), Carkhuff's scales did not correlate significantly with interest and understanding. It is possible that their interest and understanding dimensions are measuring different qualities than Carkhuff's scales. Another variable may be that counselors' ratings on Carkhuff's scales in both Gruberg's (1969) and Nida et al.'s (1978) studies were made from tapes of actual counseling sessions. On the H.E.L.T. counselors had to pick responses from five choices. Perhaps the responses counselors choose are not always consistent with those they generate themselves.

**Listening Skills**

The H.E.L.T. yielded several interesting results:

1. As discussed previously, the Response-ability sub-area was significantly correlated with TFA. That is, volunteers high in TFA showed more ability to choose the correct response to a client, based on a correctness criterion which stresses empathic understanding.

2. Conscientious as opposed to nonconscientious volunteers had significantly higher scores on the Interest
and Understanding sub-areas of the H.E.L.T. Thus the volunteers who remained as hotline crisis volunteers showed higher interest in helping the clients, and better understanding of the clients' verbal and affective messages. While all three dimensions are important skills in counseling effectively on a crisis hotline, it may be that "interest in" and "understanding of" the callers are necessary factors in motivating volunteers to give their time and gain satisfaction from the work. Interest differentiated the conscientious from the nonconscientious volunteers most strongly, and also correlated significantly with Understanding and Response-ability. Interest in the client, therefore, may be the most important factor in determining which people will become active, effective volunteers.

3. Intercorrelations between the subtests of the H.E.L.T.: The strongest correlation ($r=.51$, $p<.01$) was between Interest and Response-ability. The correlation between Interest and Understanding, $r = .39$, $p < .05$, was weaker but still significant. The correlation between Understanding and Response-ability was not significant. This would indicate that the most significant factor in how well a crisis volunteer responds to a client is the volunteer's level of interest in the client. Levels of interest and understanding are also interrelated. However, these results would also seem to indicate that understanding
of a client and the ability to respond effectively are not related.

Nida et al. (1978) found their strongest correlation between Understanding and Response-ability ($r=.62$, $p<.001$). The present study found no significant correlation between the variables. This variability in the relationship of Response-ability to Understanding may be a function of several factors. Nida, Gray and Coonfield (1978) used graduate students as subjects in their study. The present investigation used crisis intervention volunteers. In earlier research Nida et al. (1976) measured the reliability of the three sub-areas of the H.E.L.T. for both graduate students and crisis intervention volunteers. They found much higher reliability coefficients for Understanding and Response-ability with the graduate students than the crisis intervention volunteers ($r=.64$, $r=.66$ for the graduate students, and $r=.29$, $r=.40$ for the crisis intervention volunteers). Therefore, the difference in the Understanding/Response-ability correlations between Nida et al.'s (1978) study and the present investigator may be because the measures were more reliable with their population.

Although subjects in both studies presumably were trained in nondirective, empathic counseling skills, they did receive their training at different institutions or agencies. Response-ability is the dimension of the
H.E.L.T. that is probably the most influenced by training. The Interest variable measures only the person's desire to help the client. Understanding measures the accuracy of a person's perception of what the client is saying, both verbally and affectively. However, the responses counselors make to a client reflect the counseling model they were trained to use. The "correct" responses to the Response-ability subtest on the H.E.L.T. reflect the test author's counseling orientation. People trained differently might choose different responses. Therefore, variation in the correlation of Response-ability to the other two subtests may be partly due to differences in the training and natural response styles of the subjects.

The results of this experiment did not validate Evans' (1976) research. Although the scores were in the direction he predicted, the difference between the conscientious and nonconscientious groups was not significant. Evans' cutoff point identified 68% of the nonconscientious volunteers as conscientious, and 21% of the conscientious group were wrongly identified as nonconscientious. The scores were scattered in such a way that no cutoff would satisfactorily differentiate between the two groups (see Table 3). Additionally, the Hotline Perseverance scores were not significantly related to any of the other variables. As stated earlier, Evans did not have any
TABLE 3

RANK ORDER OF HOTLINE PERSEVERANCE SCORES

*--28.43
*--25.96
*--25.23
*--23.87
--22.81
--22.58
--22.12
*--21.45
--21.15
*--20.70
--20.59
*--20.35
*--20.11
--19.83
--19.03
--18.66
--18.64
--17.50
*--17.46
*--17.44
--17.42
*--17.36
*--17.30
--17.25
--16.85
--16.80
*--16.39
--15.88
*--15.15
*--14.98
--14.62
--14.22
*--13.15
--12.10
--10.83

*indicates nonconscientious volunteer
theoretical basis for his results; he merely empirically analyzed MMPI data at the crisis center where he did his research. It is impossible to determine exactly what characteristics his HPS is measuring. Every crisis center is unique, and may attract and retain different types of people. Evans' formula may be measuring something that is particular to the volunteers at the Con-tact Hotline. No data are available to compare Evans' Con-tact Hotline and the We Care center. However, Con-tact is in Ontario, Canada, and there may be significant cultural and community differences between We Care and Con-tact. Evans' research may be valid for his individual center (as he states in his conclusions), but the indications from the present research are that it does not generalize to other centers.

Demographic Variables

Several demographic differences between the conscien-
tious and nonconscientious volunteers need to be discussed:

1. There was a much higher percentage of females in the nonconscientious group than among We Care volunteers as a whole. The experimental group of conscientious volun-
teers was matched with the nonconscientious group for sex. However, 75% of the nonconscientious group was female while approximately 54% of active We Care volunteers are female. Therefore, it would seem that males have a much better follow-through record. This may be because volunteering
is traditionally considered a female activity. Therefore, marginally interested females may go through training to see what it is like. Marginally interested men probably never go through training.

2. The males in the two experimental groups constituted a very small sample (four in each group) and were matched for age range. It was not possible to do this with the larger female sample. The females in the conscientious group were generally older than the females in the nonconscientious group. The mean age for the conscientious female group was 40.25 years, with 25% under 30 years. The mean age for the nonconscientious female group was 32.9 years, with 62.5% under 30 years. The younger group may have more conflicting commitments elsewhere (five of the nonconscientious group under 30 were both working and going to school--none of the under 30 conscientious group was doing this). The younger people are also more likely to be establishing their identities, and becoming involved in different activities as they look for things they feel worthwhile and at which they feel competent. They therefore may be less sure than the older volunteers when they start training that crisis intervention is something they want to do. The younger group may also start out with more idealistic notions of helping people and what they can accomplish, and become more easily frustrated and discouraged. As indicated earlier, interest and
understanding seem to be key factors in whether someone becomes an active conscientious volunteer. However, in the under-30 nonconscientious female group, the mean for interest was 11.2, and 10.0 for understanding. The means for the over-30 nonconscientious female group were 9.8 and 8.17, respectively (compared to overall conscientious group means of 11.7 and 11.0). This may indicate that while older volunteers drop out because of lack of interest in helping the clients, and low understanding of or relating to what the client is saying, there may be other factors operating in the younger group. It would therefore not be recommended that younger applicants be screened out simply because of age. The age range for the conscientious volunteers was 18 years to 50 years, and one-fourth of them were under 30. There are, therefore, many good potential volunteers in the under-30 group. However, there does appear to be increased risk that the interests and/or commitments of the younger, especially female volunteers will turn elsewhere.

3. *We Care* currently has no active Black volunteers. Members of this minority group have not historically become active volunteers with *We Care*. Four of the nonconscientious volunteers, or 20%, were Black females. Mean interest and understanding for this group were 10.0 and 7.2, compared with 10.8 and 9.3 for the nonconscientious group as a whole. According to the results of this study,
to facilitate Black trainees remaining with the organization, it will be necessary to increase interest and understanding. Perhaps the problem areas being discussed in the training are not those that are the most relevant to the Black community. Interest and understanding might be higher in Black volunteers if the issues being discussed were related specifically to the Black community, and if more Black professionals were utilized as consultants in training.
CONCLUSIONS AND RECOMMENDATIONS

Many variables appear to influence whether a person who goes through crisis intervention training becomes an active conscientious or long-term volunteer. These factors include individual personality characteristics, feelings of competence on the phone lines, feelings of satisfaction from helping someone, and feelings of belonging to an organization or social group. This study examined tolerance for ambiguity, and competence as measured by listening skills in relation to whether the individual would become a conscientious volunteer or terminate prematurely. TFA was not borne out as a significant factor in this determination. Two components of listening skills, interest in helping and understanding of the callers, significantly differentiated conscientious from nonconscientious volunteers. Ability to verbally respond to the client did not.

These results have implications both for screening and training potential volunteers. Interest in helping clients seems to be an important factor in motivating people to stay as volunteers. Therefore, when interviewing volunteer applicants, training personnel would be advised to screen for those who demonstrate genuine caring
for and interest in other people. With regard to training, it would seem that emphasis should be put on increasing trainees' ability to listen to and understand what a caller is saying, including underlying and affective components of the message. The strong positive correlation between the Interest and Response-ability factors discussed above suggests that perhaps less emphasis needs to be placed on rote practicing responding to callers. According to this study the strongest correlation found was between Interest and Response-ability. Therefore increasing trainees' interest in helping the callers should enable them to respond more effectively.

Recommendations for Further Study

Two areas of further study are recommended:

1. The more resistant nonconscientious volunteers refused to participate in this research. It is recommended that volunteers be tested as they finish training, and the predictive validity of the tests (both TFA and listening skills) be assessed using a more accurate sample. It might also be profitable to test a group of volunteers as they start training, to see if there are any differences in those who never complete training.

2. This study was done at one crisis center in one community. Generalizability of the results beyond the We Care center cannot be assessed. Further research at
other centers is recommended.
APPENDIX A

RAW DATA
Conscientious Volunteers:

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APPENDIX B

TOLERANCE FOR AMBIGUITY QUESTIONNAIRE
Name_____________________ Age _______ Sex ___
Occupation_________________

1. I am cordial to strangers.
2. Usually I prefer known ways of doing things rather than trying out new ways.
3. It is a good rule to accept nothing as certain or proved.
4. The unfinished and the imperfect often have greater appeal to me than the completed and the polished.
5. I am uninterested in discussions of the ideal society or Utopia.
6. I want to know that something will really work before I am willing to take a chance on it.
7. I dislike following a set schedule.
8. Novelty has great appeal to me.
9. I have always hated regulations.
10. I am inclined to take things hard.
11. I don't like things to be uncertain and unpredictable.
12. I like to go alone to visit new and strange places.
13. Politically I am probably something of a radical.
14. I like to fool around with new ideas, even if they turn out later to have been a total waste of time.
15. I show individuality and originality in my school work.
16. I am usually calm and not easily upset.
17. I always see to it that my work is carefully planned and organized.
18. I prefer to engage in activities from which I can see definite results rather than those from which no tangible or objective results are apparent.
19. Perfect balance is the essence of all good composition.
20. Straightforward reasoning appeals to me more than metaphors and the search for analogies.
21. I believe I am no more nervous than most persons.
22. I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer.
23. My way of doing things is apt to be misunderstood by others.
24. I like to have a place for everything and everything in its place.
25. The prophets of the Old Testament predicted the events that are happening today.
26. It doesn't bother me when things are uncertain and unpredictable.
27. For most questions there is just one right answer, once a person is able to get all the facts.
28. I have had very peculiar and strange experiences.
29. I like to listen to primitive music.

30. I have had strange and peculiar thoughts.

31. I find it difficult to carry on light conversation with strangers.

32. Many of my friends would probably be considered unconventional by other people.

33. I find it difficult to give up ideas and opinions which I hold.

34. Trends towards abstractionism and the distortion of reality have corrupted much art in recent years.

35. I much prefer friends who are pleasant to be around to those who are always involved in some difficult problem.

36. Some of my friends think my ideas are impractical if not a bit wild.

37. I dislike having others deliberate and hesitate before acting.

38. I find that a well-ordered mode of life with regular hours is not congenial to my temperament.

39. I don't like to undertake any project unless I have a pretty good idea how it will turn out.

40. I prefer to visit with one person rather than with a group of people.
APPENDIX C
CONSENT FORM
I understand that I am being asked to participate in research investigating personality characteristics of people who have been trained to work as crisis intervention volunteers. This will involve taking a true/false personality inventory and a listening skills test. I understand that my MMPI which is on file at We Care will also be used as data.

I will not be personally identified in any way in the research. If I desire any feedback on the test results or the experiment in general, it will be provided by the experimenter.

Date_________________ Signature_________________
REFERENCES


Frenkel-Brunswik, E. Intolerance of ambiguity as an emotional and personality variable. Journal of Personality, 1949, 18, 118-143.


