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The Social History Questionnaire in Relation to Suicide Risk Potential

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The Social History Questionnaire in Relation to Suicide Risk Potential

(TITLE)

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Edward Ward
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THESIS

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Abstract

The study of suicide is the study of individuals, each of whom can be considered a unique entity. However, in the course of studying suicide case histories, some demographic variables seem to repeat themselves as differentiating potential suicides from persons who will never attempt or commit suicide. The purpose of this paper is to determine which social history variables correlate significantly with subjects who have made a definite suicide attempt or gesture.

The basic question raised by this thesis was: What factors in a person's social history correlate significantly to an increased probability of having made a suicide attempt or gesture? The reason for asking this question was that by finding these factors a clinician could increase his acumen at detecting potential suicides.

The problem involved with this theses was to find the significant demographic variables of one's social history which would indicate increased probability of having made a suicide attempt or gesture. The hypothesis advanced was that the findings would be much the same as those of previous studies, which are delineated in the review of literature section.

The design of the study involved matched subjects, with a suicidal group of subjects who had made a suicide gesture or attempt, and a control group consisting of persons who had no history of such an attempt or gesture. The subjects were matched on the basis of sex, age, and marital status. Each subject had completed a Social History Questionnaire (Best, 1971), and these forms were analyzed for significantly differentiating social history factors. These factors were found to be indicative of an increased probability of having made a suicidal gesture or attempt. A previous

attempt or gesture increases the likelihood of the next attempt being completed. A subject who has a large number of the significant variables apply to him can be considered to be in the high-risk category of suicide probability.

Suicide research involves the study of people, which in turn involves the study of idiosyncrasies. However, some demographic variables seem to differentiate potential suicides from persons who will not attempt or commit suicide. The purpose of this paper is to determine which social history variables correlate significantly with subjects who have made a definite suicide attempt or gesture.

The U.S. suicide rate is such that another suicide occurs, on the average, once every twenty minutes (Coleman, 1972). Hafen (1967) states an annual suicide rate for the U.S. of 23,000, making it one of the top ten causes of death in the country. The "official" rate can be misleading, because suicidologists have estimated that the acutal number of suicides is from two to five times the number actually reported (Hafen, 1967).

In addition, Coleman (1972) lists some 2,000,000 living Americans as having made a suicide attempt. An important fact about this large number of attemptors, according to various researchers (Batchelor, 1955; Moss & Hamilton, 1956; Motto, 1965; Pokorny, 1966; Pretzel, 1972) is that any subsequent attempt is much more likely to be fatal. Tuckman and Youngman (1963) concluded that persons who had attempted suicide were at a greater risk than were those persons with no history of a suicide attempt.

It thus seems possible that the suicide rate can be reduced by lowering the risk of suicide among those who have made previous suicide attempts. One of the needs of the mental health clinician is to recognize the potential suicides; the purpose of this study is to determine which social history variables correlate most significantly with subjects who have made a definite suicide attempt or gesture.

Review of Literature

Indications of increased suicide risk can be found in a client's social history. One of these indicators is a previous suicide attempt or gesture. Resnik (1966), in a study of suicide completors, found that 75% have a history of a previous suicide attempt or threat. Farberow and Shneidman (1955), after studying 128 male veteran hospital patients, concluded that 62% had made a previous attempt. Robin, Brooke, and Freeman (1968) studied 92 suicide completors and found an incident of previous self-injury or poisoning to be significant. Moss and Hamilton (1956) studies a group of 50 suicide attemptors; 11 subsequently committed suicide. Motto (1965) stated that of 100 suicide attemptors, one a year will ultimately kill themselves. His article observed that the rate of suicide for the normal population is 10.5 per 100,000, but for previous suicide attemptors the rate is 1,000 per 100,000. Motto (1965) summed up by adding that the suicide rate for previous attemptors is 80 to 100 times the rate for normals. These researchers (Moss & Hamilton, 1956; Motto, 1965; Pretzel, 1972; Robin et al., 1968; Tuckman & Youngman, 1963) have all found that a history of a previous suicide attempt increases the probability that a subsequent attempt will be fatal. A previous attempt is therefore one of the most important indicators of increased suicide risk.

An actual attempt is more significant than suicidal ideation or threats, as evidenced by Pokorny (1966). The group studied was 615 male veterans who had received psychiatric counseling due to having made a suicide attempt, or having had suicidal ideas, or having made a suicide threat. The highest rate for subsequent completion was for those who had made an attempt, and the lowest rate was for those who had thought about suicide.

In addition to a previous suicide attempt, suicide victims have often had a loss in the family within a short time preceding the act. Dorpat and Ripley (1960) found that 27% of a group of completors had lost a family member by death, separation, or divorce within a year of the suicide. Moss and Hamilton (1956) found in their study that 60% of the suicide cases had the death of a close person as an important precipitiating factor. Buglass and McCulloch (1970) observed that male suicide attemptors were likely to repeat an attempt within three months after the loss of their spouse. These studies point out that the time period following the death of a person's spouse of a family member is a time of increased suicide risk.

Another social history variable in the client's history which indicates increased suicide risk is that the client came from a broken home. A surfeit of studies support this contention. Ettlinger (1964), in a study of 228 suicide attemptors, of which 17 subsequently committed, found that the later committers had a significantly higher incidence of irregular homes during adolescense. Stengal (1967) found the incidence of broken homes to be significantly higher among suicidal groups. Greer (1964), in a study which defined parental loss as the loss or absence of parents for one year or more before the age of fifteen, found 65% of a suicidal group to be from a broken home, while only 37% of the controls were. Greer (1966), working with the same population, found the loss of both parents to be four times as common among the attempted suicide group as among the controls. This study found the sex of the lost parent to be significant. Levi, Fales, Stein, and Sharp (1966), found four times as many early childhood separations (under the age of 7) in a suicide attempt group as in the control group. Dorpat, Jackson, and Ripley (1965) interviewed 121 attemptors and the friends and relatives of 114 completors. They found the incidence of broken homes to

be 50% in the completed suicide group and 63.9% in the attempted suicide group. In a study of 100 suicide attemptors under the age of 18, Tuckman and Connon (1962) found that 47% came from broken homes. Hill (1969) found that females who lose their father while between the ages of 10 and 14 stand a fourfold increase in the risk of a depressive illness with attempted suicide in later life. The studies cited (Buglass & McCulloch, 1970; Dorpat et al., 1965; Ettlinger, 1964; Greer, 1964, 1966; Hill, 1969; Levi et al., 1966; Stengal, 1967; Tuckman & Connon, 1962) have all found a high incidence of broken homes in the childhood of both suicide attemptors and completors.

A criminal record is another social history variable which indicates increased suicide risk for a client. In a study of matched suicide attemptors and depressives, Weissman, Fox and Klerman (1973) found the attemptors to have significantly more criminal convictions. Ettlinger (1964) observed that in a sample of 228 suicide attemptors, the 17 who went on to complete the act had a significantly greater number of criminal convictions. Tuckman and Connon (1962) studies 100 adolescent suicide attemptors, and found the rate of delinquency to be 30%. These studies indicate that the presence of a criminal record in a client's history indicate increased suicide risk.

A history of medical or psychiatric care has also been found to be common among the suicidal population. Ettlinger (1964), in a study of 228 attemptors, found that those who subsequently committed suicide had a greater number of psychiatric admissions in their records. Seager and Flood studied 325 suicides, and found that 20% were physically ill at the time of the act, and that 23.4% had seen a medical doctor within the preceding week (Seager and Flood, 1965). Bennett (1967) observed that 75% of his sample of completed suicides had been to see a medical doctor within

the preceding six months. Robins, Gassner, Kayes, Wilkinson, and Murphy (1959) noted that of 119 completed suicides, 50% had received medical or psychiatric care within the preceding year, and 98% were clinically ill immediately preceding the act. Jones (1965) found that in the six month period before the suicidal act, the suicidal group had three times the physical illness as a control group, and for the preceding two years the suicidal group had 66 times as much significant mental illness. It can therefore be stated that mental and/or physical illness often occurs in the period immediately preceding the suicidal act.

Variables which indicate increased suicide risk are found not only in the client's history, but also in his behavior. An example is that a client with a previous suicide attempt will most likely try to repeat the act immediately following the previous attempt. Buglass and McCulloch (1970) observed 511 attemptors, and found the months immediately following discharge from a psychiatric hospital after having attempted suicide to have the highest risk of another attempt, and that the risk declines with time. Robin Brooke, and Freeman (1968) considered 92 subjects who had committed suicide after release from a psychiatric hospital, and found 40% of the acts to have occurred within three months of the discharge or last treatment. Pokorny (1966) found the greatest risk to be within two years of the original attempt, threat, or ideation. In this study, the suicide risk and rate declined as a function of time, with the rate after five years being only 12% of the rate within the first three months.

Another aspect of a client's behavior which is useful in determining risk is that several attempts occur for each actual suicide (Choron, 1967). Estimates by experts range from seven to ten attempts for every completion (Wilkins, 1967), (Dublin, 1967), (Faberow and Shneidman, 1961). In an

attempt to determine if an attempt was serious or not, Humphrey and Segal (1970) concluded that attemptors of suicide, as opposed to completors, are far more likely to be female and to use less lethal methods than completors of suicide.

The most salient aspect of a client's behavior which indicates increased suicide risk is a statement of intent to commit suicide. The incidence of communication of intent is given by Resnik (1966) as occurring at least sixty percent of the time, while Fawcett (1969) stated that fifty to seventy percent of those who verbally threaten suicide will make an attempt. Other researchers (Robins, Gassner, Kayes, Wilkinson, and Murphy, 1959), (Delong and Robins, 1961) have found similar percentages of communication, with the statement being made most commonly to the spouse, followed in frequency by other relatives, friends, job associates, physicians, and others.

As to their work behavior, Weissman, Fox, and Klerman (1973) found suicide attemptors to have an impaired work record significantly more often than matched depressives, and Buglass and McCulloch (1970) found that women who repeated suicide attempts more often had a fair, poor, or bad work record than those who did not repeat the attempt.

Another behavioral characteristic of the suicidal client is a background of drug use and/or alcohol abuse. In the matter of drug use, Buglass and McCulloch (1970) found that women with a diagnosis of drug addiction were significantly more likely to repeat a suicide attempt. Weissman, Fox, and Klerman (1973) concluded that suicide attemptors had a more frequent history of drug use than did depressives. As to alcohol abuse, Rushing (1968) stated that while in the general population only 4% are alcoholics, 30% of suicide victims were alcoholics. Rushing (1969) also found that attempts at suicide occur among 7 to 21% of all alcoholics, a rate several

hundred times that of a normal population. Ettlinger (1964) found the tendency to use alcohol to excess to be a significant characteristic of suicide completors as compared to attemptors. The tendency to use alcohol and other drugs to excess is thus a significant behavioral characteristic of the suicidal person.

In addition to a client's social history and behavioral tendencies, their personality is useful in determining suicide risk. Kamano and Crawford (1966) state that self-abasement and a low self-regarding attitude are cardinal characteristics of the suicidal personality.

An important aspect of the suicidal personality is how the potential suicide views death. In this respect, Hafen (1967) found "nearly all suicidal persons conceive death in terms of a continued existence superior to the life they wish to leave".

One reason for the aforementioned desire to leave this life is the personality characteristic most frequently associated with suicide: depression. By all odds the major cause of suicide, (Shneidman, 1970) depression can be detected by these personality characteristics: loss of energy, loss of initiative, an absence of interest in the usual pleasures such as sex and eating, guilt feelings, a mood of sadness, low self-esteem, and a feeling of hopelessness, social withdrawal, which completes the depression, is indicated by a loss of interest in social gatherings and other people (Hafen, 1967).

Studies which support the contention that depression is closely allied with suicide include Minkoff, Bergman, Beck, and Bech (1973), who administered to 68 suicide attemptors personality tests which measured the cognitive, affective, and motivational aspects of depression. A highly significant correlation level occurred between the level of hopelessness and the seriousness

of intent. Silver, Bohnert, Beck, and Marcus (1971) administered the Beck Depression Inventory to 45 attemptors, and found an incidence of depression of 80%.

In discussing the predominance of depression in the suicidal personality, a need to know the difference between depressed persons and suicide attemptors arises. In light of this, Weissman, Fox, and Klerman (1973) studied 29 attemptors and 29 matched depressives, and found the following items to significantly differentiate the two groups: (1) attemptors had made a greater number of previous suicide attempts, (2) attemptors had a more frequent history of drug use and criminal convictions, and (3) attemptors had a more impaired total work record.

Other personality symptoms which indicate an increased suicide risk are listed by Hafen (1967) as (1) an inability to maintain warm, interdependent relationships, (2) marital isolation, (3) a distorted communication of dependency wishes, (4) the rejection of helpful overtures from others, (5) psychosis as indicated by the loss of reality, and (6) excessive dependency, in which others are expected to make decisions.

With this type of personality, a compounding factor discussed by Hafen (1967) is that the potential suicide is often unable to express and satisfy needs in a open manner. This causes him to be unable to maintain warm and interdependent relationships. Ianzite (1970), in studying 95 suicide attempts, found the main cause to be problems of interpersonal relationships. An example of this inability to maintain relationships is that marital difficulties have often occurred in the suicidal person's life. Simon and Lumvy (1970) found that of 40 suicide victims, 60% had serious marital discord, 18 were separated or divorced, and 5 had received divorce threats. Robins,

Schmidt, and O'Neal (1957) concluded from their study that 60% of suicide attemptors have a history of serious marital problems. Buglass and McCulloch (1970) found that of a group of attemptors, those who went on to commit suicide at a later date had significantly more violent events in their relationship with their spouse. The results of these studies indicate that one personality aspect of the suicidal person is an inability to maintain warm relationships.

In an attempt to determine even more personality factors which are predominate in the suicidal person, Rosen, Hales, and Simon (1954) administered the Minnesota Multiphasic Personality Inventory to suicide attemptors, suicide ideators, and controls. No significant difference was found on the L, Mf, or Ma scales; the group which thought about suicide scored significantly higher than controls on the F, Pa, and Sc scales; the ideators were significantly higher than both other groups on the Si, Pt, and D scales; the controls were lower than both other groups on the Pd scale. Another personality inventory, the Potential Suicide Personality Inventory (Devries, 1966), found the following personality factors indicative of the suicidal personality: (1) My future happiness does not look promising, (2) My future does not look secure, (3) I sometimes fear that I will lose control over myself, (4) I never feel that I am completely worthless, and (5) Lately I have not felt like participating in my usual activities. These two studies help to delineate the suicidal personality.

With the suicidal personality thus delineated, demographic variables can be viewed. These variables are important due to their objectivity. Some of the most studied of these variables are age, sex, occupation, and marital status.

Age: In terms of age in relation to suicide risk, a summary statement of research findings is that the older the client, the greater risk (Cohen, Motto, and Seiden, 1966; Miskimins, DeCook, Wilson, and Maley, 1967; Tuckman & Youngman, 1968). The highest risk is among those aged 65 and older, but the largest number of suicides is found in the 40 to 50 age group, due to its larger size (Dublin, 1963). The modal age of suicides is 42 (Scheidman & Farberow, 1965), with women's rates peaking at 35-39, and men's rates peaking at the age of 65 and older. The suicide rate for those 65 and older is five times that of teenagers (Pretzel, 1972; Dublin, 1963). Other researchers who found that the older the client, the greater the risk, include (Schmid & Arsdol, 1955; Stengel, 1964; Batchelor, 1955).

Although suicide rates rise with the age of the client, adolescents comprise an increasingly risky group. Teicher and Jacobs (1966) found that for the 15-19 age group in 1950, suicide accounted for 2.5% of the deaths; by 1962, this percentage had risen to 4.3%.

Marital Status: Generally, suicide rates are lowest for married couples who have children, and highest for the divorced (Dublin, 1967; Hafen, 1967; Schmid & Arsdol, 1955). Married persons do not have as high a suicide rate as non-married persons. The variance is such that Seager and Flood (1965) found widowers to have rates six times that of married men, a finding supported by Rachlis (1970).

Sex: The sex of the client is significant, in that men make far fewer attempts than women, but have more completions. Men were found to outnumber women two to one in one study of completed suicides, while for attempted suicide the rate was reversed, with twice an many women as men making an attempt (Schneidman & Farberow, 1965). That women are more common among

suicide attemptors is a finding reported by Ianzito (1970) and Segal and Humphrey (1970), while other studies conclude that men perform more completed suicides (Dublin, 1965; Seager & Flood, 1965; Segal & Humphrey, 1970).

Occupation: A general finding was that "white collar" occupations and professions had a lower attempted and completed rate than did "blue collar" occupations. The highest rates have been found in the unskilled and laborers line of work (Dublin, 1967; Schmid & Arsdol, 1955), and the lowest rates have been found among artisans, agricultural laborers, and clerical and kindred workers (Dublin, 1967; Schmid & Arsdol, 1955).

Age, sex, marital status, and occupation are not the only significant demographic variables. Geographically, Northern states have a higher rate than Southern states, and Western states have a much higher rate than Southern states, with the exception of Virginia and Florida (Lester, 1970). As to domicile, suicide rates are slightly higher for rural areas, with female rates rising significantly (Hafen, 1967; Seager & Flood, 1965).

As to season and month, suicide rates are highest in the spring, particularly April and May. The lowest rates are found in the winter, particularly December and January (Cerbus, 1970; Hafen, 1967). In addition to the season and month of the attempt, the day of the week of the attempt has been studied. Although Schmid and Arsdol (1955) found no significance attached to what day the attempt occurred, another study of 3,672 suicides found Monday to have the significantly highest rate, and Saturday the significantly lowest rate (Zung & Green, 1974).

Studies have been conducted to determine if a person's month and season of birth affect suicide risk. These studies have acheived non-significant results (Lester, Reeve, and Priebe, 1970; Sanborn & Sanborn, 1974).

College students have a higher rate of completed suicide and attempted suicide than do non-students of the same age. Females and graduate students are significantly more likely to commit suicide than are males and undergraduates. The marital status and religion of the student do not affect the suicide rate. Those who do commit suicide have been found to have a grade-point-average better than the student body average (Seiden, 1966).

In summation of demographic variables as regards suicide risk, the highest risk is among males of advanced age, who are not married.

Despite the knowledge of what factors significantly contribute to increasing a client's suicide potential, an instrument has not yet been constructed that will accurately predict suicide to potential. Suicide prediction scales in use today, such as the Revised Suicide Potential Scale and Potential Suicide Personality Inventory, misclassify over 30% of nonsuicidals into the suicidal classification (Braucht & Wilson, 1970; Devries, 1966). The need for an accurate scale to measure suicide potential lies in the fact that having made a suicide attempt or gesture increases the chance of the next such action being successful (Batchelor, 1955; Motto, 1965; Pokorny, 1966). As there are currently some seven to ten attempts for every completed suicide, it is impractical to hospitalize all those who have attempted suicide. The purpose of this paper is to determine what social history variables correlate significantly with subjects who have made a definite suicide attempt or gesture.

Method

Subjects

From a total population pool of 462 patients, 45 were found to have answered "true" to item 164 or 173. This group was designated as the suicidal group. From the same population pool, 45 subjects were pulled that had

answered "false" to both items 164 and 173, and matched the suicidal group mean and standard deviations on the basis of sex, age, length of education, and marital status. This second group was designated as the control group.

The subjects for this study were 90 patients who completed the Social History Questionnaire (SHQ) (Best, 1971) at a small mental health clinic in the Midwest. The sample included 20 males, and 70 females. The mean age for the males was 21.3, and for the females 23.0. The average education for the males was 11.7 years, and for the females 11.7 years. Marital status of the group was 46 married, 25 single, 9 divorced, 0 widowed, 8 separated, and 2 unknown. As to social class, 1 was upper, 23 were middle, 52 were working class, and 14 were unknown.

The suicidal group was 45 of the aformentioned patients. The suicidal subjects were all those who had answered "true" to either item 164 (I have attempted suicide even though I did not wish to kill myself), or item 173 (I have made at least on serious suicide attempt in the past). The suicidal group included 10 males and 35 females. The mean age for the males was 21.4, and for the females 23.0. The average education for the suicidal males was 11.6, and for the females 11.6. Marital status of the suicidal group was 22 married, 13 single, 4 divorced, 0 widowed, 5 separated, and 1 unknown. As to social class, 1 was upper, 12 were middle, and 23 were working class, with 9 unknown.

The control group consisted of 45 patients, all of whom were drawn from the same subject population as the suicidal group. The control group was those subjects who had answered "false" to both items 164 and 173 of the SHQ. The control group included 10 males and 35 females. The mean age for the males was 21.3, and for the females 23.0. The average years of education for both sexes in the control group was 11.7. Marital status

of the group was 26 married, 10 single, 6 divorced, 0 widowed, 2 separated, and 1 unknown. As to social class, 0 were upper, 11 were middle, 29 were working class, and 5 were unknown.

Measuring Instrument

The measuring instrument was the Social History Questionnaire (SHQ), a 393 item forced choice, pencil and paper, intake inventory. There are three validity scales on the SHQ. In addition, the following characteristics are dealt with: emotional disturbances, thought disturbances, behavioral disturbances, psychosomatic disturbances, marital problems, interpersonal relations, childhood, education, relationship to mother/father, parental relationships, vocational, and treatment.

Other information which is garnered by the SHQ concerns the client's name, address, age, and social class.

Procedure

The SHQ was administered as a routine part of the pretreatment admission procedure. Items 164 and 173 were examined for all completed SHQ forms at the mental health center. Subjects who answered "true" on item 164 (I have attempted suicide even though I did not wish to kill myself) or item 173 (I have made at least one serious suicide attempt in the past) were designated as the suicidal group. The control group consisted of subjects who answered "false" to both items 164 and 173.

From a total population pool of 462 patients, 45 were found to have answered "true" to item 164 or 173. This was designated the suicidal group. From the same population pool, 45 subjects who had answered "false" to both items 164 and 173 were matched with the suicidal group on the basis of sex,

age, length of education, and marital status. These were the same variables used to match the experimental and suicidal groups of previous kindred studies (Dean et al., 1967; Miskimins & Wilson, 1969).

Statistical Analysis

Responses were transferred to IBM scoring sheets, and scored by the counseling and testing center at Eastern Illinois University. Differences in responses between the two groups were noted. A phi correlation coefficient was computed concerning the differences, and from the phi, chi square scores were computed. A determination was made as to what items on the SHQ significantly differentiated between the control and suicidal groups, at the .05 level of significance and beyond. These significant items, which are viewed as potential indicators of suicidal tendencies, were grouped under the appropriate SHQ category and were listed in Table 1. An examination of the significant social history variables was made in order to determine the characteristics of a subject who has made a suicide attempt or gesture.

An expectancy table, Table 2, was constructed. Its purpose was to inform a clinician as to the degree of suicide attempt risk presented by the client's social history.

A table of cumulative frequencies and percentages delineating the test scores received by the suicidal and control groups was constructed. This table, Table 3, indicated at what point in the continum a particular score placed.

The phi coefficient and the chi-square test were chosen as the statistical tests in this exploratory study. The phi coefficient was chosen because each of the variables is a dichotomy, and two groups are used. The chi-square was chosen because it is easily computed from the phi coefficient, and a significant chi-square is interpreted as showing a relationship between the two variables.

TABLE 1

Items of Significance

Category	Item	Level of significance	Phi
Thought Disturbances	I sometimes hear voices talking when no one is there. (34)[a]	.05	-.246
	Sometimes I do not know where I am even though I have been there before. (175)[a]	.05	-.270
	Sometimes it is hard for me to remember things. (148)[a]	.02	-.268
	I believe that people do not want me around anymore. (287)[a]	.02	-.306
	I often believe things that are not true. (16)[a]	.01	-.317
	I am afraid of many things even though I know there is no logical reason to be afraid. (112)[a]	.01	-.389
	I am often confused by the things that are happening around me. (157)[a]	.01	-.338
	Sometimes I do not know what day, month, or year it is. (166)[a]	.01	-.372
	There are many things wrong with my mind. (392)[a]	.01	-.397
	I often have strange ideas that do not make much sense to me. (7)[a]	.001	-.408
	Sometimes I have to do certain things (like wash my hands) or else I get more and more nervous. (139)[a]	.001	-.432
Behavioral Disturbances	I believe I know what my mental problems are and how they began. (8)[a] (F)[b]	.05	-.242
	I often feel very lonely even when my husband (wife) is with me. (50)[a]	.05	-.293
	In the past I received treatment for my mental problems at a mental health clinic. (53)[a]	.05	-.279

	I spend less than the average amount of time raising my children. (176)[a]	.05	-.294
	I pay less than average attention to raising my children. (194)[a]	.05	-.278
	I tried to kill someone before. (32)[a]	.02	-.290
	I have never received treatment for a mental problem before. (44)[a] (F)[b]	.02	.271
	In the past I received inidvidual psychotherapy. (89)[a]	.02	-.340
	I would like to take medicine for my mental problems. (188)[a]	.02	-.314
	I have seriously planned to kill someone. (23)[a]	.01	-.311
	In the past I received private out-patient treatment for my mental problems. (80)[a]	.01	-.310
	Although I am not an alcoholic I could easily become one. (92)[a]	.01	-.348
	Taking drugs could become a problem for me if I am not careful. (128)[a]	.01	-.303
	I have threatened to kill someone. (5)[a]	.001	-.485
	I often have thoughts about sex that make me uncomfortable. (56)[a]	.001	-.377
	I often feel that life is not worth living. (155)[a]	.001	-.469
Emotional Disturbances	Most of the time I do not feel any emotion. (40)[a]	.05	-.270
	Sometimes I get so nervous that I am unable to do things that I want to do. (82)[a]	.05	-.212
	I have been tense and nervous for a long long time. (109)[a]	.05	-.247
	I often feel very sad and depressed. (118)[a]	.05	-.285

	I cannot seem to get interested in anything. (4)[a]	.02	-.262
	Sometimes my emotions are just the opposite of what they should be. (49)[a]	.02	-.319
	I am tense and nervous almost all the time. (73)[a]	.02	-.304
	My emotions often change without warning. (67)[a]	.01	-.346
	It is very hard for me to keep my emotions under control. (85)[a]	.01	-.325
	Most of the time I feel sad, unhappy, and gloomy. (127)[a]	.01	-.364
	I have been depressed for a long long time. (163)[a]	.01	-.298
	I often feel very guilty. (181)[a]	.01	-.348
	Sometimes I get so angry that I almost lose control of myself. (22)[a]	.001	-.355
	Something bad happened to me and I have had a mental problem ever since. (37)[a]	.001	-.434
	I often feel very happy and gay but then suddenly become bery sad and depressed. (76)[a]	.001	-.390
	Sometimes I lose all control of my emotions. (94)[a]	.001	-.449
	I feel very guilty about some of the things I have done. (190)[a]	.001	-.351
Psychosomatic Disturbances	My health has been poor during the past six months. (52)[a]	.05	-.246
	Sometimes I have trouble breathing. (106)[a]	.05	-.247
	My skin is sensitive and I often break out in hives. (151)[a]	.05	-.253
	I often feel so tired that it is almost impossible for me to do anything. (187)[a]	.05	-.244

	I have about the same amount of of energy that I always had. (206)[a] (F)[b]	.05	.241
Interpersonal Relations	I would much rather be alone than spend time with other people. (6)[a]	.05	-.280
	I usually believe anything anyone tells me. (27)[a]	.05	-.241
	I am often jealous of other people. (33)[a]	.05	-.245
	It has always been hard for me to talk to other people. (96)[a]	.05	-.222
	I usually try to comfort everyone. (135)[a]	.05	-.239
	I often criticize other people. (138)[a]	.05	-.226
	I am often angry with others and I let them know about it. (147)[a]	.05	-.268
	I am too generous where other people are concerned. (153)[a]	.05	-.217
	I get along well with the other members of my family. (332)[a] (F)[b]	.05	..248
	I get along well with the other people in a group. (368)[a] (F)[b]	.05	.256
	I have as much self-confidence as most people. (57)[a] (F)[b]	.02	.284
	I am a friendly person. (63)[a] (F)[b]	.02	.288
	I often feel that I am just no good. (114)[a]	.01	-.354
	People do things that make me angry enough to kill or seriously injure them. (165)[a]	.01	-.306
	I am almost always ashamed of myself. (123)[a]	.001	-.388
Relationship with Parents	I never knew whether my mother would punish me or just ignore the bad things I did. (294)[a]	.02	-.080
	My mother neglected me when I was little. (249)[a]	.01	-.309

Vocational and other Information	I believe I would enjoy dangerous work. (310)[a]	.05	-.262
	I am very proud of the many things I have accomplished in the past. (389)[a] (F)[b]	.02	-.311
	I would like to be a daredevil and do all kinds of dangerous things. (314)[a]	.01	-.380
Childhood	I did not like school. (221)[a]	.05	-.221
	When I was little I often set fires just for the "fun" of it. (306)[a]	.05	-.297
	I had trouble with nightmares and bad dreams when I was little. (270)[a]	.02	-.281
	In school I liked math and science. (239)[a] (F)[b]	.01	.300
	In school I made good grades. (mostly A's and B's). (248)[a] (F)[b]	.01	.369
	I often skipped school. (284)[a]	.01	-.335

[a]Item number in SHQ
[b]Answered in direction of false by suicidal group

TABLE 2

Expectancy Table

Number receiving each score		Test Scores	Percent receiving each score	
Suicidal	Control		Suicidal	Control
		55-77		
4		52-54	100	
4		49-51	100	
4		46-48	100	
3		43-45	100	
8	2	40-42	80	20
7	1	37-39	88	12
2	2	34-36	50	50
2	2	31-33	50	50
1	8	28-30	11	89
2	5	25-27	28	72
2	4	22-24	33	67
2	2	19-21	50	50
1	5	16-18	16	84
2	2	13-15	50	50
	4	10-12		100
1	4	7-9	20	80
	3	4-6		100
	1	1-3		100

Table 3

Cumulative frequencies and percentages

Control group		Test scores	Suicidal group	
CF	CP	77-55	CF	CP
		54	45	100
		53	43	95
		52	42	92
		51	41	90
		50	39	86
		49	38	84
		48		
		47	36	79
		46	34	75
		45	33	73
		44	32	70
		43	31	69
		42	29	64
		41	27	59
45	100	40	23	51
43	95	39	20	44
		38	17	37
		37	16	35
42	92	36	15	33
41	90	35	14	31
		34		
		33	13	29
39	86	32	12	26
		31		
38	83	30	11	24
36	79	29		
31	69	28		
29	64	27		
27	60	26	10	22
26	57	25	9	20
25	55	24		
24	53	23	8	18
22	48	22	7	15
20	44	21		
		20	6	13
		19	5	11
18	40	18	4	9
17	37	17		
15	33	16		
13	29	15		
		14	3	7
		13	2	4
12	26	12		
11	22	11		
9	20	10		
7	15	9		
6	13	8	1	2
5	11	7		
4	9	6		
		5		
2	4	4		
1	2	3		
		2		
		1		

The formula for the phi coefficient was taken from Bruning and Kintz (1968), and was as follows:

$$\text{phi} = \frac{AD-BC}{\sqrt{(A+B)\ (C+D)\ (A+C)\ (B+D)}}$$

The formula for the chi-square was taken from Bruning and Kintz (1968), and was as follows:

$$x^2 = \frac{N(AD-BC)^2}{(A+B)\ (C+D)\ (A+C)\ (B+D)}$$

The numbers represented by the letters A,B,C, and D come from a contingency table, as follows:

Suicidal group	A	B
Control group	C	D
	True	False

Items were tested at the .05, .02, .01, and .001 level of significance. This made it possible to give more weight to those items where differences between groups were greater and less weight to items where differences between groups were smaller.

Results

Of the items on the SHQ, 76 proved significant at or beyond the .05 level. These items were grouped into the appropriate SHQ categories. The categories were: emotional disturbances, thought disturbances, behavioral disturbances, psychosomatic disturbances, interpersonal relations, childhood, education, relationship with parents, and vocational.

Of the significant items, which were listed in Table 1, sixteen are in the category of behavioral disturbances. At the .05 level of significance, the suicidal subjects indicated that they spend less than the average time and give less than the average attention to the raising of their children (items 176, 194). The suicidal subjects also indicated at the .05 level of

significance behavioral disturbances such as having received previous treatment at a mental health clinic (item 53), feeling lonely even when the spouse is present (item 50), and not knowing what their mental problems are or how they began (item 8). At the .02 level of significance, the suicidal subjects reported they had received treatment for a mental problem before (item 44), including individual psychotherapy (item 89). The suicidal group desired to take medicine for their mental problem (item 188), and have attempted murder at some point in the past (item 32). The behavioral disturbances reported by the suicidal subjects which were significant at the .01 level were a potential problem with alcohol (item 92) and drugs (item 128), a history of private out-patient treatment for a mental problem (item 80), and having planned a murder (item 23). At the .001 level of significance, the suicidal group had behavioral disturbances of having threatened murder (item 5), having thoughts about sex that make them uncomfortable (item 56), and feeling often that life is not worth living (item 155).

In the category of emotional disturbances, seventeen items were significant at the .05 level of significance or beyond. At the .05 level, the suicidal subjects were found to often not feel any emotion (item 40), and often feeling sad and depressed (item 118). At this level, the suicidal subjects reported pervasive and sometimes incapacitating nervousness (items 109, 82). Emotional disturbances reported by the suicidal subjects which were at the .02 level of significance were a prevalent feeling of tension and nervousness (item 73), an inability to become interested in anything (item 4), and having inappropriate emotions (item 49). At the .01 level of significance, the suicidal group reported difficulty in controlling their emotions (item 85), and that their emotions often change without warning

(item 67). The suicidal group was found to have been depressed for a long time (item 163), and to often feel sad and gloomy (item 127). Also at the .01 level, suicidal subjects indicated feeling guilty frequently (item 181). At the .001 level of significance, the suicidal subjects stated they often have emotion changes from insouciance to depression (item 76), and that they sometimes become so angry they almost lose control of themselves (item 22). They further reported that they sometimes do lose control of their emotions (item 94), and feel very guilty about some things they have done (item 190). Suicidal subjects also reported at the .001 level of significance that something bad had happened to them, and that they had had a mental problem ever since (item 37).

In the category of thought disturbances, suicidal subjects were found at the .05 level to have had auditory hallucinations (item 34), and to not know where they are even though they have been there before (item 175). At the .02 level, the suicidal group stated they had impaired memory (item 148), and a belief they were not wanted around anymore (item 287). Items at the .01 level of significance as reported by the suicidal subjects were often being confused (item 157), and sometimes not knowing what day, month, or year it is (item 166). Also at the .01 level, the suicidal subjects reported often believing things which are not true (item 16), being illogically afraid of some things (item 112), and having many things wrong with their mind (item 392). Thought disturbance items at the .001 level of significance concerning the suicidal group was that they have strange ideas which do not make much sense to them (item 7), and a compulsion to do certain things (item 139).

In the category of psychosomatic disturbances, the suicidal subjects indicated at the .05 level of significance poor health and reoccuring hives (item 151). Also at this level, the suicidal group reported having less energy than in the past (item 206), often feeling tired and listless (item 178), and often being so tired that effort was difficult (item 187). Psychosomatic disturbances items were not significant at other levels of significance.

In the category of interpersonal relations, suicidal subjects reported at the .05 level of significane that they do not get along well with other members of their family (item 332) or other members of a group (item 368). Also, they were too generous with others (item 153), and usually try to comfort others (item 135). Other items significant at the .05 level as indicated by the suicidal group were a desire to be alone (item 6), a difficulty in talking with others (item 96), often being jealous (item 33), usually believing anything anyone tells them (item 27), often criticizing other people (item 138), and often being angry with others and expressing that anger (item 147). At the .02 level of significance, the suicidal group indicated a lack of self-confidence (item 57), and that they are not friendly (item 63). Items significant at the .01 level for the suicidal group were they often felt as if they were no good (item 114), and that people sometimes do things which arouse enough anger to cause a murder (item 165). The suicidal group reported at the .001 level a chronic feeling of shame (item 123).

In the category of relationship with parents, the suicidal group reported at the .02 level of significance that they did not know as a child whether or not they would be punished for the bad things they did (item 294), and they were neglected by their mother (item 249). No other items in this category were significant.

In the vocational category, the suicidal subjects indicated at the .05 level of significance that they would enjoy dangerous work (item 310). At the .02 level, a lack of pride in past accomplishments was shown (item 389), and at the .01 level a desire to be a daredevil was stated (item 314).

The SHQ items in the category of childhood found that the suicidal subjects did not like school (item 221), and often set fires for the fun of it (item 306), with both items being at the .05 level of significance. At the .02 level, nightmares and bad dreams were reported during childhood (item 270). Significant items at the .01 level found that the suicidal group disliked math and science in school (item 239), did not make good grades (item 248), and often skipped school (item 284).

To obtain a more unified representation of the scores for suicidal and control subjects a computation of a frequency distribution of SHQ scores and a distribution of percentages for the two criterion groups was made. This data is presented in Table 3.

Using the data in Table 3 an expectancy table was constructed. The expectancy table is presented in Table 2. Cutting scores were established by using the expectancy table. This table showed that the fourth highest scoring individual in the suicidal group answered 52 of the items as "true". Therefore, the top 9% of the suicidal subjects scored at 52 or more. This established 52 as the cut off score for suicidal subjects in the upper 9% of the entire suicidal group.

Discussion

These findings strengthen the results published by previous researchers. An example is that most researchers (Buglass & McCulloch, 1970; Rushing, 1967, 1968; Weissman et al., 1973) have found alcohol/drug abuse to be a tendency among suicide attemptors; this is supported by items 92 and 128 being significant.

Other research which the present study supports include those which have found that social withdrawal and the inability to maintain warm relationships are representative of the suicidal person (Hafen, 1967; Schneidman, 1970). Their conclusions were mirrored in the significance of items 6, 96, 332, 368, and 63. Hafen (1967) stated that the depression which accompanies a suicide attempt is recognizable by a loss of energy, as shown by the suicidal group in items 178, 187, and 206. Low self-esteem has been shown to be an indicator of suicidal inclination (Hafen, 1967), and was reported by the suicidal group in items 57, 63, 287, 389, 114, and 123. The suicidal group also indicated a feeling of hopelessness (item 155), and an absence of interest in the usual pleasures (item 4), which according to Hafen (1967) is characteristic of the depression which is found among suicides.

Poor health and previous treatment for mental problems has been found to be a characteristic of suicides (Buglass & McCulloch, 1970; Ettlinger, 1964; Jones, 1965; Seager & Flood, 1965). This was also found to be a significant difference in the predicted direction, as evidenced by items 52, 53, 44, 80, and 89.

The presence of mental disorder has been found to be a variable positively correlated with high suicide rates (Stengal, 1964). Items 34, 392, and 7 support this finding.

Depression has been found to be a salient personality characteristic of suicidal persons (Dean et al., 1967; Hafen, 1967; Shneidman, 1970; Silver et al., 1971). This was also true in the suicidal persons of this study, as seen in items 118, 127, 163, and 155.

The PSPI (Deries, 1966) found suicidal subjects had reported feeling worthless; this reflected in items 114 and 389. In the same study, suicidal

subjects indicated a lack of interest in their usual activities; this is mirrored in this study in items 187 and 4.

Tuckman and Youngman (1968) found the existence of a nervous disorder to be indicative of suicides. This is reflected in this study in items 73, 82, and 109 all being significant in the predicted direction.

Failure to Replicate

Researchers (Tuckman & Connon, 1962; Weissman et al., 1973) have found suicide attemptors to have a greater number of criminal arrests in their social history. However, in this exploratory study, items dealing with an arrest record or multiple arrest record were not significant (item 20 and 29).

The presence of marital problems have been reported as being prevalent in the social history of suicide attemptors (Robins et al., 1957). The items which deal with this in the SHQ (68, 77) were not significant in differentiating the suicidal and control groups.

The loss of parents during childhood has been found to be indicative of suicide attemptors (Dorpat et al., 1965; Levi et al., 1966, Tuckman & Connon 1962). The items in the SHQ which deal with the loss of parents during childhood due to death or divorce were not significant (items 327, 388, 334, 343, 361, and 370).

The primary reason for the lack of replication in this study is that previous studies used normals for a control group. This study used other patients from a mental health clinic for controls. Another reason is that the total number of subjects in this study was quite small in comparison with other studies.

Limitations

The limitations of this exploratory study include the small number of subjects in each of the groups; 45. This could have allowed some skewing of the social history variables being measured. In addition to the smallness of the groups, all the subjects were from the same general locale. This could prejudice the results somewhat due to regional environmental influences.

Further limitations include the lack of cross-validation, due to the small number of total subjects. Also, no comparison was made as to the results by the sex of the subjects.

Suggestions for Further Research

This exploratory study needs to be cross-validated, preferably with a large number of subjects. The items which did prove to be significant should be combined with other suicide research scales in order to improve its validity.

An attempt to replicate the findings presented in this study should be attempted with using normals rather than mental health clients in the control group. This would allow for more widespread general use of the findings.

Finally, due to experiment-wise error rate, this study needs to be replicated to determine which items were significant by chance.

Summary

The purpose of this exploratory study was to find social history factors in the background of clients at a mental health center which would significantly differentiate those who had attempted suicide or made a suicidal gesture, from those who had never done so. An experimental design using matched groups was used, and data was taken from the SHQ form which each subject had completed. From this form, 76 social history variables were found to significantly differentiate a group of 45 controls from a group of 45 subjects who had made a suicidal gesture or attempt. An expectancy table was devised, which indicated that a client who scores 52 or more of the significant variables as "true" places himself in the top 10% of the suicidal group. This would lead a clinician to infer that the client is a higher suicide risk than normal.

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