Victim Index
Reliability and Validity Study

Abstract

The validity of the Victim Index (VI) was investigated in a sample of 666 participants. The VI has eight scales for measuring morale, suicide ideation, self-esteem, distress, resistance, stress coping problems and severity substance (alcohol and drugs) abuse. Reliability analyses showed that all eight VI scales had alpha reliability coefficients of between .88 and .96. The Substance Abuse Screen Scale identified all participants who had been treated for alcohol or drug problems. Clients who admitted having emotional and other problems were identified: Morale Scale (91.8%), Suicide Ideation Scale (100%), Distress Scale (100%) and Resistance Scale (100%). VI classification of risk was shown to be within 2.3% of predicted risk range percentile scores for all VI scales. This is very accurate assessment.

Victim Index: Reliability and Validity Study

Community counseling centers often evaluate clients who present multiple problems. Assessment tests give therapists a working framework upon which to develop intervention and treatment plans based on client self-reported problems. The Victim Index (VI) is a multidimensional test that was developed to meet the needs of clinical practitioners victim screening and assessment. The VI has eight scales that measure morale, self-esteem, distress, suicide ideation, stress coping abilities, resistance and alcohol and drug abuse severity. In addition, the Truthfulness Scale measures client truthfulness, denial and problem minimization while completing the VI. Truthfulness Scale scores are used for truth-correcting other scale scores.

This study validates the VI in a sample of clients who were evaluated by community service programs. The data for this study was obtained from the agencies that used the VI in their assessment programs. The method for validating the VI was to examine the accuracy at which the VI identified clients who admitted having problems (predictive validity). The following areas were studied, morale, suicide ideation, distress, resistance and substance abuse problems. For the Morale, Suicide Ideation, Distress and Resistance scales clients' self-admissions of problems were derived from participants' responses to test items. The following items were used. "I am confident things will be better for me in the future." "During the last six months I have been suicidal." "Suffering: Physical/Mental (very often or always)." "Uncooperative or resistance (very often or always)."

For the Substance Abuse Screen Scale alcohol and drug treatment information was obtained from the following test items. "I have been in one or more alcohol treatment programs." "I have been in one or more drug treatment programs." Undoubtedly, there are some clients who have an alcohol or drug problem but have not been in treatment. Nevertheless, clients who have been in treatment would be expected to score in the corresponding scale's problem range.

For the predictive validity analyses, participants were separated into two groups, those

who had treatment and/or admitted problems and those who did not have treatment or admit problems. Then, participant scores on the relevant VI scales were compared. It was predicted that clients with treatment histories and admissions of problems (problem group) would score in the problem risk range (70^{th} percentile and above) on the relevant VI scales. Clients who did not have treatment or admit problems (non-problem group) would score the low risk range (39^{th} percentile and below). Participants who had problems and also scored in the 70^{th} percentile range and above was considered a correct identification of problems. High percentages of participants with problems (treatment and/or admission of problems) and elevated problem risk scores would indicate the scales were valid. The other VI scales were not included in this analysis because of a lack of suitable criterion test items within the VI database.

Method

Subjects

There were 666 participants tested with the VI. Data for this study was provided by professional community service agencies that used the VI. Test data were collected during the year 2001. There were 45 males (6.8%) and 621 females (93.2%). The ages of most participants ranged from 20 through 49 as follows: 19 & Under (13.4%); 20-29 (36.5%); 30-39 (31.5%); 40-49 (15.0%); 50 & Over (3.6%). The demographic composition of the participants was as follows. Race/Ethnicity: Caucasian (62.9%); Black (5.5%), Hispanic (8.9%), Native American (20.0%) and Other (2.7%). Education: Eighth grade or less (4.7%); Some high school (27.3%); High school graduate (46.6%); Some college (14.7%) and College graduate (6.1%). Marital Status: Single (41.5%); Married (25.4%); Divorced (15.1%); Separated (16.9%) and Widowed (1.1%).

Procedure

Participants completed the VI as part of their intake evaluation for referral in community service programs. The VI contains eight measures or scales. These scales are briefly described as follows. The Truthfulness Scale measures respondent's truthfulness, denial and problem minimization while taking the VI. The Distress Scale measures misery, pain and suffering. Distress incorporates pain imposed by physical and mental abuse. Distress also includes anguish, anxiety and depression. The Morale Scale measures the client's mental outlook with respect to enthusiasm, confidence and willingness to work through hardships. The Self-Esteem Scale reflects a client's explicit valuing and appraisal of self. Self-Esteem incorporates an attitude of acceptance-approval versus rejection-disapproval. It is a person's perception of himself or herself. The Resistance Scale measures defensiveness, resistance to help and uncooperativeness. This scale varies directly with the client's attitude and outlook. Some people resist help; whereas, others accept it. The Suicide Ideation Scale measures a client's probability of committing suicide. Suicidal persons give many warnings regarding their intentions. Any elevated (70^{th} percentile and higher) Suicide Ideation Scale score should be taken seriously. Sometimes, it is important to determine whether or not the victim is involved with substance (alcohol or other drugs) use or abuse (Substance Abuse Scale). The Stress Coping Abilities Scale measures how well the client handles stress. This is a non-introversive way of screening identifiable (diagnosable) emotional and mental health problems.

Results and Discussion

The inter-item reliability (alpha) coefficients for the eight VI scales are presented in Table 1. All scales were highly reliable. All of the alpha reliability coefficients for all VI scales were at or above 0.88. These results demonstrate that the VI is a reliable test for victim assessment.

Table 1. Reliability of the VI

VI Scale	Alpha
Truthfulness Scale	.88
Resistance Scale	.94
Morale Scale	.96
Distress Scale	.96
Substance Abuse Scale	.88
Self-Esteem Scale	.94
Stress Coping Abilities	.93
Suicide Ideation Scale	.94

Predictive validity results for the correct identification of problems (poor morale, suicide ideation, distress, resistance and substance abuse) is presented in Table 2. Table 2 shows the percentage of participants who had problems and who scored in the problem risk range on the selected VI scales in comparison to participants who scored in the low risk range. For the Morale, Suicide Ideation, Distress and Resistance scales, clients' responses to test items indicating problems represented criterion items. For the Substance Abuse Screen Scale problem behavior means the participant had alcohol or drug treatment.

For the Morale Scale comparisons between problem risk and low risk clients, there were 73 participants who reported having morale problems. Of these 73 participants, 67 individuals, or 91.8 percent, had Morale Scale scores at or above the 70th percentile. The Morale Scale correctly identified nearly all of the participants who had morale problems. This result validates the VI Morale Scale.

The Suicide Ideation Scale also correctly identified participants who admitted suicide ideation problems. There were 52 participants who admitted being suicidal. All 52 individuals, or 100 percent, had Suicide Ideation Scale scores at or above the 70^{th} percentile. These results support the validity of the VI Suicide Ideation Scale.

There were 52 clients who admitted having severe distress, all 52 were identified by the Distress Scale. The Resistance Scale identified 100 percent of the clients who admitted being uncooperative and resistant toward help. And the Substance Abuse Screen identified all 131 clients who had been in treatment for alcohol and drugs problems. These results validate the Morale, Suicide Ideation, Distress, Resistance and Substance Abuse Screen scales.

Table 2. Predictive Validity of the VI

VI Scale	Correct Identification of Problem Behavior
Morale	91.8%
Suicide Ideation	100%
Distress	100%
Resistance	100%
Substance Abuse	100%

For ease in interpreting participant risk, VI scale scores were divided into four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of participants scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify participants as having problems.

The above predictive validity results lend support for using these particular percentages. The 70th percentile cut off for problem identification correctly classified nearly 100 percent of problem participants. The low risk level of 39 percent avoids putting a large percentage of participants into a "moderate" range. Putting low risk clients into intervention programs aimed at higher risk clients would over-burden counseling programs and may be counter-productive, unnecessarily alarm clients and result in clients exhibiting more problems than they originally had. This undesirable outcome of inappropriate level of intervention selection has been found in the corrections area (Andrews, D., Bonta, J.& Hoge, R. Classification for effective rehabilitation: Rediscovering Psychology. Criminal Justice and Behavior, 1990, 17, 19-52.).

Risk range percentile scores were derived by adding points for test items and truth-correction points, if applicable. These raw scores are converted to percentile scores by using cumulative percentage distributions. These results are presented in Table 3. Risk range percentile scores represent degree of severity. Analysis of the VI risk range percentile scores involved comparing the participant's obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 3. The actual percentage of participants falling in each of the four risk ranges, based on their risk range percentile scores, was compared to these predicted percentages. The differences between predicted and obtained are shown in parentheses.

As shown in Table 3, the objectively obtained percentages of participants falling in each risk range were very close to the expected percentages for each risk category. All of the obtained risk range percentages were within 2.3 percentage points of the expected percentages and many (26 of 32 possible) were within one percentage point. Only three obtained percentages were more than two percent from the expected percentage classification. These results demonstrate that risk range percentile scores are accurate.

Table 3. Accuracy of VI Risk Range Percentile Scores

Scale	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Truthfulness Scale	41.1	(2.1)	29.2	(0.8)	18.7	(1.3)	11.0	(0.0)
Resistance Scale	41.3	(2.3)	30.2	(0.2)	17.7	(2.3)	10.8	(0.2)
Morale Scale	39.2	(0.2)	29.9	(0.1)	20.7	(0.7)	10.2	(0.8)
Distress Scale	39.5	(0.5)	29.6	(0.4)	20.7	(0.7)	10.2	(0.8)
Stress Coping Abilities	39.2	(0.2)	29.9	(0.1)	20.2	(0.2)	10.7	(0.3)
Self-Esteem Scale	38.4	(0.6)	30.7	(0.7)	19.9	(0.1)	11.0	(0.0)
Substance Abuse	41.0	(2.0)	29.6	(0.4)	18.3	(1.7)	11.1	(0.1)
Suicide Ideation	39.8	(0.8)	29.7	(0.3)	20.0	(0.0)	10.5	(0.5)

Conclusions

This study demonstrated that the VI is a reliable and valid assessment test for adult counseling clients. Reliability results showed that all eight VI scales were highly reliable. Reliability is necessary in screening tests for accurate measurement of client risk and needs.

Predictive validity analyses demonstrated that the VI identified participants who had substance abuse problems as well as emotional and suicide ideation problems. The Morale, Suicide Ideation, Distress and Resistance scales were accurate in identifying morale, suicide ideation, distress and resistance problems. The Substance Abuse Screen scale correctly identified all participants who had been in treatment for alcohol and drugs. Furthermore, obtained risk range percentages on all VI scales very closely approximated predicted percentages. These results support the validity of the VI.

Victim Index results provide important risk and needs assessment for this specialized client population, i.e., victims of abuse, sexual abuse or domestic violence. Problem-prone individuals exhibit many characteristics that are identified with the VI. Identification of these problems and prompt intervention can reduce a victim's pain and suffering, and aid in their recovery process. The VI facilitates understanding of victim's emotional and mental health problems and provides an empirical basis for recommending appropriate intervention and treatment programs.

One of the most important decisions regarding a counseling client is what intervention program is appropriate for the client. The VI can be used to tailor intervention (treatment) to each client, based upon his or her assessment results. Low scale scores are associated with low levels of intervention and treatment, whereas high scale scores relate to more intense intervention/treatment recommendations. Placing counseling clients in appropriate treatment can enhance the likelihood that a client will complete treatment, benefit from program participation and change their behavior.

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