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Sex Differences in Suicide and Attempted Suicide: A Study of Differential Social Acceptability and Expectations

Marsha Linehan
Loyola University Chicago

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SEX DIFFERENCES IN SUICIDE AND ATTEMPTED SUICIDE: A STUDY
OF DIFFERENTIAL SOCIAL ACCEPTABILITY AND EXPECTATIONS

by

Marsha M. Linehan

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
June, 1971

ABSTRACT

Two experiments were conducted to test: (1) whether or not social acceptability of suicidal behavior varies as a function of both the type of suicidal behavior and the sex of the suicidal person; and, (2) the effect of a suicidal person's sex and personality description on subjects' predictions of type of suicidal behavior. In the first experiment, a 2 x 2 x 2 multivariate factorial design was used with the following three factors: (1) sex of the subject (male, female); (2) sex of the stimulus concept rated (male, female); (3) suicidal behavior of the stimulus concept rated (suicide, attempted suicide). 202 evening school college students rated the four concepts (males who committed suicide, males who attempted suicide, females who committed suicide, females who attempted suicide) on semantic differential scales, using the following dimensions of concept ratings as the dependent variables: (1) Social Desirability; (2) Meek goodness; (3) Dependable goodness; (4) Dynamic goodness; (5) Moral evaluative; (6) Social evaluative; (7) Potency; (8) Activity; (9) Masculinity. The hypothesis that social desirability of male attempted suicide would be lower than the social acceptability of female attempted suicide was not supported. The hypothesis that subjects would rate persons who commit suicide higher than persons who attempt suicide on both masculinity and potency scales was supported.

In the second experiment, 146 college students and 795 naval personnel were given descriptions of a masculine or a feminine personality attributed to either a male or a female. They were then asked to make a prediction, choosing between the alternatives that the person described

committed suicide or that the person attempted suicide. The hypothesis that subjects would predict suicide more often for the male stimulus person than for the female stimulus person was not supported in either sample. The hypothesis that subjects would predict suicide more often for a person described as masculine than for a person described as feminine was supported in both samples. The two studies taken together suggest that: (1) suicide is evaluated as masculine whereas attempted suicide is evaluated as feminine; and, (2) feminine persons are expected to attempt suicide more often than masculine persons. These results support a theory that high male suicide rates relative to female rates and high female attempted suicide rates relative to male rates can be at least partially explained as a function of social pressure against male attempted suicide.

LIFE

Marsha M. Linehan was born in Tulsa, Oklahoma, May 5, 1943. She graduated from Monte Cassino High School, Tulsa, Oklahoma, in May, 1961. She received the degree of Bachelor of Science, cum laude, from Loyola University of Chicago in June, 1968.

The author began her graduate studies at Loyola in September, 1968, and received the degree of Master of Arts in June, 1970.

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CHAPTER I

INTRODUCTION

The problem of self-destruction exists in all known societies. In the United States alone an estimated 20-25,000 persons per year choose to take their own lives or as Porterfield (1968) puts it, fully 2,000,000 suicides occur in a century (estimated for 1900-1999 in the United States). Between 175,000 and 200,000 persons make more or less serious attempts to kill themselves annually (Shneidman & Farberow, 1961). Although research on suicide and attempted suicide has uncovered numerous differences between those who commit suicide and those who attempt suicide, one of the most frequent observations has been the different rates for males and females. Various theories have been put forth to explain either the differential suicide rates or the differential attempted suicide rates. To the author's knowledge, however, no one theory has been proposed which takes into account the differences in both types of suicidal behavior. The major purpose of this research is to test the hypothesis that these rates can be at least partially predicted in terms of differential social acceptability and social expectations of male and female suicidal behavior.

Statistics

Methodological Problems

Research on suicide and attempted suicide consists primarily of studies arising out of two major theoretical approaches to suicide behavior--the sociological and the psychological. Sociological studies have for the most part focused on variations of suicide and attempted

suicide rates in various societies and sub-societies. Psychological studies have to a great extent utilized life histories, in-depth histories, in-depth studies of persons who attempted suicide, reconstructions of what persons who committed suicide and attempted suicide said and did, in what sequence, etc., and most recently the "psychological autopsy" (Curphey, 1968; Litman, Curphey, Shneidman, Farberow, & Tabachnick, 1963). Data collection problems are enormous and can be discussed in terms of two major problem areas: (1) identifying real cases of suicide and attempted suicide; (2) subject availability.

Identification of real cases of suicide and attempted suicide is of course crucial and involves not only the reporting of suicide and attempted suicide in the sense that such behavior is brought to the attention of the researchers either directly or via the official statistics, but also the classification of such behavior as in fact suicidal in nature. Classification of behavior as suicidal would of course depend on one's definition of suicide. Unfortunately, a clear definition has not been generally agreed upon, although most definitions include the aspect of intentionally taking one's own life.

Douglas (1967) lists the dimensions included in different combinations and to different degrees in most definitions of suicide as follows:

- (1) The initiation of an act that leads to the death of the initiator; (2) the willing of an act that leads to the death of the willer; (3) the willing of self-destruction; (4) the loss of will; (5) the motivation to be dead (or to die) which leads to the initiation of an act that leads to the death of the initiator; (6) the knowledge of an actor that actions he initiates tend to produce the objective state of death" (p. 351).

In terms of research on suicide, however, the most relevant definition of

suicide is the one that administrators responsible for the official suicide statistics are using. Since most researchers employ official statistics, it is important to note that the particular researcher's definition of suicide or attempted suicide is often unimportant or irrelevant since his data will probably have been collected in terms of other assumptions (e.g., the assumptions of the official statisticians). Little research has been done on what methods, assumptions, etc., are used by officials in determining whether or not a particular death should be classified as suicidal. Classification of behavior as attempted suicide is equally complex and includes not only the above considerations listed by Douglas but also the extent of injury and the social constellation at the time of the attempt, i.e., the chances of intervention from the environment (Stengel, 1964). Due to the important part that assessment of intent has played in classification of suicide and attempted suicide, recognition of these factors, while contributing immensely to the understanding of the suicidal person, has led to greater confusion in classification.

Even if there were not these difficulties in classification official statistics would still be somewhat suspect due to the attempts of suicidal persons and survivors to conceal suicidal behavior. Reasons for such attempts include such considerations as the social stigma attached to not only the suicidal person but also to his family and relevant others. In some cases the relevant others receive more blame than the suicidal person in that they are seen as the cause of the suicide or attempted suicide. Dublin (1963) reports societies that require the survivor who "caused" the person to commit suicide to suffer the same fate. This same attitude, though less extreme, is found to

some extent in more civilized societies. In addition, religious stigma is a factor in attempts to conceal suicide and attempted suicide. Especially among Roman Catholics, where males who have attempted suicide cannot enter the priesthood and the victim of suicide was often denied a Catholic burial, it is apparent that it would often be in the best interests of the survivors to conceal the suicide or attempted suicide. Other factors motivating concealment include possible loss of insurance and other legal factors. The latter is especially relevant in attempted suicide due to the fact that in some states and countries, where suicide and attempted suicide are illegal, persons who attempt suicide have actually been sent to jail (Dublin, 1963). The psychological makeup of the survivor would also be a factor contributing to suicide concealment and attempted suicide concealment. Guilt and shame for attempted suicide or for one's actual or imagined role in precipitating suicide, inability to accept the death as suicide, etc. are possible contributing factors.

The above factors undoubtedly contribute to an overall lowering of the reported rates of suicide and attempted suicide. More important in the context of this study, however, are factors which contribute to differential lowering of rates for different societies and sub-societies. The two major causes of such potential differences are as follows: (1) differential abilities to conceal suicide and attempted suicide; and, (2) application by officials of different standards for different groups in classifying a death or self-injury as suicide or attempted suicide. Effects of differential concealment which may be related to sex differences in suicide, attempted suicide, and total

suicidal behavior include: (1) greater underestimation of attempted suicide than suicide due to the ability of the attempted suicide victim to lie about the inflicted injury (e.g., if a person attempts suicide by cutting but then explains it as an accident--and often the explanation does not have to be plausible--it would rarely be reported as attempted suicide) or not report the attempted suicide (i.e., not seek medical attention); in suicide a death at least must be reported; (2) greater underestimation of female suicide due to male tendencies (at least in some countries) to use more violent methods which are often harder to conceal (e.g., a fatal wound from a rifle held in the mouth would be harder to explain as an accident than would be an overdose of barbiturates); (3) greater underestimation of male attempted suicide due to a possibly greater tendency of females to seek medical attention for minor injuries.

The second cause of differential reporting, application by officials of different standards for different groups in classification of suicidal behavior, is discussed extensively by Douglas (1967). Essentially he points out that the greater the integration of the person in his community the greater the tendency of the officials (e.g., doctors, coroners, county investigators, etc.) to be favorably influenced by the desires of the victim and his significant others. In addition, social expectations of probable motives for suicide and attempted suicide are different for different sub-societies. This latter factor could result in a suicide or attempted suicide incorrectly classified as accidental, etc., due solely to the inability of the investigator to find a motive which in that particular group is deemed a probable cause of suicide.

The second problem in collection of data related to suicidal

behavior is subject availability. This is of course an obvious problem in suicide where the subject is dead. It is also a major problem in attempted suicide due to the difficulty of identifying and studying persons who will attempt suicide before the actual attempt. Post hoc studies are largely hampered by the almost inevitable temporary or permanent changes in life situation of the person who attempts suicide (Rubinstein, Moses & Lidz, 1958; Stengel, 1962b), including the largely predictable grief reactions, guilt feelings, and upsurge of affection of those close to the person attempting suicide (Stengel, 1962a) and the frequent change in the person's motivation or perception of it after the attempt (Dorpat, 1968).

Incidence of Male and Female Suicidal Behavior

Studies of completed and attempted suicide in the United States indicate that males commit suicide anywhere from two to four times as frequently as females, whereas for attempted suicide the ratio is almost exactly reversed (e.g., Dorpat & Boswell, 1963; Dublin, 1963; Gibbs & Martin, 1964; Jacobziner, 1965; Motto, 1965; Schmid & Van Arsdol, 1955; Shneidman & Farberow, 1961; Trautman, 1961). Similar differences have been found in most other countries studied. Gibbs and Martin (1964), for instance, report that out of 25 countries studied male suicide exceeds female suicide in all but one. Of particular interest are three studies which considered both suicide and attempted suicide in the same population. Shneidman and Farberow's (1961) study found that in Los Angeles the male:female ratios for completed versus attempted suicide were approximately 2.3:1 and 1:2.3 respectively. Parkin and Stengel (1965) in Sheffield, England, and Yap (1959) in Hong Kong traced attempted and completed suicides. Both found proportions of male and

female completed and attempted suicide similar to, though somewhat smaller than, the proportions found by Shneidman and Farberow (1961).

In total suicidal behavior (suicide + attempted suicide) females outnumber males by about four to one. This difference is due primarily to the greater frequency of attempted suicide relative to completed suicide. Stengel (1962b) estimated the attempted suicide:suicide ratio at seven or eight to one (at least in an urban population) and Jacobziner (1965) estimated the ratio among adolescents at 100:1. It should be noted that this greater frequency of attempted suicide relative to suicide occurs in both sexes, although the difference is greater for females than for males.

The above differences in suicidal behavior are found in various subgroups of the United States population. They occur in whites and blacks; in single, married, divorced, separated, and widowed persons; and across all ages (Gibbs & Martin, 1964; Shneidman & Farberow, 1961). In general, then, the order of incidence from highest to lowest is as follows: (1) female attempted suicide; (2) male attempted suicide; (3) male completed suicide; (4) female completed suicide.

Seriousness of Male and Female Suicide Attempts

Although differentiating a serious attempt at suicide from a non-serious attempt is complex and most often controversial, many studies (e.g., Dorpat & Boswell, 1963; Hendin, 1960; Rubinstein et al., 1958) have concluded that males make more serious attempts than do females. Shneidman and Farberow (1961) found that the percentage of male suicide attempters rated by their physicians as "really wanting to die" was 36%, while the corresponding percentage for females was 27%.

In contrast to this, 40% of the females were rated as definitely expecting to be saved; 25% of the males were rated as expecting to be saved. We can tentatively assume, then, that if all suicide attempters who "really want to die" were successful, the sex differences in both suicide and attempted suicide would be greater.

Suicidal Behavior as an Attempt to End One's

Own Life: Why Do Women Fail?

The question of why males commit suicide more frequently than females, whereas females attempt suicide more frequently, can be phrased in a variety of ways. If all suicidal behavior is seen as an attempt to bring about one's own death, the question becomes why is the frequency of male success so much greater than female success, even though females try more often.

Choice of Method

One common assumption made to account for this difference is that males use more lethal methods than do females, i.e., methods by which the point of no return is reached precipitously as opposed to methods by which the point of no return is reached gradually. Dublin (1963) points out that in the United States, for instance, the most common method of suicide for males is firearms (precipitous); the most common method for females is barbiturates (gradual). Beall (1969) views the more lethal methods, which include gunshot wounds, jumping, and hanging as violent and direct methods fitting the masculine sex-role stereotype. The more gradual methods, such as barbiturates and wrist-cutting, are viewed by her as subtle and indirect, and thus fitting the feminine sex-role stereotype.

As Lester (1969) has pointed out, these differences in method are not the complete answer. He noted that even if method is held constant, the sex difference in suicidal behavior remains. For example, in the Shneidman and Farberow (1961) data, 16 out of 24 males who tried to kill themselves by jumping succeeded, whereas for females only 9 out of 27 succeeded. Considering a less precipitous method, of 1090 females who attempted suicide with barbiturates only 105 succeeded (10%). For males, 70 of 352 attempts (20%) succeeded ($\chi^2 = 63.06$, $p < .001$).

Another problem with this explanation is that whereas sex differences in suicide and attempted suicide hold up cross-culturally, methods of suicide and attempted suicide are not necessarily more violent for males than for females in all countries. For example, in England, Scotland, Denmark, and Sweden poison gas, hanging, and drowning are most common for both sexes with firearms being used in only about 5% of the cases (Dublin, 1963).

A third problem with the differential method explanation was pointed out by Stengel (1964). If differences in method were the whole explanation, then the total number of suicidal acts should be the same for both sexes with differences occurring only in the frequency of success. As has been noted, however, total suicidal behavior for females exceeds that of males.

Male and Female Anatomy

Lester (1969) suggested that anatomical differences may in part explain the differential suicide rates. Females are in general smaller than males, physically weaker, and muscularly less well developed. These differences would lead to a lesser mechanical competence in females,

making firing a gun, plunging a knife, or kicking a chair away more difficult. However, since in several countries the majority of suicides for both sexes require no such mechanical competence (e.g., the poison gas method preferred in England by both sexes), this explanation has the same problems as an explanation relying on differential choice of method.

Suicidal Behavior as a Response to a Problem in Living: Why

Do Males Commit Suicide and Females Attempt Suicide?

The simplistic view of suicidal behavior as an attempt to take one's own life is one that few students of suicidal behavior would accept. Instead, attempts to change the environment (Stengel, 1964), the "cry for help" (Farberow & Shneidman, 1961), and other related variables (Dorpat & Boswell, 1963; Rubinstein et al., 1958; Stengel, 1962a; Trautman, 1961) are considered important motivational factors in self-destructive acts. Murphy and Robins (1968) view attempted suicide as at least partially a communication of suicidal intent. As Shneidman (1963) points out, individuals can attempt to commit, attempt to be nonsuicidal, or attempt to attempt.

Stengel and Cook (1958) has pointed out that attempted and completed suicide comprise two distinct but overlapping populations, differing most notably in age and sex. These differences support a view that suicide and attempted suicide can be considered as two different, though potentially related, phenomena rather than as a continuum of a single phenomenon. The question then becomes why do males more often than females respond to problems in living by bringing about their own death, whereas females respond more frequently by non-lethal suicidal behavior. Various theories have been proposed to account for either

the differences in suicide or the differences in attempted suicide. Let us now turn to a consideration of these theories.

Suicidal Behavior as a Function of Psychological Predisposition

Durkheim's monograph, Suicide, first published in 1897, represents beyond doubt the classical sociological study of suicide. Durkheim's fundamental proposition is that suicide rates vary inversely with the degree of integration of the social groups of which the individual forms a part. Durkheim, however, did not provide a measure of integration and his explanation of the greater suicide rate for males vs. females often relied on a intuitive interpretation of psychological differences between males and females. Illustrating this approach is the following quotation explaining the greater "egoistic" suicide rate of males by attributing it to a supposedly greater masculine egoism.

This is also why woman can endure life in isolation more easily than man.... Her sensibility is rudimentary rather than highly developed. As she lives outside community existence more than man, she is less penetrated by it; society is less necessary to her because she is less impregnated with sociability.... Man, on the contrary, is hard beset in this respect. As his thought and activity develop, they increasingly overflow these antiquated forms. But then he needs others. Because he is a more complex social being, he can maintain his equilibrium only by finding more points of support outside himself, and it is because his moral balance depends on a larger number of conditions that it is more easily disturbed. (Durkheim, 1951, pp. 215-216)

Others (e.g., Morselli, quoted in Douglas, 1967) have put forth similar explanations based on the supposed differences between the feminine and masculine mind.

Suicidal Behavior as Aggressive Behavior

A belief that suicide and attempted suicide can be viewed as aggressive behavior has been used to account for the sex differences

in both types of behavior.

Stengel (1964) suggested that females to a greater extent than males are inclined to use suicidal behavior as an aggressive and defensive weapon and as a manipulator of relationships. He stated that this is probably because other means of exerting pressure, such as muscular power, are not at their disposal to the same degree as they are to males. At present there is little or no evidence to support this point of view. Lester (1969) in a reanalysis of Shneidman and Farberow's (1959) data found that suicide notes left by females were not significantly different than those of males in terms of number expressing the "wish to kill." These data, however, are not directly to the point as Stengel's theory is primarily an attempt to explain the high female attempted suicide rate, whereas the Schneidman and Farberow data deal with completed suicide.

Henry and Short (1954) viewed suicide as an aggressive response to frustration by which aggression is directed toward the object to which the individual imputes generalized responsibility for his frustration. The direction of the imputation of generalized responsibility is determined by the degree of external restraint on the actions of the individual. Those with high external restraint direct their aggression outward and those with a low degree of external restraint direct their aggression inward. Since Henry and Short operationally define low external restraint as a high degree of achievement, possession, authority, and power, it is apparent that males would tend to have lower external restraints than females. They would therefore tend to direct their aggression inward and thus would have a higher

suicide rate.

Other researchers (e.g., Lester, 1969) have attempted to account for the greater prevalence of male suicide relative to female suicide by pointing to the greater aggressiveness of males. That males are more aggressive than females is apparent in psychological tests of aggression (Buss, 1961) and in studies of overt behavior (Sears, Maccoby, & Levin, 1957). Berkowitz (1962) found that females seemed to develop more guilt and anxiety after an aggressive act, presumably because they had departed from the cultural norm.

A major problem with the above theories, pointed out by Douglas (1967), is that no evidence is presented to support the theory that the motive of aggression is in fact ever associated with actions that are intended or expected to injure oneself. Many students of suicidal behavior, especially psychoanalysts, have of course argued that individuals who commit suicide have generally given definite indications of feelings of aggression. Tuckman, Kleiner, and Lavell (1959), however, concluded from content analyses of suicide notes that hostility characterized 24% of the suicide notes, while positive affect without hostility characterized 51% and neutral affect characterized 25%. It should be noted that even if the available evidence showed a positive correlation between aggression and suicide, this would not be justification for assuming some causal relation.

Another major problem with these aggression-oriented theories of differences in suicide rates is that if they explain the higher rates of female attempted suicide, they do not explain the higher rates of male suicide. Conversely, if they explain the higher male suicide rate, they do not explain the higher female attempted suicide rate.

Suicidal Behavior as a Function of Role Conflict

A number of theories attribute higher suicide rates to higher degrees of role conflict.

Halbwachs' theory (Douglas, 1967), for example, relates suicide rates to degree of social differentiation (or social complexity) and argues that greater social differentiation causes a greater suicide rate because it causes certain situations that are more conducive to social conflicts. These social conflicts produce a tendency to depression or disequilibrium which in turn leads to a greater tendency to suicide. Although Halbwachs was primarily concerned with the differences between urban and rural suicide rates, insofar as we can assume that social differentiation is greater among males than among females, his theory accounts for the differential rates of completed suicide.

Gibbs and Martin (1964) incorporated a similar concept in their status integration theory. The central postulate of their theory is that the suicide rate of a population varies inversely with the degree of status integration in that population. Status integration is seen as an index of the general durability and stability of social relationships and varies inversely with the degree of status- or role-conflict in a given group. In general, their studies relating male and female status integration measures in various countries supported their theory.

A problem with those theories is that although they may partially explain the higher suicide rates for males, they do not explain why role or status conflict does not cause a correspondingly high attempted suicide rate. Thus the problem of the high rate of attempted suicide

among females remains unexplained.

Suicide and Attempted Suicide as a Function of Differential Social Acceptability and Social Expectations

Theoretical Orientation

Some light may be shed on the problem of sex differences in suicide and attempted suicide if suicidal behavior, like other behavior, is viewed as in part a product of specific cultural expectations.

Cultural expectations have been noted as at least a partial causative factor for some instances of suicide (e.g., Japanese hara-kiri and the practice once prevalent among the Eskimos of suicide among the aged by voluntarily "leaving" the community in winter). In both cases mentioned suicide can be viewed as a solution (although perhaps not the best one available) to a problem in living. In the case of hara-kiri the person avoids dishonor; in the case of the aged Eskimos the person avoids being a burden to the community.

In general, all cases of suicide and attempted suicide are attempts to solve some problem in living. In the case of suicide, the problem is solved by removing one's self from the problem situation. In the case of attempted suicide, although the problem may not be adequately solved, there is almost invariably a major change in the environment of the individual as a result of the suicidal behavior. Stengel and Cook (1958), for instance, have listed a number of consequences of an attempted suicide, including the following: (1) hospitalization and treatment; (2) removal from the scene of conflict; (3) changes in human relations and modes of life; (4) provision of a warning signal to others in time of personal crises; (5) arousal of community aid;

(6) changes in the state of isolation of the suicide attempter; (7) catharsis, and a number of other outcomes. From this point of view (i.e., suicidal behavior as a response to a problem in living) suicide is the method of last resort chosen when no other solution seems available. Attempted suicide is at least some of the time the most drastic solution available short of suicide. The question then becomes, when males and females reach a point where they see suicidal behavior as the only possible response to their problem, why do males tend to choose the more drastic solution. Once a person has reached this crisis point, it is possible that social acceptability and expectations may influence the response chosen.

If suicide is socially evaluated as more masculine than attempted suicide and/or if male attempted suicide is less socially acceptable than female attempted suicide, then it is plausible to suppose that these cultural values may serve as pressures constricting the choice of males to either suicide or some other more culturally acceptable way of responding. Put another way, due to social pressures against attempted suicide, males would tend to "skip" over the less drastic solution of attempting suicide and instead go directly to suicide. As a result, females would tend to have higher attempted suicide rates than males and also lower suicide rates.

Social pressure against male attempted suicide would also explain the higher rate of total suicidal behavior for females. Many males who would in the absence of this pressure attempt suicide do not go on to commit but rather choose some other non-suicidal response, thus lowering the rate of total suicidal behavior for males. Implicit in

this point of view is the assumption that given the option of attempted suicide as a solution most people would choose it in preference to suicide, at least as a first attempt to solve their problem in living. Although there are obviously other factors which contribute to a person attempting suicide instead of completing it and vice versa, it is the central assumption of this paper that social acceptability and social expectations contribute to this choice in the same manner as they contribute to choices among any other behavioral responses.

Although much attention has been given to the influence of social factors on suicide and attempted suicide, the Bibliography on Suicide and Suicide Prevention (Farberow, 1969) lists only one empirical study relating attitudes to suicidal behavior. Kostrubala and McInerney (1966) noted in personal interviews with personnel of the Cook County, Illinois, Coroner's Office that the personnel exhibited a "covert attitude...that a person is considered 'innocent' of suicide until proven 'guilty'." (p. 122) Although Kostrubala and McInerney present no concrete data to support their conclusion, other researchers (e.g., Douglas, 1967; Shneidman, 1970) recognize at least the probability of such attitudes. Shneidman's discussion of suicide as a taboo topic points out that at least in most cultures suicidal behavior is met with hostility and condemnation.

Variation in social reactions to suicide from one society to another and from one situation to another led Dublin and Bunzel (1933) to conclude that there is a positive relationship between suicide rates and social acceptance of suicide. Although there has been no empirical test of this proposition, it does nevertheless express a

psychological truism--that individuals tend to conform to social expectations. It should be noted that in contrast to the above theory, the position taken in this study is that suicide rates may be influenced not only by social attitudes to suicide but also by social attitudes to attempted suicide.

CHAPTER II

THE RESEARCH STUDY

The aim of the first experiment in this study was to explore empirically social attitudes related to suicide and to test whether or not social acceptability of suicidal behavior varies as a function of both the type of suicidal behavior (suicide vs. attempted suicide) and the sex of the suicidal person. Specifically, it was hypothesized that social acceptability of male attempted suicide, as measured by subjects' ratings on the evaluative scales of the semantic differential, would be lower than the social acceptability of female attempted suicide. A second hypothesis was that subjects would rate persons who commit suicide higher than persons who attempt suicide on a scale of masculinity. Since the masculinity-femininity scale has a high factor loading on the potency factor (Osgood, Suci, & Tannenbaum, 1957), suicide would also be rated as more potent than attempted suicide.

The second experiment was proposed as an alternate method of testing the hypothesis that suicide is viewed as masculine behavior and expected of males whereas attempted suicide is viewed as feminine behavior and expected of females. If the hypothesis is true, then it should follow that when asked who will commit suicide and who will attempt suicide a person would predict that males will commit and females will attempt. If the masculinity and femininity are varied in descriptions of suicidal persons, suicide should be predicted more often for masculine persons and attempted suicide should be predicted more often for feminine persons.

Experiment I

Method

Design. A 2 x 2 x 2 multivariate factorial design was used with the following three factors: (1) sex of the subject (male, female); (2) sex of the stimulus concept rated (male, female); (3) suicidal behavior of the stimulus concept rated (suicide, attempted suicide). Subjects rated the four concepts (males who committed suicide, males who attempted suicide, females who committed suicide, females who attempted suicide) on semantic differential scales, using the following dimensions of concept ratings as the dependent variables: (1) Social Desirability; (2) Meek goodness; (3) Dependable goodness; (4) Dynamic goodness; (5) Moral evaluative; (6) Social evaluative; (7) Potency; (8) Activity; (9) Masculinity.

Subjects. The subjects were 202 white college students attending the evening schools of Loyola and Northwestern Universities. The Northwestern students were included primarily to decrease the proportion of Roman Catholics in the sample. Four subjects did not answer the biographical questions and were deleted from the experiment, leaving 86 males and 112 females. Of the remaining 198 subjects, the average age was 25 years and 114 identified themselves as members of the Roman Catholic church.

Experimenters. There were three experimenters, two females and one male. The male and one female were graduate students and the other female was an undergraduate research assistant.

Construction of the Semantic Differential. The semantic differential used in the study consisted of a standard form (Osgood et al., 1957) of

23 nine-step bipolar adjective scales. The use of a nine-point scale rather than the more usual seven-point scale was intended to increase precision of measurement on the negative ends of the scales as most judgments were expected to be in that direction.

Social desirability of suicidal behavior was measured by two scales shown by Osgood et al. to be high on the evaluative dimension. Scales representing several sub-evaluative modes and clusters were selected on the basis of past factor analyses by Osgood et al. (1957). The clusters labeled "Meek goodness," "Dynamic goodness," and "Dependable goodness" were determined from a Square Root method of factoring and are tentative sub-evaluative scales. The "Moral" and "Social evaluative" scales were obtained from cluster analysis of scales within the evaluative factor and are tentative. A high positive relationship between the evaluative dimension and social desirability has been demonstrated by Ford and Meisels (1965). Scales representing the potency and activity factors and several other scales were included because of their relevance to sex differences in suicidal behavior. Although Osgood et al. (1957) found that the masculinity-femininity scale had a high positive factor loading on the potency factor, this scale was included as a separate factor in the present study. Table 1 lists the scales used and their identification according to factor composition.

Responses on each scale were scored from one to nine in the direction of positive evaluation for the six evaluative factors and in the direction of activity, potency, and masculinity for the latter factors. Scores were obtained for each factor by summing a subject's scores on the component scales and dividing the total by the number of scales within the factor.

TABLE 1

Factor Composition of 23 Descriptive Adjectives

Evaluative (Social Desirability)	Potency
good-bad	hard-soft
nice-awful	strong-weak
"Meek goodness"	tenacious-yielding
altruistic-egotistic	dominant-submissive
grateful-ungrateful	Activity
clean-dirty	active-passive
unselfish-selfish*	fast-slow
"Dependable goodness"	dynamic-static*
reputable-disreputable	Masculinity
healthy-sick	masculine-feminine
"Dynamic goodness"	
meaningful-meaningless	
"Moral evaluative"	
fair-unfair	
valuable-worthless	
moral-immoral*	
innocent-guilty*	
"Social evaluative"	
honest-dishonest	
brave-cowardly	

*These scales were not used by Osgood et al. in the factor analyses.

Test Booklets. At the top of each scale form was printed one of the following stimulus concepts: (1) MOST MEN WHO COMMIT SUICIDE; (2) MOST MEN WHO ATTEMPT SUICIDE; (3) MOST WOMEN WHO COMMIT SUICIDE; (4) MOST WOMEN WHO ATTEMPT SUICIDE. The scale forms were stapled into booklets and a brief description of the nature of the study along with directions for using the scales were printed on a cover sheet. The last page of the booklet contained biographical questions along with questions

about any past suicidal behavior of the subject, his relatives, and his close friends. Each booklet contained all four stimulus concepts and all 24 possible orders were used. In half the booklets the bipolar adjective scales were in one random order on each page and in the other half they were reversed.

Procedure. Subjects were run in groups and the test booklets were handed out in random order. Subjects were given verbal instructions on how to use the semantic differential and were told that the purpose of the study was to measure the meaning of suicidal behavior for various people. It was emphasized that different people have different points of view on the subject and hence there were no right or wrong answers. It was mentioned that at the end of the booklet was a page asking for quite personal information. To insure as much freedom as possible, it was stressed that names were not required on the rating sheets. It was also stressed that they would not be rating a stimulus concept more than once and that they should not go back and forth through the booklet.

Results

The original plan for data analysis involved scoring only the first concept in the booklet for each subject. With this procedure, concept ratings would not be affected by the ones immediately preceeding it. However, during the course of the study, the experimenters noticed that many of the subjects reported that they felt they were rating the same concepts more than once. To check this impression, in the last two experimental sessions the subjects were asked at the end of the session to mark on their booklets whether or not they thought they had

rated any concept more than once. A large majority answered yes. This suggested that subjects may not have been discriminating among the concepts until they were well into the booklet. After discussions with subjects regarding their perceptions of the concepts, it was determined that some subjects were not differentiating between men and women on the first concept rating while others were not discriminating between suicide and attempted suicide. It was therefore decided to do a separate set of analyses on just the last concept rated. Since all possible orderings of the four concepts were used in preparing the booklets, there was no bias of any particular order occurring before the last concept rating.

For each concept rating (first page and last page) data were analyzed by multivariate analyses of variance for unequal n 's. Separate univariate analyses of variance for unequal n 's were also done for each of the nine variables.

Analysis of First Concept Rating. Nine subjects were deleted from the analyses for not completing one or more of the scales on the first concept rating, leaving 85 males and 104 females in the analyses.

Multivariate analysis of variance results indicated a significant main effect of sex of concept, $F(9,171) = 2.11$, $p < .03$. This means simply that when male suicidal persons (summing over suiciders and attempted suiciders) are rated, the pattern of rating over the nine variables is different than the pattern for female suicidal persons. There were no other multivariate effects obtained.

Univariate analyses of variance indicated no significant main effects or interaction effects for the following eight out of the nine

variables analyzed: Social Desirability, Meek goodness, Dependable goodness, Dynamic goodness, Morally evaluative, Socially evaluative, Activity, and Potency. Significant effects were found, however, on the Masculinity variable.

Main effects due to sex of concept were significant at the .001 level, $F(1,181) = 10.53$. Inspection of the means in Table 2 reveals that male suicidal persons were rated as more masculine than female suicidal persons. Males were rated as slightly above the neutral point (towards the masculine end) and females were rated as slightly below the neutral point (towards the feminine end). There was also a significant sex of concept x suicidal behavior interaction, $F(1,181) = 5.85$, $p < .02$. Planned comparisons of means (outlined in Hays, 1963) showed that males who commit suicide were rated as significantly more masculine than males who attempt suicide, $F(1,181) = 4.09$, $p < .05$, while females who commit suicide were not rated as significantly different from females who attempt suicide ($F = 1.51$).

Analysis of Last Concept Rating. Eleven subjects were deleted from the analyses for failure to complete one or more of the scales on the last concept rating, leaving 82 males and 105 females in the analyses.

As in the analyses of the first concept rating, multivariate analysis of variance indicated a significant main effect of sex of concept, $F(9,171) = 2.12$, $p < .03$. There were again no other multivariate effects.

Univariate analyses of variance indicated no significant main effects or interaction effects for either the Activity variable or any of the six evaluative variables. Significant effects were found on both

TABLE 2

Mean Ratings of Males and Females Who Commit and Attempt Suicide
on Masculinity for First and Last Concept Ratings

Sex of Concept	Suicidal Behavior	First Concept		Last Concept	
		Mean	n	Mean	n
male	suicide	5.6	53	5.3	52
male	attempted suicide	5.0	48	4.9	50
female	suicide	4.5	48	4.7	42
female	attempted suicide	4.9	40	4.2	43
both	suicide	5.0	101	5.0	94
both	attempted suicide	5.0	88	4.6	93
male	both	5.3	101	5.1	102
female	both	4.7	88	4.4	85

the Masculinity and the Potency variables. Male suicidal persons were rated more masculine than female suicidal persons, $F(1,179) = 8.97$, $p < .003$. The main effect of suicidal behavior was significant on both the Masculinity variable, $F(1,179) = 4.54$, $p < .03$, and on the Potency variable, $F(1,179) = 5.18$, $p < .02$. Inspection of the means for Masculinity (see Table 2) reveals that persons who commit suicide were rated as more masculine than persons who attempt suicide. Persons who commit suicide were also rated as more potent than persons who attempt suicide. Summing over sex of concept, the suicide and attempted suicide condition means were 4.3 and 3.8, respectively, for the Potency variable. There were no interaction effects on either variable.

Data for both the first and the last concept rating are summarized in Appendix A.

Experiment II

Method

Design. A chi-square design was used. Subjects of both sexes were given descriptions of a masculine or a feminine personality attributed to either a male or a female. They were then asked to make a prediction, choosing between the alternatives that the person described committed suicide or that the person attempted suicide.

Subjects. Two samples of subjects participated in the experiment. The first sample consisted of 54 female and 92 male Loyola undergraduates fulfilling part of the requirements of a course in Introductory Psychology. The second sample consisted of 795 male naval personnel. These subjects were all assigned to the Electronics Technicians Service School at Great Lakes Training Center, Great Lakes, Illinois. All were of Seaman rank and with few exceptions the subjects had been in the Navy for one year or less. Ages ranged from 18 to 25 years with the vast majority between 18 and 19 years. Six subjects did not complete the questionnaire and were deleted from the analysis, leaving a total of 789 subjects in the navy sample.

Experimenters. One-third of the college subjects were run by a female experimenter; the remaining two-thirds were run by a male experimenter. Both experimenters were graduate students. All of the Navy subjects were tested by their regular class instructors.

Personality Descriptions. Two lists of personality traits were constructed, one consisting of ten traits associated with masculinity and one consisting of ten traits associated with femininity. The traits were taken from a study by Jenkin and Vroegh (1969) in which subjects

checked on an adjective check-list traits characteristic of most and least masculine and feminine persons. Jenkin and Vroegh compiled a list for each of the concepts ("most masculine," "most feminine," "least masculine," "least feminine") composed of traits checked by at least 66% of the subjects. They found quite a bit of overlap between the concepts (e.g., a number of the traits checked as characteristic of the most feminine person were also checked as characteristic of the most masculine). For the purposes of this study, however, only traits which appeared exclusively in one list were included. The one exception to this rule was the trait "masculine" which appeared in both the "most masculine" and the "least feminine" list. For the masculine trait list, seven adjectives from the "most masculine" list and three traits from the "least feminine" list were included. For the feminine trait description, seven traits from the "most feminine" list and three traits from the "least masculine" list were included. (Traits from the "least masculine" and "least feminine" lists were included primarily because otherwise the personality descriptions sounded just too good to be true.) As far as possible the two sets of traits were equated in terms of their ranking on the original lists of Jenkin and Vroegh. An attempt was also made to pick pairs of traits for the two lists which were more or less opposite of each other. Traits which obviously indicated emotional maladjustment were excluded. The traits used, along with identification of which Jenkin and Vroegh list they came from, are listed in Table 3.

Each trait list description was attributed to both a male and a female resulting in the following four stimulus descriptions: (1) a

TABLE 3

Masculine and Feminine Personality Traits

Masculine	Feminine
masculine ^{a,d}	feminine ^b
ambitious ^a	graceful ^b
straight-forward ^a	indecisive ^c
hard ^d	gentle ^b
practical ^a	sentimental ^b
physically strong ^a	physically weak ^c
coarse ^d	charming ^b
athletic ^a	artistic ^b
competitive ^a	tactful ^b
arrogant ^d	apologetic voice ^c

Letters indicate Jenkin and Vroegh list from which traits were taken as follows: (a) "most masculine," (b) "most feminine," (c) "least masculine," (d) "least feminine."

masculine male; (2) a feminine male; (3) a masculine female; and (4) a feminine female.

Test Booklets. At the top of each stimulus page a fictitious case number and the sex of the stimulus person were printed in capital letters. The personality traits were typed in lower case in a single-spaced column starting four lines below. An effort was made to pair the adjectives in the two lists so that a trait in position i in the masculine list corresponded as closely as possible to the trait in

position i in the feminine list. Half the lists were in one order and the other half were in the reverse order. For all lists, however, the first trait was either "masculine" or "feminine." At the bottom of each list was a question asking the subject to circle "committed suicide" if he thought the stimulus person committed suicide or "attempted suicide" if he thought the stimulus person attempted suicide. On half the lists the words ATTEMPTED SWICIDE were on the left side of the page with COMMITTED SUICIDE on the right; on the other half the positions were reversed.

Booklets were put together with one of the four stimulus descriptions on the first page and a number of filler descriptions on subsequent pages. Biographical data identical to that asked for in Experiment I was asked for on the last page. A cover sheet contained the following cover story and instructions:

SUICIDAL BEHAVIOR PREDICTION TEST

This is a test to see how well people with little or no training in psychology can predict suicidal behavior. On each of the following pages you will find a short list of personality traits describing a person who is known to have either committed suicide or attempted suicide. The information was obtained by interviewing two close relatives and three friends and/or associates of the person three days following the suicide or attempted suicide.

Each friend or relative interviewed was asked to rate the person on a standard list of personality traits. Only those traits which all five persons checked as extremely characteristic of the person are included in the personality descriptions. Since most studies indicate that the degree of emotional disturbance is the same for both those who attempt suicide and those who commit suicide, the descriptions do not include any assessment of the degree of emotional disturbance that may have been present.

At the end of each description please circle "attempted suicide" if you think the person attempted suicide or "committed suicide" if you think the person committed

suicide. We realize that this is a difficult task, but we hope that you will try to make the best guess possible with the limited information available.

Procedure. Subjects were run in groups. The test booklets were handed out in random order and the instructions and cover story on the first page were repeated to the subjects. It was mentioned that at the end of the booklet was a page asking for quite personal information. To insure as much freedom as possible, it was stressed that names were not required.

Results

The data for the college sample and the Navy sample were analyzed separately. Frequencies of suicide and attempted suicide predictions for both samples are summarized in Tables 4 and 5. Male and female college subjects did not differ appreciably in their predictions in any of the four conditions and the sexes were combined in all further analyses.

In every analysis done, results for the college and the Navy samples were the same. Over all conditions, subjects predicted attempted suicide more often than committed suicide ($\chi^2 = 26.33$, $p < .001$, for the college sample; $\chi^2 = 157.93$, $p < .001$, for the navy sample). There was no effect of sex of the stimulus person in either sample. There was, however, a significant effect of personality description ($\chi^2 = 15.35$, $p < .001$, for the college sample; $\chi^2 = 854.45$, $p < .001$, for the navy sample). Subjects predicted suicide more often for the masculine person than for the feminine person whereas for attempted suicide the order was reversed. The order of frequencies, the same for both samples, was as follows (from high to low): (1) feminine--attempted suicide; (2)

masculine--attempted suicide; (3) masculine--suicide; (4) feminine--suicide. This order corresponds to the order of incidence of male and female suicide and attempted suicide.

TABLE 4

Frequencies of Predictions for Committed Suicide (S) and Attempted Suicide (AS) in Relation to Sex and Personality
Description of Stimulus Person

Sex	Personality Description	College Sample		Navy Sample	
		S	AS	S	AS
male	masculine	17	26	86	104
male	feminine	5	30	30	168
female	masculine	15	16	72	126
female	feminine	5	32	30	173
TOTAL		42	104	218	571

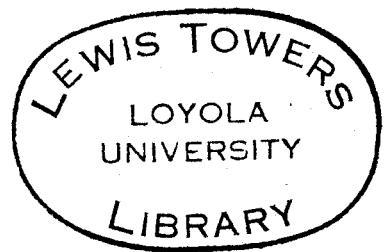
TABLE 5

Frequencies of Predictions of Committed Suicide (S) and Attempted Suicide (AS) in Relation to Personality
Description of Stimulus Person

Personality Description	College Sample		Navy Sample	
	S	AS	S	AS
Masculine	32	42	158	230
Feminine	10	62	60	341
TOTAL	42	104	218	571

CHAPTER III

DISCUSSION



The hypothesis that social acceptability of male attempted suicide would be lower than that of female attempted suicide was not supported by the results in Experiment I. This hypothesis would have been supported by significant sex of concept x suicidal behavior interactions on the Social Desirability and other evaluative dimension of the semantic differential. There were, however, as noted above, no significant results whatsoever for the six evaluative variables. Although the number of possible reasons for not confirming a hypothesis are limitless, two of the more likely reasons are suggested.

First, a number of subjects said after the experiment was over that they simply could not make judgments on the limited information available. Most subjects stating this said that their judgments would be strongly influenced by the life situation of the suicidal person. Implicit in these comments is the belief that at times suicide and/or attempted suicide is justified and presumably good while at other times it is unjustified and presumably bad. This difficulty in making evaluative judgments may have led to the rather unexpectedly obtained neutral ratings. For example, over both concept ratings and including all six evaluative variables, there were only 16 cell means out of 96 below 4.0 (5 being neutral, 1 being extremely negative). Apparently our attempt to get around this rather common resistance to rating abstract persons on evaluative scales by inserting the word "most" in front of each stimulus concept was not as effective as had been hoped. A

possible solution to this in future research might be to construct a standard set of situations in which a male or female responds by attempting or committing suicide. This would have the effect of giving the subject a specific rather than an abstract stimulus to judge.

Secondly, although it is of course possible that the social attitudes hypothesized do not in fact exist, it is also possible that they were simply not tapped by the semantic differential. As an illustration of this, one subject on hearing the experimental hypothesis at the conclusion of the session said that she agreed but hadn't thought of it on the test. It would seem that a more adequate test of the hypothesis would require an in-depth survey of social attitudes toward suicidal behavior. Questions about subjects' perceptions of motives of male and female suicidal persons would seem especially appropriate. Another approach might be to ask males and females how they think other people would react to them if they committed or attempted suicide. This type of question would hopefully lead to greater involvement on the part of the subject and would have the added advantage of not requiring the inference that males and females are aware of the prevailing social attitudes toward suicidal behavior (since it would be directly measuring their perception of social attitudes). A third method of testing the hypothesis would be to devise an experimental situation to measure subjects' negative behavior toward males and females identified as persons who have recently attempted suicide. This, of course, could not be used to measure negative behaviors toward males and females who commit suicide unless some kind of role playing technique were used (set before the stimulus person supposedly committed suicide).

The second hypothesis, that subjects would rate suicide as both more masculine and more potent than attempted suicide, was supported on the last concept ratings in Experiment I. On the first concept rating there were no significant effects obtained on the potency ratings. There was, however, a sex of concept x suicidal behavior interaction effect on Masculinity and also a main effect for concept sex. Comparing the means over the four stimulus conditions on the first concept rating to the corresponding means on the last concept rating, it can be seen that the failure to find a significant main effect for suicidal behavior on the first concept ratings is due to the high rating for the female attempted suicide condition. Male suicide was, however, rated more masculine than male attempted suicide, female committed suicide and female attempted suicide. The two concept ratings together, give general support to the hypothesis that suicide is considered more masculine than attempted suicide and partial support to the hypothesis that suicide is considered more potent than attempted suicide.

The mean differences are quite small and do not support a conclusion that suicide is seen as extremely masculine while attempted suicide is seen as extremely feminine. Instead, the means lie slightly above and below the neutral point. Although the differences in social attitudes may indeed be this slight it is also possible that the problems with the semantic differential test as noted above were operating on these dimensions also.

Alternate research techniques can help clarify the strength of this relationship. Experiment II can be viewed as an alternate technique

for measuring the perceived masculinity-femininity of suicide and attempted suicide. As such, it gives strong support for the above conclusion that suicide is considered masculine and attempted suicide is considered feminine. The use of two different samples in Experiment II increases not only the generality of the findings but also the confidence that can be placed in the results. This is especially so since all members of the navy are armed service volunteers. It is likely that a person who volunteers for active duty in the armed forces is quite different on many variables from the average college student. The naval study can also, of course, be seen as a replication of the college study. The differences in settings, experimenters, etc., make it improbable that the results of either study were due to artifacts of the experimental situation.

Suicide was predicted more often for masculine persons than for feminine persons and conversely attempted suicide was predicted more often for feminine than for masculine persons. The hypothesis that suicide would be predicted more often for males while predictions for females would more often involve attempted suicide, however, was not supported. This would seem to indicate that it is not the male sex per se that is associated with suicide but rather the male sex-role. Similarly, the female sex-role rather than the female sex per se is associated with attempted suicide. Put another way, a person who acts like a man is expected to commit and a person who acts like a woman is expected to attempt. This absence of effects for sex of stimulus person would also rule out the interpretation that the predictions are based on knowledge of the differential suicide and attempted suicide rates.

Nor can these results be readily explained as a function of some mental health--mental illness distinction. In sum, Experiments I and II, taken together, indicate that: (1) suicide is considered more masculine than attempted suicide and, (2) masculine persons to a greater extent than feminine persons are expected to commit rather than attempt suicide.

A causal link between these results and the differential suicide and attempted suicide rates reported in the literature would necessarily involve an assumption that most males (or at least most males who commit suicide) want to be masculine rather than feminine. Since there is no way of knowing whether or not the male subjects are comparable to males who would commit suicide, a causal link would also require that most males reaching a suicidal crisis are aware of the link between masculinity evaluation and suicide. This raises the intriguing possibility that males who commit suicide are more aware of the social expectations regarding male suicidal behavior and/or that they are more concerned with living up to the male sex-role than are males who attempt suicide. Another possibility is that males who commit suicide are less willing than males who attempt suicide to accept the consequences (e.g., social censure) of an attempted suicide. One would also expect the families and significant others of males who commit suicide to put a greater emphasis on "men being men" than those of males who attempt suicide. Similarly, one would expect females who commit to be more masculine than females who attempt. Families and significant others of females who attempt should expect or accept feminine sex-role behavior to a greater extent than those of females who commit suicide. Insofar as those who make serious attempts are comparable to persons who commit

suicide, these same relationships would also be expected in studies comparing males and females who make serious suicide attempts with persons who make non-serious attempts.

It must be noted that the results of this study support both Dublin and Bunzel's (1933) theory that suicide rates are a function of social acceptance of suicide and also the theory proposed in this paper that differential suicide and attempted suicide rates may be a function of greater proscription of male vs. female attempted suicide. Dublin and Bunzel's theory requires the assumption that social acceptance is greatest for appropriate sex-role behavior, i.e., male suicide, female attempted suicide. The latter theory involves the assumption that suicide is more probable if a person anticipates a negative reaction to a suicide attempt.

One method of obtaining support for this view, would involve follow-up studies of persons who attempt suicide. One would expect that negative reaction to the first attempt would have been greater for those who subsequently commit suicide than for those who do not. Psychological autopsies might also be helpful here as a method of gathering information about the suicidal person's attitude toward attempted suicide, the communications he received regarding probable consequences of an attempted suicide, etc.

In conclusion, the present study supports the proposition that social expectations of suicidal behavior vary as a function of the sex-role of the suicidal person. More research is needed to support a conclusion that there is a causal link between these expectations and suicidal behavior.

CHAPTER IV

SUMMARY

Two experiments were conducted to test: (1) whether or not social acceptability of suicidal behavior varies as a function of both the type of suicidal behavior and the sex of the suicidal person; and (2) the effect of a suicidal person's sex and personality description on subjects' predictions of type of suicidal behavior. In the first experiment, a $2 \times 2 \times 2$ multivariate factorial design was used with the following three factors: (1) sex of the subject (male, female); (2) sex of the stimulus concept rated (male, female); (3) suicidal behavior of the stimulus concept rated (suicide, attempted suicide). Two hundred and two evening school college students rated the four concepts (males who committed suicide, males who attempted suicide, females who committed suicide, females who attempted suicide) on semantic differential scales, using the following dimensions of concept ratings as the dependent variables: (1) Social Desirability; (2) Meek goodness; (3) Dependable goodness; (4) Dynamic goodness; (5) Moral evaluative; (6) Social evaluative; (7) Potency; (8) Activity; (9) Masculinity. The hypothesis that social desirability of male attempted suicide would be lower than the social acceptability of female attempted suicide was not supported. The hypothesis that subjects would rate persons who commit suicide higher than persons who attempt suicide on both masculinity and potency scales was supported.

In the second experiment, 146 college students and 795 naval personnel were given descriptions of a masculine or a feminine personality attributed to either a male or a female. They were then asked to make a

prediction, choosing between the alternatives that the person described committed suicide or that the person attempted suicide. The hypothesis that subjects would predict suicide more often for the male stimulus person than for the female stimulus person was not supported in either sample. The hypothesis that subjects would predict suicide more often for a person described as masculine than for a person described as feminine was supported in both samples. . The two studies taken together suggest that: (1) suicide is evaluated as masculine whereas attempted suicide is evaluated as feminine; and, (2) feminine persons are expected to attempt suicide more often than masculine persons. These results support a theory that high male suicide rates relative to female rates and high female attempted suicide rates relative to male rates can be at least partially explained as a function of social pressure against male attempted suicide.

APPENDIX A

TABLE A

Means and Standard Deviations for Each of the Dependent
Variables on the First Concept Rating

Sex of Rater		Male				Female			
Sex of Concept		Male		Female		Male		Female	
Behavior		S	AS	S	AS	S	AS	S	AS
Social Desirability									
M		5.1	5.0	5.0	4.9	5.1	5.2	5.1	5.1
SD		1.0	1.4	1.6	1.3	1.4	1.1	.9	.7
Meek goodness									
M		4.3	4.4	3.9	4.1	4.6	4.2	4.3	4.1
SD		.9	1.4	1.4	1.2	1.4	.9	1.3	1.3
Dependable goodness									
M		4.1	4.0	4.1	4.0	4.2	4.1	4.0	3.7
SD		1.0	1.6	1.7	1.4	1.6	1.6	1.1	1.2
Dynamic goodness									
M		4.2	4.3	5.2	4.0	4.7	4.2	4.2	4.2
SD		1.8	2.6	2.7	2.3	2.2	1.9	2.7	2.5
Morally evaluative									
M		4.7	4.6	4.4	4.0	4.8	4.5	4.8	4.4
SD		.8	1.2	1.3	1.2	1.5	1.2	1.1	.8
Socially evaluative									
M		4.3	5.2	4.2	3.8	4.8	4.1	4.7	4.3
SD		1.2	1.7	1.7	1.3	1.9	1.4	1.5	1.7
Potency									
M		3.9	4.4	4.2	4.4	3.9	3.9	3.8	4.1
SD		1.3	1.7	1.6	1.7	1.5	1.4	1.3	1.3
Activity									
M		4.8	4.7	4.8	5.1	4.6	4.6	4.6	5.0
SD		1.2	1.5	1.2	1.8	1.8	1.4	1.5	1.4

TABLE A (cont'd)

Means and Standard Deviations for Each of the Dependent
Variables on the First Concept Rating

Sex of Rater	Male				Female			
	Male		Female		Male		Female	
Sex of Concept								
Behavior	S	AS	S	AS	S	AS	S	AS
Masculinity								
M	5.4	5.1	4.7	4.9	5.7	5.0	4.1	4.9
SD	1.0	1.3	1.8	1.8	1.4	1.4	1.3	1.4

Note: S = Suicide; AS = Attempted Suicide

TABLE B

Means and Standard Deviations for Each of the Dependent
Variables on the Last Concept Rating

Sex of Rater		Male				Female			
Sex of Concept		Male		Female		Male		Female	
Behavior		S	AS	S	AS	S	AS	S	AS
Social Desirability									
M		5.1	4.7	4.7	4.6	5.0	5.1	5.2	5.2
SD		1.5	1.1	1.2	1.3	.6	1.0	1.4	1.7
Meek goodness									
M		4.1	4.0	4.2	4.2	3.9	4.3	4.4	4.3
SD		.9	.8	1.1	1.2	1.0	1.2	1.2	1.4
Dependable goodness									
M		4.3	3.9	3.8	3.9	3.7	3.6	3.7	4.0
SD		1.4	1.0	.9	1.5	1.2	1.2	1.1	1.2
Dynamic goodness									
M		4.5	3.9	4.2	4.5	4.9	4.8	4.3	4.2
SD		2.2	1.7	1.8	2.3	1.7	2.1	2.1	2.2
Morally evaluative									
M		4.2	4.3	4.3	4.3	4.5	4.6	4.2	4.6
SD		1.1	.9	1.1	1.5	1.3	1.3	1.2	1.5
Socially evaluative									
M		4.2	3.9	4.6	4.1	4.2	3.9	4.5	4.1
SD		1.4	1.2	1.4	1.5	1.8	1.7	2.0	1.9
Potency									
M		4.0	4.0	4.4	3.7	4.6	3.6	4.1	3.9
SD		1.8	1.0	1.3	1.2	1.7	1.4	1.5	1.3
Activity									
M		4.6	4.8	4.5	4.6	5.4	4.2	4.3	4.3
SD		1.5	1.4	1.2	1.4	1.8	1.4	1.2	1.9

TABLE B (cont'd)

Means and Standard Deviations for Each of the Dependent
Variables on the Last Concept Rating

Sex of Rater		Male				Female			
Sex of Concept		Male		Female		Male		Female	
Behavior		S	AS	S	AS	S	AS	S	AS
Masculinity									
M		5.0	5.0	4.8	4.1	5.5	4.9	4.7	4.2
SD		1.7	1.2	1.8	1.6	1.6	1.2	1.5	1.4

Note: S = Suicide; AS = Attempted Suicide

REFERENCES

- Beall, L. The dynamics of suicide: A review of the literature 1897-1965. Bulletin of Suicidology, March, 1969, 2-16.
- Berkowitz, L. Aggression: A social psychological study. New York: McGraw-Hill, 1962.
- Buss, A. H. The psychology of aggression. New York: Wiley, 1961.
- Curphey, T. J. The psychological autopsy: The role of the forensic pathologist in the multi-disciplinary approach to death. Bulletin of Suicidology, July, 1968.
- Dorpat, T. L. Loss of control over suicidal impulses. Bulletin of Suicidology, July, 1968.
- Dorpat, T. L. & Boswell, J. W. An evaluation of suicidal intent in suicide attempts. Comprehensive Psychiatry, 1963, 4, 117-125.
- Douglas, J. D. The social meanings of suicide. Princeton: Princeton Press, 1967.
- Dublin, L. I. Suicide: A sociological and statistical study. New York: Ronald Press, 1963.
- Dublin, L. I. & Bunzel, B. To be or not to be, a study of suicide. New York: Harrison Smith & Robert Haas, 1933.
- Durkheim, E. Suicide: A study in sociology, J. A. Spaulding (trans.) with an Introduction by G. Simpson (ed.). New York: Free Press, 1951.
- Farberow, N. L. Bibliography on suicide and suicide prevention. Chevy Chase, Md.: National Clearinghouse for Mental Health Information, 1969.
- Farberow, N. L. & Shneidman, E. S. The cry for help. New York: McGraw-Hill, 1961.

- Ford, L. H. & Meisels, M. Social desirability and the semantic differential. In J. G. Snider & C. E. Osgood (Eds.) Semantic differential technique. Chicago: Aldine, 1969.
- Gibbs, J. P. & Martin, W. T. Status integration and suicide. Eugene, Oregon: University of Oregon, 1964.
- Hays, W. H. Statistics. New York: Holt, Rinehart and Winston, 1963.
- Hendin, H. Attempted suicide. Psychiatric Quarterly, 1950, 24, 39-46.
- Henry, A. F. & Short, J. F. Suicide and homicide. Glencoe: Free Press, 1954.
- Jacobziner, J. Attempted suicides in adolescence. Journal of the American Medical Association, 1965, 191, 7-11.
- Jenkin, N. & Vroegh, K. Contemporary concepts of masculinity and femininity. Psychological Reports, 1969, 25, 679-697.
- Kostrubala, T. & McInerney, M. Suicide in Chicago: A preliminary statistical and attitudinal survey. Social Psychiatry, 1966, 1, 121-123.
- Lester, D. Suicidal behavior in men and women. Mental Hygiene, 1969, 53, 340-345.
- Litman, R. E., Gorphey, T., Shneidman, E. S., Farberow, N. L. & Tabachnick, N. D. Investigations of equivocal suicides. Journal of the American Medical Association, 1963, 184, 924-929.
- Motto, J. A. Suicide attempts. Archives of General Psychiatry, 1965, 13, 516-520.
- Murphy, G. E. & Robins, E. The communication of suicidal ideas. In H. L. P. Resnik (Ed.) Suicidal behaviors. Boston: Little Brown, 1968.

- Osgood, C. E., Suci, G. J. & Tannenbaum, P. H. The measurement of meaning. Urbana: University of Illinois Press, 1957.
- Parkin, D. & Stengel, E. Incidence of suicidal attempts in an urban community. British Medical Journal, 1965, 2, 133-138.
- Porterfield, A. L. The problem of suicide. In J. P. Gibbs (Ed.) Suicide. New York: Harper & Row, 1968.
- Rubinstein, R., Moses, R. & Lidz, T. On attempted suicide. Archives of Neurology and Psychiatry, 1958, 79, 103-112.
- Shneidman, E. S. Orientations toward death. In R. W. White (Ed.) The study of lives. New York: Prentice-Hall, 1963.
- Shneidman, E. S. Suicide as a taboo topic. In E. S. Shneidman, N. L. Farberow & R. E. Litman (Eds.) The psychology of suicide. New York: Science House, 1970.
- Shneidman, E. S. & Farberow, N. L. Statistical comparisons between attempted and committed suicides. In N. L. Farberow & E. S. Shneidman (Eds.) The cry for help. New York: McGraw-Hill, 1961.
- Shneidman, E. S. & Farberow, N. L. Suicide and death. In H. Feifel (Ed.) The meaning of death. New York: McGraw-Hill, 1959.
- Schmid, C. G. & Van Arsdol, M. D., Jr. Completed and attempted suicides: A comparison analysis. American Sociological Review, 1955, 20, 273-283.
- Sears, R. R., Maccoby, E. E. & Levin, H. Patterns of child rearing. Evanston, Ill.: Row Peterson, 1957.
- Stengel, E. The complexity of motivations to suicidal attempts. Journal of Mental Science, 1962a, 106, 1388-1391.

Stengel, E. Recent research into suicide and attempted suicide.

American Journal of Psychiatry, 1962b, 118, 725-727.

Stengel, E. Suicide and attempted suicide. Bristol: Macgibbon & Kee, 1964.

Stengel, E. & Cook, N. Attempted suicide: Its social significance and effects. Maudsley Monograph No. 4. London: Chapman and Hall, Ltd., 1958.

Trautman, E. C. The suicidal fit. Archives of General Psychiatry, 1961, 5, 76-83.

Tuckman, J., Kleiner, R. J. & Lavell, M. Emotional content of suicide notes. American Journal of Psychiatry, 1959, 116, 59-63.

Yap, P. M. Suicide in Hong King. Journal of Mental Science, 1958, 105, 266-301.

APPROVAL SHEET

This dissertation submitted by Marsha M. Linehan has been read and approved by members of the Department of Psychology.

The final copies have been examined by the director of the dissertation, and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the dissertation is now given final approval with reference to context, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Date

James E. Johnson
Signature of Advisor