Development of a Tool to Assess Suicide Potential among Filipino Youth

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This report details the development of the Suicide Potential Inventory for Filipinos (SPIF). It is based on the assumption that self-destructive tendencies are manifested in identifiable and quantifiable thoughts, feelings, and behaviors associated with suicide. The study involved six steps: Content validation, Face validation, First trial run, Final test administration, Item analysis, and Evaluation of test. Two hundred twenty-two test items were initially written based on the perceived suicide-related psychological conditions reported by seven clinicians and counseling psychologists, five suicidal individuals, and 16 significant others. This figure was reduced to 150, which were subjected to item inspection, revision, language translation, and categorization of items by 11 experts. The preliminary form of the SPIF was then administered to 18 significant others, one suicidal and nine non-suicidal individuals. Items were reviewed and further reduced to 140 for the final test administration to 42 significant others, 58 suicidal, and 50 non-suicidal individuals. Its psychometric properties were eventually established after analysis, leaving 87 items. Results revealed high factor scale intercorrelations between the SPIF sub-scales and total scale scores, with correlation values ranging from .71 to .96. Its internal consistency was determined using Cronbach's Reliability Coefficient Alpha, with values ranging from .87 to .98. A further analysis of the construct validity of the SPIF was established using the contrasted groups method. It significantly differentiated between those suicidal and non-suicidal, with a t-value of 10.75. The final procedure examined the evidence of convergence between the SPIF and the Suicide Probability Scale sub-scales and total scale scores, with coefficients ranging from .51 to .77. The five sub-scales (Hopelessness, Negative

Self-Evaluation, Suicide Ideation, Helplessness, and Hostility) were then confirmed to measure suicide potential among Filipino youth.

The need to recognize high-risk potentially suicidal adolescents through the use of psychological tests remains a pressing issue since suicide has continued to be a leading cause of death among young people (White, Murdock, Richardson, Ellis, & Schmidt, 1990). The measurement of suicide risk and identification of persons likely to make fatal or nonfatal suicide attempts remain high priorities in the United States, as reported by Beck, Kovacs, and Weissman (1979) in their study. Various attributes of suicidal behaviors were assessed through the use of standard psychological tests or the recent development of suicide-specific assessment instruments.

Although various scales have been developed, none has been widely adopted primarily due to questions about validity. Quite a number of methodological problems were identified that contributed to the slow progress of research on suicide prediction. These include the following: the infrequency of suicide, the magnitude of known and unknown variables that contribute to its risk, and the inherent limitation of using suicide as a validating criterion (White et al., 1990). Over the past decades, some clinicians would rather rely on their clinical judgment of suicide potential or risk after a face-to-face interview with their clients. Some prefer to minimize the use of certain scales to fit their individual interests and concerns.

It is a fact that there are relatively few research studies along this line despite the growing number of published articles on suicide. Though there were optimistic results on the efficacy of certain suicide assessment scales, not enough findings have been consistent to prove their external reliability. A call to standardize and validate the clinical procedures in suicide evaluation using the assessment scales may be considered for future undertakings.

It is also important to note that most of these scales have reported psychometric properties that have met the minimum standards for validation. Some instruments (e.g., Scale for Suicide Ideation, Hopelessness Scale, and Suicide Status Form) tested significant in distinguishing suicidal from non-suicidal individuals. Others (e.g., Suicide Ideation Questionnaire, Suicide Probability Scale, and Suicidal Behavior Questionnaire) hold promise of predicting eventual suicide not only in settings found to have a large number of suicide risk but also in low-risk settings. Thus, the need to regularly use the suicide-specific assessment scales together with the clinical interview is deemed necessary. This will help augment such interview-based evaluation instruments of suicide risk that have unknown validity.

Here in the Philippines, very few research studies on suicide had been conducted. No specific assessment of suicide potential for Filipinos has been developed. Probably, the trauma of and social stigma attached to the victims, survivors, and their families are very strong, making research quite difficult. However, if investigators have to address this pressing concern which is happening everywhere in increasing magnitude, research has to be pursued.

It is in line with these observations that this study was conceived. It aimed to develop a direct and quantifiable assessment of suicide potential that can help clinicians and educate counseling practitioners into talking about suicide potential in their sessions. This objective information on probable youth suicide can also be used as a standard procedure in the intake interview to facilitate the formulation of clinical diagnosis and preventive interventions prior to any further self-destructive thoughts and behaviors of suicidal individuals.

An integrated model on "Suicide Potential among Filipino Youth", based on the reviewed literature, in-depth interviews and survey procedures conducted in the local setting during the first stage

of test development, was conceptualized to serve as the framework of this study. The model reflects three general determinants contributing to the development of certain suicide-related conditions that may lead a person to end or not to end one's own life. It is significant to note that this model is more specific to our culture in terms of the factors identified per determinant.

The first determinant includes predisposing risk factors such as problems with loved ones, poor problem-solving skills and negative view about life. The second involves the psychological functioning experienced by Filipino suicidal individuals in terms of thoughts, feelings, and behaviors. This functioning is indicative of the person's development of suicide related conditions such as Hopelessness, Negative Self-Evaluation, Suicide Ideation, Helplessness, and Hostility. These conditions determine the person's level of suicide risk which could be assessed by an instrument together with other available techniques such as clinical interviews and/or other tests. The third determinant considers the immediate precipitating causes such as conflictual interpersonal relationship with family, peers, and opposite sex, and loss of loved ones in the form of broken romance or separation from family.

Looking at the connection of these three determinants, suicide is portrayed as a process and not just as a sudden outburst of emotions. A Filipino suicide prone youth who has major problems in relation to significant others and to life in general would likely develop initial symptoms of suicide related conditions. If this suicidal person is not detected and significantly helped early enough, and the predisposing risk factors are not controlled or adequately dealt with, the occurrence of major conflictual interpersonal relationships or loss of loved ones might trigger conditions from low to high levels of suicide risk. This might lead to eventual suicide. In case the person was detected through an assessment tool and different

techniques and was substantially helped through counseling/ psychotherapy and strengthening of support system, suicide might be prevented.

The aforementioned suicide related-conditions which are assessed with the use of a tool developed through this study, indicate that a Filipino suicide prone youth who feels <u>hopeless</u> sees life as useless and meaningless, the future hopeless, and that no one cares. This person has *negative self-evaluation* because he/she has poor problem-solving skills and considers oneself inadequate, dumb, or stupid. *Suicide ideations* such as suicide is a solution or an escape from all problems and wanting to die or plans of committing suicide, come to mind. In the process, one becomes *helpless* because of the belief that trying will not change anything anyway and may thus resort to *hostility* by physically hurting oneself. Such conditions are manifested in terms of the person's thoughts, feelings, and behaviors, given the predisposing factors and a certain amount of the immediate precipitating causes.

The main purpose of this study was to develop a valid and reliable local instrument that will assess suicide potential. Specifically, it sought to answer the following questions:

1. Are the theoretically identified dimensions of suicide (e.g., hopelessness, negative self-evaluation, suicide ideation, hostility, and helplessness) empirically applicable in the local setting?

2. Is the Suicide Potential Inventory for Filipinos (SPIF) a reliable instrument in identifying suicide prone individuals?

3. Is the SPIF able to discriminate suicidal from non-suicidal individuals?

4. Is there a significant correlation between the SPIF and the Suicide Probability Scale?

·This study tested the following hypotheses:

1. The theoretically identified dimensions of suicide (hopelessness, negative self-evaluation, suicide ideation, hostility, and helplessness) are empirically applicable to the local setting.

2. The SPIF is a reliable instrument in identifying suicide prone individuals from the general population.

3. The SPIF is able to discriminate suicidal from non-suicidal individuals.

4. There is a significant correlation between the SPIF and the Suicide Probability Scale.

METHOD

Research Design

This study employed the descriptive type of research design using the survey and correlational procedures. Six steps in test development were undertaken: Content Validation, Face Validation, First Trial Run, Final Test Administration, Item Analysis, and Evaluation of Test.

Participants

The purposive sampling method was employed in the selection of the participants for this study. Four main types of participants were involved: Clinicians and Counseling Psychologists, Suicidal Individuals, Significant Others, and Non-suicidal Individuals. The first type of participants was composed of clinicians and counseling psychologists who were handling suicidal individuals during the time of this study. A sub-total number of 18 participants was tapped in the completion of the four tasks prior to test administration. For the interview phase, the first group was composed of five psychiatrists who were working in a leading government hospital in Manila. For

the item inspection phase, the second group was composed of three psychologists. The third group of five members was tasked to be language translators and for the categorization of items, three experts served as judges.

The second type of participants consisted of Filipino male and female suicidal individuals, mostly college students, aged 15 to 24 years. A sub-total number of 64 suicidal individuals were tapped for the interview phase, first trial run, and final test administration in this study. They were depressed or under stress, with suicidal thoughts, and with or without previous suicide attempt/s as attested to by the persons themselves and/or the professional helpers seeing them during the time of this study. They did not have any psychiatric history or record of substance abuse. The age bracket, 15 to 24 years, was chosen because of previous research studies (Morales, 1979; Mercy, Tolsma, Smith, & Conn, 1984; Enriquez et al., 1986; Kaplan, Sadock, & Grebb, 1994; Pascual, 1996) showing that individuals in this age bracket are very vulnerable to suicide. This is also in line with my interest and professional practice as Guidance Counselor of college students.

The third type of participants involved 76 "significant others" of the suicidal individuals who were tapped during the interview phase, first trial run, and final test administration. They were included in this study because of the belief that suicidal persons do tell somebody significant or close to them about their thoughts and feelings. In the process of their interaction and observed behavior with suicidal persons, significant others gain a perspective on what goes on in the life of suicidal individuals. This belief was verified with the significant others prior to their participation in this undertaking. They were mostly the suicidal persons' boy/girlfriends, close friends/classmates, family/relatives (e.g., siblings and cousins), teachers and/or guidance counselors.

The fourth type of participants for this study considered 59 male and female non-suicidal individuals who served as respondents during the first trial run and final test administration. They were Filipinos, aged 15 to 24 years, who were not easily depressed and capable of handling problems/life stresses, as attested to by the persons themselves. They did not have any past or current suicidal thought or attempt during the time of this investigation. In addition, they did not have any psychiatric history or record of substance abuse. These participants were chosen through the assistance or referral of my fellow guidance counselors, classmates, colleagues, and friends. Other participants were my students.

An interview with each of these non-suicidal individuals prior to test taking was conducted to find out if they qualified for inclusion in this study based on the aforementioned criteria. The following questions were asked: a) What were your three major stresses/difficulties for the past months until the present? b) How did/do you handle these stresses/difficulties? c) Have you engaged in prolonged periods of depression (two or more days) when under stress? d) Have you resorted to hurting yourself? e) Have you thought of suicide before? f) Have you tried to commit suicide? g) Have you seen a psychologist or psychiatrist before for major problems? and h) Have you indulged in any form of substance abuse before?

A total number of 217 participants were invited in the first four steps undertaken in this study. From this figure, 150 participated in the final test administration. They formed the norm group. From the 150, 100 were drawn out for the contrasted groupings (50 suicidal vs. 50 non-suicidal).

Instruments

Three instruments were used in this study. The first two, an interview guide and a preliminary survey form, were constructed for

the purpose of generating suicidal indicators needed in the formulation of test items. The interviews and survey aimed to identify the psychological functioning of Filipino suicide prone individuals. During the in-depth interview sessions which the author conducted with the participating clinicians and counseling psychologists, the following questions were asked: "What are the thoughts, feelings, and behaviors of suicidal individuals, ages 15 to 24 years?" and "What are their self-talk or verbal statements?". For suicidal individuals, the author asked: "What are your thoughts (self-talk or verbal statements), feelings, and behaviors for the past weeks until the present time?". For the significant others, the author asked: "What are the thoughts, feelings, and behaviors of the suicidal individual/s whom you know or have close encounter with?". In addition, the preliminary survey forms were fielded to other counseling practitioners to serve the same purpose.

The third instrument used was the Suicide Probability Scale (SPS). It was selected for inclusion in this investigation in order to test the convergent validity of the Suicide Potential Inventory for Filipinos (SPIF). Both scales measure the same construct. The 36-item, 4-point SPS has four sub-scales: Hopelessness, Suicide Ideation, Negative Self-Evaluation, and Hostility. Its internal consistency was determined using Cronbach's Coefficient Alpha on the sample of 579 even-numbered cases and then replicated on the sample of 579 odd-numbered cases (for both cases, $\underline{n}$ = 281 normals, 130 psychiatric patients, and 168 suicide attempters). Results showed that the SPS is a highly reliable instrument with a coefficient of .93 for both samples. Moreover, evidence for convergent validity was proven when a coefficient of .70 was obtained between the SPS total weighted score and the Suicide Threat Scale (Cull & Gill, 1988).

Data Gathering Procedures and Analyses

The following six steps were undertaken in this study:

Content Validation

Documentary analysis and pre-survey. The theoretical constructs directly related to suicide (e.g., Hopelessness, Negative Self-Evaluation, Suicide Ideation, Hostility, and Helplessness), which were derived from the review of literature and interviews/pre-survey conducted, provided a starting data for this study. The responses obtained were already categorized according to these suicide-related conditions as reflected in the survey questionnaire. The clinicians and counseling psychologists whom the author interviewed also confirmed these categories.

Development of Table of Specifications. The theoretical constructs of suicide which were determined from the reviewed literature and conducted pre-survey/interview represented the nature of the variables being measured by the Suicide Potential Inventory for Filipinos (SPIF). The number and percentage of items were considered per variable or area in terms of the psychological functioning of the suicide prone individual (e.g., affect, behavior, and cognition).

Item writing. The cognitive, affective, and behavioral indicators gathered from the reviewed literature, pre-survey forms and conducted interviews were used as bases in formulating the items of the SPIF. The initial instrument contained a total of 222 statements (items) which people might use to describe their thoughts, feelings, and behaviors. The respondent is instructed to read each statement and determine how often the statement is true of him/her for the past weeks until the time the SPIF was accomplished. A 4-point scale ranging from "Almost None of the Time (*Halos di-Kailanman*)" to

"Almost All of the Time (*Halos Parati*)" was used. The simple integer weighting method (coded 1 through 4, including reversals for items scored in the opposite direction) was used in the SPIF. For the significant others, some wordings in the directions were changed to serve the same purpose.

The instrument was subjected to review and try-out procedures for possible deletion of items. Sample items include: " Nobody cares for me." (cognition), "I feel ashamed of myself." (affect), and "When I am in trouble, I throw things around". (behavior).

Face Validation

Item inspection. Three experts inspected and reviewed every item of the SPIF. The appropriateness or suitability, relevance, clarity of language used, correctness of sentences, and content of each item were considered. The experts were asked to indicate the items to be retained as is, deleted, or revised. Comments and suggestions for items to be revised were also solicited. Items considered for retention by two out of three raters were looked into.

Language translation. For proper language usage, both in Filipino and English, the double translation with decentering technique was utilized in this study. A total of five bilingual individuals were tapped for this procedure. The first translation was done from English to Filipino and the second, from Filipino back to English. A panel of three members evaluated each item of the two English versions and its Filipino translation to come up with the pre-try-out form.

Marin and Marin (1991) reported the usefulness of the "decentering" technique in producing culturally appropriate instruments. They further stated that double translation with decentering solved problems in the wording of the scale and produced

a more comprehensible data collection instrument in both languages being examined.

Categorization of items. Three experts were requested to categorize the items per area being measured by the SPIF. The proportion of the distribution of items in the table of specifications was taken into consideration. The pre-try-out form comprised 50 items.

First Trial Run

Sevilla, Ochave, Punsalan, Regala, and Uriarte (1992) mentioned that at this stage, the language suitability of the items and ease in following test directions from the point of view of the examinees should be determined. They also suggested that the average length of time to finish the test and other problems relevant to test taking be determined during this phase.

In this study, the respondents were asked to identify the items which were not clearly understood after taking the SPIF. Comments and suggestions on how to improve the items and other concerns in test taking were also solicited. After the analysis, the number of items for the main try-out form was reduced to 140 (including 24 positive item stems). The average testing time was placed at 25 minutes.

Final Test Administration

The administration of the main try-out form was done to evaluate the items and to establish the psychometric properties of the Suicide Potential Inventory for Filipinos (SPIF). The participants who responded to the SPIF were tapped through the assistance or referrals of the author's fellow guidance counselors, classmates, colleagues, relatives, and friends. Other respondents were my students. Most of

the people who helped me were counseling practitioners and educators from different schools, colleges, and universities in Metro Manila.

Item Analysis

Sevilla et al. (1992) reported the use of the Pearson Product-Moment Correlation method to analyze the items of tests with continuous scaling. The three or more-point Likert scale or the bipolar scales are of this kind. The total score serves as an X criterion whereas an item score is the Y criterion.

In this study, the item-total score correlation of the 150 respondents were computed twice. Items which yielded significant coefficients of .30 and above indicated good items while insignificant ones reflected poor items.

Evaluation of Test (Hypotheses testing)

In this final stage after item analysis, the psychometric properties of the test were established using the remaining 87 items of the Suicide Potential Inventory for Filipinos (SPIF). This procedure involved the examination of the reliability and validity of the inventory.

Evaluation of test reliability. The reliability of the SPIF was determined using Cronbach's Coefficient Alpha formula. This method examines the internal consistency of the SPIF through an analysis of individual test items. The inventory was administered once to the 150 qualified participants of the main try-out.

Evaluation of test validity. Construct validity was employed in this study to examine the validation of the theory or the concept behind the SPIF. It involved testing the correlation between and among the variables/constructs that defined the concept (Sevilla et

al., 1992). Three methods namely, factor analysis, contrasted groups, and convergent validation, were utilized.

Factor analysis is a statistical procedure of reducing a large number of measures to a fewer number called factors. A factor matrix is derived which is composed of each of the item correlation coefficients and the groupings of items under individual factors. Thus, the components of a construct are discovered. In this study, exploratory factor analysis was done using several factor solutions. In this procedure, the items were simply entered and the resulting factors were described (Gable, 1986). A principal component-analysis with varimax rotation was finally performed using a 5-factor solution. Factor loading of .30 or greater was adopted for the screening of the items.

Groups known or assumed to differ with regard to the affective variable are used to examine the discriminative power of the SPIF. In this undertaking, the author contrasted the mean total score of the 50 top suicidal scorers against that of the 50 non-suicidal individuals in validating the said instrument.

For the third procedure, the convergent validity of the SPIF was tested to measure the extent of its correlation with the Suicide Probability Scale (SPS). Both instruments measure the same construct. The correlation coefficients between the sub-scales and total weighted scores on the SPIF and the SPS were computed using the Pearson Product-Moment Correlation formula.

Norms expressed in percentile ranks were generated using the remaining items in the SPIF after it had undergone item and factor analyses. Percentile ranks were established for each of the SPIF sub-scales and total weighted score. Respondents' scores on the main try-out form were utilized for establishing the norms of the SPIF.

RESULTS

From the reviewed literature and interview/survey data, an initial total number of 222 items were written to assess suicide potential among Filipino youth. These items were subjected to inspection, revisions, language translation, and categorization of items. In the process, these were reduced to 150 items for the pre-try-out and further to 140 for the main try-out. The item-total score correlation coefficients were computed twice, first for each of the 140 items and the second, for the remaining 87 items per sub-scale. Item analysis was employed to identify the good items of the Suicide Potential Inventory for Filipinos (SPIF) based on the scores of 150 participants.

From the first analysis, eight items (Items 48, 52, 62, 81, 82, 103, 105, and 136) were eliminated from the instrument. These items did not meet the .30 cutoff correlation coefficient. The remaining 132 items, with coefficients ranging from .32 to .85, were then subjected to a series of factor analyses. This procedure was performed to document the content dimensions of the SPIF item pool and to provide proof that response consistency exists for clusters of items that have psychological meaningfulness. Factor analysis formed evidence for construct validity which was addressed in the first hypothesis of this study.

Considering the exploratory factor analysis, several factor solutions were done before determining the final selection. The 5-factor was chosen because of the highest value obtained in the total variance accounted for by this solution which is 53.7%. An initial principal component analysis with varimax rotation was performed on the entire sample of the 150 participants. All of them were included to maximize the possible range of item responses that would affect the intercorrelations between items entering factor analysis. The following factors extracted in the varimax rotation are:

Factor 1: Hopelessness. The first factor extracted displayed the most number of items (n = 48). Some of them were observed to load on more than one factor. A factor loading of .30 or higher was adopted as a basis for screening these items. Factor loadings ranged from .30 to .66. Considering the top 26 (54%) high loading items, this dimension reflects an individual's psychological state on the verge of committing suicide. This factor was labeled Hopelessness. The prevailing tone of this sub-scale is one of global pessimism and despair especially caused by conflictual interpersonal relationships. Items seem to reflect an overall life dissatisfaction and a generalized negative expectancy about the present situation and the future. Sample items include Item 65: "I feel like my world is falling apart.", Item 86: "I have no one to depend on anymore.", and Item 9: "Nobody cares for me.".

Factor 2: Negative Self-Evaluation. The second factor also yielded quite a number of items (n = 43) wherein some of them also loaded on other factors. Loadings ranged from .39 to .65. The top 23 (53%) high loading items were included in the listing for this factor. This sub-scale clearly defines a cluster of items which assesses Negative Self-Evaluation. Items seem to reflect an individual's general sense of incompetence, worthlessness, ambivalence, and negative attitude toward the self in relation to others. Feelings of shame, guilt, and inadequacy are also reflected in the items. Sample items include Item 84: "I do not have the ability to change things.", Item 28: "I feel ashamed of myself.", and Item 30: "I think I am stupid".

Factor 3: Suicide Ideation. The third factor extracted in the varimax rotation consisted of a smaller cluster of 17 items. Considering all (100%) of these items, some were also observed to load on other factors. Factor 3 was labeled Suicide Ideation with factor loadings ranging from .40 to .71. Items seem to reflect an individual's generally morbid ideas and perceptions about oneself in relation to one's world, present situation, and life itself. Reasons for

suicide attempts or current suicide wishes are also reflected in the items. Sample items include Item 17: "I think that suicide may be a way to escape this intolerable situation.", Item 108: " I consider suicide as the only solution to all my problems.", and Item 23: "I see death as an answer to all my problems.".

Factor 4: Helplessness. Like Factor 3, the fourth factor (Helplessness) likewise consisted of 17 items, all (100%) of which were considered for inclusion in the instrument. Some of the items were also observed to load on more than one factor. Loadings ranged from .36 to .66. Items seem to reflect an individual's belief that any action is futile so the person might as well give up. There seems to be a loss of control over things on the part of suicide prone individuals. Sample items include Item 47: "Nothing good will happen anyway, that's why I've stopped trying.", Item 128: "It is very difficult to reach out to a friend", and Item 138: "I do not ask for help when I am in great trouble.".

Factor 5: Hostility. The fifth factor with the smallest cluster of seven items, all (100%) of which were included in the SPIF, clearly measures Hostility. Factor loadings ranged from .38 to .61). Items seem to reflect an individual's irritability, lack of patience, and possible danger to oneself, others, and property. Sample items are Item 96: "When things become complicated, I abuse myself to the point of endangering my health.", Item 25: "I hit my head against the wall when I am in trouble.", and Item 76: "When I am in trouble, I throw things around.".

In the process of identifying the cluster of items for each factor, the items which loaded .30 or greater on more than one factor were initially listed together. The empirically identified cluster of items was then ascertained if they share common conceptual meanings with respect to the content of the items (Gable, 1986).

After this analysis, 20 items were finally assigned to Factor 1, 22 to Factor 2, 16 to Factor 3, 20 to Factor 4, and 9 items were assigned to Factor 5. Three items (Items 18, 64, and 111) were discarded

because of confusion in interpretation in terms of psychological meaningfulness. The other 42 items (Items 2, 3, 7, 8, 10, 12, 13, 20, 21, 26, 33, 36, 40, 42, 43, 45, 46, 55, 56, 57, 59, 60, 61, 71, 73, 75, 77, 78, 83, 85, 87, 89, 92, 93, 101, 113, 114, 120, 122, 126, 132, and 137) were also eliminated because they did not make the cutoffs set for Factors 1 and 2. Thus, 87 items made it in the final form.

Results in general lend support to the first hypothesis of this study: The theoretically identified dimensions of suicide (e.g., Hopelessness, Suicide Ideation, Negative Self-Evaluation, Hostility, and Helplessness) are empirically applicable in the local setting.

Following the factor analyses and finalization of the factor scales, the intercorrelations between the five sub-scales and total SPIF scores were computed. Table 1 shows the intercorrelation matrix. The lowest correlation is between Hostility and Negative Self-Evaluation ($r = .71$) and the highest is between Hopelessness and Suicide Ideation ($r = .87$). The range of sub-scale to total correlation is .83 for Hostility to .96 for Hopelessness. Thus, the sub-scales and total scale scores are highly interrelated. All correlation values are significant at the .01 level of confidence using the 2-tailed test.

TABLE 1

Intercorrelations Among SPIF Sub-scales and Total Score

Scale	Ho	NS	SI	He	Hs	TS
Hopelessness (Ho)	-					
Negative Self-Evaluation (NS)	.84	-				
Suicide Ideation (SI)	.87	.78	-			
Helplessness (He)	.86	.80	.85	-		
Hostility (Hs)	.77	.71	.76	.72	-	
Total Score (TS).96	.91	.93	.93	.83	-	

$N = 150$, $p < .01$

Measures of internal consistency indicate the extent to which items on a test interrelate and represent similar content. They also provide a check on the content validity of the sub-scales since items within a sub-scale should be relatively homogeneous (Cull & Gill, 1988). In determining the reliability coefficient of the Suicide Potential inventory (SPIF) based on the remaining 87 items, Cronbach's Coefficient Alpha was computed for each sub-scale and for the total scale. This specific procedure also yielded item-sub-scale and -total correlations for each of the items. Coefficients ranged from .32 to .88, indicating good to very good items using the .3٦ cutoff.

Moreover, the results in Table 2 generally document a very high level of internal consistency, especially given the small number of items in each sub-scale. The coefficients ranged from .87 for Hostility to .96 for Hopelessness. The estimated internal consistency of the total scale was even higher (Alpha = .98).

These findings lend support for the second hypothesis of this study: The SPIF is a reliable instrument in distinguishing suicide prone individuals from the general population.

TABLE 2

Reliability Coefficients of the SPIF (N = 150)

Scale (Number of Items)	Alpha
Hopelessness (20)	.96
Negative Self-Evaluation (22)	.94
Suicide Ideation (16)	.95
Helplessness (20)	.93
Hostility (9)	.87
Total Score (87)	.98

$p < .001$

The last two quantitative analyses were performed to further assess the construct validity of the Suicide Potential Inventory for Filipinos (SPIF) and to test the last two hypotheses of this study.

Using the contrasted groups method, the top 50 suicidal individuals' total scores were compared with those of the 50 non-suicidals. The total mean score of the suicidal group is 179.48 (indicating a moderate suicide risk level), whereas for the non-suicidal, their score is 136.2 (indicating a low suicide risk level). Findings revealed a significant difference between their total mean scores, t (91) = 10.75 (p < .000).

These results lend support to the third hypothesis: The SPIF is able to discriminate the suicidal from non-suicidal individuals.

For the final analysis, the relationship between the four sub-scales and total scores of the 87-item SPIF and 36-item Suicide Probability Scale (SPS) was examined. The participants consisted of 58 suicidal individuals and 42 significant others. Correlations between the scales of both instruments are presented in Table 3. In general, the moderate to high correlations document the convergent validity of the SPIF. Coefficients ranged from .51 to .77.

TABLE 3

Correlations Between SPIF and SPS Sub-Scales and Total Scale

Sub-Scale	r
SPIF Hopelessness with SPS Hopelessness	.53
SPIF Negative Self-Evaluation with SPS Negative Self-Evaluation	.51
SPIF Suicide Ideation with SPS Suicide Ideation	.62
SPIF Hostility with SPS Hostility	.67
SPIF Total Scale with SPS Total Scale	.77

p < .000

These findings confirmed the last hypothesis of this study: There is a significant correlation between the SPIF and the SPS.

After the SPIF psychometric properties had been established, norms were derived based on the scores of the 150 participants for test interpr tation. Table 4 presents the norms which are expressed in percentile ranks using the 5th, 10th, 25th, 50th, 75th, 90th, and 95th distribution for each sub-scale and total scale score based on 87 items.

Values obtained from the test in terms of percentile ranks were interpreted in the context of suicide risk using verbal descriptions of Very Low, Low, Moderate, High, and Very High. The ranges of scores were based on the percentile distribution in a normal curve. Note that the greatest portion in the distribution represents the Moderate level, covering 50% of the distribution in the curve.

TABLE 4

Raw Scores, Percentile Ranks, and Interpretation of Test Scores for Each Sub-Scale of the SPIF (N = 150)

| Sub-Scale | Percentile Ranks/Raw Scores/Interpretation | | | | |
	1-9 Very Low	10-24 Low	25-75 Moderate	76-90 High	91-99 Very High
Hopelessness	1-25	26-30	31-54	55-63	64 up
Negative Self-Evaluation	1-36	37-41	42-62	63-71	72 up
Suicide Ideation	1-20	21-23	24-47	48-51	52 up
Helplessness	1-26	27-29	30-49	50-57	58 up
Hostility	1-12	13-14	15-23	24-27	28 up
Total Score	1-126	127-144	145-235	236-265	266 up

After this procedure, the instrument entitled Suicide Potential Inventory for Filipinos, was finalized. This 87-item scale measures the affective (30%), behavioral (23%), and cognitive (47%) indicators of suicidal tendencies. Note that the cognitive indicators are comprised of almost half of the SPIF item pool. This indicates that most of the suicide related measures (Hopelessness, Negative Self-Evaluation, Suicide Ideation, and Helplessness) of the SPIF which are reflected in the model and framework of this study are more cognitive in nature. These were categorized under the five sub-scales of the instrument. Table 5 displays the table of specifications of the final form.

TABLE 5

Table of Specifications of the Final SPIF

| | Number / (%) of Items | | | | | | | |
| | Affect | | Behavior | | Cognition | | Total | |
Sub-Scale	N	(%)	n	(%)	n	(%)	n	(%)
Hopelessness	5	25	3	15	12	60	20	23
Negative Self-Evaluation	9	41	3	14	10	45	22	25
Suicide Ideation	5	31	-	-	11	69	16	18
Helplessness	4	20	10	50	6	30	20	23
Hostility	3	33	4	44	2	22	9	10
Total Scale	26	30	20	23	41	47	87	99

DISCUSSION

Results suggest that the Suicide Potential Inventory for Filipinos (SPIF) is a valid and reliable instrument in spotting suicide-prone individuals. The SPIF has good to very good items which reflect the

factors of suicide potential among Filipino youth. It is a highly reliable instrument and has evidence of convergence with the Suicide Probability Scale (SPS). Five sub-scales confirmed the theoretically identified dimensions of suicide. It also proved to discriminate suicidal from non-suicidal individuals.

Note that this study did not examine the divergent validity of the SPIF with another instrument because of the scarcity of available scales on health, strength of person's ego, resilience, or personal power in the local setting during the time of this investigation. Such types of instrument may be considered as the SPIF counterpart to test its discriminant validity with another scale. This procedure may be done for future research.

Of special interest in this study is the content defining each of the following SPIF sub-scales which resulted from the interviews and preliminary survey, and analysis of data performed in this study.

Factor 1: Hopelessness. This first factor, labeled Hopelessness, has 20 items which are descriptive of a Filipino who seems pessimistic, desperate, and on the verge of committing suicide. There is a general sense of abandonment, solitude, detachment, and resignation from communicating with significant others on the part of this suicide prone individual.

What is unique about hopelessness among Filipino suicide prone individuals is the great emphasis given to interpersonal relationships or support systems, as mentioned earlier. This observation may be connected to the Filipino culture which places a high premium on social acceptance, group-belongingness, and close family ties. In line with the Filipino kinship structure and the closely-knit family, Church (1986) mentioned that help is often depended upon from family members and others, especially in the rural areas where people have little reserve nor control over the environment. In addition, Andres (1991) mentioned that a typical Filipino is psychologically dependent.

He may be able to stand on his feet physically or financially but not intellectually and emotionally.

Results further suggest that a Filipino who feels hopeless would likely believe that people have turned their backs on him/her, there is no one to depend on, no one can help him/her anymore, and that nobody cares, as reflected in the test items. Feelings of being so alone (I don't find the people I love when I need them most.), forsaken (I have no one to depend on anymore.), misunderstood (No one can fully understand what I am going through.), or neglected (I am being neglected by my loved ones.) become predominant emotional states which are manifested in their overt behaviors. These include withdrawal and inactivity, among others. Moreover, results imply that these people sees themselves as trapped in a bad situation from which there is no escape and that the continuation of this situation is perceived as unbearable. Social interaction and communication tend to stop and there seems nothing to look forward to. Note that this pessimistic worldview may be caused by circumstances leading to the loss of one's reputation and coherence with significant others. Thus, suicide may be seen as an attractive way out of this intolerable situation.

Another outcome worth mentioning is the highest correlation (r = .87) derived between this factor (Hopelessness) and factor 3 (Suicide Ideation), considering the four factors. It also obtained the highest correlation (r = .96) with the total scale score (Suicide Potential) score, among others. Evidence of convergence (r = .53) between the SPIF Hopelessness and SPS Hopelessness sub-scale score was likewise established. Results suggest that if responses to the SPIF include a high degree of Hopelessness, the respondent is likely to have overt suicide ideation and is at risk for probable suicide.

These findings were strongly supported by the research studies of Beck and his colleagues (1974) who have consistently identified

hopelessness as a suicide risk factor and directly associated with suicide ideation and intent. Cull and Gill (1988) likewise reported hopelessness as a dimension of suicide risk which is highly correlated with suicide ideation.

Factor 2: Negative Self-Evaluation. The 22-item Negative Self-Evaluation sub-scale reflects an individual's subjective appraisal that things are not going well with the self, that people are distant and uncaring, and it is difficult to do anything worthwhile, as reflected in the test items. This description is in line with Cull and Gill's (1988) concept of this factor. In particular, results suggest that Filipinos who assessed themselves negatively show an incredible lack of confidence in their own resources for solving problems. In the process, they seem to experience an altered sense of self-concept or loss of stability in the social world brought about by altered social relationships. Feelings of inadequacy, worthlessness, guilt, fear of embarrassment, and the like seem to accompany this negative perception. According to Mandle (1984), this type of individual who perceives relating to people as totally ineffective and who lacks self-esteem may consider suicide as a solution to this intolerable situation.

Findings further revealed that this second factor correlated the highest ($r = .84$) with the first factor (Hopelessness), considering the four sub-scales. Its correlation with the total scale (Suicide Potential) yielded a .91 coefficient. A convergent validity ($r = .51$) was likewise observed with the SPS Negative Self-Evaluation sub-scale. These results are consistent with what would be expected given the nature of the scale: A person who has more negative self-image is at a higher risk for hopelessness and eventual suicide than a person with a more positive self-image.

Factor 3: Suicide Ideation. This third 16-item factor was labeled Suicide Ideation. This sub-scale reflects the extent to which an individual reports thoughts or behaviors associated with suicide. What

is unique about suicide ideation among Filipino suicidal individuals is the meaning attached to this gesture which is contextualized in terms of interpersonal relationships and religious beliefs, as reflected in the test items. Filipinos who have suicidal wishes may not push through with their plans of committing suicide because they think that people will miss them when they are gone. They also fear God's punishment. These positive perceptions may prevent one from attempting suicide; however, extra caution should be undertaken if denied or expressed openly.

Of significance to these observations is the intention or motivation for suicide attempt or current suicidal wishes. Again, the strong need for security, belonging, and emotional bonding were reflected in the results. There seems to be an inner mental and emotional distress that is intolerable and they see no way out of their problematic situations. Sample test items include "I think that suicide may be a way to escape this intolerable situation." and "I consider suicide as the only solution to all my problems."

Results further show that like the second factor, Suicide Ideation correlated the highest with Hopelessness ($r = .87$) and its correlation with Suicide Potential was established at .93. Evidence of its convergence with the SPS Suicide Ideation was proven at .63 correlation. Results imply that if suicide ideation is overtly expressed, a high degree of hopelessness and suicide risk may be present. Consistent with these findings, Beck and Weishaar (1990) and Beck et al. (1979) found similar suicidal thoughts and wishes given by suicidal attempters.

Factor 4: Helplessness. The fourth 20-item factor was labeled Helplessness. This sub-scale reflects an individual's general inactivity, passivity, and negative cognitive set. This factor also correlated with Hopelessness ($r = .86$) among the four factors and its correlation with Suicide Potential was determined at .93. Results suggest that if

..responses to the SPIF include a high degree of Helplessness, the respondent is likely to become hopeless and eventually may commit suicide.

These findings merit the inclusion of this factor in the inventory. It is important to take note of the person's psychological functioning in terms of predictability and controllability of oneself and of the environment in spotting probable suicide. Such functioning is related to one's own efficacy and ability to control one's surroundings. In particular, results suggest that Filipinos who are helpless tend to do nothing to improve their situation, as reflected in the test items. There is a sense of surrender or resignation (e.g., Nothing good will happen anyway, that's why I've stopped trying.) on the part of the suicide prone person as manifested in one's loss of motivation and low energy level. There is a seemingly reliance on fate or luck which may be explained in part by how Filipinos perceive the way of controlling their lives. The focus seems to be on their inability to effect positive changes simply because they have given up.

In a related study, Church (1986) mentioned that Filipinos are more external, less internal, in their perceived locus of control. There is a tendency to attribute outcomes to external factors such as God, luck, society, and the like rather than one's own efforts. Thus, if a more dependent or external orientation is valued and accepted, a suicide prone Filipino individual may rely more on others or on God than the self for one's fulfillment and happiness. However, if this person is not able to get that much needed attention, support, and love, the inability to handle problems might trigger suicide-related tendencies (Church, 1986). The religious perspective surfaced as a saving grace for this kind of functioning, knowing that there is a God who helps in times of troubles.

Factor 5: Hostility. The last factor with the smallest cluster of nine items likewise correlated the highest with Hopelessness ($r =$

.76) among the factors, and Suicide Potential (r = .83). It has a good convergent validity with SPS Hostility at .67 correlation. Findings imply that if responses to the SPIF include a high degree of hostility which follows an inward directing of hostility, the respondent is likely to become hopeless and possibly a lethal suicide attempter.

Results further suggest common behavioral characteristics associated with hostility among suicide prone individuals, as reflected in the test items. What is unique about hostility among Filipinos is that it is either denied or suppressed in our culture since we are more of the passive-aggressive type of people. Lapuz (cited in Church, 1986), in her experience with clinical out-patients, found that Filipinos have great difficulty in regulating the expression of hostility and aggression. Since Filipinos are not the confrontative type, a need to release hostile thoughts and impulses builds up through suppression and repression of aggressive and assertive impulses.

This is in relation to a Filipino value of "emotional control" involving endurance and suppression of depressed feelings and problems. Maintaining a pleasant disposition despite presence of problems is desirable, while showing one's unhappiness or annoyance to others is considered in bad taste (Church, 1986). Thus, there is a cultural tendency in the Philippines to deny the presence of depression and to endure and to suffer in silence. A suicide prone Filipino individual would likely engage in self-infliction of pain or self-destructive behavior to release such hostile thoughts and feelings that could not be directed to the persons concerned.

The five SPIF sub-scales were constructed empirically through extensive factor analyses and may be used to generate clinical hypotheses and to identify areas of strengths and vulnerability in individual clients. Although high intercorrelations among factors were established since this may indicate a general consensus about

the nature of these underlying dimensions which seems to be caused by loss or conflictual interpersonal relationships, it is important to consider each sub-scale separately. For one, each sub-scale was proven reliable (Alpha values range from .87 to .96) and valid (correlations with SPS sub-scales range from .51 to .67). All values are significant at the .001 level of confidence.

By comparing the relative elevations of sub-scale scores across all five dimensions, one can begin to make inferences about the nature of suicide risk in a particular individual. For example, does this person feel isolated and alone, but not suicidal? To what extent does he/she express hostility toward oneself and others, and how does this relate to one's sense of hopelessness, helplessness, and overt suicide ideation? Does this individual regard the current situation as something that will pass or as fixed in relation to one's self-evaluation? As with all tests, the interpretation of the SPIF should take into account all relevant clinical data on the person being assessed and try to integrate this view with the scale results.

It is important to note that this study did not include other possible measures of committing suicide, i.e., existence of plan, specificity of plan, readily available means to carry out plan, lethality of the plan and the likelihood of rescue. These detailed probes may be explored during the counseling session once the individual with suicidal tendencies has been initially assessed through an instrument.

In summary, results of this study suggest that suicide potential is a universal phenomenon that can be formulated through a model and validated through the development of an assessment instrument. However, there are unique features or characteristics of this phenomenon among Filipinos that may be attributed in part to cultural differences. In particular, Filipinos place a high premium on social acceptance and good interpersonal relationships. If such conditions which form one's support system are conflictual or lost,

the individual may develop psychopathological thoughts, feelings, and behaviors which place him/her at risk for probable suicide.

Results also provide strong support for the inclusion of the five components of suicide potential which were empirically validated through the development of the SPIF. These components are Hopelessness, Negative Self-Evaluation, Suicide Ideation, Helplessness, and Hostility. Note that Helplessness, which was not included in the Suicide Probability Scale or in any other suicide evaluation scales is an added component of probable suicide in the local setting. Helplessness implies conflictual interpersonal relationships among Filipino suicidal youth.

Findings also suggest that among the five dimensions of suicide, Hopelessness, which comes from a general sense of life dissatisfaction because of conflictual interpersonal relationships, is the most valid and reliable factor in measuring suicidal tendency. Suicide Ideation, Helplessness, and Negative Self-Evaluation closely follow Hopelessness. Hostility places the least with the smallest number of items cluster. With this in mind, Hopelessness seems to be primarily what puts the person at risk for suicide ideation and behavior. Thus, clinical interventions aimed at hopelessness might be useful, particularly in acute crisis situations.

Considering the foregoing results and discussion, it is important for counseling practitioners to be culture-sensitive in using western counseling approaches. Since Filipinos place a high value on close family ties and smooth interpersonal relationships, the involvement of significant others may be needed in therapy. Moreover, western interventions which largely assign the locus of control for behavior change and decision-making to the individual might be less appropriate for Filipino clients. According to Sue (cited in Church, 1986), in family- and small-group oriented cultures like ours, the person is defined less separately from the family. A more dependent

or external orientation is valued and accepted as reflecting good personal adjustment. Finally, in actual practice, appropriate counseling intervention is a highly individual matter and should not depend on a fixed formula or "cookbook" approach.

In using the SPIF, it is important to be guided accordingly. This instrument serves a 3-fold purpose: a) to screen suicide potentials in high risk settings in conjunction with other methods of assessment; b) to generate hypotheses and to formulate treatment plans in the context of counseling and psychotherapy; and c) to evaluate alternative intervention strategies, investigate personality components associated with suicide, or monitor changes in suicide potential over time.

Users of the SPIF are counseling psychologists, guidance counselors, clinicians, social workers, and other related helping professionals. Respondents of this inventory are intended for Filipinos, ages 15 to 24 years, who may manifest some of the symptoms of suicide-related conditions since the scale uses a self-report format. Following another format, it can also be utilized by significant others in reporting the suicide potential of the suicidal individuals they have encountered in order to facilitate making referrals and to assist in formulating intervention strategies. Individuals who are either unable or unwilling to cooperate in completing this rating form are not recommended for its use. The reading difficulty of the SPIF is approximately at second year high school level.

Prior to test administration, users should be familiar with the inventory's theoretical rationale, method of construction, psychometric properties, and implications of its use which are currently being discussed in this study. The SPIF users should also be prepared to make a sound judgment about the validity of the test results by supplementing test data with information concerning suicide risk factors, recent life events, and current mental status of the client. A follow-up of any

unusual or incongruent responses through an in-depth interview may be necessary. Of greater importance in this undertaking is the preparedness of these trained users to know how to handle suicidal clients with the use of an appropriate range of alternative interventions which are available to them.

The use of the SPIF in the clinical, counseling and research settings further calls for conformity to the testing standards and professional and ethical guidelines prescribed by our profession. Such guidelines require that test users should take the necessary precautions to secure the informed consent of the client prior to test taking in order to safeguard the confidentiality of test results. Restricted use of the test to trained individuals should also be considered.

In interpreting test data to individual clients, focus should be on the qualitative aspects of assessed suicide risk rather than reporting specific scores. It is important in this undertaking to evaluate the overall level of suicide risk and to look for specific problem areas among the various sub-scales of the SPIF which should be addressed in counseling. Finally, due to the sensitive nature of the test items, SPIF users should be especially careful to avoid unwarranted intrusions on individual privacy. Users have a legal responsibility to competently evaluate individuals who are at risk for suicide and to intervene appropriately.

AUTHOR NOTE

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