YOUTH SUICIDE

Issues, Assessment, and Intervention

Edited by

PETER CIMBOLIC
DAVID A. JOBES

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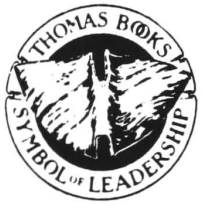

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To my uncle, Stephen Cimbolic, who has been like a brother,
a father, and is always a friend.
PC

To my parents, Frank and Helen, and Colleen.
DAJ

PREFACE

Youth suicide has increased dramatically over the last thirty-five years. Depending on the subgroup under examination, suicide is now the second or third leading cause of death in young people between the ages of fifteen and twenty-four years. Clearly, the emotional impact of these losses is tremendous. While many of us think of being young as a carefree time of little responsibility, the fact remains that young people are killing themselves at alarmingly high rates. In recent years the media has brought attention to this increase, but this coverage has often resulted in hyperbole and a distortion of the facts. We would therefore like to present in this book the problem of youth suicide in a balanced, factual manner, using both empirical and clinical data. As much as possible, we have interspersed specific suggestions we have found useful as experienced clinicians.

To begin our discussion, we are going to first explore the basic scope of the problem from an epidemiological, demographic, and sociocultural perspective. For example, we will examine the changing patterns of those at risk for suicide by age, gender, and method over the last twenty years. Having considered suicide first from a general perspective, we will then review issues of suicide risk assessment in youth by considering the difficulties in trying to "predict" an extremely low base-rate event like suicide.

Our discussion of assessment begins with "objective" paper-and-pencil self-report instruments. An examination of their validity and reliability as it relates to suicide risk will be considered and what they may add to the precision in this science/art of clinical assessment. The assessment focus will shift somewhat as we consider the clinical/diagnostic interview as it specifically applies to the assessment of suicidal risk. Discussion of the various interview tools and techniques of assessment will be presented which can be integrated to obtain information which will lead to the best overall global index of suicide risk at a particular point in time. We feel

strongly that the appropriate assessment of suicide should not, or cannot, be limited to one discrete assessment procedure at one moment in time, since competent assessment of suicide requires a variety of data obtained in an ongoing process. Clinicians often find that those who were not at risk when initially evaluated may become suicidal later, while the converse could be true as well. In that vein, we shall stress that the delineation between suicide assessment and intervention is an obscure (if not impossible) distinction to make. Therefore, our subsequent discussion of treatment is closely intertwined with ongoing assessment of risk.

We realize that in dealing with potential suicide victims in either assessment or treatment ethical and legal dilemmas confront the "helper." In working with minors these issues become even more complex. Therein we will try to provide the reader some perspective to the various forces that come into play from a legal and ethical perspective and how these impact the person in the helper/assessor role.

The focus will then shift as we consider "special issues" unique to youth suicide which have not been as extensively addressed in the literature. The first of these issues centers on aftermath of suicide—those issues which confront those who survive a youthful suicide. While the pain associated with any death may seem unbearable, survivorship is that much more accentuated when the victim is a young person who dies by their own hand. Often, the survivors of youth suicide are ignored in their communities and frankly in the suicide literature (until more recently). To more fully address this topic, a chapter will focus specifically on this forgotten constituency.

Imitative (modelling) effects of suicide, the "Werther effect," and the occurrence of suicide "clusters" is another set of special issues which has received a great deal of recent attention. We will discuss both the relevant history and empirical data which bear on the evolution of thinking related to these phenomena.

A final issue we will explore is that of school-based suicide prevention (curriculum) programming. While intuitively appealing, the scant research conducted on such programming has provided some mixed results. In our final chapter we will present the inherent issues and recommendations related to the role and scope of suicide education as a means of suicide prevention within secondary education.

P.C.
D.A.J.

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YOUTH SUICIDE

Chapter 1

YOUTH SUICIDE: THE SCOPE OF THE PROBLEM

Peter Cimbolic, Ph.D. and David A. Jobes, Ph.D.

Introduction

Over the past ten years there has been a significant increase in the public's awareness of youth suicide. Much of this recent awareness has come from extensive (and at times sensational) media coverage. Understandably, parents, educators, and mental health professionals have responded strongly to the problem, as reflected in widespread development of suicide education programming (see Chap. 6,) and the notable increase in the empirical research devoted to the topic (Berman & Tanney, 1984). As the problem of youth suicide tends to touch deep emotional chords within all of us, it is important to understand the actual shifts in the data base of this phenomena to separate the smoke from the fire. As Berman (1987) noted, misrepresentation and distortion of the data by the media and even among those presenting themselves as "experts" is not unusual.

What may be surprising is that youth suicide is not a new social health crisis. Indeed, almost 80 years ago Sigmund Freud and the Vienna Psychoanalytic Society addressed the significant public health issue of alarming increases in student suicides in the year 1910 (Berman, 1986). Epidemiologists (e.g. Holinger, 1978; Holinger & Offer, 1981) who regularly use mortality statistics to track suicide trends find that rates meaningfully fluctuate over time. For various subgroups, including youthful populations, suicide as a cause of death increases and decreases over the decades.

While the preceding places today's concern about youth suicide in historical context, it is not meant to minimize current concerns about the scope of the problem, as modern-day youth suicide is a tragic, serious, and alarming problem. It is, however, essential that the true scope of the problem be realistically understood. Our examination of youth suicide then begins with a look at the most basic actuarial data. We first present

an overview of the extent of suicide in our culture, followed by a more specific examination of suicidal vulnerability as a function of the variables of sex, race, and age and changes in suicide methods over time and to the present day.

Suicide as a Cause of Death

Within this century, there have been notable changes in the causes of death in the United States. According to the National Center for Health Statistics, Division of Vital Statistics, National Vital Statistics System (1988), of the ten leading causes of death in 1900, five of the ten were due to infectious disease. Not surprisingly, suicide did not appear within these ten leading causes of death. However by 1950, following significant medical breakthroughs in disease control, there were only two infectious diseases within the ten leading causes of death. Suicide by then had become the tenth leading cause of death. By 1988, heart disease and cancer accounted for almost 60 percent of all deaths while suicide was the eighth leading cause of death in the general population. The movement of suicide from tenth to eighth reflects the decrease of other causes rather than a meaningful increase in the suicide rate. Over the past 35 years the overall suicide rate has been a remarkably stable statistic—the suicide rate per 100,000 resident population in 1950 was 11.0, by 1960 it had dropped to 10.6 per 100,000 resident population, by 1980 it was up to 11.4, and in 1985 it was 11.5 per resident population.

Considering that the overall suicide rate has been relatively stable, one might wonder why there has been such a national focus on suicide, particularly youth suicide, in recent years? To better understand the shift over time an examination of the data and the specific variables (such as sex, race, marital status, age, and method) that help illuminate the true nature of changes and trends for suicidal deaths will be helpful.

Race and Gender as Variables

Some striking trends become apparent when race and gender are taken into consideration. For white males over the past 35 years, suicide appears to be relatively stable, in that there were 18.1 suicide deaths per 100,000 resident population in 1950 as compared to 20.1 in 1987 (reflecting approximately a 10% increase). Over the same time span, there was a notable increase in suicide deaths in black males (rising from 7.0 in 1950

to 12.0 per 100,000 in 1987—a 60% increase). White males, in summary, account for over 70 percent of all suicidal deaths.

Turning to differences in causes of death by gender, some dramatic differences between suicide rates specifically are apparent. Men are strikingly more likely to commit suicide than women. White men are four times more likely to kill themselves than white women, while black men are five times more likely to kill themselves than black women. Interestingly, the suicide rate for white women has not changed in thirty-five years; the rate in 1950 is exactly the same figure in 1985. However, for black women there is a little more fluctuation over this thirty-five-year period as the 1950 rate of 1.7 per 100,000 almost doubled by 1970 to 2.9, only to decrease to 2.1 by 1985.

Age as a Variable

Another predictor variable of suicide is age. For all races and sexes, there is a persistent and clear trend that reflects increased suicide risk as a function of increased age.

Not unexpectedly, white males have the strongest association between age and suicide. This correlation has been consistently strong for the last 35 years, with white males over 75 years old being the age/sex category most at risk for suicide. Initially, this may be a surprising observation. However, upon further reflection it is clear that deaths from natural causes have taken the lives of most of their birth cohorts, in effect, leaving behind the most disease-resistant survivors in this category. Men over 75 in our culture will have lost most of their supports, their "reasons for living" in a culture that is not known for its veneration of the elderly.

The relationship between increased age and increased suicide risk is apparent in other race and sex categories, although the association is much weaker for women and blacks.

Youth Suicide Statistics

The preceding sets the stage for our central interest, youth suicide. Suicide was the third leading cause of death in 1988 for youth aged 15–24. There was a 287 percent increase in suicide for young people between the ages of 15 and 24 between 1959 and 1985. The race/gender group that was most responsible for the major impact of this increase are white males. In 1950 white male suicides between the ages of 15–24 were

6.6 per 100,000 residents, whereas by 1985 there were 22.7 suicide deaths for the same group (a 344% increase). During the same period there were also increases for black males, in that there were 4.9 suicide deaths per 100,000 population in 1950, while the figure rose to 13.3 by 1985, an increase of over 270%.

Once again, the suicide rate comparisons are quite different for young women than men. For white females between the ages of 15–24 the 1950 suicide rate per 100,000 of 2.7 had risen to 4.7 by 1985, a 74 percent increase but still significantly less in comparison to either white or black males. An examination of changes in suicide rates for black women between the ages 15–24 from 1950 to 1985 leads to an intriguing comparison. There has been almost no overall change, with the exception of an unusual fluctuation. The suicide rate for black women rose dramatically from 1950 to 1970, showing over a 200 percent increase; yet, from 1970 to 1985 there was an encouraging reversal of this trend almost back to the 1950 level.

Method and Youth Suicide

Having examined some of the youth suicide trends, it is important to put these statistics in context. Specifically, there has been a dramatic increase in youth suicide in recent years, but it is not only the rate that is changing. What is also changing are the methods being used to complete suicides by the young. One alarming observation is that firearms accounted for about half of completed suicides for males between the ages of 15–24, but by 1980 65 percent of the suicide deaths for males of this age were by gunshot. In a recent empirical investigation it was shown that the availability of firearms was a key factor in differentiating young people who had attempted suicide from those who had actually completed suicide (Brent, Perper, Goldstein, Kolko, Allan, Allman, & Zelenak, 1988). The period from 1970 to 1980 reveals some startling shifts in behavior for young women. For this population, there has been a dramatically decreasing trend line for suicide by poison (solid and liquid), usually by drug overdose. In 1970 about 43 percent of the suicides were by drug overdose, whereas in 1980 only slightly more than 20 percent of suicidal deaths were by overdose. However, in an almost mirror-opposite relationship, suicide by gunshot has increased dramatically for young women. In 1970 the method of firearms accounted for slightly more than 30 percent of youthful female suicide deaths, but by 1980 suicide by gunshot accounted

for almost 55 percent of these suicidal deaths. This increased use of guns by young women is alarming, since one important component in assessing suicidal risk involves an assessment of potential reversibility of a method used in an attempt (see Chap. 3). One of the reasons that the completed suicide rate for males is, and has been, so much higher when compared to females is that males have tended to use less reversible methods, particularly gunshot. Similarly, the shift by women using more lethal methods may significantly change the emerging profile of youthful suicide in women.

Such trends are meaningful to researchers, mental health practitioners, public health officials, and ultimately the general public. The rapid increase of use of firearms by women or the threefold increase in youth suicide since 1950 are examples of statistical trends which are important to track in research, how they should affect public health policy, and subsequently in prevention programming. Indeed, the statistical trends in youth suicide have directly led to the development of a federal public health policy objective by the Department of Health and Human Services to decrease youth suicide by 1990 (Centers for Disease Control, 1985). While it is important to attend to the statistics, we may only be seeing the tip of the youth suicide iceberg. Much has been written about the suspected underreporting of suicide as an officially reported death statistic, especially among youth (see Jobes, Berman, & Josselson, 1987). The actual magnitude of the youth suicide problem may be greatly underestimated.

Summary

This chapter examined the most basic data used in suicide research and prevention, namely, suicide mortality statistics. To provide a factual foundation for our focus on youth suicide, we examined the changes in suicide as a cause of death and those variables that predict risk. While the overall suicide rate in the United States has remained relatively stable, there have been shifts in who is at risk. While white males (especially above 75) are the most at risk, the dramatic tripling of suicide among all youth 15–24 since 1950 is alarming. Having examined the facts, the focus turns to youth suicide assessment, treatment, and special issues.

References

Berman, A. L. & Tanney, B. (1984). Taking the mystery out of research. Paper presented at the annual meeting of the American Association of Suicidology, Anchorage, Alaska.

Berman, A. L. (1986). A critical look at our adolescence: Notes on turning 18 (and 75). *Suicide and Life-Threatening Behavior, 16,* 1–12.

Berman, A. L. (1987). The reporting of youth suicide statistics. *Newlink.*

Brent, D., & Kolko, D. Risk factors for adolescent suicide. *Archives of General Psychiatry, 45*(6), 581–588.

Brent, D. A., Perper, J. A., Goldstein, C. E., Kolko, D. J., Allan, M. J., Allman, C. J., & Zelenak, J. P. (1988). Risk factors for adolescent suicide: A comparison of adolescent suicide victims with suicidal inpatients. *Archives of General Psychiatry, 45,* 581–588.

Centers for Disease Control: Suicide Surveillance, 1970–1980. Issued April 1985, pp. 26, 31.

Holinger, P. C. (1978). Adolescent suicide: An epidemiological study of recent trends. *American Journal of Psychiatry, 135,* 754–756.

Holinger, P. C., & Offer, D. (1981). Perspectives on suicide in adolescence. *Research in Community and Mental Health, 2,* 139–157.

Jobes, D. A., Berman, A. C., & Josselson, A. R. (1987). Improving the validity and reliability of medical-legal certifications of suicide. *Suicide and Life-Threatening Behavior, 17,* 310–324.

National Center for Health Statistics: *Health, United States, 1987.* DHHS Pub. No. (PHS)88-1232. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1988, pp. 10 & 11.

Chapter 2

SUICIDE RISK AND ASSESSMENT INSTRUMENTS

James R. Eyman, Ph.D.[1] *and Susanne Kohn Eyman, Ph.D.*[2]

Introduction

The purpose of suicide assessment is to be able to identify those at risk and to intervene in a timely fashion. The use of assessment instruments can be extremely valuable to clinicians, if they provide more or different information than can be obtained through an interview, or provide it more efficiently. For example, a paper-and-pencil inventory could be administered to large groups of adolescents, identifying those under stress or experiencing more than usual difficulty with depression or suicidal ideation. This would not be possible through interviews, given limited time and resources. Also, individuals who had difficulty articulating directly their concerns about suicide might be more able to reveal this through testing.

Despite these advantages, it is unfortunately quite difficult to develop useful tests to assess suicidal thoughts and risk. Psychologists have had little success predicting any behavior, let alone a behavior like suicide, which occurs very infrequently and which is multiply determined. Nevertheless, the tragedy of suicide demands every attempt to increase our skill in its prediction. Any instrument, to be helpful, must first consistently measure the phenomenon, either through agreement among items on a paper-and-pencil measure or by being able to be scored similarly by different raters. Certain types of reliability, such as test-retest, might not be as important when measuring less enduring aspects of suicidality, such as depression or hopelessness, but might be crucial when assessing long-standing characterological features that might lead to a suicidal life course. Criterion or predictive validity, while elusive, is critical in this field. It is particularly important to have a very low false

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negative rate; that is, predicting that an individual will not be suicidal when, in fact, they are. A thorough review of the difficulties that arise when constructing instruments to predict suicide risk is found in a chapter by Eyman, Mikawa, and Eyman (1990). In presenting the instruments in this chapter, we have attempted to provide the reader with information about these important characteristics. The goal of using psychological instruments to provide efficient, useful, and alternative information about suicide risk has evolved along two lines: (a) the use of existing psychological tests (e.g., the Rorschach, MMPI, or TAT) to assess suicide potential; and (b) the construction of psychological instruments to assess suicide potential. Unfortunately (with a few exceptions), efforts to use existing tests to assess suicide have not provided applications which prove to have valid or reliable predictive utility (see Lester, 1970; Eyman et al., 1989). Alternatively, efforts to construct suicide-specific instruments show somewhat more promise but have significant limitations as well. Ironically, while a great deal has been written about the use of psychological tests to assess suicide, relatively little has been written about suicide-specific instruments. Therefore, our focus in the present chapter will center on the various instruments which have been constructed to predict suicide risk. Before proceeding it is important to note that relatively few instruments have been constructed for a suicidal adolescent population. We have therefore also reviewed the instruments most commonly used with adults as they may be appropriate for use with younger populations. We hope further research will demonstrate the effectiveness of these instruments with an adolescent population.

In writing this chapter, the authors assume that the readers have adequate training in the proper use of psychological tests. While this chapter contains information of interest for both the beginning and experienced practitioner, psychological tests should only be used by those individuals who are able to evaluate the appropriateness of the instrument for the task and who are appropriately trained to interpret the results.

Scales to Predict Suicidal Behavior

Hilson Adolescent Profile

Inwald, Brobst, and Morissey (1987) developed the Hilson Adolescent Profile (HAP) as a screening tool for adolescent behavior problems. The

profile contains 310 true and false items, constructed on a rational-intuitive basis, divided into 16 scales: guarded response, alcohol use, drug use, educational adjustment difficulties, law/society violations, frustration tolerance, antisocial risktaking, rigidity/obsessiveness, interpersonal/assertiveness difficulties, home life conflicts, social/sexual adjustment, health concerns, anxiety/phobia avoidance, suspicious temperament, depression/suicide potential, and unusual responses. A manual contains normative data for 2,259 adolescents divided into three groups: juvenile offenders, clinical inpatients and outpatients, and a school population. The instrument is computer scored.

The Depression/Suicide Scale had an acceptable internal consistency of .88, and test-retest reliability measured over a two- to four-week period on a sample of students was quite good at .92. Forty-nine high school adolescents who had made at least one suicide attempt were compared to 379 students who had made no attempts, using a stepwise discriminant analysis. The suicide attempters scored significantly higher on alcohol use, educational adjustment difficulties, law/society violations, frustration tolerance, rigidity/obsessiveness, social/school adjustment, anxiety/phobic avoidance, suspicious temperament, and depression/suicide potential. Seventy-two percent of those who had not made an attempt were correctly classified, as were 74 percent of the adolescents who had attempted suicide, although the manual is not clear as to how the classification was accomplished, i.e. using a cutoff score or other criterion. Seventy-nine percent of juvenile offenders who never made a suicide attempt were correctly classified, as were 91 percent of offenders who had made at least one attempt. For the clinical population, the correct classifications were 74 percent and 67 percent, respectively.

The HAP was factor analyzed, with a resulting three factors which accounted for a total of 64 percent of the variance. The depression/suicide potential scale loaded on both the first (internalized problems) and third (depression, worry, and low self-esteem) factors. There is no information available on item-to-total score correlations, nor is there information regarding the unique variance of each scale. Thus, it cannot be determined that the scales are measuring distinct, unrelated concepts.

The HAP is promising in its ability to distinguish suicidal and non-suicidal adolescents in school and offender populations. Unfortunately, in a clinical population, the misclassification of one-third of suicide attempters would be dangerous, particularly if the instrument was relied on solely. Another problem is the construction of the depression/suicide

scale, which is heavily oriented toward the assessment of depressive affect. Perhaps the high false positive rate results from a confounding of depressed and suicidal adolescents, which could happen easily in a clinical population.

Suicide Probability Scale

The Suicide Probability Scale (SPS) by Cull and Gill (1986) was designed for use with adults and adolescents. It is unique both in design and construction, combining theoretical and empirical approaches. Items were generated based on Durkheim's concept of anomie, Freud's conceptualization of introjected rage, Shneidman's ideas about perturbation, and the notion of impulsive action and constricted cognitive style.

Respondents are asked to rate the frequency of occurrence for thirty-six items using Likert scales ranging from "none or a little of the time" to "most or all of the time." However, given the structure of the instrument, it is not clear whether the responses refer to current or past experiences. Two global scores are obtained: a normalized total T-score, and a suicide probability score which is the statistical likelihood that an individual might belong in a population of lethal suicide attempters. The suicide probability is determined based on the context in which the person is being assessed: high risk for those using a suicide prevention center or for psychiatric inpatients, intermediate risk for those in an outpatient setting, and low risk for the general population. In addition to the global scores, four subscale scores are obtained: hopelessness, suicide ideation, negative self-evaluation, and hostility.

Internal consistency coefficients ranged from .62 for the negative self-evaluation scale to .93 for the total score, similar to the split-half reliability, which ranged from .58 for negative self-evaluation to .93 for total score. All the coefficients except that for negative self-evaluation are acceptable. Factor analysis indicated that the scale items were scattered among the factors (Golding, 1985) and scales were intercorrelated above .70. Thus, the subscales are not statistically sound, nor independent, and should be used with caution.

Discriminant function analysis correctly classified approximately 85% of individuals as suicidal or non-suicidal. However, employing differential cutting scores based on the three presumptive risk categories (mild, moderate, severe) the false negative rate was 2 percent in the high risk group, 17 percent in the intermediate risk group, and 71 percent in the

low risk group. This misclassification rate among the low risk group makes the scale of questionable clinical utility.

The "presumed risk" notion is problematic. The individual's "risk" for suicide is determined by the setting, before the instrument is administered. Why, then, is a screening device necessary? For those in the low risk category, screening would be most useful; however, in this group the misclassification rate is 71 percent (Eyman, Mikawa, & Eyman, 1990). Furthermore, separate norms are unavailable for adolescents. Research and clinical evidence points to differences between adolescents and adults who make serious suicide attempts, so that adult norms might be inappropriate for teenagers (Eyman, Mikawa, & Eyman, 1990).

Index of Potential Suicide

The Index of Potential Suicide (IPS) (Zung, 1974) measures potential suicide risk and includes social-demographic and clinical variables that were selected from previous suicide scales. The social-demographic variables include demographic status, socioeconomic status, environmental stress, family history and past medical history. The clinical variables measure alcoholism, anxiety, current general health, depression, emotional status, and suicidal behavior. Depression is rated by the Zung Depression Scale (Zung, 1965), and the scale Zung (1971) developed to rate anxiety disorders comprises the anxiety measure. Zung investigated the IPS using a group of psychiatric inpatients. The demographic portion of the IPS did not distinguish between those patients who had no suicidal behavior, had suicidal ideations, made a suicide threat, or attempted suicide; however, the clinical variables were able to do so.

Crisis intervention volunteers and non-volunteer subjects were administered the Index of Potential Suicide (Zung and Moore, 1976). In all the clinical categories except alcoholism, there was a trend of increasing scores with degree of suicidal behavior (no suicidal behavior, ruminators, threateners, and attempters). T-tests indicated that the non-suicidal group scored significantly lower on all the clinical items, except alcoholism, as compared to the suicidal group (ruminators, threateners, and attempters). When the scores of the subjects with a history of suicidal behavior were compared to the scores of inpatient psychiatric subjects in a previous study (Zung, 1974), the psychiatric patients scored significantly higher on measures of depression, anxiety, alcoholism, and concerns about current health. The results indicate the need to have separate norms for different populations.

Moore, Judd, Zung, and Alexander (1979) found that the subjects who had made a suicide attempt scored higher on the Index of Potential Suicide than subjects who had made no attempt. Petrie and Chamberlain (1985) investigated the ability of the Index of Potential Suicide to predict future suicidal behavior by administering the IPS to patients who attempted suicide within two days of their suicide attempt. Six months after the attempt, the subjects were sent a questionnaire seeking information about their suicidal behavior over the past six months. Sixty-nine percent of the subjects completed and returned the follow-up questionnaire. Using this group of subjects, the internal consistency coefficient for the clinical scale was .84, .75 for the depression subscale, emotional status—.70, anxiety—.69, suicidal behavior—.59, alcoholism—.55, and general health—.38, indicating that the suicidal behavior, alcoholism, and general health subscale have questionable internal consistency. Concurrent validity was investigated by correlating each subscale with suicidal ideation and number of prior suicide attempts. Depression and emotional status were significantly correlated with suicidal ideation and number of prior suicide attempts. The anxiety subscale was significantly correlated to suicidal ideation but not to prior attempts. None of the clinical subscales were significantly correlated with number of suicide attempts within the six-month follow-up. The IPS seems to be able to adequately distinguish between individuals with no suicidal behavior and those with past and present suicidal behavior/ideation, and may therefore have some clinical utility.

Scale for Assessing Suicide Risk (SASR)

In an attempt to answer another important question in suicide prediction, Tuckman and Youngman (1968) developed a Scale for Assessing Suicide Risk to identify among suicide attempters those individuals with a high potential to commit suicide. They evaluated risk factors involved in suicide attempts by persons ages 18 and older of which 48 were completed suicides. Answers to each factor were conceptually divided into high risk and low risk categories. For example, one of the factors was age, with 45 years of age or older considered high risk category, while 45 years of age and under was low risk. Based on the samples studied, the suicide rate per 1,000 population among the high and low risk categories were established and 17 factors differentiated between high and low risk. A total score of 17 is possible, as one point is given for each high risk factor present. The authors concluded that the higher the SASR score,

the higher the suicide rate. The predictive ability of the SASR was investigated by Resnick and Kendra (1973) using 63 psychiatric patients who attempted suicide and 25 psychiatric patients who completed suicide. Suicide rates in the high risk and low risk category for each of the 17 variables were calculated as in the Tuckman and Youngman study, but only 7 variables were found to be consistent with previous studies—age 45 or older, male, unemployed, poor emotional condition, methods of hanging, jumping, firearms, or drowning, attempt during warm months, and self-reported suicidal intent. The authors also found that an increasing risk score surprisingly corresponded to a decreasing suicide completion rate. Resnick and Kendra conclude that the SASR is not applicable to a psychiatric population but might be valuable in a non-psychiatric population as used by Tuckman and Youngman. We agree that the scale should not be used for a psychiatric population and also believe its use in a general population is premature, as the original finding has not been replicated.

Scale to Predict Future Suicide in Individuals Who Have Attempted Suicide

Pallis, Barraclough, Levey, Jenkins, and Sainsbury (1982) reasoned that the risk of future suicide among suicide attempters would be greatest among the attempters who had characteristics most similar to individuals who completed suicide. They collected information on the personal and social characteristics of 151 patients who made a suicide attempt and 75 individuals who committed suicide. Differences between the groups were examined using a stepwise discriminate analysis, and of the 203 items that were coded 20 significantly discriminated between the two groups. Of these 20 items, seven were chosen for a shorter scale. Using the seven-item scale and weighted scores, a score of 28.5, four out of five suicides scored at or above this point and four out of five attempters below this point. The 20-item scale using weighted score found that the score of 87 provided optimal discrimination between the two groups. Pallis, Gibbons, and Pierce (1984) concluded that the 20-item scale in combination with a measure of suicide intent was the most accurate predictor of future suicidal behavior. This is a promising scale whose theoretical premise is sound. However, the scale needs to be revalidated on a new subject pool because the very good discriminant ability of the scale might be capitalizing on chance. It also remains to be seen as to whether its discriminant validity is maintained for an adolescent/young adult clientele.