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Peer Knowledge of and Reactions to Adolescent Suicide

Eileen Norton

Loyola University Chicago

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PEER KNOWLEDGE OF AND REACTIONS TO ADOLESCENT SUICIDE

by

Eileen Norton

A Thesis Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Master of Arts

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1987
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VITA

The author, Eileen M. Norton, is the daughter of Francis C. Norton and M. Shirley Norton. She was born June 6, 1961 in Plainfield, New Jersey.

The author obtained her high school diploma in 1979 from Naperville Central High School, Naperville, Illinois. In May, 1983, she received the Bachelor of Arts degree in psychology from the University of Illinois at Urbana-Champaign and was elected a member of Phi Beta Kappa.

In August, 1984, Ms. Norton was granted an assistantship at Loyola University of Chicago. She will complete a two year clerkship at the Charles I. Doyle Child Guidance Center in August, 1987.
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INTRODUCTION

Several researchers have noted the recent and alarming increase in adolescent suicide rates (Eisenberg, 1985; Farberow, 1978; Hendin, 1985). Whereas suicide rates have remained quite stable for the general population, in the last 25 years, adolescent suicide rates have increased about 250% (Hendin, 1985). Suicide is identified as one of the top three causes of death for persons between the ages of 15 and 24 (Fisher & Shaffer, 1984; Hendin, 1985). These statistics point to the need for an increased awareness of risk factors that identify potential suicidal youth.

Many adolescents know of someone their age who has attempted suicide (Ross, 1985). Discovering what adolescents themselves know about the factors contributing to suicide, as well as their attitudes toward suicide, and how they may respond to peers at suicidal risk may be very important to the reduction of suicide. For example, in a survey conducted by Ross (1985), 91% of 120 high school students selected "friend" as their first choice as to whom they would tell if they were contemplating suicide. If adolescents are most often the recipients of suicidal messages from other adolescents, the importance of ascertaining their knowledge, attitudes, and response to such messages is paramount.
Unfortunately, we currently lack empirical data on this topic. The purpose of this study is to begin developing such a data base. More specifically, the present investigation will collect three types of information from adolescents: 1) knowledge of risk factors that identify potential suicidal behavior in peers, 2) attitudes towards peers who attempt and commit suicide, and 3) ability to respond appropriately to suicidal messages from peers.
Adolescents are often acquainted with someone who has attempted suicide. In addition, adolescents are likely to be the recipients of suicidal communications from peers (Ross, 1985). As a result, the assessment of adolescents' knowledge, attitudes, and capacity to respond to suicidal messages is extremely important. Unfortunately, empirical data on these three topics is virtually nonexistent for adolescent populations. Therefore, the present study attempts to provide such an empirical assessment.

**Warning Signs**

Much research concerning adolescent suicide, like that of adult suicide, has attempted to identify factors that are associated with suicidal behavior. Numerous factors mentioned by several authors (Anderson, 1981; Farberow, 1978, 1983; Greenberg, 1985) were grouped into six categories by Ross (1977). These categories, or warning signs of suicide, include previous suicide attempts, statements revealing a desire to die, suicidal threats, changes in behavior, depression, and making final arrangements. On the one hand, the identification of three of the factors, previous suicide attempts, changes in behavior, and depression, is based on a consensus of research findings. On the other hand, the notions that suicidal adolescents express a desire to
die or make a direct suicidal threat, as well as making some type of final arrangements, results more from clinical anecdotal impressions rather than from empirical data. However, the repeated mention of these factors in the literature suggests their association with suicide is based on much clinical experience, and therefore merits attention. The following sections briefly review each of the six major warning signs.

**Previous Attempts**

Many authors have noted that adolescents exhibiting suicidal behavior have made previous attempts (Eisenberg, 1985; Farberow, 1978, 1983; Garfinkel & Golumbek, 1983; Greenberg, 1985; Hawton & Osborn, 1984). Farberow (1978) in his review of 31 articles on adolescent suicide, noted that ten mention previous attempts as especially significant in describing adolescent suicide.

**Statements about Death**

Two other factors that have been discussed as being predictive of possible suicidal behavior are statements revealing the desire to die as well as direct suicide threats (Greenberg, 1985; Ross, 1977). Statements revealing a desire to die seem to be masked in general statements about the adolescent's death, without specific mention of suicide. Ross (1977) mentioned specific examples of such statements as
adolescents saying they wished they were dead or that everyone would be better off without them. Greenberg (1985) also noted "verbal expressions about self death" (p. 4) in reference to adolescents who attempted suicide at a midwestern hospital. Both Greenberg (1985) and Ross (1977) noted that adolescents, as well as other age groups who are exhibiting suicidal behavior, will also make direct threats to end their lives. Farberow (1983) points out that adolescents will often identify themselves as suicidal through an actual suicide threat.

**Changes in Behavior**

According to Ross (1977), changes in behavior most often related are withdrawal, apathy, and moodiness. Farberow (1978) noted in his review that the most frequent social characteristic mentioned in association with adolescent suicide was withdrawal and isolation. He described the subjects in these various studies as having poor interpersonal relationships with their peers in terms of less contact and communication. Teicher (1979) and Teicher and Jacobs (1966) discussed the adolescents' withdrawal in terms of social isolation. They theorized that adolescents' suicide attempts should be viewed in the context of long standing family problems, problems that begin a process which culminates in isolation from family and friends and leads to an eventual suicide attempt. Problems in school may
further isolate them from peers. Greenberg (1985) noted that a decline in school performance may be associated with or precede a suicide attempt. Similarly, Teicher (1979) found, in his sample of adolescent suicide attempters, that 36% were not enrolled in school because of medical reasons, behavior problems, or dislike of school. When not in school, these adolescents are further isolated from social ties, and as a result, withdrawal from peer relationships may be exacerbated. In this manner, isolation from both parents and peers may occur.

**Depression**

Ross (1977) theorized that changes in behavior, like withdrawal from family and friends, can be viewed as an outgrowth of depression. The presence of depression in suicidal adolescents has been widely discussed by both theorists and researchers (Cohen-Sandler & Berman, 1980; Pfeffer, 1981; Toolan, 1975). Depression is the feeling most often found in suicidal adolescents (Farberow, 1985) with a majority of adolescent suicide attempters demonstrating symptoms of depression such as vague somatic complaints and both sleep and appetite disturbances (Tishler, McKenny, & Morgan, 1981). A more direct relationship between depression and suicide has been discussed by Beck, Kovacs, and Weismann (1975). They present evidence
that, in adults, hopelessness connects depression and suicide. The idea of hopelessness in suicidal intent has been extended to adolescents (Farberow, 1983; Topol & Reznikoff, 1982). Topol et al. (1982) found that suicidal adolescents considered themselves as feeling hopeless significantly more often than two groups of non-suicidal adolescents.

**Final Arrangements**

A final factor that is associated with suicide, yet is less explored in the literature, is that of making final arrangements before the suicidal attempt. This behavior can include giving away important possessions (Greenberg, 1985) or "putting affairs in order" (Ross, 1977, p.4). In adults, this behavior may take the form of preparing a will, but in adolescents, giving away a prized possession may be more common (Ross, 1977).

In sum, the six general factors that seem strongly associated with suicide in adolescents include: 1) previous suicide attempts, 2) expression of a desire to die, 3) direct suicide threats, 4) changes in behavior, 5) depression, which can be manifested as an appetite or sleep disturbance, as well as feelings of hopelessness and pessimism, and finally, 6) the making of final arrangements.

The first logical step in the education of peers
concerning suicide in other youths seems to be ascertaining what they already know; in other words, assessing their knowledge of the above risk factors.

Several authors purport that adolescent suicide attempters can be distinguished from suicide completers on the basis of such factors as gender, age, and method (Eisenberg, 1985; Fisher, et al., 1984; Shneidman & Farberow, 1965). However, it appears extremely difficult to distinguish these two groups on the basis of the above six risk factors. Eisenberg (1985) has noted that the extent of the overlap between the two groups is not at all clear. This may be due to the fact that the above warning signs have been reported to be exhibited by both groups (Garfinkel, et al., 1983; Shneidman, et al., 1965). In terms of knowledge of risk factors, suicidal behavior will be discussed in general without distinguishing between completed versus attempted suicides.

Knowledge of Warning Signs

Research assessing adolescents' knowledge of these risk factors is virtually non-existent. Emphasis in the literature has been on assessing the knowledge of risk factors among helping professionals because it is members of the helping professions who treat suicidal persons (Holmes & Howard, 1980; Inman, Basque, Kahn & Shaw, 1984).
One study that did report youths' recognition of risk factors did so using college students (actual ages not reported) as a control group to compare their recognition with that of various members of the helping professions (Holmes et al., 1980). Of a possible 13 correct responses to multiple choice questions indicating knowledge of risk factors, the college students obtained a mean of 5.23 correct responses, indicating some knowledge of risk factors. Other groups obtained mean correct scores of 9.37 (physicians), 9.03 (psychiatrists), 7.53 (psychologists), 6.23 (social workers), and 5.33 (ministers). Using the same rating scale as Holmes et al. (1980), Inman, et al. (1984) found a similar result (mean of 5.07 correct responses) with 89 nursing students, 79% of whom were under 25. These two studies seem to indicate that youths may possess a moderate amount of knowledge of suicidal risk factors. However, given the paucity of data and the fact that the college students were not clearly separated from other age groups, specific study of adolescent samples is necessary.

Based on her involvement in the implementation of adolescent suicide prevention programs at the high school level, Ross (1977, 1985) discusses adolescents' lack of factual information and their misinformation concerning suicide. She purports that many adolescents
are not completely innocent of knowledge of suicide, but some of the information they do possess concerning the topic is actually misinformation based on rumor and speculation (Ross, 1985, p. 157). Although perhaps accurate, Ross does not cite any empirical data to substantiate her assertions. Although it is clear that students at the college level possess some knowledge of suicide (Holmes et al., 1980; Inman et al., 1984), we lack precise information concerning exactly what high school students know or do not know about suicide and its warning signs.

**Attitudes**

Equally as important as assessing adolescents' knowledge of suicide is assessing their reactions and attitudes towards peers who attempt and commit suicide. As Kalish, Reynolds, and Farberow (1974) point out, suicide and suicide attempts take place within the context of a population that has developed norms concerning what a suicidal act or attempt means. These researchers examined community attitudes towards suicide. Through the use of a questionnaire, the researchers reported that over one-third of the 400 adult subjects felt that persons who commit suicide do so primarily because they are "mentally ill" or "crazy" (p. 307). The authors also found that a substantial number of these subjects believed suicidal persons were
"cowardly".

More specifically, other researchers have assessed community reactions to the suicide of a child (Calhoun, Selby, & Faulstich, 1980; Calhoun, Selby, & Gribble, 1979; Range, Bright, & Ginn, 1985; Rudestam & Imbroll, 1983) or an adolescent (Range et al., 1985). These authors also found the existence of negative attitudes towards youth who exhibit suicidal behavior. They used similar procedures to examine these community, or societal attitudes. Calhoun et al. (1980), in one of the original uses of this methodology, presented subjects with one of two hypothetical newspaper stories depicting the death of a child either by suicide or by natural causes (disease). Subjects were then asked to give their reactions to these deaths through use of Likert-type questionnaires, and the reactions of the subjects to the two types of deaths were compared.

Calhoun et al. (1980) found a child who died by means of a suicide was seen as more psychologically disturbed than a child who died through illness. Rudestam et al. (1983) replicated these findings. Range et al. (1985) looked at community reactions to the suicide of a 17 year old male compared to the suicide of a 13 1/2 and 10 year old males and found that the older youth was viewed as more psychologically disturbed than the younger children. Finally, Selby and Calhoun (1975)
examined community reaction to an attempted suicide compared to a completed suicide and found that suicide attempters were viewed as more "mentally ill" than actual completers. Clearly, much community, or societal, reaction towards those who attempt or commit suicide is quite negative. A question to be empirically examined is whether adolescents hold similar negative attitudes towards the suicidal behavior of other adolescents. Again, one finds a lack of empirical information concerning this topic.

Another question of interest involves false conceptions that adolescents hold about suicide. Ross (1977), again without citing empirical research, discusses several attitudes or misconceptions held by adolescents. These attitudes or misconceptions include: 1) someone an adolescent's own age would not seriously consider suicide, 2) people who talk about suicide won't actually commit suicide, 3) if an adolescent told anyone he were having suicidal thoughts, they would think he was "crazy", 4) suicidal impulses indicate self-pity or inadequacy (Ross, 1977, 1985). That these attitudes are actually held by many adolescents seems to be a reasonable assertion; however, empirical validation is necessary to confirm the existence and prevalence of such views.

Research concerning the attitudes of adolescents...
towards peers who attempt or commit suicide has implications for educational interventions. Gaining specific information about the attitudes adolescents hold can lead to more specific goals of suicide prevention education at the high school or college level. For example, if research validates the notion that youths do hold some of these attitudes discussed by Ross (1977, 1985), education concerning youth suicide can be specifically directed at correcting currently held misconceptions.

**Capacity to Respond**

Besides peer knowledge of and attitudes towards suicide and suicide attempts, this project will investigate the ability of adolescents to respond appropriately when a peer exhibits suicidal behavior. Inman et al. (1984) have demonstrated that knowledge of risk factors is independent of capacity to respond appropriately to suicidal communications (i.e., measures of knowledge and simulated response to suicidal persons were not significantly correlated). In other words, one should not assume that a person who possesses knowledge of the risk factors that identify suicidal behavior would also know what to do when another person exhibits such behavior. Therefore, it seems important to examine both knowledge and response competency. Once again, a limited amount of information is available concerning
the ability of adolescents to know what to do when a person communicates suicidal messages. No such information is available for high school students.

Neimeyer and MacInnes (1981) have constructed a measure that assesses a person's capacity to respond appropriately to suicidal messages. This questionnaire, called the Suicide Intervention Response Inventory (SIRI), contains 25 hypothetical comments made by a client to a counselor. The respondent is asked to choose between two replies, with one of those replies being a more appropriate response to suicidal communications. The authors have demonstrated the high internal consistency ($r=.84$ using a Kuder-Richardson 20) and test-retest reliability ($r=.86$) over a three month period for their measure (Neimeyer et al., 1981). They have also demonstrated some support for its concurrent validity (Neimeyer & Oppenheimer, 1983).

Inman, et al. (1984), using the SIRI, reported that a group of untrained nursing students obtained a mean of 20.75 correct responses out of a possible 25 correct. The authors compared this mean score to those obtained in the Neimeyer et al. (1981) study for adult education college students (17.64), newly trained crisis workers (23.05), and veteran crisis workers (24.17). The Inman et al. (1984) study indicates that youths at the college level may indeed possess some knowledge of
how to respond to suicidal behavior in others.

Ceiling effects seem to occur with use of the SIRI measure, as evidenced by the fact that most groups score relatively high. Nevertheless, the SIRI appears useful as an initial assessment of reactions to suicidal behavior. Furthermore, the results obtained from various study samples can be compared to previously obtained results in order to compare performances of different groups.

A question to be asked is whether youths would choose to make similar responses to a friend. In other words, the above studies asked the subjects to respond to hypothetical comments made by a client in a counseling session. It may be important to examine whether adolescents would choose similar responses if they were asked to respond to hypothetical comments made by a peer, a situation that seems closer to the real lives of these youths. The current project attempts to study this difference by modifying the SIRI referents. The subjects will be requested to indicate how they would respond to a friend rather than a client in a counseling session.

Hence, inclusion of the modified SIRI in this project will accomplish two aims. First, the modified SIRI will be used to look at adolescents' capacity to respond appropriately to the suicidal communications of
peers. Second, this study will attempt to replicate the Inman et al. (1984) finding that the ability to respond to suicidal behavior is independent of knowledge of risk factors.

As discussed above, the Calhoun et al. (1980) study, as well as the studies that followed with similar methodology (Calhoun et al., 1980; Calhoun et al., 1979; Range et al., 1985; Rudestam et al., 1983) set a precedent for the methodology to examine attitudes towards those who commit or attempt suicide. This method can easily be applied to the study of adolescent attitudes towards peers who commit or attempt suicide by examining the reactions of a group of adolescents to a story about an adolescent suicide or suicide attempt. This methodology can also be used to assess peer knowledge of the risk factors related to adolescent suicide, as well as attitudes toward suicide.

Additionally, since evidence exists that suicide attempters may be viewed by society as more psychologically disturbed than actual completers (Selby et al., 1975), the adaptation of the Calhoun et al. (1980) measure will contain one story depicting a completed youth suicide and another story depicting an attempted youth suicide.

In summary the current investigation will use the adapted Calhoun measure and the SIRI measure to obtain
Information from a sample of high school students. Information in three areas will be obtained: 1) knowledge of risk factors that identify suicidal behavior in peers, 2) attitudes towards peers who attempt and commit suicide, 3) and capacity to respond appropriately to suicidal behavior in peers. The following hypotheses are made.

First, it is predicted that adolescents' knowledge of suicidal risk will vary as a function of the specific warning sign in question. Based upon clinically reported information, it is expected that adolescents' knowledge of depression and previous suicide attempts will be significantly better than their knowledge regarding the other warning signs (changes in behavior, direct suicide threat, expression of a desire to die, and making final arrangements). Second, subjects will express negative attitudes towards those who either complete or attempt suicide. Third, similar to the Selby et al. (1975) study, subjects will view attempters as more psychologically disturbed than actual completers. Fourth, subjects will be found to possess ability to respond to suicidal behavior in peers similar to the ability found for nursing students in the Inman et al. (1984) study. Fifth, ability to respond to suicidal communications will be independent of knowledge of risk factors that identify suicidal behavior (scores
on the adapted Calhoun and SIRI measure will not be significantly correlated).
METHODS

Subjects

The subjects who participated in this study were 130 high school sophomores, juniors and seniors. Ten students failed to complete the questionnaires discussed below; therefore, the questionnaires for only 120 students were used in the data analysis. There were 36 fifteen year olds, 38 sixteen year olds, 27 seventeen year olds, and 19 eighteen year olds. Of those students, 67 were females and 53 were males. The high school is located in a lower middle and working class Chicago suburb. School officials were contacted to gain initial permission to administer the questionnaires during individual classroom periods. Subjects were enrolled in either a sophomore general biology class, a senior human biology class, or a combined junior and senior social studies class. All subjects were given all questionnaires.

Materials

Two questionnaires were used in this investigation and can be found in Appendix A. The first questionnaire attempted to address the two major areas of peer knowledge and peer attitudes towards adolescent suicide. The questionnaire was in part based on Calhoun, et al. (1980) and contained two brief scenarios, one scenario depicting the attempted suicide of an adolescent and the
other depicting the completed suicide of an adolescent (Selby, et al., 1975). Each scenario was limited to a description of gender, age, and method used (Calhoun, et al., 1980). In both scenarios, the adolescent was described as a 17 year old male in order to keep age and gender constant. Each scenario depicted the youth as ingesting an overdose of barbiturates and either being found dead (completed suicide) or found unconscious and recovering in a local hospital (attempted suicide).

Each scenario was followed by 30 five-point Likert-type items in part based on Calhoun, et al. (1980), Rudestam, et al. (1983), and Selby, et al. (1975). The directions asked the subject to answer the following questions based on the limited information present in the scenario. The first 19 statements addressed peer knowledge; five were filler items while 14 were directly related to the six suicide risk factors discussed above: previous attempts, expressing a desire to die, suicide threats, changes in behavior, depression and making final arrangements.

For example, in assessing knowledge of possible depression, the subject was asked to indicate the extent to which the subject thought the following statement was likely: "This person felt depressed before attempting (committing) suicide". The items pertaining to depression were broken down into four separate questions.
referring to depression, hopelessness, change in eating patterns and change in sleeping patterns. The items pertaining to changes in behavior were broken down into six separate items referring to isolation from family or friends, difficulties or failures in school, relationship difficulties, and worry. The 19 statements also included five distractor or filler items, such as "This person experienced dizzy spells before attempting (committing) suicide".

The last 11 items addressed peer attitudes and pertained to the following areas: psychological disturbance of the adolescent, blame for the act, difficulty in expressing sympathy to the parents (Calhoun, et al., 1980), anger towards the parents (Rudestam, et al., 1983), intent of harm (Selby, et al., 1975), morality of the act, and cowardice of the act. For example, in assessing peer attitudes involving the possible psychological disturbance of the adolescent, the subject was asked to indicate the extent to which the subject agreed with the following statement, "This person was psychologically disturbed". Higher scores on the items indicated more negative attitudes.

The second measure used in this investigation assessed the subjects' capacity to respond appropriately to suicidal communications and was based on Neimeyer, et al. (1981). The adapted SIRI contained 26 hypothetical
comments of a suicidal adolescent to a peer. The actual comments and responses of the original version (Neimeyer, et al., 1981) were modified slightly to be more relevant to the experiences of adolescents (see Appendix A). There are two possible responses per statement, only one (the "correct" response) representing an appropriate reply that would facilitate effective intervention during a suicidal crisis. The SIRI items involved responding to an indirect or direct suicide threat, avoiding simple reassurances, and securing a verbal contract from the friend to refrain from self-harm (Neimeyer, et al., 1981). An additional item was added to assess whether subjects would know to inform an adult of a peer's suicidal behavior despite the friend's specific request not to do so.

The two questionnaires were followed by 12 demographic items concerning age and gender of the subject, as well as subjects' previous acquaintance with a suicidal peer. These latter items pertained to whether the subjects knew someone who contemplated, attempted, or committed suicide, as well as how well they knew this peer and how long ago the act occurred.

Procedure

Questionnaires were given during seven individual classroom periods. Subjects were told that the purpose of the study was to find out about high school students'
understanding of and reactions to peers who attempt and commit suicide. They were also told that participation was both voluntary and confidential. Whether students answered the questions pertaining to attempted or completed suicide in the first questionnaire was counterbalanced across subjects. Subjects always completed the SIRI last. After administration of the questionnaires, a class discussion was held in which the students were able to ask questions pertaining to the surveys and the topic of suicide in general. The students were also given information concerning the warning signs of suicide, and the importance of contacting an adult in authority when a peer exhibits suicidal behavior was emphasized.
RESULTS

The first task in the analysis was to examine each measure and establish acceptable levels of internal consistency. In general, this procedure entailed calculating a Cronbach alpha for each measure, inspecting the corrected item-total correlation for each scale item, removing poorly correlated items, and then re-calculating the alpha statistic. Copies of all the measures can be found in Appendix A. The general results for each measure were as follows.

Knowledge of Warning Signs

The initial Cronbach alpha was .88 for the nineteen items assessing knowledge of warning signs. Each item possessed acceptable item-total correlations ($r > .25$) and were therefore all retained.

Attitudes

Cronbach alpha for the original 11 items comprising the attitude scale was .47. Previous investigations examining these various attitudes toward suicidal behavior have treated each of the items as a separate scale (Calhoun, et al., 1980; Rudestam, et al., 1983; Selby, et al., 1975). However, when five of the items with low item-total correlations ($r < .06$) were removed in the present investigation, the alpha statistic rose to .74. Therefore, the final scale consisted of six items concerning the psychological
disturbance of the adolescent, blame for the act, immorality of the act, dishonor involved in the act, intent of harm and cowardice of the act. These six items are also contained in Appendix A.

SIRI

Cronbach alpha was .73 for the original 26 items on the adapted SIRI scale. Three of these 26 items were removed from the scale due to low item-whole correlations ($r \leq -.07$), correlations that were most likely the result of the modifications made and the use of different wording in the questions. The final 23 item scale possessed a Cronbach alpha of .77.

Preliminary Analyses

To determine if differences existed between reactions to attempted as compared to completed suicide scenarios, paired $t$-tests were computed on scores for both the knowledge and attitude scales. These $t$-values were nonsignificant, indicating similar reactions to attempted and completed suicides. As a result, the scores averaged across responses to attempted and completed suicides were used in the subsequent analyses.

Hypothesis One

In reference to the first hypothesis concerning knowledge of warning signs, responses to these items were first examined individually rather than as a scale of 19 items, despite the high internal consistency of
the items. This method of analysis was conducted due to the importance of gaining more specific data about which warning signs adolescents are and are not aware of. Furthermore, specific hypotheses were made concerning subjects' relative knowledge of different warning signs. Accordingly, subjects' knowledge of warning signs was examined in three ways.

First, one-sample $t$-tests were performed for each warning sign to discover whether mean responses differed significantly from the theoretical value of 3, represented on the questionnaire as "I don't know". Table 1 presents the means, standard deviations and $t$-values for these $t$-tests. Results demonstrated that the mean responses for 11 of the 14 $t$-tests for non-filler items were significant in the positive direction, indicating that subjects possessed accurate knowledge of most of the warning signs of suicide. However, results of two of the $t$-tests were significant in the negative direction (suicide threats and previous attempts), demonstrating inaccurate knowledge about certain warning signs. Furthermore, the mean response of one of the filler items (suicidal adolescent's thoughts raced) was significant in the positive direction, a result that demonstrates subjects inaccurately believed this item to be indicative of suicidal behavior.

Second, percentages of correct, incorrect and
Table 1

One-sample t-tests Assessing Knowledge of Suicide

Warning Signs

<table>
<thead>
<tr>
<th>Signs</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressed Desire to Die</td>
<td>3.26</td>
<td>1.02</td>
<td>2.76*</td>
</tr>
<tr>
<td>Suicide Threats</td>
<td>2.51</td>
<td>.94</td>
<td>-5.77*</td>
</tr>
<tr>
<td>Previous Attempts</td>
<td>2.39</td>
<td>.92</td>
<td>-7.24*</td>
</tr>
<tr>
<td>Depression</td>
<td>4.15</td>
<td>.79</td>
<td>15.94*</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>4.07</td>
<td>.79</td>
<td>14.71*</td>
</tr>
<tr>
<td>Change in Eating Patterns</td>
<td>3.29</td>
<td>.79</td>
<td>3.97*</td>
</tr>
<tr>
<td>Change in Sleeping Patterns</td>
<td>3.44</td>
<td>.78</td>
<td>6.12*</td>
</tr>
<tr>
<td>Worried</td>
<td>3.50</td>
<td>.81</td>
<td>6.83*</td>
</tr>
<tr>
<td>Gave Away Possessions</td>
<td>2.98</td>
<td>1.04</td>
<td>- .31</td>
</tr>
<tr>
<td>Isolated from Family</td>
<td>3.33</td>
<td>.95</td>
<td>3.83*</td>
</tr>
<tr>
<td>Isolated from Friends</td>
<td>3.18</td>
<td>1.02</td>
<td>1.96**</td>
</tr>
<tr>
<td>Problems in School</td>
<td>3.61</td>
<td>.85</td>
<td>7.85*</td>
</tr>
<tr>
<td>Failure in School</td>
<td>3.47</td>
<td>.78</td>
<td>6.50*</td>
</tr>
<tr>
<td>Break-up in Relationship</td>
<td>3.61</td>
<td>.78</td>
<td>8.60*</td>
</tr>
<tr>
<td>Felt Nausea</td>
<td>2.80</td>
<td>.62</td>
<td>-3.44*</td>
</tr>
</tbody>
</table>

(continued)
Table 1 (continued)

One-sample t-tests Assessing Knowledge of Suicide

Warning Signs

<table>
<thead>
<tr>
<th>Signs</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dizzy Spells</td>
<td>2.96</td>
<td>.61</td>
<td>- .76</td>
</tr>
<tr>
<td>Ears Ringing</td>
<td>2.88</td>
<td>.57</td>
<td>-2.31**</td>
</tr>
<tr>
<td>Easily Embarrassed</td>
<td>3.01</td>
<td>.78</td>
<td>.17</td>
</tr>
<tr>
<td>Thoughts Raced</td>
<td>3.93</td>
<td>.91</td>
<td>11.14*</td>
</tr>
</tbody>
</table>

Note. For each warning sign, one-sample t-tests were calculated to discover whether mean responses differed from the theoretical value of 3, represented on the questionnaire as "I don't know." Positive t-values represent accurate knowledge while negative t-values represent inaccurate knowledge.

*p < .01

**p < .05
don't know responses are presented in Table 2. The correct category reflected the percentage of those respondents who accurately reported the likelihood of a suicidal adolescent exhibiting those behaviors. The incorrect category reflected the percentage of those respondents who inaccurately reported the likelihood of a suicidal adolescent exhibiting those behaviors. The percentage of respondents who reported no knowledge of the items are presented in the don't know category.

Examination of these percentages reveals another meaningful picture of subjects' knowledge regarding suicidal signs. For example, in looking at the variable "expression of a desire to die", the mean value from Table 1 of 3.26 (SD=1.02) was significant ($t(119)=2.76$, $p<.01$), indicating knowledge of this warning sign for the group as a whole. However, the percentages in table 2 illustrate that although 51% of the subjects responded correctly, a clinically significant percentage of 31% answered incorrectly and another 18% responded "I don't know". Taken together, these percentages indicate that a full 49% of the adolescent subjects failed to recognize that a suicidal peer may express his/her desire to die before attempting or committing suicide. Another example concerns the variable "isolated from family" in which the mean value of 3.33 (SD=.95) was also significant ($t(119)=3.83$, $p<.01$). Again, 55% of
Table 2
Percentages Indicating Accurate, Inaccurate and a Lack of Knowledge of Suicide Warning Signs

<table>
<thead>
<tr>
<th>Signs</th>
<th>Incorrect</th>
<th>I Don't Know</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressed Desire to Lie</td>
<td>31</td>
<td>18</td>
<td>51</td>
</tr>
<tr>
<td>Suicide Threats</td>
<td>42</td>
<td>42</td>
<td>16</td>
</tr>
<tr>
<td>Previous Attempts</td>
<td>43</td>
<td>44</td>
<td>13</td>
</tr>
<tr>
<td>Depression</td>
<td>4</td>
<td>22</td>
<td>74</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>5</td>
<td>16</td>
<td>79</td>
</tr>
<tr>
<td>Change in Eating Patterns</td>
<td>10</td>
<td>57</td>
<td>33</td>
</tr>
<tr>
<td>Change in Sleeping Patterns</td>
<td>6</td>
<td>55</td>
<td>39</td>
</tr>
<tr>
<td>Worried</td>
<td>13</td>
<td>34</td>
<td>53</td>
</tr>
<tr>
<td>Gave Away Possessions</td>
<td>23</td>
<td>51</td>
<td>26</td>
</tr>
<tr>
<td>Isolated from Family</td>
<td>18</td>
<td>37</td>
<td>45</td>
</tr>
<tr>
<td>Isolated from Friends</td>
<td>27</td>
<td>29</td>
<td>44</td>
</tr>
<tr>
<td>Problems in School</td>
<td>10</td>
<td>34</td>
<td>56</td>
</tr>
<tr>
<td>Failure in School</td>
<td>10</td>
<td>43</td>
<td>47</td>
</tr>
<tr>
<td>Break-up in Relationship</td>
<td>6</td>
<td>40</td>
<td>54</td>
</tr>
</tbody>
</table>

(continued)
Table 2 (continued)

Percentages Indicating Accurate, Inaccurate and a Lack of Knowledge of Suicide Warning Signs

<table>
<thead>
<tr>
<th>Signs</th>
<th>Incorrect</th>
<th>I Don't Know</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt Nausea</td>
<td>21</td>
<td>71</td>
<td>8</td>
</tr>
<tr>
<td>Dizzy Spells</td>
<td>14</td>
<td>72</td>
<td>14</td>
</tr>
<tr>
<td>Ears Ringing</td>
<td>15</td>
<td>77</td>
<td>8</td>
</tr>
<tr>
<td>Easily Embarrassed</td>
<td>18</td>
<td>62</td>
<td>20</td>
</tr>
<tr>
<td>Thoughts Raced</td>
<td>5</td>
<td>33</td>
<td>62</td>
</tr>
</tbody>
</table>

Note. Percentages were divided into three categories. The correct category reflected the percentage of those respondents who accurately reported the likelihood of a suicidal adolescent exhibiting those behaviors. The incorrect category reflected the percentage of those respondents who inaccurately reported the likelihood of a suicidal adolescent exhibiting those behaviors. The percentage of respondents who reported no knowledge of the items are presented in the don't know category.
the subjects failed to realize that a suicidal adolescent may feel isolated from his/her family. Other examples of similar patterns can be found in Table 2 for items such as "change in eating and sleeping patterns", as well as "problems in school".

Third, outcomes concerning knowledge of warning signs were examined specifically to discern whether knowledge of signs of depression and previous attempts were significantly greater than knowledge of the remaining warning signs, as stated in the first hypothesis. Results partially support this hypothesis. Paired $t$-tests indicate subjects did indeed possess significantly greater knowledge of signs of depression and previous attempts combined ($M=3.47, \text{SD}=.56$) when compared to the remaining warning signs combined ($M=3.27, \text{SD}=.57$), $t(119)=5.09, p<.01$. However, upon closer examination, the data indicate this difference results from the responses to the depression item. Whereas 74% of the subjects knew depression was a warning sign of suicidal behavior, only 13% knew a previous suicide attempt was also a warning sign.

In sum, the analyses conducted for the first hypothesis indicate that although subjects possessed accurate knowledge for some of the suicide warning signs, they also lacked or possessed inaccurate knowledge of other warning signs.
Hypothesis Two

The second hypothesis predicted that subjects would hold negative attitudes towards those who exhibit suicidal behavior. A one sample \( t \)-test was performed for the six item attitude scale to discover whether the mean response across items also differed from the theoretical value of 3 (i.e., a "neutral" attitude). This mean score (\( M=3.71, SD=.79 \)) was significant in the expected direction, \( t(119)=9.81, p<.01 \), indicating that subjects possessed negative attitudes towards adolescents' suicidal behavior. Thus results confirmed hypothesis two.

Hypothesis Three

Besides examining attitudes as a scale of six summed items, paired \( t \)-tests were computed on the individual items to look at differences between attempted and completed suicide stories. This type of analysis was conducted in part as a replication of a previous investigation. More specifically, similar to Selby, et al. (1975), the third hypothesis predicted that suicide attempters would be viewed as significantly more psychologically disturbed than suicide completers. In direct contrast to what was predicted, subjects viewed actual suicide committers (\( M=3.89, SD=1.04 \)) as significantly more psychologically disturbed than suicide attempters (\( M=3.73, SD=1.13 \)), \( t(119)=-2.09, \).
Although not specifically predicted in previous studies nor in the present study, differences for the other individual items on the scale were also examined. Results indicated significance for one of these individual items. Subjects found the suicidal act significantly more "dishonorable" when the adolescent in the story attempted suicide \((M=3.74, SD=1.34)\) as compared to committed suicide \((M=3.61, SD=1.40)\), \(t(119)=1.70, p<.05\).

**Hypothesis Four**

The fourth hypothesis predicted that subjects would possess an ability to respond to suicidal communication from peers similar to the ability of nursing students found in the Inman, et al. (1984) study. Scores on the adjusted SIRI range from 0 to 23 with higher scores reflecting more knowledge of how to respond when a peer communicates suicidal messages. Since scores on the original SIRI range from 0 to 25, mean scores from previously mentioned studies (Inman, et al., 1984; Neimeyer, et al., 1981) were adjusted to reflect mean scores as if the top range were 23. These adjusted mean scores can be found in Table 3. In comparison, the mean score for subjects in the present study was 10.57 \((SD=4.06)\), a score that indicates subjects in the current investigation possess considerably less knowledge than the other groups.
Table 3

Adjusted Mean for SIRI

<table>
<thead>
<tr>
<th>Study</th>
<th>Subjects</th>
<th>Adjusted Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Inman et al., 1984)</td>
<td>nursing students</td>
<td>19.09</td>
</tr>
<tr>
<td>(Neimeyer et al., 1981)</td>
<td>adult education students</td>
<td>16.23</td>
</tr>
<tr>
<td>(Neimeyer et al., 1981)</td>
<td>newly trained crisis workers</td>
<td>21.21</td>
</tr>
<tr>
<td>(Neimeyer et al., 1981)</td>
<td>veteran crisis workers</td>
<td>22.24</td>
</tr>
<tr>
<td>Current Study</td>
<td>high school students</td>
<td>10.57</td>
</tr>
</tbody>
</table>

Note. Mean SIRI scores were adjusted from previous studies to make them comparable to the current study. With the adjustment, higher scores reflect better capacity to respond to suicidal communications (range 0 to 23).
mentioned in Table 3. This mean score for the high school students is more than eight points lower than the adjusted mean score for the nursing students (19.09) in the Inman, et al. (1984) study. Capacity to respond to suicidal communications in peers appears to be quite poor for adolescent subjects.

**Hypothesis Five**

The fifth hypothesis predicted that ability to respond to suicidal communication in peers would be independent of knowledge of risk factors that identify suicidal behavior. This prediction was based on the Inman et al. (1984) finding that a lack of statistical association was present when the original SIRI was correlated with a knowledge scale different from the one in the present study. Similarly, the Pearson product-moment correlation computed between the knowledge scale in the present study and the modified SIRI was .16 and was not significant at the .05 level. Although there is no alpha level for failing to reject the null hypothesis, this outcome appears to replicate the Inman et al. (1984) finding, and the lack of association indicates a consistency in this expected independence.

**Additional Analyses**

Independent t-tests were conducted to examine the effects of first, gender, and second, previous acquaintance with a suicidal peer on the knowledge,
attitudes and capacity to respond variables. Interestingly, gender differences were found only when looking at attitudes towards suicidal peers and capacity to respond to suicidal communications from peers. Males held attitudes that were significantly more negative ($M=3.98, SD=.75$) than those held by females ($M=3.51, SD=.77$), $t(118)=3.30, p<.01$. Also, females were found to possess significantly greater capacity to respond to suicidal communications in peers ($M=11.80, SD=4.22$) than males ($M=8.96, SD=3.22$); $t(118)=4.19, p<.01$.

Pearson product-moment correlations were computed to examine a possible relationship between attitudes and capacity to respond when males and females were examined separately. A significant inverse relationship between these variables existed for each sex. For males, the correlation was $-.43, p<.01$, and for females, it was $-.36, p<.01$. This result indicates that more negative attitudes in both males and females are associated with less capacity to respond to suicidal messages from peers.

No significant correlations were found between knowledge and capacity to respond, or between knowledge and attitudes when males and females were examined separately.

Previous acquaintance with a suicidal peer was
assessed in terms of whether subjects knew someone who
committed, attempted, or thought about suicide. Of the
120 subjects 98 knew someone who had committed suicide.
The t-tests showed that those subjects who knew someone
who committed suicide possessed significantly better
capacity to respond to suicidal peers ($M=10.96$, $SD=4.24$)
than those subjects who did not know someone who
committed suicide ($M=8.86$, $SD=2.53$), $t(118)=3.04$, $p<.05$.
The t-tests indicated no other significant differences
concerning subjects who knew someone who committed
suicide.

Of the 120 respondents, 73 knew someone who
attempted suicide. No significant differences were
found when t-tests were computed concerning this variable.

Of the 119 subjects who responded to this
question, 91 knew someone who had thought about suicide.
The t-tests revealed significant differences only for
negative attitudes and capacity to respond. Those
subjects who did not know someone who thought about
suicide held attitudes that were significantly more
negative ($M=4.03$, $SD=.51$) than those subjects who knew
someone who had thought about suicide ($M=3.61$, $SD=.85$),
$t(117)=3.17$, $p<.01$. Also, those subjects who did not
know someone who thought about suicide ($M=8.82$, $SD=4.11$)
possessed significantly less capacity to respond than
DISCUSSION

In general, the results of this study lend support to the notion that educating adolescents about suicide is necessary. The outcomes concerning knowledge of suicide warning signs, attitudes, and capacity to respond to suicidal communications all point to such a need. A substantial minority of subjects possessed either inaccurate or lacked accurate knowledge of many warning signs of suicide. Subjects also held quite negative attitudes towards those adolescents who exhibit suicidal behavior. Finally, the respondents as a group appeared to possess limited capacity to respond appropriately to suicidal communications from peers. The implication of the current findings is that future educational efforts should clearly focus on all three of the above dimensions (i.e., knowledge, attitudes, and behavior). Current findings also suggest how effective educational programs could help prevent suicide.

In reference to knowledge of suicide warning signs, it is reassuring to note that many of the subjects did possess accurate knowledge of some suicide warning signs. For example, most subjects were able to identify depression and hopelessness as indicators of possible suicidal behavior. However, the fact that eight of the 14 warning signs were correctly identified by less than 50% of the subjects is quite distressing.
That these adolescents either lacked such knowledge, or in some instances, actually possessed inaccurate knowledge regarding suicidal warning signs is clinically significant. If a considerable number of adolescents fail to recognize behavior in their peers that indicates suicidal potential, many of those suicidal adolescents may remain unidentified and eventually might initiate self-destructive behavior. Therefore, the ability of adolescents to accurately recognize such behavior in peers certainly needs to be increased.

Results pertaining to the second hypothesis demonstrate that adolescents do indeed hold negative attitudes towards peers who exhibit suicidal behavior. These attitudes parallel general societal attitudes found in previous investigations (Calhoun et al., 1980; Calhoun, et al., 1979; Kalish, et al., 1974; Range, et al., 1985; Rudestam, et al., 1983). The possession of such attitudes has special implications for those at the high school level. First, it seems quite probable that a suicidal adolescent's feelings of isolation from friends could be exacerbated if those peers learned that the adolescent was suicidal.

Second, after attempting suicide, many adolescents will return to their high school community. These students face possible stigmatization that may accompany negative attitudes. This stigmatization could
conceivably make a return to the high school community a more painful and distressing experience. If suicide prevention programs were present at the high school level, the accurate knowledge gained by the students might conceivably lead to less negative attitudes and perhaps, in turn, more empathetic behaviors toward suicidal peers. These changes in attitudes and behavior could result in a less distressing reentry into the high school community for the attempter.

Results from the third hypothesis were in direct contrast to the prediction that suicide attempters would be perceived as psychologically more disturbed than committers. The results also conflict with the findings of Selby, et al. (1975) who found a subject population of various ages considered a suicide committer as less disturbed ("mentally ill") than a suicide attempter. The evidence in the present study indicates that when the suicidal act of an adolescent results in death, the suicidal youth is perceived as more disturbed by his peers than a suicide attempter. It appears that adolescents differ in their viewpoints on this matter from the general population. In speculating about this finding, it is possible that committers are viewed as more troubled and as possessing less options for help because of the fact that they have gone to the extreme of completing the suicidal act.
In contrast, attempters were viewed as more dishonorable than completers. This result may indicate that because no death resulted, the attempt was viewed as more manipulative than a completed act. Ross (1985) notes concern in the general population that some adolescent suicide attempts are not a "last resort message" (p. 154); rather, they are a means of "gaining attention" (p. 154).

In reference to the fourth hypothesis concerning adolescents' capacity to respond to suicidal communications from peers, the current investigation demonstrated that these students possessed ability that was quite poor when compared to other age groups. Overall, subjects answered less than half of the 23 questions on the revised SIRI correctly, indicating that if a peer were to communicate a suicidal message, the average adolescent would not be prepared to respond adequately. This fact is especially disturbing since adolescents apparently often communicate suicidal messages to their peers (Ross, 1985). If many-adolescents do not possess sufficient skills to respond appropriately, then are probably unable to effectively act in the prevention of possible suicide attempts, or more importantly, actual suicides.

While subjects in the study did appear to possess some knowledge in recognizing warning signs, it seems
clear that they did not possess the skills to act upon what they knew. As a result, two skill areas: recognition of suicide warning signs, and intervention competency, appear to be independent of each other. Indeed, the fact that these two skill areas were found to be statistically independent as predicted by the fifth hypothesis strengthens this argument. Thus, the notion that these two domains be treated separately in suicide training programs (Inman et al., 1984) is given support by the present results. In other words, if adolescents are taught the warning signs of suicide in a prevention program, it cannot be assumed that they will then know how to respond effectively when confronted with a peer exhibiting those signs.

The importance of exploring what factors have contributed to subjects' lack of intervention skills seems readily apparent. A more distinct picture of these factors may emerge when the relationship between capacity to respond and negative attitudes is examined. As noted previously, an inverse relationship was found for both males and females when looking at these two variables. In other words, the more negative attitudes the subjects possessed, the less capacity they possessed to respond to suicidal communications. This result may indicate that negative attitudes towards those who exhibit suicidal behaviors act to impede peers from
learning adequate intervention skills. For example, Inman, et al. (1984) noted that beliefs about suicide prevention can affect untrained workers' initial intervention skills. The present study suggests that beliefs that affect intervention skills can be extended to include negative attitudes towards those exhibiting suicidal behavior.

The gender differences found in relation to negative attitudes and capacity to respond seem to strengthen this argument. Because males hold significantly more negative attitudes and at the same time, possess significantly less capacity to respond than females, it is possible to argue that males' more negative perceptions of suicidal peers might be influencing their level of initial skill in responding to suicidal peers. The correlational analyses conducted in this study, however, restricts such reasoning to mere speculation.

In examining the methodology and analyses conducted in this investigation, it is possible to perceive three limitations: 1) the restriction in interpretation of the correlational analyses conducted and mentioned above, 2) the large number of subjects previously acquainted with a person who has displayed suicidal behavior, and 3) the fact that all subjects were given both scenarios about attempted and completed
suicides.

First, due to the descriptive nature of the study, correlational analyses were conducted to examine the relationships between knowledge of warning signs, attitudes, and capacity to respond to suicidal communications. Therefore, the study is limited in its ability to make causal inferences. For example, previous acquaintance with someone who committed or thought about suicide was associated with increased capacity to respond to suicidal messages. Although it would be important to possess more information about the relationship between these two variables, stronger inferences cannot be made. Further investigation is necessary to determine the causal nature of the relationships between these variables.

Second, it was surprising to find the large number of subjects who were acquainted with someone who committed (N=98), attempted (N=73), or thought (N=91) about suicide. A consequence of having such a large number of subjects acquainted with a suicidal person is to limit the study in terms of its generalizability. If other populations of adolescents are not acquainted with suicidal persons to the same degree, then the ability to extend the present results to other populations is restricted. It seems important, therefore, to determine whether adolescents are indeed acquainted with suicidal
persons to the extent reported in the current study. If this is actually found to be true, then the need for widespread prevention programs at the high school level becomes even more urgent.

Third, another limitation that may lead to cautious interpretation of the results is the fact that all subjects were given both the scenario about attempted and completed suicides. This fact may have led respondents to realize a comparison was being made between reactions to attempted versus completed suicides. As a result, their responses to these items may have been influenced. For example, the lack of differences found between reactions to attempted and completed suicides might have been the result of this influence. Therefore, future studies where the scenarios depicting attempted and completed suicides are presented to separate groups of adolescents might prove helpful.

In sum, the present study attempted to assess adolescents' knowledge, attitudes, and capacity to respond to peers exhibiting suicidal behavior. Two measures were constructed to assess the three areas of interest. These measures were in part a modification of other measures (Calhoun, et al., 1980; Neimeyer, et al., 1981) to make them more relevant for the adolescent subject. The first measure included the construction of
a knowledge scale and an attitude scale, both of which were found to be reliable for the high school aged person.

For the particular items that examined attitudes, previous investigations have treated such items separately and not combined them into a scale (Calhoun, et al., 1980; Rudestam, et al., 1983; Selby, et al., 1975). However, the present study found six of the original eleven items used to be internally consistent. Therefore those six items were constructed into a scale that seems to be capable of assessing negative attitudes towards suicidal behavior. Further empirical support is obviously needed for the use of this scale, and the knowledge scale, with adolescent populations. The revised SIRI, which was also found to be reliable, needs further empirical support for its ability to assess adolescents’ capacity to respond to suicidal communications from peers.

Future study can also investigate other possible uses for these scales. For example, the feasibility of using these scales to evaluate the success of adolescent suicide prevention programs can be investigated. It may be possible to use the scales as pre- and post- measures to assess any change in the three areas (i.e., knowledge, attitudes, and capacity) that may have resulted from participation in suicide prevention
Empirical evidence for the need for more widespread implementation of suicide prevention programs has been presented. More importantly, the study provides empirical data on the foci for such programs, namely, knowledge of suicide warning signs, attitudes, and ability to respond to suicidal communications from peers. The results of this study suggest that preventative education at the high school level should address all three domains when dealing with the topic of suicide. The possession of less negative attitudes by high school peers may help to reduce feelings of isolation in the suicidal adolescent. It is hoped that the acquisition of accurate knowledge in these domains will result in not only a less painful reentry into the high school community for the adolescent attempter, but most importantly, a reduction in the current rates of suicide.
REFERENCES


APPENDIX A
Please read the short paragraph below and answer the questions following it.

Jim Smith, a 17-year-old student at American Public High School, was found dead yesterday afternoon. Police report the youth took an overdose of barbiturates. People who knew Jim Smith were shocked by news of his suicide. Mike Jones, a close friend, said, "I just can't believe that Jim would do something like this." Jim is survived by his parents, Mr. and Mrs. Matthew Smith.

Based on the limited information you have been given, please indicate the extent to which you think the following statements are likely. Place the number that matches your response on the dotted line that precedes each question.

1. This person expressed a desire to die before committing suicide.
   
2. This person made suicide threats before he committed suicide.

3. This person has attempted suicide before.

4. This person felt depressed before committing suicide.

5. This person was troubled by attacks of nausea and vomiting before committing suicide.

6. This person felt hopeless before committing suicide.

7. This person experienced a change in eating patterns before committing suicide.
8. This person experienced a change in sleeping patterns before committing suicide.

9. This person experienced dizzy spells before committing suicide.

10. This person seemed worried before committing suicide.

11. This person felt their ears ringing before committing suicide.

12. This person gave away possessions before committing suicide.

13. This person was cut off or isolated from family members before committing suicide.

14. This person was cut off or isolated from friends before committing suicide.

15. This person felt easily embarrassed before committing suicide.

16. This person experienced problems in school before committing suicide.

17. This person experienced a failure in school before committing suicide.

18. This person experienced a break up in a relationship before committing suicide.

19. This person's thoughts raced before committing suicide.

Based on the limited information you have been given, please indicate the extent to which you agree or disagree with the following statements. Place the number that matches your response on the dotted line that precedes each questions.

1 2 3 4 5
highly moderately I don't moderately highly
disagree disagree know agree agree
20. This person was psychologically disturbed.*
21. This person thought of himself as psychologically disturbed.
22. This person seriously intended to harm himself.*
23. This person took the easy way out.
24. This person acted in a cowardly manner.*
25. This was a dishonorable thing to do.*
26. This was an immoral thing to do.*
27. It would be difficult to express sympathy to the parents of this person.
28. If I knew his parents, I would feel angry towards them.
29. Ultimately, the blame for this suicide rests with Jim Smith.*
30. Ultimately, the blame for this suicide rests with Jim Smith's family.

*These items are included in the final scale of attitudes towards suicidal behavior.
SUICIDE SCENARIOS

Attempted Suicide

Please read the short paragraph below and answer the following questions.

Jim Smith, a 17-year-old student at American Public High School, was found unconscious yesterday afternoon. Police report the youth took an overdose of barbiturates. People who knew Jim Smith were shocked by news of his attempted suicide. Mike Jones, a close friend, said, "I just can't believe that Jim would do something like this." Jim received emergency medical treatment and is now in stable condition at Doctor's Hospital.

Based on the limited information you have been given, please indicate the extent to which you think the following statements are likely. Place the number that matches your response on the dotted line that precedes each question.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>highly unlikely</td>
<td>moderately unlikely</td>
<td>I don't know</td>
<td>moderately likely</td>
<td>highly likely</td>
</tr>
</tbody>
</table>

1. This person expressed a desire to die before attempting suicide.

2. This person made suicide threats before he attempted suicide.

3. This person has attempted suicide before.

4. This person felt depressed before attempting suicide.

5. This person was troubled by attacks of nausea and vomiting before attempting suicide.

6. This person felt hopeless before attempting suicide.

7. This person experienced a change in eating patterns before attempting suicide.
8. This person experienced a change in sleeping patterns before attempting suicide.

9. This person experienced dizzy spells before attempting suicide.

10. This person seemed worried before attempting suicide.

11. This person felt their ears ringing before attempting suicide.

12. This person gave away possessions before attempting suicide.

13. This person was cut off or isolated from family members before attempting suicide.

14. This person was cut off or isolated from friends before attempting suicide.

15. This person felt easily embarrassed before attempting suicide.

16. This person experienced problems in school before attempting suicide.

17. This person experienced a failure in school before attempting suicide.

18. This person experienced a break up in a relationship before attempting suicide.

19. This person's thoughts raced before attempting suicide.

Based on the limited information you have been given, please indicate the extent to which you agree or disagree with the following statements. Place the number that matches your response on the dotted line that precedes each questions.

1 highly disagree
2 moderately disagree
3 I don't know
4 moderately agree
5 highly agree
20. This person was psychologically disturbed.*

21. This person thought of himself as psychologically disturbed.

22. This person intended to seriously harm himself.*

23. This person took the easy way out.

24. This person acted in a cowardly manner.*

25. This was a dishonorable thing to do.*

26. This was an immoral thing to do.*

27. It would be difficult to express sympathy to the parents of this person.

28. If I knew his parents, I would feel angry towards them.

29. Ultimately, the blame for this suicide attempt rests with Jim Smith.*

30. Ultimately, the blame for this suicide attempt rests with Jim Smith's family.

*These items are included in the final scale of attitudes towards suicidal behavior.
Suicide Intervention Response Inventory

Directions: Imagine you are counseling a friend. Imagine that your friend makes the following statements. Each statement begins with an expression by your friend concerning some aspect of the situation he/she faces. For each statement, select the response that you feel is the more appropriate reply to your friend's statement, recording either "A" or "B" to the left of the item to indicate your preferred response. Be sure to select only one response per item, and try not to leave any item blank.

1. Friend: I decided to call you tonight because I really feel like I might do something to myself...I've been thinking about suicide.

   Helper A: You say you're suicidal, but what is it that's really bothering you?
   Helper B: Can you tell me more about your suicidal feelings?

2. Friend: And now my health is going downhill, too, on top of all the rest. Without my girlfriend around to care for me anymore, it just seems like the end of the world.

   Helper A: Try not to worry so much about it. Everything will be alright.
   Helper B: You must feel pretty lonely and afraid of what might happen.

3. Friend: But my thoughts have been so terrible...I could never tell them to anybody.

   Helper A: You can tell me. I'm a friend, and I can be objective about these things.
   Helper B: Some of your ideas seem so frightening that you imagine other people would be shocked to know you are thinking such things.

4. Friend: No one can understand the kind of pain I've been going through. Sometimes I just feel like I have to hurt myself, so I cut my wrists.
Helper A: It seems like you've been suffering so much that cutting your wrists is the only way you can make the pain go away.

Helper B: But you're so young, you have so much to live for. How can you think of killing yourself?

Friend: How do you know what I've been going through? You've probably always had it soft.

Helper A: I think you're wondering if I can understand how you feel.

Helper B: You're not even giving me a chance. I've had a pretty rough life too; you're not the only one who's seen some hard times.

Friend: My life has been worthless ever since my girlfriend, Emma, broke up with me four months ago. I'm lonely without her, and I feel distant from my friends, too. It just seems that I'd be better off dead.

Helper A: But try to think of what Emma would want for you. She'd want you to continue leading a productive life, wouldn't she?

Helper B: It sounds like everything just collapsed around you when Emma broke up with you. But what has happened recently to make things even worse, to make you think that dying is the only way out?

Friend: I really need help...it's just...(voice breaks; silence)

Helper A: It must be hard for you to talk about what's been bothering you.

Helper B: Go on, I'm here to listen to you talk.

Friend: When you sum up my problem like that, it makes it seem less confusing and not so scary.

Helper A: See, it really isn't so bad after all. It certainly isn't anything you would think of killing yourself over, is it?

Helper B: Sometimes talking about problems does make them a bit clearer. I think you realized how dangerous your suicidal feelings were, and that's why you decided to contact me.
9. Friend: You were supposed to help me, but you've only made things worse.

Helper A: I'm sorry. I was only trying to help.
Helper B: You sound pretty angry.

10. Friend: How could you ever help me? Have you ever wanted to kill yourself?

Helper A: It sounds like you're concerned about whether I can understand and help you.
Helper B: Sure, I've thought about suicide sometimes, but I always found more realistic solutions to my problems.

11. Friend: I don't know...this whole thing with my girlfriend really gets to me. (Sobs.) I try so hard to keep from crying...

Helper A: Do you think that the reason it's hard for you to cry is because you're male?
Helper B: With all the hurt you're feeling, it must be impossible to hold those tears in.

12. Friend: How can I believe in God anymore? No God would ever let this happen to me; I've never done anything to deserve what's happened.

Helper A: Things have gotten so bad, that it's difficult to see any meaning in the things that have happened to you.
Helper B: Well, God works in mysterious ways. Maybe this is His way of testing your faith.

13. Friend: I don't know why I'm calling you. My family is well off, and they spend plenty of time with me if I want them to. I get good marks at school and have lots of free time to spend with my friends. But nothing seems to interest me. Life is just a bore...

Helper A: Considering all you have going for you, your problems can't be all that serious. Try to focus more on the positive aspects of your situation.
Helper B: So even though things seem to be going well at one level, life still seems pretty depressing, even if it's hard to say exactly why.
14. Friend: I have to hang up now. My mother's coming home soon, and I don't want her to know I've been talking to you about this.

Helper A: Okay, but if you keep feeling suicidal, remember you can always call back.

Helper B: All right, but first I want you to promise me you won't do anything to hurt yourself, until you call and talk to me again. Will you repeat that promise?

15. Friend: Is that really true, that many people feel this way? I thought I was the only one who had such dreadful sinful ideas.

Helper A: No, there are many people who suffer from illness. But with appropriate treatment by a qualified physician, some of these patients can be cured.

Helper B: It is true. You're not the only one who has suicidal thoughts. And you can be helped to get through this crisis, just as others have been.

16. Friend: I'm so lonely, so tired (crying). There just isn't anywhere left to turn.

Helper A: You seem so alone, so miserable... Have you been feeling suicidal?

Helper B: Come on now. Things can't be all that bad.

17. Friend: (Over telephone). It's hard to talk here, with all these people...

Helper A: Would it help if I asked questions?

Helper B: Why don't you call back some other time when you can talk more easily?

18. Friend: I have a gun pointed at my head right now, and if you don't help me, I'm gonna pull the trigger!

Helper A: You seem to be somewhat upset.

Helper B: I want you to put the gun down so we can talk.
19. **Friend**: Why should you care about me, anyway?

**Helper A**: I'm supposed to care about my friends. That's what friends are for.

**Helper B**: Because I think your death would be a terrible waste, and it concerns me that things are so bad that you are considering suicide. You need help to get through this critical period.

20. **Friend**: I don't think there's really anyone who cares whether I'm alive or dead.

**Helper A**: It sounds like you're feeling pretty isolated.

**Helper B**: Why do you think that no one cares about you anymore?

22. **Friend**: I tried going to a therapist once before, but it didn't help...nothing I do now will change anything.

**Helper A**: You've got to look on the bright side! There must be something you can do to make things better, isn't there?

**Helper B**: Okay, so you're feeling hopeless, like even a therapist couldn't help you. But has anyone else been helpful before--maybe another friend, relative, teacher or clergyman?

23. **Friend**: My psychiatrist tells me I have an anxiety neurosis. Do you think that's what's wrong with me?

**Helper A**: I'd like to know what it means to you, in this present situation. How do you feel about your problem?

**Helper B**: I'm not sure I agree with that diagnosis. Maybe you should seek out some psychological testing, just to be certain.

24. **Friend**: I can't talk to anybody about my situation. Everyone is against me.

**Helper A**: That isn't true. There are probably lots of people who care about you, if you'd only give them a chance.

**Helper B**: It must be difficult to find help when it's so hard to trust people.
25. **Friend:** (Voice slurred, unclear over telephone).

    **Helper A:** You sound so tired. Why don't you get some sleep and call back in the morning?
    **Helper B:** Your voice sounds slurred. Have you taken anything?

26. **Friend:** I've been thinking about suicide lately, but I don't want you to tell anyone about it, not my parents, not any adult!

    **Helper A:** You know you can trust me. I won't let you down. I won't tell a soul.
    **Helper B:** I know you don't want me to tell anyone, but I'm concerned about you, and if you don't tell an adult about how you've been feeling, I will.
General Information

1. age ______

2. gender  M  F

3. Have you known someone who has committed suicide? (Circle one, please) yes  no

4. If so, what was that person's age at the time of his (her) suicide? ______

5. How long ago did the suicide occur? _____

6. How well did you know the person? (Circle one, please) very well moderately well not at all

7. Have you known someone who has attempted suicide? (Circle one, please) yes  no

8. If so, what was that person's age at the time of his (her) suicide attempt? ______

9. How long ago did the suicide attempt occur? _____

10. How well did you know the person? (Circle one, please) very well moderately well not at all

11. Have you known someone who has thought of suicide? (Circle one, please) yes  no

12. If so, what was the age of this person when they told you about their thoughts? ______
The thesis submitted by Eileen M. Norton has been read and approved by the following committee:

Dr. Joseph A. Durlak, Director
Professor, Psychology, Loyola

Dr. Alan DeWolfe
Professor, Psychology, Loyola

Dr. Maryse Richards
Assistant Professor, Psychology and
Director, Developmental Department, Loyola

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

August 6, 1947
Date

Director’s Signature