KEVIN R. KULIC
The Crisis Intervention Semi-Structured Interview: A Study to Establish Norms, Reliability, and Validity
(Under the Direction of JOHN C. DAGLEY and LINDA F. CAMPBELL.)

The purpose of the present study was to determine the psychometric properties of a crisis intervention assessment instrument, The Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001). The CISSI was designed to be accurate and complex enough for use by experienced clinicians, while remaining concrete and reliable enough to be used by beginning clinicians and others inexperienced in crisis intervention. Crisis intervention is defined as any situation in which a client presents to a clinician in a state that the safety of the client and/or others may be at risk. The target audience for the current instrument is the inexperienced clinician in a crisis situation.

Forty-seven novice clinicians participated in the current study. The subjects watched a videotaped analogue client in crisis being interviewed, and completed the CISSI based on the data the client provided. Subjects then watched a second videotaped analogue client present a monologue, and made a decision whether that client should or should not be psychiatrically hospitalized. The results of the CISSI were analyzed and the CISSI appears to possess acceptable reliability, depending on the type of client assessed. The results of the hospitalization decisions subjects made when using the CISSI and when using clinical judgment were compared, and it was found that, on average, more accurate dispositional decisions were made when subjects utilized the CISSI, than when utilizing clinical judgment alone.

Two of the CISSI's major scales, Depression/Suicide and Psychosis/Homicide, were compared against two valid and reliable instruments, the Scale for Suicide Ideation (Beck, Kovacs, & Weisman, 1979) and the Manchester Scale (Krawiecka, Goldberg, & Vaughan, 1977), and were found to possess acceptable convergent validity. Subjects also completed a second instrument, the Crisis Intervention Self-Efficacy Scale (CISES; Kulic, 2001), which was constructed to measure a clinician's level of crisis intervention self-efficacy. Crisis intervention self-efficacy was compared to hospitalization decisions based upon subjects' results on the CISSI, and for clinical judgment alone, and no

difference was found between subjects with high and low self-efficacy. It is concluded that the Crisis Intervention Semi-Structured Interview is a promising instrument for use by the novice clinician in assessing clients in crisis.
INDEX WORDS: Crisis, Crisis intervention, Crisis assessment, Crisis intervention self-efficacy

THE CRISIS INTERVENTION SEMI-STRUCTURED INTERVIEW – A STUDY TO ESTABLISH NORMS, RELIABILITY, AND VALIDITY

by

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DEDICATION

This dissertation is dedicated to all of the people who helped me through the process of earning my doctoral degree. To my parents, Bert and Judy, who were always there for me. To my wife, Carolyn, who endured the time I spent away from her while working, and who always had an encouraging word about the importance of the work I was doing, especially when I felt discouraged. To my friends, especially John and Randy, who always believed in me, and who were supportive of me while I worked my way through the process. Finally, to my doctoral class cohort: Tara, Tina, Sonya, Bernadine, Sarah, Lorie, and Catherine.

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CHAPTER 1

STATEMENT OF THE PROBLEM

Introduction

The current study is an attempt to assess the utility of a new instrument designed to enable both the novice and experienced clinician to deal with crisis intervention situations so that the best possible outcome is achieved for the client. In this chapter the problems addressed by the current study will be discussed, including concerns of public health, the economy, graduate training in clinical work, beginning and advanced clinicians, college and university counseling centers, and community mental health. The purpose of the study will then be explained, and the instruments tested in the study will be introduced. The seven research questions addressed by the current study will then be presented, followed by the study's limitations.

Statement of the Problem

The problem for public health.

In 1997, the most recent date for which data is available on causes of death in the U.S. population (Centers for Disease Control and Prevention, 1999a), suicide was the third leading cause of death for the age groups 10 to 14 and 15 to 24, and was the second cause of death for the age group 25 to 34. These rates then dropped to third for the age group 35 to 44, sixth for the age group 45 to 54, and ninth for the age group 55 to 64. Among all age groups, the rate of suicide completion is highest among the elderly. According to the National Institute of Mental Health (1999), older Americans are disproportionately likely to commit suicide. The elderly comprise 13 percent of the U.S. population, yet individuals aged 65 years and older account for 20 percent of all suicide deaths, with white males being particularly vulnerable. The highest suicide rate among the elderly is for white men ages 85 and older, which is 65.3 deaths per 100,000 persons in 1996, the most recent year for which statistics are available. This rate is approximately six times the national U.S. rate of 10.8 per 100,000.

In 1997, homicide was the fourth leading cause of death for ages 1 to 14, was the second leading cause of death for each group 15 to 24, was the third leading cause of death for the age group 25 to 34, then decreased to the sixth leading cause of death in the

age group 35 to 44 (Centers for Disease Control and Prevention, 1999a). The statistics cited above were for all races and both sexes. The percentage of homicides related to mental illness is unknown, but murder may be a product of mental illness, unless it is performed in the service of an assisted suicide or euthanasia. Clearly suicide and homicide are major problems in the United States. In fact, in 1999 the Surgeon General released a "Call To Action To Prevent Suicide" (U.S. Public Health Service, 1999), a document that addresses the gravity of the suicide problem in the U.S. The report focuses on a three-tiered approach to suicide, known by the acronym AIM. "Awareness: Appropriately broaden the public's awareness of suicide and its risk factors. Intervention: Enhance services and programs, both population-based and clinical care. Methodology: Advance the science of suicide prevention." (U.S. Public Health Service, 1999) Included in the report are several mandates relevant to the current study:

- "Promote public awareness that suicide is a public health problem and, as such, many suicides are preventable. Use information technology appropriately to make facts about suicide and its risk factors and prevention approaches available to the public and to health care providers.
- Expand awareness of and enhance resources in communities for suicide prevention programs and mental and substance abuse disorder assessment and treatment.
- Improve the ability of primary care providers to recognize and treat depression, substance abuse, and other major mental illnesses associated with suicide risk. Increase the referral to specialty care when appropriate.
- Enhance research to understand risk and protective factors related to suicide, their interaction, and their effects on suicide and suicidal behaviors. Additionally, increase research on effective suicide prevention

programs, clinical treatments for suicidal individuals, and culture-specific interventions.

- Develop additional scientific strategies for evaluating suicide prevention interventions and ensure that evaluation components are included in all suicide prevention programs" (U.S. Public Health Service, 1999).

The problem for the economy. In 1995, the "Years of Potential Life Lost Before Age 65" for all causes of death totaled 3.5 million (Centers for Disease Control and Prevention, 1999b). Out of that number, a mind-boggling 1.5 million years of potential life was lost to suicide and homicide deaths. If you multiply that 1.5 million years by 1997's per capita income of almost $23,000, the total economic loss, over the collective lifespan of these individuals, was $34.5 billion dollars.

The problem for training programs. Training programs for both beginning and advanced clinicians ought to be invested in a crisis intervention model of training (Marson, 1985). Master's-level programs produce clinicians with approximately two years of training; unless these clinicians enter doctoral training, they stream directly into the mental health workforce. It is both unlikely and unrealistic to assume that all of the training necessary to become an effective clinician is learned within the initial two-year training period (Neimeyer & Pfeiffer, 1994). In fact, the first five years of a clinician's career have been conceptualized in the supervision literature as mostly formative and educational in nature (Skovholt & Ronnestad, 1992a, 1992b).

There are numerous models and guidelines published in the literature to assist with training in crisis intervention (Lamb, Boniello, Bowen, Isabelli, & McCormack, 1983; Marson, 1985; Martin, Martin, & Barrett, 1987; Rosenberg, 1997; Slonim, 1994; Southwestern Academy of Crisis Interveners, 1994; Tierney, 1994). The teaching of crisis intervention skills ought to be a primary goal of the training model in master's programs, as the brief therapeutic modality espoused by crisis intervention may help

students become more effective, more prepared, and more marketable in the short run (Ewing, 1990).

Doctoral-level programs and others involved in training advanced clinicians should also invest in the crisis intervention model. Training in crisis intervention skills provides advanced students with additional techniques, prepares them for real-world experiences, and makes them more marketable (Kalafat, 1984; Kranz, 1985a). Upon receipt of their degree, doctoral-level students ought possess the skills necessary to be a comprehensive and effective entry-level mental health professional. Legal, ethical, and risk management concerns may occur when doctoral-level clinicians are not trained in crisis intervention assessment, outcome, and follow-up. For example, if clinicians do not understand the duty to warn, targets of threatened violence may get hurt or killed (Koocher & Keith-Spiegel, 1998). Further, it is important to understand how the legal system interacts with the clinician's ethical duties, as demonstrated by a 1999 ruling in Ohio that changed Ohio law to reflect that clinicians are only legally protected from liability if they take steps to hospitalize patients who threaten violence to others, rather than just warn intended victims (Davis, Davis, & Davis, 1999).

The problem for beginning clinicians. It is of the utmost importance that beginning clinicians receive early and continued training in crisis intervention (Kalafat, 1984; Kranz, 1985a). Though often handed mild severity cases while working on their first practicum or internship, new counselors will likely encounter a client crisis at some point during their training. Because mild severity cases can often turn out to be more serious than when first assessed, the novice clinician should be equipped to deal with unexpected situations (Knop & Schjodt, 1999). Across human service fields, engaging in a particular activity for a relatively long time does not necessarily mean one becomes a better practitioner of that activity (Bernard & Goodyear, 1998). It is essential to get thorough training early on and to keep up-to-date with crisis intervention skills throughout one's career.

The problem for advanced clinicians. As noted above, bad habits may be formed early, and can be kept or extended throughout one's career. Graduate training in crisis intervention is often either insufficient or non-existent. Most clinicians learn their crisis intervention skills through being involved in crises (Wales, 1972). Unfortunately, this is not a particularly effective way to train in mental health services. Once trained, professionals have no particular mandate to receive further training in crisis intervention unless it happens to be a significant part of their professional work (Kleespies, Deleppo, Gallagher, & Niles, 1999). In a national survey of school psychologists, Wise, Smead, and Huebner (1987) found that clinicians were being asked to intervene in a wide variety of crisis situations, but felt under-prepared to do so.

The problem for college and university counseling centers. College and university counseling centers are working with increasingly severe pathology in their student populations (Erickson-Cornish, Riva, Cox-Henderson, Kominars, & McIntosh, 2000; Harris & Kranz, 1991; Kiracofe, 1993). Sharkin (1997) reported there was little evidence to directly support the perceived increase in student distress, but noted that a consistent level of pathology exists in college and university populations. A study by Johnson, Ellison, and Heikkinen (1989) showed that of students seeking help at the university counseling center, one-fourth of the students who filled out a symptomatology questionnaire, which represented 82% of all clients served, met the criteria for the presence of a psychiatric disorder. Further, one-third of the clients who sought help for personal problems showed signs of psychiatric illness. Johnson, et al. (1989) reported that their data showed the need for university counselors to possess crisis intervention skills. The need for crisis intervention services will likely parallel the level of pathology found in institutions' populations, and a valid and reliable crisis intervention instrument could prove valuable to the clinicians in these settings. Counseling psychologists working in counseling centers can improve their treatment planning if they are able to more accurately assess clients with whom they work. In addition, college and university counseling centers often serve as practicum and internship training centers. The reasons

cited above for graduate training programs to embrace the crisis intervention training model apply equally well to college and university counseling centers that participate in training activities.

The problem for mental health centers. Mental health centers typically serve clients with a relatively severe range of pathology (Pepper, Kirshner, & Ryglewicz, 2000). Different options are usually available to deal with the various levels of severity, from outpatient treatment to inpatient treatment, known as the continuum of care (Schreter, 2000). The continuum of care as a mental health policy practice has been questioned because the data does not show it to be more effective than traditional mental health services (Bickman, 1996), yet it is still widely implemented in community mental health. A study by Bickman, Karver, and Schut (1997) demonstrated that inter-rater reliability was close to zero among clinicians trained to use mental health agency guidelines in assigning children to the appropriate level of care in the continuum of care. It is important for the clinician in the community mental health environment to be able to quickly and accurately assess client functioning, in order to refer them to the appropriate level of service upon intake, during treatment, and during crisis situations. The addition of a valid and reliable instrument to assist in these tasks could be a valuable tool to those working in community mental health.

Purpose of the Study

The purpose of the present study was to determine the psychometric properties of a crisis intervention assessment instrument, The Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001; see Appendix A). The CISSI is a 78-item clinician-administered instrument that enables the clinician to determine an objective level of client risk factors, such as recent and current emotional, cognitive, and behavioral symptom severity. The CISSI was designed to be accurate and complex enough for use by experienced clinicians, while remaining concrete and reliable enough to be used by beginning clinicians and others inexperienced in crisis intervention. Crisis intervention is defined as any situation in which a client presents to a clinician in a state that the safety

of the client and/or others may be at risk – hence the need for reliable and accurate assessment. The target audience for the current instrument is the inexperienced clinician in a crisis situation.

The significance of having a valid and reliable assessment instrument for crisis situations is of great importance; the prediction of dangerousness to self or others has long been a goal of psychiatry, psychology, and related human service fields (Douglas, Cox, & Webster, 1999). Prior to the 1980s, accurate prediction of risk of violence to self or others was not considered likely to occur. Douglas, et al. (1999) note that "Until fairly recently, it may have been argued that the state of knowledge did not provide any sort of reliable or trustworthy direction on violence risk assessment. This position seems no longer tenable" (p. 149). Throughout the 1980s and 1990s evidence began to accumulate that risk prediction was possible (Doyle & Doyle, 2000). Steadman (2000) believes that the next quarter-century will provide clinicians practically useful tools to use in risk prediction, the likes of which would not have been possible twenty years prior. Mossman (2000), however, argues that research is unlikely to produce an instrument that will be practically helpful in predicting violence.

The prediction of risk of violence to self or others is a difficult task. Suicide and other forms of dangerous behavior are low-occurrence events, even in special populations (e.g., the mentally ill), making accurate prediction of these behaviors difficult because of the relative rarity of the event(s) (Shergill & Zmukler, 1998). Fremouw, de Perczel, and Ellis (1990) explain the problem of low-occurrence events as the "base-rate problem." The term base-rate refers to how often an event occurs given a particular population. Low base-rate occurrence of an event makes it extremely difficult to predict behavior on an individual basis; predictions for low base-rate events are more reliable when made as a group. Predictive difficulties are not unique to suicide, but result from statistical probabilities (Fremouw, et al., 1990). Better results for group-based predictions, however, are of no comfort to the clinician who needs to determine the safety of a client, nor to the crisis intervention worker dealing with a possibly psychotic and homicidal patient, nor to

the telephone hotline worker trying to convince a person in crisis into revealing their address so police personnel can complete a safety check. However, recent research points to the possibility of successful prediction of violence to both self and others at both the individual and group levels (Douglas, Cox, & Webster, 1999).

There are two types of risk prediction, clinical and actuarial (Groth-Marnat, 1997; Marchese, 1992). Clinical risk prediction is defined as any prediction effort that is not actuarial in nature, and is typically considered to be based solely on clinician assessment and judgment (Groth-Marnat, 1997; Steadman, 2000). Historically, clinical risk prediction was the predominant modality utilized by mental health professionals. Actuarial risk predictions, on the other hand, are based upon statistical probabilities and mathematical models (Steadman, 2000). Throughout the 1980s and 1990s there was a debate in the risk prediction literature as to which form successful risk prediction would take. Buchanan (1999) reports that actuarial methods are most likely to provide accurate prediction instruments. Some research has pointed to the effectiveness of actuarial risk prediction over clinical risk prediction (Gardner, Lidz, Mulvey, & Shaw, 1996). Fuller and Rowan (1999), however, demonstrated that clinical prediction could rival actuarial models.

Ferris, Sandercock, Hoffman, Silverman, Barkun, Carlisle, and Katz (1997) reviewed the literature on risk assessment of violence to third parties and found that risk assessment may be carried out in a number of ways, but that they must all be thorough and systematic. Davison (1997) also argues for an integrated approach to risk prediction. Monahan, a noted researcher in the risk prediction literature (American Psychological Association, 1991), wrote "…actuarial approaches are more likely to be promoted as adjuncts to clinical judgment than as replacements for it" (Monahan, 1997, p. 167). Dolan and Doyle (2000), in a review of the research on violence risk prediction for mentally ill offenders note that "Systematic/structured risk assessment approaches may enhance the accuracy of clinical prediction of violent outcomes….[but] violence risk prediction is an inexact science and as such will continue to provoke debate" (p. 303). The CISSI (Kulic,

2001) is intended to serve as an instrument that blends both clinical and actuarial risk prediction, and it is hoped that the current study will serve as the foundation for the development and validation of the CISSI. Hopefully, it is simply a matter of time and continued scientific inquiry until we are able to arrive at the best possible combination of methods to achieve the difficult yet necessary goal of quick and accurate prediction of the risk of harm to self and others.

Research Question

Three primary research questions guided the present study. The first research question was whether a valid and reliable crisis intervention semi-structured interview could be developed. The Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001; see Appendix A) was developed in response to the first research question. The second research question addressed whether a reliable instrument could be constructed to measure crisis intervention self-efficacy. The Crisis Intervention Self-Efficacy Scale (CISES; Kulic, 2001; see appendix B) was constructed in response to the second research question. The third research question examined whether crisis intervention self-efficacy, as measured by the CISES, impacts the delivery of effective crisis intervention services. In addition, the relationships between crisis intervention self-efficacy and gender, race, level of education, prior crisis intervention experience, and supervision-seeking behavior were explored.

Research Hypotheses

- The Crisis Intervention Self-Efficacy Scale:
    1. The Crisis Intervention Self-Efficacy Scale subscales and full scale will achieve acceptable levels ($r > .70$) of internal reliability as determined by coefficient alpha.
    2. The Crisis Intervention Self-Efficacy Scale subscales and full scale will achieve acceptable levels of internal reliability ($r > .70$) as determined by split-half reliability.

- The Crisis Intervention Semi-Structured Interview:
    3. The Crisis Intervention Semi-Structured Interview Subscale "Depression/Suicide" will achieve acceptable levels of convergent validity (r>.70) as determined by correlation with Beck, Kovacs, and Weissman's (1979) Scale for Suicide Ideation.
    4. The Crisis Intervention Semi-Structured Interview subscale "Psychosis/Homicide" will achieve acceptable levels of convergent validity (r > .70) as determined by correlation with Krawiecka, Goldberg, and Vaughan's (1977) Manchester Scale.
    5. Individual items of The Crisis Intervention Semi-Structured Interview will be endorsed correctly by a majority of raters when presented with symptom-based video analogues, as determined through analysis of the percentage of correctly and incorrectly answered items.
    6. Raters utilizing The Crisis Intervention Semi-Structured Interview will more successfully differentiate between video analogue severity levels than raters not utilizing the CISSI, who rely solely upon clinical judgment.
- Additional hypothesis:
    7. There will be a significant difference on crisis intervention effectiveness between individuals with high and low levels of crisis intervention self-efficacy, as determined through both utilization of the Crisis Intervention Semi-Structured Interview and clinical judgment alone.

Limitations

There are several limitations to the current study. One limitation is that there may be a lack of generalizability because of the small overall sample size and the small sample sizes within each group. A second limitation is the lack of diversity of professions and a lack of representation of clinical experience levels represented by the sample. A third limitation of the study is the lack of external validation of the instruments. The CISSI was not validated in the present study with an actual client population.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter reviews the crisis intervention literature. Definitions will be provided for crisis and crisis intervention, and a literature review will be presented on the difference of the perception of crisis between clients and clinicians. Training issues in crisis intervention are then reviewed, focusing on the importance of training early, availability of training resources, characteristics of the effective crisis interventionist, and what happens to clinicians during and after crisis intervention. Selected instruments in crisis intervention are then reviewed, covering the content areas of suicide assessment, homicide and violence assessment, and crisis intervention.

A Brief History and Current Status of Crisis Intervention

Crisis intervention as a coherent school of thought has existed for several decades. Before its emergence in the professional research literature, it was practiced by those who knew it best – those on the front lines of emergency situations, such as police, fire, medical, and psychiatric personnel. Several writers and theorists throughout the mid-twentieth century first documented crisis intervention as a coherently emerging field, with the earliest and most influential works coming from Lindemann (1944), Erickson (1959, 1963) and Caplan (1964).

Lindemann's (1944) study of the survivors of the 1943 Coconut Grove fire in Boston led him to posit a theory of sequential stages of crisis or grieving. Later, Erickson (1959, 1963) provided the dividing line between two major, yet different, types of crisis – the maturational-developmental and the accidental-situational. Maturational-developmental crises occur along the continuum of Erickson's developmental theory of personality. Crises occur at the points at which individuals either get stuck or progress in their development as a person, from the earliest stage of trust vs. mistrust of others, to the last stage of coming to terms with whether or not one has made a significant contribution to the world. Accidental-situational crises arise when individuals are affected by unexpected life events, such as the death of a loved one, or other major personal loss or trauma.

Caplan's (1964) work, cited as "one of the primary building blocks of modern intervention" by Hendricks and McKean (1995), focused on describing the principles of preventive community psychiatry, and dealt very specifically with crisis intervention. According to Caplan and Grunebaum (1967), crisis intervention is by its very nature a part of the prevention continuum. At first glance crisis appears rather disconnected from prevention ideals, but crisis is a point at which intervention may occur which can help to address any future concerns, thereby becoming a preventative approach. Crises can also be addressed anywhere along the tripartite continuum model of prevention: primary, secondary, or tertiary. The literature on crisis intervention notes that individuals in crisis are somewhat open to suggestion, more so than they would normally be. It is at the highly suggestible point that professional intervention can have a particularly beneficial effect.

Crisis Intervention Definitions

Crisis. The perception of what constitutes a crisis varies widely, so definition is needed. Hendricks and McKean (1995) describe Caplan's work as a continual effort to detail and describe crisis. One of Caplan's earlier definitions of the process of crisis involved the use of a homeostatic mechanism which attempts to fix the imbalance created by the crisis through problem-solving; if that fails, more serious consequences can occur, resulting in a confused state. A continuing crisis may result in major personality disorganization. Several definitions have been provided in the literature to date. Hendricks and McKean (1995) qualify a crisis as:

> "…when unusual stress brought on by unexpected and disruptive events render an individual either physically or emotionally disabled because their usual coping mechanisms prove ineffective. During the crisis period, the individual has the opportunity either to marshall additional resources in order to gain control and to grow personally or to encounter a disorganization of the personality and become more vulnerable and emotionally unstable. As a result of this ineffective problem-solving,

anxiety increases, depression mounts, disorganization of thought and behaving continues, and a severe, disabling condition ensues" (p. 8). Similarly, Aguilera (1998) defines a psychological crisis as "an individual's inability to solve a problem" (p.1). Rubin-Wainrib and Bloch (1998) provide what they call "working definitions" of crisis, based on the crisis intervention literature. The authors cite several sources in their definitions, including Lillibridge and Klukken's (1978) definition, that crisis is "an upset of equilibrium at the failure of one's traditional problem-solving approach which results in disorganization hopelessness, sadness, confusion, and panic." Rubin-Wainrib and Bloch cite Erikson's (1950) developmental definition of crisis, which "no longer connotes impending catastrophe…[instead it is] designating a necessary turning point, a crucial moment when development must move one way or another, marshalling resources of growth, recovery, and further differentiation." Caplan's (1964) definition is cited, which is "the state of the reacting individual at a turning point in a hazardous situation which threatens integrity or wholeness." Rubin-Wainrib and Bloch further define crisis as "a catalyst that disturbs old habits and evokes new responses" (pp. 14-15).

Crisis can be considered an overwhelmingly stressful period of time in the course of a life in which an individual's resources are not enough to enable them to effectively deal with the situation at hand. At this over-stressed point different maladaptive behaviors can occur, ranging from less severe reactions such as depression and anxiety, to the more severe and life-threatening reactions such as a psychosis, suicide, and homicide.

Kleespies, Deleppo, Gallagher, and Niles (1999) make an even further distinction in the definition of crisis. These authors agree with the general spirit of the above definitions of crisis, yet they note that psychological or behavioral emergencies have long been confused with crises. Kleespies, et al. note that a crisis does not necessarily imply a state of dangerousness, such as serious physical harm or life-threatening danger. A crisis

can often precipitate an emergency, but is not defined as the emergency. According to Kleespies, et al. (1999),

> "An emergency occurs when an individual reaches a state of mind in which there is an imminent risk that he or she will do something (or fail to do something) that will result in serious harm or death to self or others unless there is some immediate intervention. High-risk suicidal states constitute one such emergency. Potentially violent states constitute another. States of very impaired judgment in which the individual is endangered constitute a third, while situations of risk to a defenseless victim (e.g., an abused child) constitute a fourth" (Kleespies, et al., 1999, p. 454).

Hence, a crisis is not necessarily an emergency, yet can quickly become one. It may not be necessary to make the same distinctions as Kleespies, et al. (1999) if the clinician conceives of crisis as a continuum, placing psychological or behavioral emergencies crisis at the far end of the crisis continuum. Ponterotto (1987) notes that clients may be hospitalized if they cannot be counted upon to attend to attend outpatient counseling. In the state of Georgia a client may be subject to involuntary outpatient commitment (Official Code of Georgia Annotated, 2001), where clients who are judged to need outpatient services on a regular basis may be involuntarily committed if they do not attend services voluntarily (Swanson, Swartz, Borum, Hiday, Wagner, & Burns, 2000). The situations noted above are not necessarily psychiatric emergencies, but the actions taken when they occur are intended to prevent psychiatric emergencies through crisis intervention. In the current study the term crisis will be used to denote when a mental health professional conducts an assessment with a client who may potentially be at risk for entering the state of psychiatric emergency. Whether that crisis contains the components that comprise a psychiatric emergency will be determined through a thorough assessment.

Legal definition of crisis. The most common type of crisis intervention assessment situation the mental health clinician is likely to encounter is the patient who is either (a) suicidal or self-injurious, (b) homicidal or threatening violence toward others, (c) psychotic or delusional, or (d) any combination of the above three (Newhill, 1989; Ponterotto, 1987; Steinberg, 1989). In the state of Georgia, licensed medical doctors, licensed psychologists, and other specifically licensed mental health clinicians may involuntarily hospitalize individuals meeting specific, legally defined criteria (Official Code of Georgia Annotated, 2001). These conditions include: (1) a psychotic or similar condition that renders one unable to take care of themselves, (2) a recent threat of violence towards others, (3) a recent act of violence towards others, (4) a recent threat of violence towards self (5) a recent act of violence towards self, and (6) a mental illness that renders one unable to take care of themselves. Patients may be similarly involuntarily hospitalized if they are incapacitated by the use of legal or illegal substances such as drugs and alcohol, if they require medical detoxification from legal or illegal substances, or if they meet the dangerousness criteria noted above as a result of substance abuse. The basic premise, however, is that an individual may be involuntarily hospitalized when they may pose a danger to themself or others.

Segal, Watson, Goldfinger, and Averbuck (1988b) note that "Most state commitment statutes today specify that patients may be involuntarily admitted to a hospital only on grounds of danger to self, danger to others, or (in many states) grave disability, and then only if the condition results from mental disorder... Judicial interpretations of the statutes indicate the common denominator, i.e., the only basis for civil commitment, is danger due to mental disorder" (p. 748). In other words, individuals planning murder for reasons other than those related to mental health (i.e., insurance fraud) are jailed, because they are criminals, not mentally ill.

A typical example of a crisis. A typical example of a crisis situation involves an individual dealing with a serious psychiatric disease, such as schizophrenia. Schizophrenics often have hallucinations; these hallucinations do not necessarily

constitute a crisis (Suslow, Schonauer, Ohrmann, Eikelmann, & Reker, 2000). In fact, schizophrenics often have to live their lives with mild hallucinations even after prescription of powerful anti-psychotic medications (Shergill, Murray, & McGuire, 1998). The situation would be considered a crisis if the patient's hallucinations were of the command variety, where the individual believes they are hearing/seeing entities that are commanding them to complete a particular course of action, such as suicide or homicide. At this point the patient is in crisis, because their coping skills are not sufficiently strong enough to defend against the ramifications of obeying their command hallucinations (Junginger, 1990, 1995). The psychiatric emergency is the distinct possibility that this patient may harm themselves or others.

An atypical example of a crisis. Currently in the United States, we are a country with children in crisis (Arman, 2000; Harper & Ibrahim, 1999; MacLennan, 1999; Miller, Clayton, Miller, Bilyeu, Hunter, & Kraus, 2000; Tolmas, 1999). Countries other than the U.S. are also dealing with increased violence (Carter & Stewin, 1999; Hatipoglu-Suemer & Aydin, 1999; Mallet & Paty, 1999; Martin, 1999) Violence in schools, stereotypically thought to be a characteristic of inner-city urban schools with low socioeconomic demographics, has grown to be a common occurrence across the U.S, cutting across demographic boundaries. Though school violence per se is not the current paper's topic, it is relevant when examined from the standpoint of crisis intervention. Through their school years, children are at a crucial point in their development, where we must primarily prevent the occurrence of negative events (Howard, Flora, & Griffin, 1999; Larson, 1994; Murray, Guerra, & Williams, 1997; Orpinas, Kelder, Frankowski, Murray, Zhang, & McAlister, 2000), while also building the competencies and protective factors to help children deal with the occurrence of negative events should they occur (Egeland, Carlson, & Sroufe, 1993; Garmezy, 1976; Masten & Coatsworth, 1998; Rutter, 1987; Werner & Smith, 1982). The emergency aspect of school violence is difficult to define. The emergency may be conceptualized as both the immediate physical presence of

violence in the schools, yet also as the ripple effect school violence may have both short- and long-term.

Client vs. Clinician Perception of Crisis

Often, clients' perception of what constitutes a crisis can be far different than the clinician's perception. For example, Thienhaus, Ford, and Hillard (1995) examined factors related to patients' decisions to visit the psychiatric emergency service, and found that the patient's definition of the presenting problem was often different from the clinician's. It was determined that although there was general agreement between client and clinician on emotional state (i.e., anxious, depressed, etc.), the presence or absence of patient suicidality was largely discrepant. Thienhaus, et al. (1995) note that clinicians were more likely to assess a patient as suicidal than were the patients themselves. Clinicians were also more likely to over-identify psychotic behaviors, and to infer suicidal ideation from psychotic patients who later reported not actually feeling suicidal.

Joiner, Rudd, and Rajab (1999) found "a high rate of discrepancy between [client self-report and clinician] ratings of suicidality…the nature of this discrepancy was such that clinicians were likely to see patients as high in suicidality, whereas patients were less likely to see themselves as such. Data on future symptoms indicated that patients' self-ratings contained considerable probative value" (p. 171). The rate of clinician endorsement of patient suicidality was relatively high (approximately 50% of the sample), but "[the clinicians] took an understandable, and probably advisable, better-safe-than-sorry approach" (p.175).

Kaplan, Benbenishty, Waysman, and Solomon (1992) found low agreement between patient self-report and clinician assessment of suicide risk, with clinician risk ratings higher than patient self-report. In another study, Jobes, Jacoby, Cimbolic, and Hustead (1997) found, while measuring the psychometric properties of the Suicide Status Form (SSF), that clients' predictions of their own level of suicidality were better than, and divergent from, clinicians' predictions. Finally, a study by Wood, Rosenthal, and Khuri (1984) compared the judgment of emergency room clinicians with patient

perception of need, and results indicated that patients' and clinicians' assessment of needs was largely discrepant. Results indicated that "Involuntary and psychotic patients underestimated, and voluntary patients overestimated, their need for hospital care when compared with [clinicians' estimates]" (p. 831). There was generally little to no agreement between patients and clinicians as to what level of care was necessary to best serve the patient's needs.

Non-social service personnel appear to fare even worse when it comes to accurate interpretation of patient states. Crises often strike at inopportune times, such as late at night or early in the morning, when emergency rooms may be the only available source of respite. Physicians and nurses are frequently the first personnel a patient in crisis encounters. A study from Nahmias, Beutler, Crago, Osborn, and Hughes (1983) indicated that emergency department staff fared badly in concordance with patients' judgments about severity of psychological state. Physicians achieved low correlations for identifying somatic symptoms, obsessive-compulsive patterns, and anxiety, and nurses demonstrated no significant positive correlation with patient self-report of psychological distress. In fact, nurses often had significant negative correlations with patient self-report of psychological distress, indicating an almost categorical denial of emotional symptomatology. Other studies, though, have pointed in the opposite direction of client-clinician agreement. Kaplan, Asnis, Sanderson, and Keswani (1994), and Eddins and Jobes (1994) reported a high degree of agreement between a client self-report suicide assessment measure and clinician ratings of suicidality.

A study to ascertain what psychiatric emergency patients wanted and how they felt about what they received (Gillig, Grubb, Kruger, Johnson, Hillard, & Tucker, 1990) concluded that: (a) these patients' needs and desires often fall outside of the traditional psychiatric spectrum, (b) these patients are often not concrete or straightforward (though they tend to be appropriate for a psychiatric emergency service), and (c) these patients may not be accurately assessed. Surprisingly, though, these same patients as a whole tended to have positive attitudes about mental health services, and clinicians were

generally able to judge which patients would report a higher level of dissatisfaction with their mental health treatment.

What is most important to glean from the above studies, though, is that there can often be a great discrepancy between what the client is thinking, feeling, and doing, and what the clinician believes the client is thinking, feeling, and doing, at any given time. Therefore, it is vitally important to use the best methods possible in making decisions that can have great impact upon a patient's life. Similarly, the client and clinician can experience a great deal of difference between them in defining "crisis." Like medical triage, possibly life-threatening situations take precedence over very serious, yet not life-endangering conditions. There are appropriate levels of treatment for any and all patient psychological/psychiatric states, and no matter what the "crisis," it is vitally important that the patient is made to feel that their problem is real, important, and amenable to solution.

To summarize, what legally defines a situation as a crisis, as opposed to what the client conceives of as a crisis, is whether the circumstances involved have the distinct possibility of endangering either (a) the client's health and welfare, or (b) another person's health and welfare. When the crisis situation reaches the point where there is the danger of harm to self or others, the crisis becomes a psychiatric emergency. Other situations that appear to be crises, in the eyes of the client, that do not meet the above requirements, can usually be handled outside of the boundaries of crisis intervention. A developing crisis, however, which is not handled effectively, can often become a full-blown crisis or an emergency situation. The danger of a crisis becoming a psychiatric emergency is an excellent argument for obtaining the best possible assessment of client current and recent functioning, and for the development of a valid and reliable crisis intervention assessment.

Crisis Intervention in Clinical Practice

Crisis intervention is a broad area of training and specialization amongst many different clinical practice areas. Counselors (Kranz, 1985a), psychologists (Wood &

Radwan, 1985), psychologists-in-training (Barlow, 1974; Lamb, Boniello, Bowen, Isabelli, & McCormack, 1983, Wales, 1972), school psychologists (Wise, Smead, & Huebner, 1987), social workers (Murdach, 1987; Walsh, 1985), psychiatrists (Caplan, 1964), teachers (Taylor, Brady, & Swank, 1991) and many others in the helping professions (Baldwin, 1979), including paraprofessionals (Elkins & Cohen, 1982; Wolber & McGovern, 1977) may encounter a crisis situation sometime during their professional tenure, whether as a single isolated incident, or as part of normal contact with clients. Kalafat (1984) noted that crisis intervention has long been a part of community psychology and community mental health, and that it often serves as a "bridge" between community and clinical approaches.

Professions outside of traditional clinical practice (i.e., police, fire, and emergency medical personnel) regularly deal with what are typically considered psychiatric crises and are often unprepared to deal with these situations outside of the normal protocol for crisis situations, which involves taking control and coming to a resolution in the safest and quickest method possible (Borum, 2000; Borum, Deane, Steadman, & Morrissey, 1998; Dupont & Cochran, 2000; Scott, 2000). Unfortunately, these methods are often not suited to the resolution of psychiatric emergencies, yet they do serve to quickly defuse most any situation. Long-term consequences and possibilities for the individual in crisis, however, need to be dealt with from a more complex perspective.

Training Issues

Crisis intervention skills are an integral component of good training programs for clinicians, and ought to be a closely supervised part of any clinical services training program. Unfortunately, this is often not the case. In any given master's or doctoral training program, there is often not a component of training specifically dedicated to crisis intervention. Baldwin (1979) commented that, although crisis intervention as a standard of care was, at the time, on the rise, it was not being strongly emphasized in graduate psychology training. Baldwin noted, "Students leave their training programs

with minimal skills in crisis intervention, a nebulous conceptual framework for brief therapy, and a plethora of myths and misconceptions that are associated with [the crisis intervention] approach" (p. 161).

Earlier, Baldwin (1977) described a comprehensive model of teaching crisis intervention to professional mental health students, where he outlined several myths that seemed to permeate the thinking of professionals at that time. Baldwin outline three specific aspects that most impact a program of training in crisis intervention: (a) crisis theory and practice as a limited framework for therapy but not as a comprehensive theory of psychotherapy, (b) the types of didactic and supervised clinical experiences most effective in teaching [crisis intervention], and (c) the level of professional development at which crisis training is introduced to students to be effectively used and to enhance professional growth. Most individuals undergoing training in crisis intervention may experience it as difficult, as Baldwin (1977) believes about beginning-level students, because it is different from what they are used to.

Bongar and Harmatz (1989) conducted a survey of member departments (N=115) of the Council of University Directors of Clinical Psychology Programs to discover how much training in suicidology (research and treatment of suicide) was being offered. They noted that of the 92 (80%) departments that responded, only 35% offered any formal training in the study of suicide. If training in suicidology occurred, it was usually offered as part of another course. However, respondents to the survey felt that the study of suicide was important for graduate training in clinical psychology, and that graduate training was an appropriate time in the student's professional development to undergo the training. In another study, Bongar and Harmatz (1991), in a survey of the National Council of Schools of Professional Psychology (NCSPP) and the Council of University Directors of Clinical Psychology Programs (CUDCP), found that only 40% of all graduate programs in clinical psychology offered formal training in the study of suicide.

Bongar and Harmatz (1989) also noted the absence of any study addressing the training issue, with the exception of an unpublished survey of training directors from four

clinical disciplines which concluded that no routine formal training in managing suicidal patients was conducted in either U.S. psychiatric residencies, clinical psychology graduate training programs, social work schools, or nursing programs. These results are shocking, and are especially so when considering that psychiatrists, clinicians who are most likely to deal with crisis-oriented patients due to the severity of the population with which they usually work, have no formal training in this area. Fauman (1983) also laments the absence of crisis intervention training for psychiatrists, noting that psychiatrists often develop crisis intervention skills through luck, and that emergency services in psychiatry is typically accorded a lower level of prestige than other areas of professional psychiatric practice.

Fauman (1983) comments that most psychiatrists go out of their way to avoid emergencies. It can be difficult to reach a patient's primary care psychiatrist, psychologist, or mental health worker during a crisis, especially late at night. In section 1.14 of the Ethical Principles of Psychologists and Code of Conduct, entitled Avoiding Harm, it is stated that "Psychologists take reasonable steps to avoid harming their patients or clients…to minimize harm where it is foreseeable and unavoidable." (American Psychological Association, 1992, p. 1601) A standard of care must be determined for emergency treatment of one's patients no matter what the disposition of the primary treating professional.

Availability of training resources. There is no longer a paucity of literature in the area of crisis intervention training. Twenty years ago one would have been hard-pressed to find much literature, either in journal article or book form, outside of the psychiatric/consultation literature, that dealt with crisis intervention training issues for neophyte counselors. Currently, however, there are several excellent books available for different areas of clinical practice, and there are whole journals dedicated to publishing in the arenas of crisis intervention, suicide, and related areas of study (Crisis Intervention and Time-Limited Treatment; Crisis; Omega: The Journal of Death and Dying; Death Education; Death Studies; Suicide and Life-Threatening Behavior). Additionally, the

American Association of Suicidology (AAS) is dedicated to the study of suicide and life-threatening behaviors, and has compiled a comprehensive bibliography to assist in teaching a suicidology curriculum. Cotton and Range (1992) have created an instrument, the Suicide Intervention Response Inventory (SIRI), to assess competence in skills required in suicide crisis intervention.

According to Bongar and Harmatz (1989), there is a large body of research on suicidality including clinical risk factors, epidemiology, psychiatric diagnoses, clinical assessment and management strategies, psychotherapy, pharmacology, risk/benefit analysis, hospitalization, law and ethics, and so forth. There is an abundance of literature on how to deal with all of these difficult clinical and/or crisis situations, especially the three primary crises – suicidal ideation, homicidal ideation, and psychosis/inability to take care of oneself. Graduate training programs should expect students to read, understand, and integrate the appropriate literature, but training programs ought to participate in structuring students' learning with the available literature. Clearly, graduates need to be prepared to treat patients presenting with serious and possibly life-threatening issues.

There is a smattering of literature dealing with the instruction of crisis intervention skills ranging from the mid-1970s to the mid-1980s, but little of this literature deals directly with graduate-level students in psychology and human services. The foci of the literature are teaching paraprofessionals (Delfin, 1978; Doyle, Foreman, & Wales, 1977; France, 1977; Wolber & McGovern, 1977), bachelors-level students (Kranz, 1985a), nursing students (Sullivan-Taylor, 1985), teachers (Ray, 1985), or psychiatric residents/medical residents (Fauman, 1983; Neimeyer & Diamond, 1983). Kalafat (1984) discussed the need for crisis intervention training with community psychologists, but also lamented the lack of recent data at that time regarding crisis intervention training in community psychology programs, with the last data gathered in the mid-1970s. Kalafat noted that "[In the mid-1970s crisis intervention training] ranked highly in polls concerning relevant courses by both students and faculty… However only

55% of the students polled indicated that the academic coverage was adequate. Training in field sites was rated higher but the most common complaints were that there was no integration between academic and field training and that field training was difficult to arrange and not a systematic part of the curricula" (pp. 242-243).

Of the articles that do deal directly with training mental health professionals, few are empirically based. No outcome evaluations of their training experiences are provided. One article (Kranz, 1985a) dealt directly with training mental health professionals in crisis intervention, yet provided no data. Seabury (1994) discussed a model of training social workers in crisis counseling utilizing interactive video disc programs, but provided no data. Another article (Taylor, Brady, & Swank, 1991) discussed follow-up data for an earlier intervention that taught crisis skills to elementary and secondary teachers enrolled in graduate education programs. Trained participants perceived themselves as more able to recognize the need for crisis intervention, and felt more effective when intervening. However, their sample size and confounded effects in the design limited their results. A survey of teachers-in-training by Taylor, Hawkins, and Brady (1991) revealed that only 41.7% of the trainees were trained to recognize the need for and deliver crisis intervention. When subjects were asked to define a teacher's role in crisis intervention, only 10.4% reported that they would be expected to both recognize the need for and to deliver interventions in crisis intervention.

Neimeyer and Diamond (1983) described the results of a study where they measured the differences between beginning and advanced medical students in their ability to accurately assess suicidal patients. The advanced medical students took part in a mandatory didactic instruction and role-playing curriculum that taught history-taking skills, empathic responding, and facilitative questioning. The students had not yet participated in their psychiatric rotation, and therefore had not had direct contact with psychiatric patients. The advanced students were assessed before and after they completed their psychiatric rotation. The mean score for all respondents obtained on the assessment instrument (the Suicide Intervention Response Inventory, a 25-item

questionnaire which contains hypothetical patient remarks followed by two reply choices) was about at the same level as that for beginning crisis counselors. Female students scored significantly higher than did males. The advanced students scored significantly higher than the beginning students, and the advanced students with psychiatric experience scored significantly higher than their previous scores, before they had obtained psychiatric experience. The advanced students with psychiatric experience achieved scores similar to those obtained by experienced paraprofessional crisis interventionists assessed in a separate study by one of the authors. These are encouraging results, albeit rudimentary ones, for the training of professionals in the basics of crisis intervention. Neimeyer and Diamond (1983) noted that medical training was incorporating more interviewing and counseling skills (what they termed non-technical training) in order to best serve the needs of the patient, and to train medical caregivers who possess technical excellence as well as good clinical and interpersonal skills.

Kranz (1985a) described his mentor-training mode for crisis intervention training, conducted at a Colorado metal health center from 1983-1985. Kranz noted problems with graduate training and beginning clinicians:

> "The author quickly became aware that learning and implementing appropriate skills involved in successful crisis intervention mental health work were not fully acquired in an academic setting. Rather they evolve as a function of the job. Graduate students as well as other mental health personnel often appear at a loss as to how to operate successfully in this situation. The demands and expectations appear quite different from their previous training and experience" (pp. 108-109).

Essentially an expanded supervisory role, Kranz' mentor-training model, though empirically untested, takes into account one major factor above all others: great crisis interventionists are not born, they are made. Though some clinicians may be more level-headed than others, some more self-efficacious than others, and some more experienced

than others, no clinician ought to be placed in a situation for which they have no training, little supervision, and where their action, or lack of action, may cause harm.

Kranz' (1985a) mentor-training model merits review. Kranz proposed that by helping to reduce clinician anxiety and self-doubt over handling weighty decisions by themselves, he could help to create more confident and accurate crisis interventionists. In Kranz' model, the trainee worked alongside an experienced crisis evaluator from the initial phone call through the final disposition, obtaining supervision while also attempting to make critical treatment decisions by themselves. The clinician's supervisor-trainer was apprised of all decisions before they were implemented. Role-playing served as a particularly useful tool for the clinician-in-training, by helping them to gain insight into aspects of their own personalities, the crisis situation, and the clients.

Supporting evidence for Kranz' (1985a) training model is provided by Doyle, Foreman, and Wales (1977), who conducted a study that found that the majority of learning occurred for nonprofessional crisis interventionists during immediate post-crisis supervision, and that relying on pre-training supervision only may result in harmful outcomes. Similarly, Knop and Schjodt (1999), in a discussion of staff supervision of emergency psychiatry, note that "The implementation of staff supervision is recommended at 3 different levels: (1) the teaching-learning level, (2) the regular supervision dialogue with the staff group, and (3) the ad hoc crisis intervention in immediate connection with a concrete dramatic/violent acute situation" (p. 83).

The importance of training early. Counseling students who are to receive training in crisis intervention ought to receive this training early (Bongar, Lomax, & Harmatz, 1992). Ethically, it is imperative for clinicians to be competent if they are to be treating a dangerous patient (Bongar, 1992). While it is important for beginning counselors to begin their training with clients who are relatively safe (i.e., no outward signs of impending crisis), once this initial introduction to the practice of counseling has begun, the growing clinician needs an early and comprehensive understanding of crisis intervention. While many programs integrate discussion of the signs and symptoms of severe depression and

suicidal symptoms, and many integrate extensive role-play situations in which this would occur, it appears that few if any programs start training clinicians early in the basics of crisis intervention.

During most students' early training in counseling they are handed mild-severity cases, commensurate with their experience. Over time the severity of this caseload grows as the clinician becomes more confident in their skills and abilities and demonstrates actual competencies. The difficulty with this philosophy of training is that it is difficult to "work one's way up to" a suicidal client or a client in crisis; this situation may occur with even the most benign client. Students may be offered cases that are more serious or complex in nature, but generally, crisis in a client's life may occur at an inopportune time, for both the client and the clinician-in-training.

It is not a stretch to venture that the first time a client is in crisis is often the first time that the student counselor has dealt with a crisis situation. Though these circumstances vary by placement and type of program in which the student is enrolled, in general, there is a model followed by those who train beginning clinicians, and crisis intervention is often not a core component. Case in point, if one examines two popular textbooks on beginning counselor skills, there is little documentation on crisis intervention. Egan's The Skilled Helper (1994) devotes three pages to the topic; Teyber's Interpersonal Process in Psychotherapy (1992) devotes none.

Another example of the acute need for training in crisis intervention was demonstrated in a study by King, Price, Telljohann, and Wahl (1999). This study sought to measure high school counselors' perceived self-efficacy in recognizing students at-risk for suicide. Out of 183 respondents, 87% of the counselors surveyed believed it was their responsibility to identify students at risk for suicide, yet only 38% believed they could identify a student at-risk for a suicide attempt. Slightly more (44%) felt they could talk with teachers, other counselors, or parents (47%) in this identification effort, and a substantial amount (79%) felt they would be able to ask the student directly. Still more believed they could refer to a mental health professional if necessary (85%). While most

counselors felt that preventing suicide was one of the most important things they could do for the school system, and that it was an essential part of their role in the school, only a little over a third felt they would actually be able to identify the student at-risk. School counselors should possess, at the minimum, a master's degree in some type of human services field, preferably school counseling. Yet, counselors' level of self-efficacy in recognizing and preventing student suicide is alarmingly low. One positive element of the study denotes significantly higher efficacy expectations for those counselors working at a school that had an active crisis intervention team. The authors' first recommendation based on their results is that "high school counselor training programs should more thoroughly prepare high school counselors to recognize students at-risk for suicide" (King, Price, Telljohann, & Wahl, 1999, pp. 465-466).

Training methods. Kalafat (1984) described the core areas of training involved when dealing with crisis intervention: (a) substance – a clear and concise understanding of the concepts and theories in which crisis intervention is grounded; (b) strategies – ensuring the placement of a model of helping and problem-solving based on the literature and research, i.e., the substance; (c) skills – basic helping skills and styles; (d) self – bringing the personal styles and interpersonal characteristics of the self into the crisis intervention situation, i.e., the ability to explore one's values while respecting others' and also paying heed to the central tenets of crisis intervention. Kalafat emphasized a skill-based method of teaching crisis intervention that applies to real-life situations instead of theoretical situations; hence the integration of theory and practice among the four components listed above for training.

Competence-based training must occur in a real-world atmosphere so those who come from a primarily academic background receive hands-on experience, while those from a primarily practice-oriented background will grasp what Kalafat (1984) terms the "so what" factor, which asks how crisis intervention can be useful to clinicians in their work. Kalafat sponsors the experiential/didactic model of adult learning, with skill teaching and training. Kalafat also outlined a generic training format suitable for graduate

education in a social service field, consisting of a course (Theory and Practice of Crisis Intervention), a beginning and advanced practicum in crisis intervention, and an advanced practicum in crisis training and consultation.

Walsh (1985) also favors the learning-by-doing method of teaching crisis intervention skills. Walsh's discussion centered on the training of social workers in health care, but also forwards an apprenticeship model of supervision and learning, "…an intensive and comprehensive case-based instruction…well suited to the psychiatric emergency service. This model of supervision emphasizes the use of modeling techniques, stresses learning by doing, and facilitates the student's gradual advancement toward clinical autonomy" (p. 27).

A structured and in-depth experience in crisis intervention training is generally not available at traditional counseling training sites (i.e., counseling centers, community mental health centers) on a regular basis. Clients often present with serious issues, and many centers may not be equipped to handle crisis intakes unless they have planned for this eventuality and have constructed a system to deal with it. What is required for this type of training is a rotation for students in a crisis-oriented placement, such as at a local emergency room. These rotations are often available to doctoral level students in psychology who are completing their pre-doctoral internship year; this type of training began gaining popularity in the early 1970s (Barlow, 1974; Wales, 1972), and has since become relatively common across internship placements. Often, though, this rotation must be chosen rather than assigned; interns who have no desire to sharpen their crisis intervention skills are not likely to ask for this assignment.

Characteristics of the Effective Crisis Interventionist

Kranz (1985a) noted that individuals who fared best and enjoyed crisis work tended to display a relatively stable set of characteristics. Kranz does not believe that all clinicians are fit for crisis work, but those who do display a relatively stable set of characteristics. Kranz lists eleven characteristics of the effective crisis interventionist. These characteristics are: (1) self-confidence in stressful situations, (2) tolerance of

ambiguity and the ability to make order out of chaos, (3) rapid decision-making ability, (4) the ability to quickly integrate data to decide on a disposition, (5) practical flexibility, fairness, and common sense, (6) excellent communication and mediation skills to bridge multidisciplinary environments, (7) an awareness of the boundaries and limits of their role, (8) a high energy level accompanied by an enjoyment of the immediacy of crisis work, (9) a healthy attitude towards life to help cope with crisis stress, (10) the ability to consult with colleagues, and (11) an acceptance of failure and the knowledge that the correct decisions may not always be made.

Kalafat's (1984) description of the ideal crisis interventionist is similar to Kranz' (1985a) description:

> "The job calls for an active approach that has as its aim the development of a collaborative relationship…it also entails the liaison with and mobilization of a variety of institutional and/or interpersonal support systems. What's more, crisis workers must be able to engage in this problem-solving in a wide variety of stressful situations, while resisting the temptation to become gurus to confused individuals in crisis. This calls for considerable ego strength as well as an awareness of one's own areas of weakness, concerns, and needs" (pp. 243-244).

What happens to clinicians during and after crisis intervention. Almost every clinician will have to deal with a crisis situation at one point during his or her career. The seeds of how a clinician deals with the consequences of the crisis are often planted early in training. As mentioned earlier, many clinicians do not have adequate training when it comes to dealing with crisis situations; often clinicians are not amply prepared to deal with loss and grief issues of their own while training for therapy. For example, Bongar and Harmatz (1989) cite statistics such as "the average professional psychologist who is involved in direct patient care has better than a one-in-five chance of losing a patient to suicide sometime during his or her professional career. Suicide has also been found to be

the most frequently encountered emergency situation for mental health professionals, and clinicians consistently rank work with suicidal patients as the most stressful of all clinical endeavors" (Bongar & Harmatz, 1989, p. 209). In addition, psychologists tend to respond to the suicide or death of patient in the same manner as they respond to the death of a family member.

Soto and Jones (1985) studied the levels of staff burnout and negligent counseling practices among crisis phone counselors, and found that higher burnout levels were correlated with higher instances of several negligent phone counseling practices, such as not answering the phone, refusing to connect runaways on the phone with their parents and relatives, and missing shifts. Though burnout is not equivalent with lack of training in crisis intervention, it can be an end result of lack of training.

Barlow (1974) noted that the initial reactions of interns on emergency psychiatric rotations were moderate-to-severe anxiety and an inability to sleep. Wales (1972) noted similar reactions to emergency exposure, such as anxiety, urgency, and a sense of feeling overwhelmed to the point of appearing as if the clinician possessed no skills at all. Another common reaction was the clinician becoming so impressed with patient urgency that they rushed to "do something" without really listening to the patient. While describing the typical reaction of a traditional clinician to the crisis situation, Kranz (1985b) noted confusion, frustration, inadequacy, and displaced anger, followed by a desire to eliminate any future contacts with crisis situations. Trainees in crisis intervention often showed irrational thinking and felt as if they ought to be able to implement a service modality in which they had little or no training.

Review of Selected Assessment Instruments

The role of deinstitutionalization.

There are many instruments extant to assist the clinician in crisis intervention. The prediction of dangerousness is a hotly debated topic, and has been since the community mental health movement of the late 1950s and early 1960s. The community mental health movement began with passage of the Community Mental Health Centers Act of 1963 (Breakey, 1996; Snow & Swift, 1985). This act of

Congress was based upon the notion that new psychotropic medications would prove to be much more effective than they actually were at the time, leading many mental health professionals and lawmakers to believe that previously long-term inpatients would be manageable on an outpatient level with the help of these new medications (Musto, 1977). Passage of the CMHC act of 1963 resulted in a long-term process of deinstitutionalization. The deinstitutionalization movement was encouraged from two separate sides - civil libertarians considered it a victory for patients' freedom and civil liberties, while conservatives lauded the substantial short-term fiduciary gain (Armstrong, 1978). Deinstitutionalization has also become an international movement, (Craig & Timms, 1992; Dencker & Dencker, 1994; Donnely, McGilloway, Mays, Perry, & Lavery, 1997; Hickling, 1994; Mezzina & Vidoni, 1995), with mixed results.

There are differing reports in the literature as to whether deinstitutionalization has had positive or negative consequences. McGrew, Wright, Pescosolido, and McDonel (1999) report a successful state hospital closure, with substantial improvements for patients and low rehospitalization rates. Goldman (1998) argues that there have been both positive and negative outcomes associated with deinstitutionalization, but that patients and society have benefited from this process. Stancliffe and Lakin (1999) note that deinstitutionalized individuals earned less than those who stayed hospitalized, and that there appeared to be few objective benefits for those who moved. Lamb (1993, 1998) and Lamb and Shaner (1993) believe that deinstitutionalization has led to large numbers of the mentally ill becoming homeless or being placed in jail because of the inability of the community to take care of them. Torrey (1995) also believes that jails and prisons are serving as the new mental hospitals for America's mentally ill. Mossman (1997), however, dismisses the concept of increased homelessness as a result of the deinstitutionalization movement as a myth.

In contrast to Mossman (1997), a study by Susnick and Belcher (1996) found that mental illness was a common denominator for homeless individuals interviewed in Washington, D. C. Strauss, Shavelle, Baumeister, and Anderson (1998) reported a

significantly higher rate of mortality in persons with developmental disabilities after deinstitutionalization. Smith and Polloway (1995), in a long-term study of the effects of deinstitutionalization, found that community placements were poor for patients, which often resulted simply in a depopulation of the institution, rather than a planned movement of patients into the community.

The CMHC act encouraged the closing of many major inpatient psychiatric hospitals over a period of years, forcing many seriously mentally ill individuals on the streets to care for themselves. Psychotropic and psychosocial care has improved somewhat in the intervening decades. However, since the deinstitutionalization movement began, emergency psychiatry has sought to determine the thresholds of dangerousness, how to best measure them, how to ensure that individuals exceeding the agreed-upon thresholds receive treatment as needed, and how to best protect clients and society.

Suicide Assessment. Early suicide instruments were usually simple checklists of demographic data or risk factors (Range & Knott, 1997). However, many of these instruments were either not fully psychometrically validated, were intended for use with beginning clinicians, or both. As time progressed and more research interest was directed toward suicide risk, better instruments were created to identify and measure the variables behind suicide. Range and Knott reviewed 20 scales measuring suicide variables. Range and Knott broke the newer generation of instruments down to five categories (a) clinician-rated suicide instruments, (b) self-rated suicide instruments, (c) self-rated buffers against suicide, (d) instruments focused on children and adolescents, and (e) special-purpose scales. Special-purpose scales are those defined as scales that measure variables other than suicidality, such as attitudes toward suicide, knowledge about suicide, or ability to respond appropriately to the suicidal caller on a telephone hotline crisis line.

One of the more recent psychometrically validated checklist instruments is the Suicide Assessment Checklist (SAC; Rogers, Alexander, & Mezydlo-Subich, 1994). The

SAC is a 21-item, two part instrument which assesses several domains in the suicide continuum. Client plan, psychiatric history, availability of method, making final plans, prior attempts, presence of suicide note, survivorship, drug and alcohol use, sex, age, children at home, and marital status are all included in the first part. In the second part of the instrument, client affect, cognitions, and behaviors are measured, including sense of hopelessness, worthlessness, isolation, depression, impulsivity, hostility, intent to die, environmental stress, and future time orientation. The total of these weighted scores are combined with other information and factors in order to determine a high- or low-risk status for the client.

The validity of the SAC was validated in three studies, reported within the context of one journal article (Rogers, Alexander, & Mezydlo-Subich, 1994). The proposed structure of the instrument and its weightings were determined through expert ratings from five members of the Suicide Risk Assessment Committee of the American Association of Suicidology. Interrater reliability in the study was .80, which suggests a reasonable level of agreement between the raters as to the appropriateness of the items' inclusion and the assigned weightings. The second phase of research consisted of validating the use of the instrument via an analogue client situation. Interrater reliability, test-retest reliability, and criterion validity was obtained by utilizing the five experts from the first phase of the study and 30 crisis line workers. The study used five audiotaped role-played suicide calls, representing callers of varying levels of suicide intent. Each rater listened to each tape and used the SAC to rate it accordingly. Some listened to the tapes individually, while others were administered the tapes in groups. Interrater reliability for the experts and the crisis workers was .84 and .83, respectively. Test-retest reliability was .82. Criterion validity was established through the use of the experts' ratings as the criterion; because the crisis workers obtained almost identical reliability coefficients, it is assumed that the instrument possesses criterion validity, which makes it appropriate as an assessment device. The third study in the series was designed to validate the internal consistency of the SAC items from the second study as measures of

suicide risk. In the study, 110 crisis workers rated 300 suicide hotline calls with the instrument; inter-rater reliability was established as .81.

Range and Knott (1997) noted that checklist instruments are only to be used as an adjunct to clinical judgment. The authors of the SAC (Rogers, et al., 1994) also note "SAC scores are for research use only and are not intended to be predictive of suicidal behavior. The SAC information should be combined with other sources of information such as third party data, clinical experience, and intuition for the final judgment of suicide risk level" (p. 365). Range and Knott make three recommendations for the best instruments to use in suicidal assessment. The first is Beck, Kovacs, and Weisman's (1979) Scale for Suicidal Ideation (SSI) series. There are three instruments in the SSI series - the original SSI (Beck, et al. 1979), the Modified Scale for Suicidal Ideation (SSI-M; Miller, Norman, Bishop, & Dow, 1986), and the Self-Rated Scale for Suicidal Ideation (SSI-SR; Beck, Steer, & Ranieri, 1988).

The SSI (Beck, Kovacs, and Weisman, 1979) is a 19-item, clinician administered, clinical and research instrument with three scales: (a) active suicidal desire; (b) passive suicidal desire; and (c) preparation. The SSI-M is similar to the SSI, with a total of 18 items, 13 items from the original SSI, and five new items. It also contains "prompt" questions, so it may be administered by a paraprofessional. The SSI-SR is the most recent in the SSI series, and includes a computerized administration. The main difference of the SSI-SR from the other scales in the SSI series is that the "passive suicidal ideation" scale has been replaced with the "wish for death" scale. The SSI has high reported internal consistency (KR-20 = .89) and high interrater reliability ($r = .83$, $p = .001$). The SSI has been tested for use with adult psychiatric outpatients and inpatients, and adolescent outpatients (Beck & Steer, 1991).

The second recommendation made by Range and Knott (1997) is Linehan, Goodstein, Nielsen, and Chiles' (1983) Reasons for Living (RFL) series of instruments. The original Reasons For Living Inventory (RFL; Linehan, et al., 1983) is a 48-item self-report inventory that measures psychological buffers against suicide. The questions target

what the client has to live for when experiencing suicidal thoughts. The RFL has six subscales: (a) survival and coping beliefs, (b) responsibility to family, (c) child concerns, (d) fear of suicide, (e) fear of social disapproval, and (f) moral objections. Range and Knott (1997) noted that the RFL is appropriate for clinical use, but is more often used in research.

Osman, Gifford, Jones, and Lickiss (1993) examined the factor structure and psychometric properties of the RFL with college students and found a similar factor structure proposed by Linehan, et al. (1983). Osman, et al. (1993) reported adequate reliability for the RFL. Osman, Jones, and Osman (1991) examined the test-retest reliability, internal consistency reliability, and the normative and item analysis data on the RFL (Linehan, et al., 1983), and reported that the "Test-retest coefficients were moderate to high. The alpha coefficients and item-total correlations for the subscales and the total inventory provide strong support for internal consistency" (Osman, et al., 1991, p. 271). The RFL (Linehan, et al., 1983) has been validated for use in different populations, including an inpatient population (Osman, Kopper, Linehan, Barrios, Gutierrez, & Bagge, 1999), as well as normal and delinquent adolescents (Cole, 1989).

A form of the RFL (Linehan, et al., 1983) has also been created for use with the college population (The College Student Reasons for Living Inventory; RFL-CS; Westefeld, Cardin, & Deaton, 1992). In addition, a brief form of the RFL has been devised, the Brief Reasons For Living Scale (RFL-B; Ivanoff, Jang, Smyth, & Linehan, 1994), which is made of 12 of the original items from the RFL. Range and Knott's (1997) main criticism of the RFL and the RFL-CS is that they are too long for use with some populations. The RFL-B is a reliable and valid instrument, and attempts to address the length criticism. However, Range and Knott (1997) recommend use of the original RFL, if at all possible, because of the strength of the instrument, as evidenced by its validation in the published literature.

The final instrument recommended for use by Range and Knott (1997) is the Suicidal Behavior Questionnaire (SBQ; Cole, 1988), originally a 7-page structured

interview from Linehan (1981). Cole used factor analysis to pare the instrument to its shortest form, which is four items. The Suicidal Behaviors Questionnaire (SBQ-C; Cotton & Range, 1993) is a version of the SBQ written for children, at a 3rd-grade reading level. Both the SBQ and the SBQ-C demonstrate adequate reliability and validity, and are appropriate for use as initial clinical or research screening tools.

Another instrument that assesses suicide risk is the SAD PERSONS scale (Patterson, Dohn, Bird, & Patterson, 1983). The SAD PERSONS scale is an acronym that may be memorized and used as an assessment guideline, prompting the use of the semi-structured interview format. SAD PERSONS is an acronym which stands for 10 components of suicide assessment: sex, age, depression, previous attempt, ethanol abuse, rational thinking loss, social supports lacking, organized plan, no spouse, and sickness. Though the authors appear to be reaching a little in creating their acronym, they do hit upon many of the important factors in suicide assessment. Patterson, et al. (1983) used the SAD PERSONS scale to teach suicide assessment to medical students, in an effort to help them develop a sense of clinical intuition about patients. In the study, medical students in psychiatry were split into two groups. Each group was asked to use the SAD PERSONS scale to rate two different role-played videotapes that were previously judged by experienced psychiatrists to be high-risk and low-risk patients, respectively. The treatment group of students was taught suicide assessment using the SAD PERSONS scale, while the control group was taught only the traditional curriculum. For both the high-risk and the low-risk patients, the experimental group scored significantly differently than did the control group, much closer to the expert ratings assigned to each analogue client. The control group rated the low-risk patient as a higher risk than the treatment group, and also rated the high-risk patient much higher than the treatment group did. In each case the treatment group's ratings closely approximated the expert psychiatrists' ratings, while the control group's ratings did not.

Juhnke (1994) replicated the original Patterson, et al. (1983) study with a sample of 59 master's-level clinicians-in-training, and found that "Ss who received SPS

instruction made more accurate and conservative suicide risk assessments based on information gathered in videotaped interviews than those who did not receive SPS training. Results suggest that the SPS can help supervisees gain increased understanding of the suicide continuum and can augment developing supervisee clinical judgment" (Juhnke, 1994, p. 21). The SAD PERSONS scale has also been adapted for use with children as the Adapted-SAD PERSONS Scale (A-SPS; Juhnke, 1996).

Homicide and Violence Assessment. Accurate assessment of violence towards others has long been considered one of the hallmark goals of psychiatry and psychology (Douglas, Cox, & Webster, 1999). It is an elusive goal, however, due to the same reasons cited for violence towards self – it is a very rare occurrence, with a low base-rate occurrence in the general population (with a slightly higher base-rate in mentally ill populations), which makes prediction a difficult task (Fremoux, de Perczel, & Ellis, 1990; Shergill & Zmukler, 1998). However, recent advances in the science of violence risk prediction have demonstrated that it is possible to predict risk of violence to others (Dolan & Doyle, 2000; Ferris, Sandercock, Hoffman, Silverman, Barkun, Carlisle, & Katz, 1997; Monahan, Steadman, Appelbaum, Robbins, Mulvey, Silver, Roth, & Grisso, 2000).

Several instruments exist that attempt to predict violence towards others through actuarial methods. These instruments are briefly noted because of their relevance to the current literature review and the construction of the Crisis Intervention Semi-Structured Interview. However, actuarial-based assessment instruments do not fit well within the time constraints of the typical crisis situation, and are generally not used within that context. In fact, Monahan, Steadman, Appelbaum, Robbins, Mulvey, Silver, Roth, and Grisso (2000) note that their empirically validated actuarial violence risk prediction instrument, the Iterative Classification Tree (ICT) has "a high degree of accuracy but can be time and resource intensive to administer" (Monahan, et al., 2000, p. 312). Actuarial risk prediction methods are most often employed in forensic settings. However, several of these forensic instruments have demonstrated efficacy in both short- and long-term

violence risk prediction with different populations, and have moved beyond clinical risk prediction alone in success rates.

Actuarial assessment instruments range from comprehensive psychosocial assessments that attempt to predict the likelihood of violence by individuals by rating them on numerous scales and then conducting longitudinal studies that track violence and recidivism rates of subjects (Monahan, et al., 2000; Webster, Douglas, Eaves, & Hart, 1997), to checklists of personality features that are associated with psychopathology (Hare, 1991). Four empirically validated, actuarially-based violence prediction instruments within the professional literature are: (1) the Dangerous Behavior Rating Scale (DBRS; Menzies, Webster, & Sepejak, 1985), (2) the Violence Risk Appraisal Guide (VRAG; Harris, Rice, & Quinsey, 1993), (3) the Psychopathy Checklist (Revised) (PCL-R; Hare, 1991), and (4) the Historical/Clinical/Risk Management-20 (HCR-20; Webster, Douglas, Eaves, & Hart, 1997).

Allen (1981), in an article that applies the concepts of suicidology to the prevention of homicide, provided a list of descriptors that may help to identify the homicidal individual. Many of these factors may also apply to the mentally ill homicidal person, although Allen did not specifically discuss the mentally ill. Allen's list was compiled by examining 60 case histories of homicidal people. Allen's entire list is not cited below, but it includes: (1) early violence, physical abuse, or poor parenting models in family life, (2) absence of significant others (3) lower SES, (4) unemployment, (5) school dropout, semi-literate or illiterate, (6) poor, crowded housing, (7) chronic abuse of drugs/alcohol, (8) history of psychiatric hospitalization and a negative view of psychiatric help, (9) easily aroused to anxiety or panic state, depressed, aggressive, poor impulse control, (10) limited-to-no coping skills, (11) loss of contact with reality, (12) previous legal history, (13) previous homicide attempt, (14) planning of use of a weapon, and (15) concrete plan. It is not necessary for a homicidal person to possess all or even many of these characteristics.

Similarly, Hardwick and Rowton-Lee (1996) reviewed the literature to ascertain the characteristics for children and adolescents who may become violent or homicidal. They found a combination of vulnerability and background factors, combined with situational factors, which can help to predict violence. The vulnerability and background factors include: family abuse, neglect, and rejection, family violence, family criminality and alcoholism; brain damage, learning difficulties, impaired language, and impulsivity and attention deficit; a long history of aggression, under- or over-control of anger, reservoir anger, homicide threats or fantasies, capacity to dehumanize, morbid identity, and paranoid ideation. The situational factors include losses or rejection in relationships, threats to manhood/self-esteem, emotional crescendo (hopelessness and helplessness), disinhibitors such as drugs and alcohol, crime, group processes, and psychiatric state. According to Hardwick and Rowton-Lee (1996),

> "Youngsters most at-risk are those with the greatest number and degree of severity of risk factors. The risk factors potentiate each other. Thus, a biologically disadvantaged youngster showing CNS damage, impulsivity, language and learning difficulties who has suffered abuse and witnessed severe violence may develop a paranoid and dehumanizing mental set and under certain environmental circumstances involving threat to self-esteem become very violent" (p. 271).

There is a copious amount of psychological and psychiatric literature on risk factors, with numerous recommendations on how to best predict violence. The focus of the present study was on the prediction of violence as a result of mental illness. Prediction of violence of a criminal nature, premeditated or otherwise, is not being considered. Often, however, individuals in crisis (i.e., the mentally ill, those suffering from depression, etc.) take out their aggressions upon others, whether due to paranoid and persecutory psychosis, the desire to "not leave anyone behind," or as revenge for perceived wrongs.

For example, a well-publicized violent incident occurred in July of 1999. Mark O. Barton, a resident from the Atlanta, Georgia area, after losing large sums of money in the stock market, proceeded to kill his family (his wife and two children), then killed 9 and wounded 13 of the workers at the office in which he traded, and subsequently shot himself to death. In notes found after his death, Mr. Barton indicated that he killed his children to spare them the pain of living without parents. “I forced myself to do it to keep them from suffering so much later,” the note said. “No mother, no father, no relative” (WISC-TV, 1999). Barton also explains killing his wife, sort of: “I killed Leigh Ann because she was one of the main reasons for my demise as I planned to kill the others. I really wish I hadn't killed her now. She really couldn't help it and I love her so much anyway” (London, 1999). Barton also wrote that he did not plan to live much longer after he had killed his family, “just long enough to kill as many of the people who greedily sought my destruction” (London, 1999) Barton previously had been a suspect in the bludgeoning deaths of his first wife and mother several years earlier, but he denied responsibility for those deaths in the same note from which the above quotes were taken. Mr. Barton, at the least appearing to suffer from a major depression, cites all three of the possible reasons listed above for committing a mental illness-related murder (and suicide); perceived wrongs, desire to not leave loved ones behind, and paranoia. Whether psychosis was involved in Mr. Barton’s case will never be known.

Mulvey and Lidz (1998) noted that the current era of managed care and community management of patients ushers in a new realm of responsibility in violence assessment and prediction. Previously, patients were hospitalized for long periods of time if they were violent. Those days, by and large, are over. It is now insufficient to know how accurate clinicians, as a whole, can be in violence prediction, or which patients are more likely to engage in violent behavior. It is now necessary to know “…when and under what conditions a violent incident will occur and how accurately clinicians can assess which patients are at a particular risk under those conditions related to violence. The essence of effective community management of violence rests on the ability to

foresee when relevant changes in a patient's life are likely to lead to violence" (Mulvey & Lidz, 1998, p. S107).

Mulvey and Lidz (1998) conducted a study to examine how clinicians in psychiatric emergency rooms fared when making predictions of this level of specificity, based upon what the authors called the clinicians' "conditional predictions," or the conditions under which the clinicians felt the client would act violently. Clinicians were asked to specify several variables: (a) seriousness of the act; (b) target of the violence; (c) location of the violence; (d) the time frame in which the violence would occur; and (e) conditions under which the violence might occur, including medication noncompliance and drug and/or alcohol use. The results of the study indicated that of the conditions which clinicians believe predict violence, most conditions could be addressed through treatment and monitoring. The top six conditions mentioned by clinicians in their predictions were (1) deterioration of clinical disorder; (2) alcohol use; (3) trouble in personal relationships; (4) drug use; (5) financial problems; and (6) medication noncompliance. With the exception of financial issues, these issues can all be dealt with clinically.

The second finding from the Mulvey and Lidz (1998) study was that clinicians are more accurate in some conditional predictions than others. Clinicians tend to overestimate the severity and immediacy of violence, but are relatively accurate about predicting where the violence will occur and against whom it will be perpetrated. Other conditions, however, such as the relevance of factors like medication compliance, were rather dismal. The relationship between prediction of violence and the use of alcohol was quite good.

In the construction of the Crisis Intervention Semi-Structured Interview, the assumption was made that when examining violence and homicide from a mental health standpoint, causality most likely lay either in the realm of psychosis or delusions. In other words, homicide is the reaction to severe mental illness. Violence toward others is a possibility for those who are severely depressed, such as individuals who suffer from

concurrent depression and panic (Korn, Plutchik, & Van Praag, 1997). However, violence in the context of the present study is conceptualized as being the result of an altered mental status. For example, Stern, Schwartz, Cremens, and Mulley (1991), in a study of the evaluation procedures of psychiatric residents, noted that psychosis was found much more frequently in the homicidal than the suicidal patients.

A full review of scales to measure psychosis will not be undertaken in the present literature review, because most of these scales are intended for use by psychiatric personnel with chronic psychotic and/or schizophrenic patients. In addition, most psychoses, for the purposes of assessment, are considered within the realm of schizophrenia, which has a tremendous literature base beyond the intended focus of the present study. The Manchester Scale (MS; Krawiecka, Goldberg, & Vaughan, 1977) comes closest to fulfilling criteria for a short-term, in-depth, valid, and reliable assessment instrument to be used to detect psychotic symptoms. The Manchester Scale was created in response to the void in the literature of a short, yet valid and reliable instrument to be used for the assessment of psychosis. The closest instrument to fit the need for a brief psychosis assessment at the time was the Brief Psychiatric Rating Scale (Overall & Gorham, 1962), which was deemed to be too lengthy and not sensitive enough to change. Superiority of the MS to the BPRS has not been conclusively demonstrated, though one study (Manchanda, Saupe, & Hirsch, 1986) demonstrated higher inter-rater reliability for the MS items over those of the BPRS, leading to the conclusion that the MS is an alternative to the BPRS for assessing schizophrenic symptoms. Several studies present solid evidence of the MS' validity, reliability, and sensitivity to clinical change (Hyde, 1989; Jackson, Burgess, Minas, & Joshua, 1990; Takekawa, Hori, Tsunashima, & Ishihara, 1994). Validity, reliability, and sensitivity to clinical change, combined with the MS' brevity and relative ease of use, makes it the best available scale for psychosis assessment. The MS is comprised of nine items that describe psychotic and related symptoms; each item has a description of the target behavior(s) to be rated on a 5-point scale. The nine items are: (1) medicine side-effects, (2) depression, (3) anxiety, (4)

flattened, incongruous affect, (5) psychomotor retardation, (6) coherently expressed delusions, (7) hallucinations (8) incoherence and irrelevance of speech, and (9) poverty of speech, or muteness.

Review of Crisis Intervention Instruments

Based upon the results of the present literature review, there does not appear to be an abundance of psychometrically validated crisis intervention assessment instruments available in the professional literature. By and large they are broken down into the assessment scales discussed previously. Frequently there exist instruments to assess portions of the areas necessary to obtain a good clinical picture of what is occurring during a crisis, but more often what is relied on is the individual clinician's expertise and experience. Some scales have been devised and published, mainly in the psychiatry literature, to help determine crisis status and suitability for psychiatric hospitalization.

Warner (1961) was one of the first to develop a scale to help decide when to hospitalize a patient against their will, utilizing clinical assessment and social support. Whittington (1966) modified Warner's checklist, yet both of these scales were used mainly to study utilization patterns (Lyons, Stutesman, Neme, Vessey, O'Mahoney, & Camper, 1997). Flynn and Henisz (1975) further modified Whittington's checklist and weighted it. Many of these and other studies, though, are retrospective chart reviews. There is an abundance of these types of studies in the literature, all citing various risk factors for the admission of the psychiatric patient.

A study of particular relevance to the present study involved the concurrent development and utilization of a crisis intervention instrument called the Crisis Triage Rating Scale (Bengelsdorf, Levy, Emerson, & Barile, 1984). Bengelsdorf, et al. (1984) headed the crisis intervention services at Westchester County Medical Center, near New York City, which was, at the time, the only emergency receiving facility in the area. They ran both an in-house and mobile crisis service, and created the CTRS to help them make dispositional decisions as quickly and accurately as possible. They wanted to create an instrument that "based on the fewest criteria…would most reliably and quickly predict

the decision we might come to after more extensive examination" (p. 425). Using the assessments they made during the first few months after the opening of the crisis intervention service, the authors decided upon the three factors they used most in making dispositional decisions: (a) the degree of dangerousness of patient to self or others; (b) the capability and willingness of the patient's family or other social support network to assist in the treatment plan; and (c) the patient's motivation and ability to cooperate in an outpatient treatment plan. The authors devised a Likert scale of 1-5 for each of the factors and created 5 items for each factor, resulting in a 15-item scale. Cut-offs were decided through early use of the scale, with patients having scores of 8 or lower generally hospitalized, and those with scores of 10 or higher referred to outpatient care. A patient with a score of 9 could go either way. The instrument was validated by utilizing it with 300 of the patients seen by the authors' crisis team (Bengelsdorf, et al., 1984).

Interrater reliability was determined by having two of the study's authors independently rate 26 of the same patients. Reliability was obtained for each subscale and the full scale, but it wasn't promising. On the dangerousness scale, the reliability coefficient was .35, on the support scale it was .42, on the motivation scale it was .55, and on the full scale it was .42. However, Bengelsdorf, et al. (1984) reported that there was a very high concordance rate (97%) between scores on the CTRS and the clinicians' judgment, i.e., there was agreement between what the CTRS would predict as the appropriate level of intervention and what the clinicians would decide the appropriate level of intervention should be 97% of the time. A major confound in the study was that the CTRS was used as part of the decision-making process – hence the high concordance rate. The authors reported that "…any statistical test to determine the significance of the high concordance would be flawed…In order truly to test significance it would be necessary to have a series of patients given CTRS scores by one team and to have the actual clinical decisions and dispositions carried out by the second team blind to the ratings of the first team" (Bengelsdorf, et al., 1984, p. 426).

A second study, reported in the same journal article as the first study (Bengelsdorf, et al., 1984), was conducted to determine the predictive value of the Crisis Triage Rating Scale and to determine weightings for each of the subscales. One hundred and sixty patients who came through the authors' emergency service were followed for six months and monitored at 1 week, 1 month, 3 months, and 6 months. Out of the 122 patients they were able to retain during the course of the study, 91% were correctly predicted for a psychiatric admission; of those not predicted to be admitted, 23% were eventually admitted sometime during the 6-month period. Of those who fell squarely in the middle of the scale (those who could go "either way"), 50% were eventually admitted. The results of weighting the subscales indicated the level of clinical importance for the subscales as dangerousness, support system, and motivation, in that order. In other words, a patient who is not dangerous, with a good support system, and who is motivated for treatment is not likely to be hospitalized, whereas a patient who is dangerous, without a good support system, and who is unmotivated for treatment is likely to be hospitalized.

Turner and Turner (1991) replicated part of the Bengelsdorf, Levy, Emerson, and Barile (1984) study with the CTRS using a sample of 500 psychiatric emergency patients in Ontario, Canada, and were able to implement the design suggested in the original study. In other words, Turner and Turner separated the rating scales from the treatment team, though they noted that the rating scales were used by people who may have been less expert than those in the Westchester county study. In addition, Turner and Turner noted the possible differences that may have existed between the two geographic areas. In the Turner and Turner study, the subscales and the scale as a whole were significantly interrelated, and those admitted to the hospital were more dangerous with less social support, much like those in the Bengelsdorf, Levy, Emerson, and Barile (1984) study. Turner and Turner's study supported the predictive validity of the Bengelsdorf, et al. (1984) study, though Turner and Turner's results raised the cut-off score from 8 to a 9 or 10. With a cut-off score of 8, Turner and Turner found a significantly lower concordance rate than the Bengelsdorf, et al. – their concordance rate between the CTRS' prediction

and actual clinical judgment and disposition was 63%. When the cut-off score was raised to 9, the concordance rate moved to 75.2%, and when 10 was used as the cut-off score, the concordance rate rose to 81.2%.

Feinstein and Plutchik (1990) developed a scale called the Violence and Suicide Assessment form (VASA), an expanded version of the Benglesdorf, et al. (1984) Crisis Triage Rating Scale, for a study which examined three questions: (a) the difference in violence between those psychiatrically admitted and those not, (b) the correlation between violence measured at time of assessment and violence on inpatient wards, and (c) correlation of suicidal behavior at the time of assessment with the same behavior on inpatient wards. The VASA was developed based upon an extensive literature review and was comprised of ten scales: (1) current violent thoughts (during interview), (2) recent violent behaviors (during the past several weeks), (3) past history of violent, antisocial, or disruptive behaviors (lifetime history), (4) current suicidal thoughts, (5) recent suicidal behaviors, (6) past history of suicidal behaviors, (7) support systems, (8) ability to cooperate, (9) substance abuse, and (10) reactions during the interview.

Following each scale of the VASA (Feinstein & Plutchik, 1990) are descriptions of relevant thoughts, cognitions, and behaviors, weighted for degrees of severity and psychopathology. Upon completion of the form the clinician is asked to make a separate rating each for likelihood, on a scale of 1-100, in the next three weeks, of suicidal and homicidal behaviors. The authors utilized the VASA form to evaluate 95 patients presenting to the ER, after evaluation and dispositional decisions were made for the patient. The final sample consisted of 45 patients involuntarily committed and 50 patients referred for outpatient treatment. The reliability coefficient alpha for the violence subscale was .68, and the reliability coefficient alpha for the suicide subscale was .73. Subscale alphas were not reported for the social support, cooperation, substance abuse, current interactional styles, and motivation items, though the full-scale internal reliability was reported to be .79. Utilizing cutoff scores on the scale as a measure of sensitivity (the ability to identify true positives, those who should be hospitalized) and specificity (the

ability to identify true negatives, those who should not be hospitalized), Feinstein and Plutchik found that their optimal cutoff score produced a sensitivity/specificity rating of 82%.

Lyons, Stutesman, Neme, Vessey, O'Mahoney, and Camper (1997) created an instrument to help predict admission decisions, the Severity of Psychiatric Illness (SPI). Originally validated as a chart-based assessment for use in a geriatric sample, this instrument was shown to possess construct and predictive validity in a psychogeriatric sample (Lyons, Coleta, Devens, & Finkel, 1995). Reliability of the SPI's subscales range from .80 to .95. In a subsequent study with 252 emergency psychiatric patients, the SPI demonstrated a sensitivity and specificity of 75.7% (Lyons, O'Mahoney, Doheney, Dworkin, & Miller, 1995).

The SPI is composed of 10 subscales, rated on 4 points, with definitions provided for each weighted point. Lyons, et al. (1997) included only 3 of the 10 total dimensions of the scale (suicide potential, danger to others, and severity of symptoms) in their model, which predicted 73% of appropriate hospitalizations. There are two reasons why the SPI is not elaborated upon further in the current review: (1) it was constructed largely as a reviewing tool, and its implementation throughout the course of its studies have generally remained that way, and (2) the SPI's authors do not offer it as an expert decision-making tool, though they note that "The ease of use, reliability, and generalizability across applications suggests that this approach can be used to provide decision makers with useful information about cases under consideration" (Lyons, et al., 1997, p. 798).

Mental Status Exam. The Mental Status Exam (MSE; Robinson & Chapman, 1997) is one of the oldest forms of psychiatric assessment. It is similar in nature to the physician's physical exam, as the MSE was modeled after the physical exam for use by psychiatrists (Groth-Marnat, 1997). The MSE data are "…selectively integrated with general background information to present a coherent portrait of the person arrive at a diagnosis" (Groth-Marnat, 1997, p. 82). Groth-Marnat also notes that psychologists typically do not use the MSE because many of the areas it reviews are covered in the

standard assessment interview, and more precise data is accrued through the interpretation of psychological tests. The format of the MSE ranges from simple checklists to comprehensive assessment tools.

The 11-item Mini-Mental Status Exam (MMSE; Folstein, Folstein, & McHugh, 1975) is considered the most popular of all of the MSEs due to its brevity, ease of administration, and high reliability coeffients (Groth-Marnat, 1997). Mental status is organized around four central concepts: appearance, behavior, thought, and feelings. Subsumed under behavior are items such as posture, facial expression, and speech; affect and mood are subsumed under feeling; items such as intellectual functioning, orientation, and judgment are subsumed under thought; and appearance is judged through clothing, hygiene, and unusual physical characteristics.

Though the MSE is not a crisis intervention scale per se, it ought to be administered by a trained clinician. It should be a regular part of the assessment process whenever working with clients, especially those in crisis. Mental status has a great effect on severity and duration of crisis, and may be the source of the crisis and ensuing emergency. Over time, elements of the MSE may become second nature with clinicians. Many aspects of the MSE can be ascertained while already conducting an assessment interview, without having the patient feel as you are asking them whether or not they are "crazy."

Summary. The present literature review examined several critical areas of the crisis assessment literature. First, a history and definition of crisis was provided. Professional views of crisis and crisis intervention have evolved since its appearance in the published literature in the mid-20th century, and there is currently an abundance of literature on crisis for both the scientist and the practitioner. Crisis was defined on a continuum, ranging from difficult situations in an individual's life, to a psychiatric emergency, when there may be a threat to the health and safety of oneself or another.

Training issues were then discussed. It is important for clinicians to learn crisis intervention skills, and to learn them early in their training. Training resources in crisis

are now widely available, and they ought to be a part of any clinician's training, but training is often not provided in a structured manner. Characteristics of the effective crisis interventionist were then discussed, as well as what may happen to the clinician involved in crisis intervention.

A review of the assessment literature followed, divided into three main content areas: (1) suicide assessment instruments, (2) homicide and violence assessment instruments, and (3) crisis intervention assessment instruments. Figure 1 presents a summary of the instruments reviewed. There are a number of reliable and valid suicide assessment instruments, including the Scale for Suicide Ideation (Beck, Kovacs, & Weisman, 1979), (SSI), the Reasons for Living Inventory (Linehan, Goodstein, Nielsen, & Chiles, 1983), the Suicidal Behavior Questionnaire (Coles, 1988), the Suicide Assessment Checklist (Rogers, Alexander, & Mezydlo-Subich, 1994), and the SAD PERSONS scale (Patterson, Dohn, Bird, & Patterson, 1983).

There are a number of reliable and valid violence/homicide prediction instruments, many based on the actuarial method of risk prediction, including the Dangerous Behavior Rating Scale (DBRS; Menzies, Webster, & Sepejak, 1985), the Violence Risk Appraisal Guide (VRAG; Harris, Rice, & Quinsey, 1993), the Psychopathy Checklist (Revised) (PCL-R; Hare, 1991), the Historical/Clinical/Risk Management-20 (HCR-20; Webster, Douglas, Eaves, & Hart, 1997), and the Severity of Psychiatric Illness (Lyons, Stutesman, Neme, Vessey, O'Mahoney, & Camper, 1997). The actuarial violence risk prediction instruments are efficacious, but are generally not appropriate for short-term crisis use.

There are few valid and reliable crisis intervention instruments in the published literature. These include the Crisis Triage Rating Scale (Bengelsdorf, Levy, Emerson, & Barile, 1984) and the Brief Psychiatric Rating Scale (Overall & Gorham, 1962). The Violence and Suicide Assessment Form (Feinstein & Plutchik, 1990), and the Manchester Scale (Krawiecka, Goldberg, & Vaughan) are not pure crisis instruments, yet contain the

components that measure some of the risk factors for possible violent behavior toward self or others.

	Instrument	Author
Suicide Assessment Instruments	Suicide Assessment Checklist	Rogers, Alexander, & Mezydlo-Subich, 1994
	Scale for Suicide Ideation	Beck, Kovacs, & Weisman, 1979
	Reason For Living Inventory	Linehan, Goodstein, Nielsen, & Chiles, 1983
	Suicidal Behavior Questionnaire	Cole, 1988
	SAD PERSONS Scale	Patterson, Dohn, Bird, & Patterson, 1983
Homicide and Violence Assessment Instruments (Actuarial)	Dangerous Behavior Rating Scale	Menzies, Webster, & Sepejak, 1985
	Violence Risk Appraisal Guide	Harris, Rice, & Quinsey, 1993
	Psychopathy Checklist (Revised)	Hare, 1991
	Historical/Clinical/Risk Management-20	Webster, Douglas, Eaves, & Hart, 1997
Psychosis Assessment Instruments	Brief Psychiatric Rating Scale	Overall & Gorham, 1962
	Manchester Scale	Krawiecka, Goldberg, & Vaughan, 1977
Crisis Intervention Assessment Instruments	Hospitalization Checklists	Warner, 1961; Whittington, 1966; Flynn & Henisz, 1975
	Crisis Triage Rating Scale	Bengelsdorf, Levy, Emerson, & Barile, 1984
	Violence and Suicide Assessment Form	Feinstein & Plutchik, 1990
	Severity of Psychiatric Illness	Lyons, Stutesman, Neme, Vessey, O'Mahoney, & Camper, 1997
	Mental Status Exam	Robinson & Chapman, 1997
	Mini-Mental Status Exam	Folstein, Folstein, & McHugh, 1975

Figure 1. Summary of Instruments Reviewed

CHAPTER 3

METHODOLOGY

Introduction

This chapter will first describe the construction of the Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001). Each scale of the CISSI will then be described in detail. Construction of the Crisis Intervention Self-Efficacy Scale (CISES; Kulic, 2001) will then be described, along with details of the subscales. The sample and procedures for the present study will then be described. Finally, the data analyses will be outlined.

The Crisis Intervention Semi-Structured Interview

Test construction. The primary goal of the present study was to construct and validate the Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001). The CISSI was developed from an integration of the literature and practical experience in assessment. Initial construction and continual refinement of the CISSI resulted in an instrument with a possible total of 78 questions, depending upon the crisis. Many questions and/or sections may be omitted based upon the presenting problem.

An important consideration influenced the construction of the CISSI, clinical prediction vs. actuarial prediction (Groth-Marnat, 1997; Marchese, 1992). As discussed earlier, the actuarial approach to test construction has often produced superior results, and actuarial judgment often outperforms clinical judgment (Gardner, Lidz, Mulvey, & Shaw, 1996; Marchese, 1992). However, a rough consensus has been reached in the published literature that, although actuarial risk prediction may be more accurate than clinical judgment in predicting risk, there exists the need to integrate the actuarial approach with the clinical approach, and that actuarial risk prediction will not likely soon replace clinical risk prediction (Groth-Marnat, 1997; Monahan, 1997; Steadman, Silver, Monahan, Appelbaum, Clark-Robbins, Mulvey, Grisso, Roth, & Banks, 2000). The CISSI was constructed with both clinical and actuarial concerns in consideration. For example, many of the answers to the first scale of the CISSI, General Risk Factors (GRF) are assigned weighted scores based upon United States data on cause of death based on age, sex, race, and so forth (Centers for Disease Control and Prevention, 2001). On the

other hand, many of the questions included on the CISSI have clinical utility, though their empirical validity has not yet been tested. Hence, both clinical and actuarial risk prediction methods are combined in the construction of the CISSI, to create an instrument based on both methods, which, it is hoped, will prove to be empirically validated. Dawes and Corrigan (1974), as cited in Groth-Marnat (1997), found that "…an actuarial formula based on specific clinicians' own decision-making processes yielded more valid future predictions than the clinicians' own predictions. This was probably due to the formula reducing the influence of uncontrolled errors in the clinicians' procedures" (Groth-Marnat, 1997, p. 29).

The CISSI was initially constructed by generating a list of questions that are typically asked during a crisis intake, based on the present author's experience in conducting crisis intakes. According to Groth-Marnat (1997), "During the initial item selection, the constructors must carefully consider the skills or knowledge area of the variable they would like to measure. The items are then generated based on this conceptualization of the variable" (p. 17). Content validity (Haynes, Richard, & Kubany, 1995) is thus addressed.

It was hypothesized that six main content areas are represented by the questions that are asked during a crisis intake: (1) demographic information and treatment history, (2) historical and current substance use/abuse, (3) depression and suicidal ideation, (4), psychosis and homicidal ideation, (5) social support network, and (6) desire for treatment. Once the initial construction of the instrument was complete, it was submitted to three experts in crisis intervention (a licensed psychologist and two licensed professional counselors) for review. Each item was accompanied by a rating section, where the expert rater was asked whether the item should be kept as is, changed, or omitted. Experts were also asked to assess the weightings assigned to the items that determine scoring. A write-in area was provided for the experts to suggest specific changes or to submit new items, and to make suggestions on the score weightings. Additionally, the experts were asked to comment on each scale and the structure of the

instrument as a whole. Suggested changes were incorporated into the subsequent version of the CISSI. Thus, content validity of the CISSI was significantly enhanced.

Another important component to consider in creating the CISSI was conceptual validity. According to Groth-Marnat (1997), conceptual validity is "…the ability of the clinician to generate hypotheses, test these hypotheses, and blend the data derived from hypothesis testing into a coherent, integrated picture of the person" (p. 22). The goal when utilizing the CISSI is to gather as much relevant information as possible about the client in order to obtain an accurate clinical picture so the best dispositional decision can be made. Hence, conceptual validity concerns were addressed by including as many questions as possible to gather as much data as needed within each scale, without making the CISSI cumbersome to use.

The CISSI was constructed in the semi-structured interview format, which was hypothesized to best fit the needs of the clinician in the crisis situation. The crisis situation is often not structured, and can be fluid in nature, though the clinician is still required to gather the same information from each patient in order to make the best treatment decision. The semi-structured interview format appeared to possess enough structural elements to allow for thorough data collection, while allowing the clinician flexibility in gathering the data. The CISSI is constructed in a decision tree format. Each section of the instrument begins with a gateway question, followed by subsequent gateway questions. This method allows the clinician to collect as much data as possible in the shortest amount of time. However, only necessary data is gathered and utilized in making the dispositional decision about the client.

Convergent validity (Campbell & Fiske, 1959) is addressed by correlating specific scales of the CISSI with normed, reliable, and valid scales in the professional literature. The Depression/Suicide Scale is correlated with the Scale for Suicide Ideation (Beck, Kovacs, & Weisman, 1979) and the Psychosis/Homicide Scale is correlated with the Manchester Scale (Krawiecka, Goldberg, & Vaughan, 1977).

Scales. The CISSI is composed of six scales. Each scale includes scored and non-scored questions. The scored questions are used to determine the client's overall score as well as the client's scale scores. The non-scored questions are intended to assist the clinician in gathering as much relevant data as possible (i.e., if the client has been losing weight, how much weight in how long of a time?), to add to the clinical decision-making process, and to assist in building rapport. The CISSI contains a total of 78 items (see appendix A).

Each of the CISSI's scales contains a different number of items; those variables that are more important to the clinician in terms of need for assessment (i.e., suicidal potential) generally have a greater number of questions dedicated to them. As mentioned above, all items may not necessarily need to be answered, as initial assessment may help the clinician to determine that no further assessment is required in a particular area. There are two types of scales in the instrument: primary and secondary, or moderator scales. The primary scales (Depression/Suicide, Psychosis/Homicide, and Substance Abuse) are considered to be the main sources of risk to the patient and others. Any one of these scales alone, elevated enough, can result in the need for radical intervention for the patient (i.e., hospitalization or the need for further evaluation by psychiatric personnel). The moderator scales (General Risk Factors, Social Support, and Individual/Support Needs), however, should generally not be weighty enough by themselves or in combination with one another to consider a patient clinically at imminent risk. The moderator scales are conceptualized much like the masculinity/femininity scale of the MMPI; they tend to "color" the primary scales to some degree (Groth-Marnat, 1997, p. 248). Clearly, if a patient is at imminent risk for harm to self according to the Depression/Suicide scale, then no amount of moderator, great or small, should have an effect on the clinician's decision. Yet, a moderate score of suicidality, combined with poor scores on the moderating scales should raise a red flag for the clinician.

There are costs associated with each end of the decision-making continuum hypothesized to be addressed by the CISSI. The costs are considered to be lower if the

CISSI leads a clinician to make the wrong decision about a client in the direction of hospitalization than if the CISSI leads a clinician to mistakenly release a patient. The cost of wrongly hospitalizing a client is measured in dollars and cents as well as civil liberties. However, the cost of mistakenly letting a client go may be measured in loss of life.

Scale I - General Risk Factors (GRF – 12 items). The literature abounds with facts on who is more likely to do what to whom based upon statistical regression models, correlative studies, etc. However, a fair portion of this literature conflicts in its reports. For the purposes of the General Risk Factors scale (GRF), the most common risk factors are given weighted scores to form a primary scoring table. Cultural confounds abound in this scale, and it should only be used to help aid the clinician's judgment. For example, more women attempt to kill themselves each year, but more men succeed at actually killing themselves each year (Centers for Disease Control and Prevention, 2001a). Males tend to use more deadly and non-reversible methods, such as guns, while women tend to utilize the overdose more often. This is not to say, however, that a woman would not use a gun, or that being a woman necessarily puts one less at risk. It is the likelihood of attempting and being successful at the act that is important, which is what the primary scales of the CISSI are intended to measure.

Other cultural factors may weigh heavily in the use of the GRF scale. As noted earlier, the statistical facts used to assign weightings to individual items are based on statistics from the United States (Centers for Disease Control and Prevention, 2001b). The use of the GRF scale with other cultures should be tempered. However, some of the risk factors included in the GRF scale are highly concordant in the professional published literature, such as the presence of a relatively severe mental illness (Allen, 1981).

Scale II - Substance Abuse (SA – 12 items). Substance abuse can often be a complicating factor in any psychological assessment, but no more so than when completing a crisis assessment. People often act very differently from their "normal selves" while under the influence of a mind-altering substance, and the clinician may often not be informed of the type or amount ingested of the substance(s). Some

psychiatric conditions can be mimicked by abused substances such as drugs and alcohol (Miller & Ries, 1991). For example, psychosis can be mimicked by acute withdrawal or intoxication from alcohol (Zealberg & Brady, 1999). Schuckit (1983) notes that "…primary alcoholism can mimic almost any psychiatric disorder, and secondary alcohol abuse can exacerbate any psychiatric symptom" (p. 1022). Marijuana can mimic a variety of psychiatric states (Estroff & Gold, 1986). It is important to assess for the past and current use of any drugs or alcohol.

Those conducting their assessments in an emergency room setting will usually have access to bloodwork and drug screens, which can tell the story the patient may be unwilling to tell. In these cases the smart clinician can utilize one of two strategies in their assessment. The first option, if one believes that a client is being untruthful with them, is to let them know that you have evidence of what's been taken into their bodies. When faced with this certain knowledge, clients will often tell the truth and discuss their habits. The other option, is to start the assessment right away by declaring one's knowledge of the patient's drug and/or alcohol habit, thereby opening the topic right up in a matter-of-fact way, encouraging the client to be forthcoming.

A study by Carroll, Rosenberg, and Funke (1988) determined that there is no difference between the ability of substance abuse counselors vs. mental health counselors, and between more experienced substance abuse counselors vs. less experienced counselors, to tell the difference between different levels of intoxification in an intoxicated male. More significantly, subjects frequently underestimated the intoxicated male's blood alcohol. The beginning clinician is often not aware of the level of drugs and/or alcohol that a habitual user can handle – it is not uncommon for chronic alcoholics to have anywhere from a 30-50% blood alcohol level, which may be enough to kill a person who is not an alcoholic. A ten percent blood alcohol level (BAC) is considered legally drunk by most states in issuing DUI tickets (Official Code of Georgia Annotated, 2001). Likewise, abusers of prescription narcotics can often ingest high dosages of their preferred drug without hitting the "high" anymore. High tolerance in

substance abuse is common, yet many clinicians are not exposed to this level of severity unless actively involved in drug/alcohol treatment.

It is important when handling the disposition of substance abusers to take care of the substance abuse issues first (Fisher, 1994). It is difficult to treat an individual for depression when they're in a chronically altered state, because that altered state is generally considered to be a part of their problem, and often reflects the client's dysfunctional attempt at a solution. Though not intended to be a primer on substance abuse treatment, the CISSI was designed to assist the clinician in deciding when the problem is primarily a substance abuse issue, or if the substance abuse is primarily a symptom. Still, the clinician working with the client who is a serious substance abuser can use the CISSI to make a basic evaluation. Substance abuse by itself is not inherently a dangerous condition; people can drink and/or consume drugs without ever radically endangering themselves or others. It is when a substance aggravates a current condition, or causes a crisis situation, that it becomes important.

Scale III - Depression/Suicide (DS – 25 items). Depression and suicide are highly correlated. It is unlikely that an individual who commits suicide is not depressed, yet it is not necessarily true that the depressed person will likely commit suicide. If that were the case, then the low population base-rate problem mentioned earlier would not exist, and clinicians would simply use major depression alone as the primary risk factor for suicidal behavior. The nature of the DS scale is to assess the major determinants of what is generally considered a depressive episode. It by no means represents an attempt to diagnose depression, as defined by a diagnostic schema such as the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR; American Psychiatric Association, 2000). There have been instruments developed for use with the DSM-IV-TR, in order to conduct this type of assessment. What the Depression/Suicide scale of the CISSI attempts to discern is the presence of the gross elements of depression that would likely contribute to the presence of a major depressive

episode. Depressogenic thoughts, feelings and behaviors, in addition to the typical components of a suicide assessment, are assessed in the DS scale.

Scale IV - Psychosis/Homicide (PH – 20 items). Psychosis and homicide have been folded into one scale. The CISSI is not intended to serve as an assessment of criminal homicidal intent, because that population is not specifically targeted by the CISSI. The accurate assessment of the mentally ill in crisis was the primary goal in constructing the CISSI, and homicidal ideation in the mentally ill tends to coincide with psychotic or delusional states. Hence, the CISSI was primarily constructed to measure the presence of psychosis or delusionality in the patient. Homicidal intent as part of these psychotic states is included. Though the CISSI does not rule out depressive homicidal ideation, the presence of homicidal ideation in the CISSI is interpreted as psychosis-related.

Scale V - Social Support (SS – 4 items). The social support scale is another "coloring" scale, intended to inform the major scales on the CISSI. Social support is important for most people, and especially so for those with deteriorating mental health. The Social Support scale is intended to measure whether the client perceives that they have a relatively supportive social network. It asks questions about interactions the client has with others, whether they feel lonely, with whom they spend their time, and with whom they would go home after speaking with the clinician. The key to social support in crisis intervention is that the presence of a support system can often dictate whether or not a client requires psychiatric hospitalization. Often, a client with relatively severe symptomatology can be released to the care of significant others, especially if the client is a minor. Clients without good social support systems often fare poorly compared to those with good social support systems (Draine & Solomon, 2000; Orrell, Butler, & Bebbington, 2000; Wu & Serper, 1999).

Scale VI - Individual/Support Wishes (ISW – 5 items). The phrase Individual/Support Wishes is shorthand for "what does the client and their support system want from treatment?" It is important to understand the wishes and desires of the client

you assess, even if your decision goes against their wishes. Often in crisis, the clinician's decision will go against the client and/or their family's wishes. People are not generally amenable to being psychiatrically hospitalized and losing their rights, and do not generally feel that others are better equipped to make their decisions for them, which is a natural reaction. However, the client's and their family's wishes can often be another source of data for the clinician. The family who insists that their relative be hospitalized may very well care deeply for that individual, but they may also wish to exhibit excessive control over that family member's life. It is always important to interview multiple people in the family, if at all possible. The clinician is much more likely to get a rounded view of the situation if descriptions are gathered from several people who know the client. The CISSI does not address multiple assessment directly, to accommodate brevity needs. However, brief "mini-assessments" with family or friends may often help the clinician to paint a fuller clinical picture. The ISW Scale is congruent with the strength-based approach of counseling psychology because it expands assessment beyond the client's symptoms and looks at the client and their system as a whole.

Another possible use for the Individual/Support Wishes Scale is to assess whether a client is trying to get admitted to a facility. Often, substance-abusing individuals will want admission to medical detoxification programs to withdraw from their drug(s) of choice. However, most substance abusers can complete their treatment in an outpatient modality. Outpatient substance abuse treatment is sometimes viewed by clients as more difficult to do, it requires a fair amount of motivation, and patients have to continue supporting themself while undergoing treatment.

Scoring. The Crisis Intervention Semi-Structured Interview is scored by scale. Each subscale contains answers that are assigned weighted numerical values. These numbers are summed to ascertain each scale's value, and an overall value for the instrument may be obtained by summing the individual scales. However, the clinically important values are those obtained for each individual scale, because a high score on any of three of the six scales (Substance Abuse, Depression/Suicide, and

Psychosis/Homicide) may result in a client's hospitalization. To translate the CISSI's raw scores into scaled scores, the highest possible score for each scale was divided by ten. Then, the mild, moderate, and severe levels for each scale were distributed across the scaled scores. Zero to thirty is considered mild, forty to seventy is considered moderate, and eighty to one hundred is considered severe. When totaled, the scores may be plotted by the clinician on a graphed scale. See appendix C for the scoring system. Eventually, norms for the CISSI may be established and cut-offs determined for use with the instrument. For that to occur, the CISSI must be empirically validated with actual clients in crisis, the next logical step in the creation, modification, and refinement of the instrument.

The Crisis Intervention Self-Efficacy Scale

Test construction. A secondary goal of the present study was to construct and test the reliability of the Crisis Intervention Self-Efficacy Scale (CISES; Kulic, 2001), and to compare the crisis intervention skills of high- and low-scoring clinicians. The CISES was developed utilizing the rational approach to test construction, from theoretical hypotheses about self-efficacy in crisis intervention. The CISES is composed of four scales – three scales contain six items each, and one scale contains seven items. Half of the items on the CISES are negatively scored.

Scales. The CISES (Kulic, 2001) was initially constructed with four scales, totaling twenty-five items (see appendix B). The first scale of the CISES is titled Composed, and is hypothesized to measure the clinician's self-estimate of their ability to remain composed and calm when engaged in crisis intervention. It is required that the clinicians perform their duties with a clear head, in order to make the best assessment of the client and to come to the best treatment choice. Additionally, clinicians can often serve to help an agitated or disturbed client relax in the presence of a scary or unfamiliar situation.

The second scale of the CISES is titled Correct, and is hypothesized to measure the clinician's belief in their ability to make the correct choices during a client crisis.

When called upon to engage in crisis intervention, clinicians make many quick decisions. The client's and others' life may literally be in the crisis clinician's hands, and the best possible treatment choice must be made to ensure clients' and others' safety.

The third scale of the CISES is titled Multi, and is hypothesized to measure the clinician's belief in their ability to handle multiple types of crisis situations. The depressed and suicidal client has a different presentation than a psychotic and homicidal client, and requires confidence that the clinician possesses the requisite skill sets to deal with each type of client. Additionally, this scale is hypothesized to tap into the clinician's belief that they are able to effectively deal with new crisis situations or new client presenting problems.

The fourth scale of the CISES is title Perspective, and is hypothesized to measure the clinician's belief that crisis intervention is a specific clinical skill-set, and that it is a required competence, across the mental health professions.

Scoring. Scoring for the CISES is based upon the five-point Likert scale. Half of the items in the CISES are negatively scored, so these items are first converted to the appropriate score, and then the items are summed for each subscale and the full scale.

Subjects

The CISSI is intended to be useful as an instrument for both experienced clinicians with little crisis intervention experience and for relatively inexperienced clinicians. The CISSI is also intended for use by those with no crisis intervention or counseling experience in general, such as paraprofessional crisis interventionists.

The current sample is comprised of 47 master's- and doctoral-level counseling students from a large southeastern university in the United States. There were 15 males (31.9%) and 32 females (68.1%). Thirty-two of the subjects were white (68.1%), 12 were African American (25.5%), one was Latino/a (2.1%), one was Asian/Pacific Islander (2.1%), and one was unspecified (2.1%). The average subject's age was 28.3 years old, and ranged from 22 to 47 years of age.

Two different groups of volunteers were utilized. The first sample group consisted of master's level students in a community counseling program and school counseling program. The master's level sample included 15 subjects (31.9%). The second sample group consisted of doctoral level students in a counseling psychology program and a school psychology program. The doctoral-level sample included 32 subjects (68.1%). Though generally more experienced than master's students (some with many years of practice), some doctoral students have only recently earned their master's degree; in some cases the master's degree is earned "along the way." The individuals in the doctoral sample are hypothesized to have more experience than those in a master's program, yet still to have limited experience with crisis intervention. Of all the subjects, 32 (68.1%) reported prior experience in crisis intervention, and 15 subjects (31.9%) reported no prior experience.

Design

Replication of a prior design. The purpose of the present study was to determine the validity and reliability of the Crisis Intervention Semi-Structured Interview. The CISSI was validated through the use of an analogue videotape design, a design that was used in the initial evaluation of the SAD PERSONS scale (Patterson, Dohn, Bird, & Patterson, 1983). In that study, two videotapes were created for viewing by study subjects. One tape featured an interview with an individual judged by three experts to be at low risk for suicide; the second tape contained an individual judged to be at high risk for suicide.

Construction of the video scenarios. Three clients were depicted in the present study, each at a mild, moderate, and severe level of symptomatology. The three clients were (1) a depressed and possibly suicidal white female, (2) a psychotic and possibly homicidal black male, and (3) an alcoholic and possibly depressed white male. Two professional acting students and one amateur actor with extensive prior acting experience were hired to fill the roles of the clients. The author of the present study served as the crisis clinician.

Eighteen videotaped client analogues were created for the present study. The 18 videos are divided into two sets of nine. The first nine videos depict a crisis clinician utilizing the Crisis Intervention Semi-Structured Interview with each client type (three clients each at the mild, moderate, and severe level of symptomatology). The scripts for the interview videos were carefully constructed to contain the symptomatology that would obtain a pre-calculated score on the CISSI to reflect a mild, moderate, or severe level of symptomatology for each client type. The actors in the first set of videos read directly off of a large-font script that was held up for them off-camera, and the clinician was also off-camera, reading from the script. Actors were provided with the scripts several weeks before taping began. Several practice tapings were conducted prior to the final taping of the interviews, to ensure fidelity of the actors in reading from the script and communicating the appropriate thoughts, feelings, and behaviors of the client they were depicting.

The second set of videos depicts each of the nine client types, engaged in a monologue directed toward the camera. Each of the monologues directly corresponds to the clients depicted in the nine interview tapes described above. The difference between the two of them is that the actors in the monologue were allowed to speak without a script, as long as they discussed all of the symptoms that were present in the interview scenario. To ensure fidelity of symptom representation, a board was held up off-camera for the actor that contained an extensive, detailed list of the symptoms that needed to be included. When the actor verbalized a symptom, that symptom was crossed off of the list. Once all symptoms were presented, the video was complete. Several practice tapings were conducted prior to the final taping of the monologues, to ensure fidelity of the actors in communicating the appropriate symptoms, thoughts, feelings, and behaviors of the client they were depicting.

The idea behind the symptom-based approach utilized in the CISSI is that one of the most important variables to attend to in crisis intervention is the client's symptoms. If the client's symptoms are appropriately assessed, then the best treatment decision may be

made based upon that accurate assessment, rather than upon the client's presentation alone. As noted earlier, there is often a difference between what the client considers a crisis, and what the clinician considers a crisis. The intent of the CISSI is to help the clinician assess whether the client may be a danger to self or others, and it is hypothesized that this may best be accomplished through a symptom-based assessment.

The two scales of the CISSI being validated in the current study were the Depression/Suicide scale, and the Psychosis/Homicide scale. Subjects viewing the Depression/Suicide client completed Beck, Kovacs, and Weisman's (1979) Scale for Suicide Ideation; those viewing the Psychosis/Homicide client completed Krawiecka, Goldberg, and Vaughan's (1977) Manchester Scale. For the purposes of the current study, the first three scales of the MS (Depression, Anxiety, and Medication Effects) were omitted from the comparisons. Psychologists at the present time are not qualified to make judgments about medication, and the depression and anxiety subscales have not been borne out by research (Jackson, Burgess, Minas, & Joshua, 1990).

Analogue video clients Three different clients were created for the present study, and three levels of severity were created for each analogue client, for a total of nine clients. Each client presents with the same basic presenting problem, with variations in their histories and symptoms so as to qualify them as mild, moderate, or severe.

Severely depressed female. The first client is a depressed and possibly suicidal white female. The following conditions are equivalent across all three severity levels. The client's husband has recently been arrested for his third DUI, the client's mother died two years prior from lung cancer, and the client is already feeling quite depressed from her mother's death. The client is on anti-depressant medication. The client does not abuse any substances. The client presents with significant vegetative symptoms, including sleeping and eating disturbances.

The severely depressed client is not currently seeing a mental health professional. The client is feeling very depressed and has thought about suicide, intensely so in the last week. The client has a plan to overdose herself, and access to medication. The client is

ambivalent about her suicidal ideation, but is unable to guarantee her safety. However, the client has no previous history of suicide attempts. There is no history of mental illness in the family, save for alcohol abuse. The client denies psychotic content. The client has a poor social support system.

Moderately depressed female. The moderate version of the depressed female client has a reported family history of depression, but denies that she is currently suicidal. The client admits past suicidal ideation, and a suicide attempt via overdose after her mother's death. The client is "probably" able to guarantee her safety. The client has significant social support.

Mildly depressed female. The mild version of the depressed female client is currently in counseling and reports no family history of mental illness save for alcohol abuse. The client admits vague suicidal fantasies, but is clearly not suicidal and able to guarantee her safety. The client has never attempted suicide before. The client has a good social support network.

Severely psychotic male. The second client is a psychotic and possibly homicidal black male. The following conditions are equivalent across all three client severity levels. The client is chronically mentally ill with schizophrenia, and sees a psychiatrist every three months. The client is on several medications. There is a history of mental illness in the client's family for two generations, including a suicide attempt. The client regularly smokes marijuana on the weekends, and has regularly done so for the past ten years. The client denies current suicidal ideation, but has a history of two suicide attempts when he was first diagnosed with schizophrenia in his late teens. The client has active auditory and visual hallucinations, regardless of drug use.

The severely psychotic client's sleep is disturbed due to his hallucinations, and he feels depressed. The client believes the hallucinations are real, and appears to have little insight. The client used to see "demons" that would tell him to kill himself, but now the demons tell him to hurt other people, if they are "bad," and that if he hurts "bad" people the world would be a better place. The client has command hallucinations to hurt others,

and has access to a gun. The client cannot guarantee that he will not hurt someone, though he has no particular target in mind. The client has no social support and does not wish to be placed in the hospital.

Moderately psychotic male. The moderate version of the psychotic male client denies suicidal ideation. The client has moderate sleep disturbance. The client has audio and visual hallucinations about demons, but cannot hear particular things the demons are saying. The client feels that the hallucinations are real when he experiences them, but realizes they're not real after the hallucinations end. There is no command aspect to the client's hallucinations. The client has a small social support network.

Mildly psychotic male. The mild version of the psychotic male client has no family history of mental illness, and denies suicidal ideation. The client has mild sleep disturbance. The client has audio hallucinations of demons, but can only hear whispers, and he knows they are not real. There is no command aspect to the hallucinations. The client has a good social support network.

Severely alcoholic male. The third client is an alcoholic and possibly depressed white male. The following conditions are equivalent across all three severity levels of the client. The client has an alcohol problem, and is having difficulty in his marriage. The client is depressed. The client's father was an alcoholic. The client has recently lost his license because of a DUI. The client denies drug abuse. The client has been drinking since he was a teenager, and has been drinking very heavily for several years. The client has been in substance abuse treatment several times, the last time three years ago. The client's work performance is suffering.

The severely alcoholic and depressed client is very depressed and drinks approximately a 12-pack of beer each evening. The client is not currently in treatment. The client was able to stay sober for approximately a year after each prior rehabilitation. The client goes through physiological withdrawal when he stops drinking, and has been detoxed on an inpatient basis previously. The client denies active suicidal ideation, endorses passive ideation, but is able to guarantee his safety. The client once tried to

overdose on alcohol to kill himself. The client's vegetative symptoms include difficulty eating. The client denies psychotic content. The client has a poor social support system and is estranged from his wife. The client wants to go into rehab immediately.

Moderately alcoholic male. The moderately alcoholic and depressed client is drinking a six-pack of beer a night, four to five nights a week. The client was sober for six years before he began drinking heavily again several months ago. The client has gone through physiological withdrawal in the past, but at the time was drinking extremely heavily, and required medical detox. The client denies suicidal ideation, and came close to a medication overdose several years ago, but never went through with it. The client has some difficulty sleeping and reports feeling depressed. The client denies psychotic content. The client has a poor social support network.

Mildly alcoholic male. The mildly alcoholic and depressed male client has been sober for seven years. The client denies a family history of mental illness. The client is drinking two to three nights a week at a bar, usually drinking several beers or drinks in a sitting. The client does not go through physiological withdrawal except for cravings, and the client has never needed medical detox. The client denies suicidal ideation and psychotic content, though admits to feeling depressed. The client has a good social support system that includes his wife, family, and friends.

Procedures

A modified version of the process used in the SAD PERSONS validation study (Patterson, et al., 1983) was utilized for the current study. First, the subject completed a demographic information form, then they completed the Crisis Intervention Self-Efficacy Scale (Kulic, 2001). There are then two major components to the study. In the first component the subject watched a videotape of a counselor using the CISSI to evaluate an analogue client. While watching the video, the subject completed the CISSI along with the counselor, but was unable to view the counselor's CISSI. The subject was asked to complete the instrument according to the answers provided by the client in the interview. Subjects were not trained in the use of the CISSI, but were briefly introduced to it and

several important details about the construction and layout of the CISSI were explained to them. Because the CISSI is a lengthy instrument, questions the subject must answer were printed in bold to avoid the subject missing questions and getting lost during the interview. Additionally, the subject was permitted to stop the videotape and re-watch portions if the tape went too fast for them. The rationale behind stopping the videotape if needed is that the study is not measuring how quickly subjects can fill out the CISSI, or if they can keep up with the counselor in the video.

After subjects finished watching the video and completed the CISSI, each subject was asked to complete a validated instrument that was hypothesized to measure the same content as one of two scales of the CISSI. If the subject watched the depressed and possibly suicidal white female, they filled out the Scale for Suicide Ideation (Beck, Kovacs, & Weisman, 1979) for comparison against the Depression/Suicide scale. If the subject watched the psychotic and possibly homicidal black male, they filled out the Manchester Scale (Krawiecka, Goldberg, & Vaughan, 1977) for comparison against the Psychosis/Homicide scale.

In the second component of the study, the subject watched a second video vignette. The second set of video vignettes consisted of the same clients from the first set of vignettes, discussing their symptoms in monologues, directly to the camera. Each symptom that was present in the semi-structured interview video was present in the monologue. After viewing the second, shorter vignette, the subject was asked to make a decision about the severity of the client based on the monologue. The subject completed a short form asking whether the client's symptoms were severe enough to warrant further action, such as psychiatric hospitalization, medical detoxification, or outpatient treatment. Additionally, subjects were asked questions about whether they would seek supervision/consultation for the client, and why. Subjects never viewed the same client in both vignettes, i.e., if they viewed the depressed woman in the interview vignette, they viewed the psychotic male or the alcohol-abusing male in the monologue vignette. Figure 2 shows the distribution of the videos over the interview and monologue scenarios.

No scoring or tabulation was required of the subjects. Subjects simply completed and submitted the instruments. Feedback, however, was encouraged, in either oral or written form. To avoid subject fatigue, each subject was asked to complete only one CISSI and one other instrument while watching the analogue videotape interview.

Statistical Analysis

The Crisis Intervention Self-Efficacy Scale. The data generated by the current study was analyzed in several ways, to ascertain reliability of the Crisis Intervention Self-Efficacy Scale (CISES) and reliability and validity of the Crisis Intervention Semi-Structured Interview (CISSI). The first phase of psychometric testing was conducted on the CISES. Two reliability indices were conducted for each scale and the full-scale instrument - Cronbach's alpha reliability statistic and Spearman-Brown's split-half reliability statistic. Item analysis was then conducted for each scale to find and remove items that significantly lowered the correlation coefficients.

The Crisis Intervention Semi-Structured Interview. The second phase of psychometric testing was conducted on the CISSI. The psychometric tests conducted on the CISSI were (1) an item-by-item analysis to determine if subjects answered items in the correct direction a majority of the time, (2) correlation of the Depression/Suicide scale with the Scale for Suicide Ideation (Beck, et al., 1979) to determine convergent validity, (3) correlation of the Psychosis/Homicide scale with the Manchester Scale (Krawiecka, et al., 1977) to determine convergent validity, and (4) correlation of the subjects' CISSI ratings for the interviewed clients with the subjects' disposition of the monologue clients, to determine if the CISSI assists the novice counselor in making clinical judgments, which addresses conceptual validity.

The second instrument completed by study subjects while watching analogue role-played videos was either Beck, et al.'s (1979) Scale for Suicide Ideation, or Krawiecka, et al.'s (1977) Manchester Scale. These instruments were included to assess convergent validity for the scales of the CISSI. The SSI is a 19-item, clinician administered, clinical and research instrument with three scales: (a) active suicidal desire,

Total Videos=18	Depressed and Possibly Suicidal White Female			Psychotic and Possibly Homicidal Black Male			Alcoholic and Possibly Depressed White Male		
Semi-Structured Interview Scenario: 9 videos	Mild Severity: 3 videos	Moderate Severity: 3 videos	Severe Severity: 3 videos	Mild Severity 3 videos	Moderate Severity: 3 videos	Severe Severity: 3 videos	Mild Severity: 3 videos	Moderate Severity: 3 videos	Severe Severity: 3 videos
Monologue Scenario: 9 videos	Mild Severity: 3 videos	Moderate Severity: 3 videos	Severe Severity: 3 videos	Mild Severity: 3 videos	Moderate Severity: 3 videos	Severe Severity: 3 videos	Mild Severity: 3 videos	Moderate Severity: 3 videos	Severe Severity: 3 videos

Figure 2. Distribution of Videos Over the Interview and Monologue Scenarios.

(b) passive suicidal desire, and (c) preparation. According to the SSI's manual,

> "The SSI items evaluate the characteristics of the suicidal thoughts as well as the patient's attitudes toward them; the extent of the patient's wish to die; the desire to make an actual attempt and details of any plans; and the patient's internal deterrents to an actual attempt and subjective feelings of control regarding a proposed attempt" (Beck & Steer, 1991, p. 17).

The inclusion of the SSI was used to determine whether the Depression/Suicide scale of the CISSI accurately assessed suicidal risk. Krawiecka, Goldberg, and Vaughan's Manchester Scale (1977) was used to determine the convergent validity of the Psychosis/Homicide scale. The Manchester Scale is comprised of 9 items that describe psychotic and related symptoms; each item has a description of the target behavior(s) to be rated on a 5-point scale. The nine items are: (1) medicine side-effects, (2) depression, (3) anxiety, (4) flattened, incongruous affect, (5) psychomotor retardation, (6) coherently expressed delusions, (7) hallucinations (8) incoherence and irrelevance of speech, and (9) poverty of speech, or muteness. The inclusion of the Manchester Scale was used to determine whether the Psychosis/Homicide scale of the CISSI accurately assessed psychosis.

The third phase of data analysis was conducted on the individual items of the CISSI. The items in the CISSI were analyzed by tabulating a frequency count for each item in the dataset, and comparing the frequency count against an answer key for each dataset. Traditional reliability measures could not be used in the data analysis because of the type of data that was collected, so the frequency of item answers was analyzed.

The fourth phase of data analysis was conducted by comparing the answers subjects provided on the Monologue Answer Form with the scores other subjects gave to the analogue clients on the CISSI. The frequency of correct versus incorrect disposition decisions were compared for subjects utilizing the CISSI versus subjects utilizing clinical judgment alone. It was hypothesized that clinicians utilizing the CISSI would make better

and more consistent decisions about the analogue clients than those making the decision utilizing clinical judgment alone.

Additional analyses. The final phase of data analysis was conducted by comparing high- and low-scoring subjects on the CISES, to determine if there was any difference on crisis intervention performance between high and low crisis intervention self-efficacy subjects. Analyses were also conducted to determine whether there were differences on the CISES scores based on gender, race, educational level, or prior crisis intervention experience.

CHAPTER 4

RESULTS

Introduction

This chapter focuses on the results of the analyses performed on the data collected in the current study. The presentation begins with a restatement of the research hypotheses. The first analysis presented is the internal reliability of the Crisis Intervention Self-Efficacy Scale (CISES; Kulic, 2001). The second analysis presented is the comparison of high- and low-scoring subjects on the CISES to performance on the CISSI and individual judgment of client dispositions, to determine if there is a difference on crisis intervention performance between subjects with high and low crisis intervention self-efficacy. The third analysis presented is the convergent validity of the Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001). The fourth analysis presented is the item analysis of the CISSI, to determine internal reliability of the instrument.

Subjects in the current study first completed a demographics form and a Crisis Intervention Self-Efficacy Scale. Subjects then observed a videotape of a clinician utilizing the Crisis Intervention Semi-Structured Interview while interviewing an analogue client. The subject followed along with the clinician and rated the analogue client on the subject's copy of the CISSI. Subjects then watched a second video of an analogue client performing a monologue of their symptoms, and were asked to make a disposition decision for the client, either inpatient or outpatient treatment. The subject's participation was then complete.

There were seven research hypotheses proposed at the outset of the current study: (1) The Crisis Intervention Self-Efficacy Scale subscales and full scale will achieve acceptable levels ($r > .70$) of internal reliability as determined by coefficient alpha, (2) The Crisis Intervention Self-Efficacy Scale subscales and full scale will achieve acceptable levels of internal reliability ($r > .70$) as determined by split-half reliability, (3) The Crisis Intervention Semi-Structured Interview Subscale "Depression/Suicide" will achieve acceptable levels of convergent validity ($r > .70$) as determined by correlation with Beck, Kovacs, and Weissman's (1979) Scale for Suicide Ideation, (4) The Crisis

Intervention Semi-Structured Interview subscale "Psychosis/Homicide" will achieve acceptable levels of convergent validity ($r > .70$) as determined by correlation with Krawiecka, Goldberg, and Vaughan's (1977) Manchester Scale, (5) individual items of The Crisis Intervention Semi-Structured Interview will correctly be endorsed by a majority of raters when presented with symptom-based video analogues, as determined through item analysis, (6) raters utilizing The Crisis Intervention Semi-Structured Interview will differentiate between video analogue severity levels more successfully than raters not utilizing the CISSI, who rely solely upon clinical judgment, and (7) there will be a significant difference on crisis intervention effectiveness between individuals with high and low levels of crisis intervention self-efficacy.

Internal Reliability of the Crisis Intervention Self-Efficacy Scale

The first data analysis in the present study was conducted on the Crisis Intervention Self-Efficacy Scale (CISES). Two reliability indices were conducted for each subscale and the full-scale instrument - Cronbach's alpha reliability statistic and Spearman-Brown's split-half reliability statistic. Item analysis was then conducted for each scale to find and remove items that significantly lowered the correlation coefficients. These analyses were conducted to determine internal reliability for the CISES. Table 1 presents the reliability indices, and Table 2 presents the means and standard deviations.

Full Scale. For the entire scale (25 items), Cronbach's alpha was .87 and Spearman-Brown's split-half was .90, indicating excellent internal reliability for the full-scale CISES. See appendix B for the CISES, and appendix D for a list of the items contained in each subscale.

Subscale Composed. For subscale Composed, Cronbach's alpha was .69 and Spearman-Brown's split-half was .64. Cronbach's alpha for Subscale Composed has moderately acceptable reliability. Item analysis revealed no individual item or group of items that, when removed, would significantly affect the correlation coefficients.

Table 1. Reliability indices for the Crisis Intervention Self-Efficacy Scale.

	Cronbach's Alpha	Spearman-Brown's Split-Half
Full Scale 25 items	.90	.94
Subscale 1 – Composed 6 items	.69	.64
Subscale 2 – Correct 6 items	.75	.72
Subscale 3 – Multi 7 items	.89	.89
Subscale 4 – Perspective 6 items	-.01	.31

Subscale Resolved. For subscale Resolved, Cronbach's alpha was .67 and Spearman-Brown's split-half was .72. The Spearman-Brown statistic exceeded the acceptable level of .70, but the Cronbach's alpha statistic did not. Item analysis was conducted and it was determined that removal of one item in subscale two increased the alpha statistic from .67 to .75, a gain of .07. Therefore the scale scoring deletes the one item that was removed.

Subscale Multi. For subscale Multi, Cronbach's alpha was .89 and Spearman-Brown's split-half was .89. Both reliability coefficients are excellent and reflect sound reliability.

Subscale Perspective. For subscale Perspective, Cronbach's alpha was -.01 and Spearman-Brown's split-half was .31. The subscale Perspective was designed to tap into one's belief that crisis intervention is an important task utilized by all counselors. The subscale Perspective does not appear to be an internally reliable subscale. Upon

Table 2. Means and Standard Deviations for the CISES Subscales and Full Scale.

	All Subjects n=47		Master's Students n=15		Doctoral Students n=32	
Scale	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Composed – 6 items	25.50	2.78	25.67	2.47	25.50	2.78
Correct – 6 items	19.97	2.73	18.67	3.50	19.97	2.73
Multi – 7 items	26.46	5.59	22.93	5.93	26.46	5.59
Perspective – 6 items	25.88	2.06	26.93	1.28	25.88	2.06
CISES Full Scale – 25 items	71.94	9.46	67.27	11.02	71.94	9.46

examination of subscale items, it is fair to assume that the items did not consistently represent the construct.

Comparison of Crisis Intervention Effectiveness with High and Low Levels of Crisis Intervention Self-Efficacy

The second data analysis was an examination of whether there was a difference in the crisis intervention performance between individuals who scored high or low on the Crisis Intervention Self-Efficacy Scale. Several other analyses were also conducted, including an examination of the effects of gender, race, level of education, level of crisis intervention experience, and the seeking of supervision for crisis cases on crisis intervention self-efficacy, and crisis intervention performance. Table 3 presents the results of the t-test analyses performed on the CISES.

Gender differences on the CISES. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between males and females. The t-test was not significant for the CISES full-scale scores.

Race differences on the CISES. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between European Americans and African Americans. The t-test was not significant for the CISES full-scale score.

Level of education differences on the CISES. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between master's and doctoral students. The t-test was not significant for the CISES full-scale score.

Level of crisis experience differences on the CISES. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between subjects who had prior crisis experience and subjects who did not have prior crisis experience. The t-test was significant for the CISES full-scale score, $t\ (45) = 2.22$, $p = .032$. Subjects with prior crisis experience ($M = 72.60$,

SD = 8.79) scored significantly higher than did subjects without prior crisis experience (M = 65.87, SD = 11.46). Table 4 presents a boxplot of the distributions of CISES total scores for subjects with and without prior experience in crisis intervention.

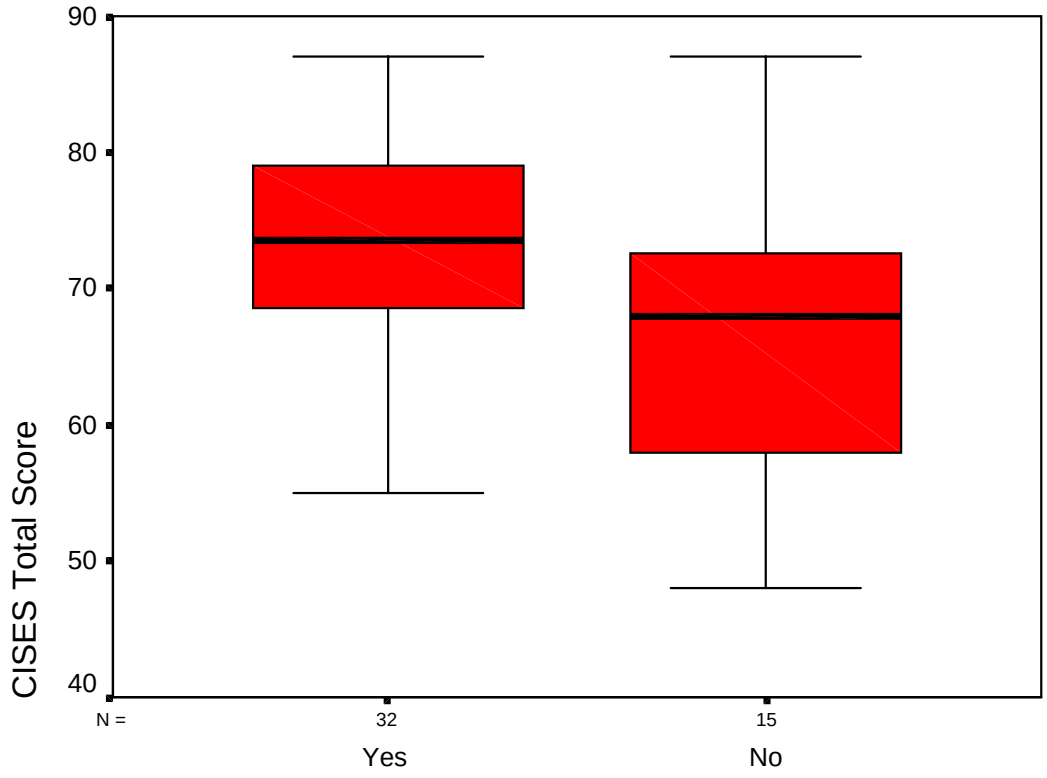
Table 3. Results of t-tests for comparison of high and low scores on the CISES

	t	df	Significance (2-tailed)
Gender	.285	45	.777
Race	.462	42	.647
Master's vs. Doctoral	-1.497	45	.141
Prior Crisis Experience	2.216	45	.032*
Supervision-Seeking	-1.647	45	.107
Critical Scale of CISSI	-.056	45	.955
Full Scale of CISSI	-1.068	45	.291
Clinical Judgment	-.019	45	.985
* indicates a statistically significant result			

Supervision/consultation differences on the CISES. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between subjects who chose to seek supervision after making their crisis intervention disposition and those who did not seek supervision. The t-test was not significant for the CISES full-scale score.

Effect of crisis intervention self-efficacy on crisis intervention performance when utilizing the CISSI – critical scale score. An independent samples t-test was conducted to

Table 4. Distributions of CISES Total Scores for Subjects With and Without Prior Experience in Crisis Intervention.



evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between subjects who correctly and incorrectly answered the critical scale of the CISSI for the client they observed in the interview scenario. The t-test was not significant for the CISES full-scale score.

Effect of crisis intervention self-efficacy on crisis intervention performance when utilizing the CISSI – full scale score. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between subjects who correctly and incorrectly achieved the entire sum score of all scales on the CISSI for the client they observed in the interview scenario. The t-test was not significant for the CISES full-scale score.

Effect of crisis intervention self-efficacy on crisis intervention performance when using clinical judgment only. An independent samples t-test was conducted to evaluate the hypothesis that there would be a significant difference on the full-scale score of the CISES between subjects who correctly and incorrectly made a referral decision for the client they observed in the monologue scenario. The t-test was not significant for the CISES full-scale score.

Convergent Validity of The Crisis Intervention Semi-Structured Interview

The third data analysis was conducted on two of the subscales of the Crisis Intervention Semi-Structured Interview (CISSI). It was hypothesized that if subscales of the CISSI correlated with well-known, valid, and reliable scales that measure the same constructs, then convergent validity would be demonstrated. The first CISSI subscale that was analyzed was the Depression/Suicide scale. This scale was compared to the Clinician Rating Version of the Beck Scale for Suicide Ideation (Beck & Steer, 1991).

There are three main subsets of data in the CISSI dataset. Each data subset is measured across three levels of symptom severity, including mild, moderate, and severe. The first data set is comprised of all instruments completed by subjects who observed videotapes of a depressed and possibly suicidal woman. The second data set is comprised of all instruments completed by subjects who observed videotapes of a psychotic and possibly homicidal male. The third data set is comprised of all instruments completed by subjects who observed videotapes of an alcoholic and possibly depressed male. For the data analyses that are described in this section, the focus of each analysis is upon the population that was measured for that analogue client's particular symptomatology. The Depression/Suicide Scale was correlated with the Beck Scale for Suicide Ideation (Beck, Kovacs, & Weisman, 1979) for the data collected on those subjects who viewed videotapes of the depressed and/or suicidal woman, and the Psychosis/Homicide Scale was correlated with the Manchester Scale (Krawiecka, Goldberg, & Vaughan, 1977) for the data collected on those subjects who viewed videotapes of the psychotic and possibly

homicidal male. No correlative analyses were performed on the Substance Abuse Scale in the current study.

Depression/Suicide Subscale of the CISSI. A Pearson correlation coefficient was calculated between the Depression/Suicide Scale of the CISSI and the Beck Scale for Suicide Ideation (SSI; Beck, Kovacs, & Weisman, 1991) to establish convergent validity. Seventeen subjects (n = 17) viewed videotapes of the mild, moderate, or severe levels of symptomatology in the depressed/suicidal female and completed both a CISSI and an SSI. A one-tailed correlation produced a correlation of .70 between the two scales, which is statistically significant at the .01 level of significance. This correlation suggests that the Depression/Suicide Scale measures a similar construct as the SSI, i.e., depression elevated to the level where suicide subjectively becomes a possible behavior for the client. A statistically significant correlation between the Depression/Suicide Scale of the CISSI and the Beck Scale for Suicide Ideation, as well as a relatively high degree of correlation, demonstrates convergent validity for the DS scale.

Psychosis/Homicide Scale of the CISSI. A Pearson correlation coefficient was calculated between the Psychosis/Homicide Scale of the CISSI and the Manchester Scale (Krawiecka, Goldberg, & Vaughan, 1977) to establish convergent validity. Fifteen subjects (n = 15) viewed videotapes of the mild, moderate, or severe levels of symptomatology in the psychotic/homicidal male and completed both a CISSI and a Manchester Scale. A one-tailed correlation produced a correlation of .81 between the two scales, which was statistically significant at the .01 level of significance. This suggests that the Psychosis/Homicide Scale measures a similar construct as the Manchester Scale, i.e., psychotic behavior. A statistically significant correlation between the Psychosis/Homicide Scale of the CISSI and the Manchester Scale, as well as a relatively high degree of correlation, demonstrates convergent validity for the PH scale.

Item Analysis of Specific Scales of The Crisis Intervention Semi-Structured Interview

The fourth data analysis was an item analysis of the items of the CISSI. The items in the CISSI were analyzed by conducting a frequency count for the answers to each

item, and comparing the frequency count to an answer key. Traditional reliability measures could not be used in the data analysis because of the type of data that was collected, so the frequency of item answers was analyzed and then discussed in order to make inferences about the reliability and effectiveness of the CISSI.

There are nine distinct data sets for the CISSI, three each for three different types of analogue clients. The first analogue client is a depressed and possibly suicidal white female. The second analogue client is a psychotic and possibly homicidal black male. The third analogue client is an alcoholic and possibly depressed white male. For each of these three clients there are three levels of severity – mild, moderate, and severe, for a total of nine data sets to analyze. For each type of client only the relevant scales were examined in the analysis. For the depressed and possibly suicidal white female, the two scales that were examined were the General Scale and the Depression/Suicide Scale. For the psychotic and possibly homicidal black male, the two scales that were examined were the General Scale and the Psychosis/Homicide Scale. For the alcoholic and possibly depressed white male, the three scales that were examined were the General Scale, the Substance Abuse Scale, and the Depression/Suicide Scale.

For each data set a frequency count was conducted to measure the number of different responses given for each item. This item frequency list was then examined to note differences in answer patterns within each analogue client's datasets. Each dataset was compared to its answer key to identify two different types of items. The first type of item identified was one that had answers other than the correct one, even if only one subject answered incorrectly (Criteria A). The second type of item identified was any item that had either several different answers given instead of the correct answer (Criteria B), or items that contained more than one subject answering incorrectly (Criteria C). The next section lists the items from each of the nine data sets that meet Criteria A, B, or C, combined with an analysis that determines whether the data supports the hypothesis that the CISSI is a reliable and accurate instrument.

The main criteria used for supporting the reliability of the CISSI is whether subjects correctly answered the questions on the CISSI, as defined by the answer key for each of the three levels of severity for each of the three unique analogue clients. Each analogue client was created with the goal of emulating a specific type of client, which should prompt specific answers to the question asked on the CISSI. Therefore, if the analogues were well constructed, and if the CISSI is a perfectly reliable instrument, all of the answers provided on the analogue CISSIs should be correct. Of course, perfection was not achieved, but the results were encouraging for further development of the CISSI.

Analogue Client #1 – Depressed and Possibly Suicidal White Female

Across all three severity levels. A summary of correct and incorrect answers to the CISSI across the mild, moderate, and severely depressed and possibly suicidal white female client analogue is presented in Table 5.

Severely depressed and possibly suicidal white female. Six subjects were included in this data set. The combined scales examined for this analogue (General Scale and Depression/Suicide Scale) total 36 items; the General Scale consists of 12 items, and the Depression/Suicide Scale consists of 24 items. Out of the 36 items, 17 (47.2%) met Criteria A, B, or C. Interestingly, though, 11 of the 17 items (64.7%) had one thing in common – they all had answers that indicated five of six subjects answered in the correct direction (83.3% answered correctly vs. 16.7% answered incorrectly); having only one subject answer the item incorrectly is the defining characteristic of Criteria A. It was not determined if this 16.7% was the same subject each time, though the pattern appears to suggest that, because in many cases certain answers that are clearly defined in the interview were not answered correctly. Questions designed to gather relatively direct information, such as the client's history of treatment, were answered by the analogue client with direct answers that even a non-clinician would answer correctly. Table 6 presents a list of the questions that were answered in the 5:1 ratio. Table 7 presents a list of the questions answered incorrectly by more than one subject.

Table 5. Range of Responses for the Depressed and Possibly Suicidal White Female Analogue Client.

Analogue Client Type	Analogue Client Severity	Subscale Under Examination	Number and Percentage of Items Answered Completely Correctly	Number and Percentage of Items with 1 Incorrect Answer	Number and Percentage of Items with More Than 1 Incorrect Answer
Depressed and Possibly Suicidal White Female n=17	Severe n=6	General – 12 items	5 items, 41.7%	7 items, 58.3%	0 items, 0%
		Depression/Suicide – 24 items	15 items, 60%	4 items, 16%	6 items, 24%
	Moderate n=6	General – 12 items	11 items, 91.7%	0 items, 0%	1 item, 8.3%
		Depression/Suicide – 24 items	11 items, 44%	7 items, 28%	7 items, 28%
	Mild n=5	General – 12 items	9 items, 81.8%	0 items, 0%	3 items, 27.2%
		Depression/Suicide – 24 items	8 items, 32%	15 items, 60%	2 items, 8%

Table 6. Questions Answered in the 5:1 Ratio for the Severely Depressed and Possibly Suicidal White Female Analogue Client.

Analogue Client Type	The questions below were correctly answered by five out of 6 subjects, an 83.3% correct rate vs. a 16.7% incorrect rate.
Severely Depressed and Possibly Suicidal White Female n=6	1. Are you currently seeing a mental health professional?
	2. Do you know if you have been assigned a particular diagnosis?
	3. Are you currently taking any medication for that diagnosis?
	4. Do you actually take the medication as prescribed?
	5. Do you know if you were assigned any particular diagnosis then?
	6. Were you taking any medication specifically for or related to that diagnosis?
	7. Have you had any major events going on in life recently?
	8. Do you have the ability to get access to and use the thing(s) you want to hurt yourself with?
	9. Do you feel hopeless about the future?
	10. Where do you see yourself in 5, 10, or 20 years?
	11. Do you find yourself sleeping too little or too much?

Table 7. Questions Answered Incorrectly by More Than One Subject for the Severely Depressed and Possibly Suicidal White Female Analogue Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Severely Depressed and Possibly Suicidal White Female n=6	1. Does the patient want to hurt/kill themselves/die?	2 subjects; 33.3%	4 subjects; 66.7%	0 subjects; 0%
	2. Do you really want to do this?	1 subject; 16.7%	2 subjects; 3.3%	3 subjects; 50%
	3. If you had the ability to hurt/kill yourself right now, would you do it?	2 subjects; 3.3%	1 subject; 16.7%	3 subjects; 50%
	4. Do you think you would be safe enough that you would not hurt yourself?	4 subjects; 66.7%	0 subjects; 0%	2 subjects; 33.3%
	5. Have you lost or gained any weight at all?	4 subjects; 66.7%	1 subject; 16.7%	1 subject 16.7%
	6. How much weight in how much time?	4 subjects; 66.7%	0 subjects; 0%	2 subjects; 33.3%

All of the questions on the CISSI are designed to gather specific data and represent important assessment material. However, there are only a few questions on the CISSI that, if answered incorrectly, could result in the possibility of danger to the client or others, if the client were to be released instead of hospitalized. These questions are typically ones that, if answered in the appropriate direction, result in the entire scale being scored at its highest value, which results in a recommendation for immediate hospitalization or further assessment. Utilizing the worst-case scenario, if the 11 items answered in a 5:1 ratio were each incorrectly answered by a different subject (as opposed to one subject), an 83% correct answer rate for each question is still encouraging.

Of the questions that assess dangerousness symptoms, the first question to demonstrate variability is "Does the patient want to hurt themself, to kill themself, or want to die?" This question is intended to tap into the concept of active vs. passive suicidal ideation and suicidal ideation vs. self-mutilation. The patient who is actively suicidal is thought to be in the most danger, the person who wishes to hurt him- or herself is next most dangerous, and the passive suicidal ideator is conceptualized as being the least dangerous. For this question the correct answer is that the client wants to kill herself; three subjects (50%) thought the client wanted to kill herself, two subjects (33.3%) thought the client wanted to die, and one subject (16.7%) thought the client had combined ideation of wanting to kill herself and wanting to die. It is more accurate to assume that this client has active suicidal ideation because of the various data she provides about her recent thoughts, feelings, and behaviors. It is a good sign, though, that all subjects endorsed items denoting suicidal ideation, as this is a pivotal question.

The next question demonstrating variability, which refers to the analogue client's suicidal ideation, is "Do you really want to do this?" The correct answer to this question is "yes," which would result in this client receiving a full score on the subscale, and which would likely result in the client's hospitalization. However, only one subject (16.7%) answered "yes" for this question. Two subjects (33.3%) answered "no," and three subjects (50%) did not answer the question at all. The results for this question are

troubling, because this item provides pivotal data in the subscale. Questions arise as to whether the video accurately communicates the client's intentions; however, it was intentionally written to depict a severely depressed and suicidal woman. That there were subjects who did not answer this question at all is particularly troubling, as this is an essential datapoint whether or not one uses a structured assessment. A similarly disturbing result was found for the question "If you had the ability to hurt/kill yourself right now, would you do it?" The correct answer to this question is "yes," though only two subjects (33.3%) answered the question correctly. One subject (16.7%) answered "no," and three subjects (50%) did not answer the question at all. These results signal either a problem with CISSI or a problem with the video. It should be noted that the client in the video does not directly answer "yes" to the latter question, but the client's presentation is structured to point in the direction of the client being unsafe. Similarly problematic are the results for the next question, "Do you think that you would be safe enough that you would not hurt yourself?" The correct answer for this question is "no," and four subjects (66.7%) answered it correctly. Two subjects (33.3%) did not answer the question. Why subjects would skip this item is unclear.

The last two items that were inconsistently answered were "Have you lost or gained any weight at all?" and "About how much weight have you lost/gained in about how long of a time?" For the first question, the correct answer is "yes," and four subjects (66.7%) answered correctly. One subject (16.7%) answered "no," while another subject (16.7%) did not answer the question. The last question was a write-in item (when subjects were provided space on the CISSI to write in data if they chose) that is not being considered in the context of this analysis, because subjects were instructed only to utilize write-in items if they felt they needed to. In the context of an actual assessment it would, of course, be important to gather this information, but for the purposes of the current study it was not. However, four of six subjects (66.7%) utilized the write-in space.

To summarize, both the General Scale and the Depression/Suicide Scale for the "severely depressed and possibly suicidal white female" demonstrated significant

variability. Of the 36 items represented by the two scales, 47.2% of those items were answered incorrectly by at least one subject. However, 64.7% of the items were answered incorrectly by only one subject. There were several items that returned incongruous data, such as clear-cut items that assess suicidal ideation. The CISSI appeared to perform variably in the assessment of suicide ideation for the severe client. Subjects incorrectly assessed important information related to the details of the client's suicidal ideation, and whether the client could guarantee her safety. Several items related to the client's history were also incorrectly answered, however, many of these items were answered correctly by 83.3% of subjects.

Moderately depressed and possibly suicidal white female. There were six subjects included in this data set. The combined scales examined for this analogue (General Scale and Depression/Suicide Scale) total 36 items; the General Scale consists of 12 items, and the Depression/Suicide Scale consists of 24 items. Out of the 36 items, 17 (47.2%) met Criteria A, B, or C. Out of these 17 items, 7 items (41.2%) displayed an answer pattern similar to the one discussed in the previous section – the 5:1 ratio (Criteria A), which indicates 83.3% of the subjects answering the questions in the correct direction for those particular questions. Table 8 presents the questions answered in the 5:1 ratio.

This moderate analogue client was conceptualized to be the most difficult one for subjects to correctly rate on the CISSI, because "moderate" clients tend to be the most difficult to accurately assess in real life. These clients may exhibit serious symptoms that are cause for great concern, but they may not exhibit enough of these symptoms to be considered at-risk. In addition, the serious symptoms may appear alongside varied levels of other symptoms, which can often "modulate" the seriousness of symptoms in the clinician's mind. Further, serious symptoms against the backdrop of a mostly asymptomatic presentation can confuse even the most seasoned clinician.

Of the 12 items in the General Scale, only one item was answered inconsistently, "Major events going on in life recently?" It is assumed from the content the client shares in the interview that there have been major events occurring in her life, yet only two

subjects (33.3%) answered correctly, with a “yes.” Four subjects (66.7%) answered “no” to this question, which is puzzling. Perhaps the term “major events” needs to be clearly defined, but the recent events described by the analogue client should qualify as major to clinicians and lay persons alike.

Fourteen of 25 items on the Depression/Suicide Scale (56%) met Criteria A, B, or C. Table 9 presents only those items that were answered incorrectly by more than one subject. Many of the answer patterns appear to reflect the confusing and ill-defined nature of the client who is presented in this analogue. The first item to have incorrect responses occurs on the Depression/Suicide Scale, which is “Have you had any suicidal thoughts?” The answers to this question were evenly split, with three subjects answering “yes,” and three subjects answering “no” (50% each). The correct answer to this question was “no,” however, it appears that half of the subjects interpreted the data as a “yes.” The second item on this scale then asks “Hurt self/kill self/want to die?” which should have been answered by three subjects (the three subjects who answered “yes” to the prior question). Instead, two subjects (33.3%) endorsed “hurt self,” and four subjects (66.7%) endorse “not applicable.” These problems continue through the next few questions, because the questions continue asking about the client’s suicidal ideation. It does not matter whether subjects were supposed to answer in a specific direction on the CISSI, but it does matter that they answer consistently in that direction. For the next few questions at least three of the subjects ought to have endorsed something related to the suicidal ideation they thought they observed earlier in the interview, but this was not the case. It appears that answers for the rest of the Depression/Suicide Scale are based on the results obtained for the “hurt self/kill self/want to die” question rather than the “suicidal thoughts” question, i.e., three subjects interpreted that the client had some type of suicidal thought, but only two subjects actually endorsed a specific thought for the client. For example, the question “How long have you been thinking about it?” prompted one subject (16.7%) to endorse “months/years,” while the other five subjects (83.3%) endorsed the correct answer, which was “not applicable.” For the question “Have you been thinking about how you might do

this to yourself?" four subjects (83.3%) answered correctly, "not applicable." One subject (16.7%) answered "yes," while another did not provide an answer.

The number of subjects who appeared to think that the client exhibited suicidal ideation slowly shrinks as we proceed through the questions in the CISSI, because the next question, "What ways have you thought about doing this?" only generates one response (16.7%), "overdose," which is consistent with the client's presentation, but which is also the incorrect answer; the correct answer was "not applicable." The next question, which is vitally important, "Do you really want to do this?" is answered appropriately given the data generated thus far. One subject (16.7%) answered "no," while the remaining five subjects (83.3%) answered "not applicable.

The next question, "If you had the ability to hurt/kill yourself right now, would you do it?" garnered similar data. Two subjects (33.3%) answered "no," while four subjects (66.7%) answered "not applicable." The question "How many times have you tried this?" (which refers to suicide attempts) was not answered by one subject (16.7%), while the remainder of subjects answered the item correctly. The question "How long ago did this happen?" (which also refers to past suicide attempts) appeared to generate some confusion, though, as a variety of answers were chosen, making it appear almost as if the question were answered randomly. One subject chose "within last year," and two more subjects chose "within last five years," for a total of 50%; the correct answer was "within last five years." However, two more subjects (33.3%) did not answer at all, while one subject (16.7%) chose "five or more years ago." It is unclear how this confusion was generated.

The next item to have incorrect responses was "Do you think you would be safe enough that you would not hurt yourself?" Five out of six subjects (83.3%) answered this item correctly, as "yes." This is a critical item in the Depression/Suicide Scale, and may result in client hospitalization if answered incorrectly. The final two items to have incorrect responses in this scale were "Do you feel hopeless about the future?" and "Where do you see yourself in 5, 10, or 20 years?" For the first item four subjects

Table 8. Questions Answered in the 5:1 Ratio for the Moderately Depressed and Possibly Suicidal White Female.

Analogue Client Type	The questions below were correctly answered by five out of 6 subjects, an 83.3% correct rate vs. a 16.7% incorrect rate.
Moderately Depressed and Possibly Suicidal White Female n=6	
	1. How long have you been thinking about it?
	2. What ways have you thought about doing this?
	3. Do you really want to do this?
	4. How many times have you tried this?
	5. How close were they to you?
	6. Do you think you would be safe enough that you would not hurt yourself?
	7. Where do you see yourself in 5, 10, or 20 years?

Table 9. Questions Not Answered in the 5:1 Ratio for the Moderately Depressed and Possibly Suicidal White Female Analogue Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Moderately Depressed and Possibly Suicidal White Female n=6	1. Major events going on in life recently?	2 subjects; 33.3%	4 subjects; 66.7%	0 subjects; 0%
	2. Suicidal thoughts?	3 subjects; 50%	3 subjects; 50%	0 subjects; 0%
	3. Hurt self/kill self/want to die?	4 subjects; 66.7%	2 subjects; 33.3%	0 subjects; 0%
	4. Have you been thinking about how you might do this to yourself?	4 subjects; 66.7%	1 subject; 16.7%	1 subject; 16.7%
	5. If you had the ability to hurt/kill yourself right now, would you?	4 subjects; 66.7%	2 subjects; 33.3%	0 subjects 0%
	6. How long ago did this happen?	2 subjects; 33.3%	2 subjects; 33.3%	2 subjects; 33.3%
	7. Do you feel hopeless about the future?	4 subjects; 66.7%	2 subjects; 33.3%	0 subjects; 0%
	8. How much weight in how much time?	3 subjects; 50%	1 subject; 16.7%	2 subjects; 33.3%

(66.7%) answered the question correctly, with a “yes;” for the second item one subject (16.7%) answered incorrectly, indicating that the client had no plans for the future, when she had described plans. These last two items described above are important in terms of the client’s future-mindedness and whether the client sees themself as alive and taking part of the future. This analogue client was confusing, because, although she voices being hopeless, she also has plans for herself in the future.

To summarize, the General Scale performed acceptably in the “moderately depressed and possibly suicidal white female” client analogue, with one question generating incorrect answers. This question should not have generated this data, as the answer to the question about major life events should have been obvious to the subjects. The Depression/Suicide Scale demonstrated some variability, as was expected. As noted earlier, the “moderate” client was conceptualized as being the most difficult for subjects to rate, and the data bore that out. The client is not suicidal, but is rated suicidal by half of the subjects. This result is troubling, because rating a client as suicidal could result in an unnecessary hospitalization. The data continues along a somewhat incongruous path, with some of the subjects who interpreted the client as suicidal endorsing various things about that client’s suicidality, though the number of subjects consistently measuring suicidality is not consistent. However, it is gratifying to see that when subjects interpret suicidality as being present, they continue to assess it, even if the results vary, because the client is ambiguous. What became clear is that as the subjects progressed through the decision tree, less severity was attributed to the client’s ideation.

The most important item to generate variability assessed the client’s current level of safety, yet only one subject answered the item incorrectly. An incorrect answer for the item could result in an inappropriate hospitalization. For a client whose symptomatic data is vague and often contradictory, the CISSI appears to have performed acceptably in helping subjects assess critical information, and served to eliminate incorrect data through further assessment when subjects interpreted symptoms as more severe than they actually were.

Mildly depressed and possibly suicidal white female. There were five subjects included in this data set. The combined scales examined for this analogue (General Scale and Depression/Suicide Scale) total 36 items; the General Scale consists of 12 items, and the Depression/Suicide Scale consists of 24 items. Out of the 36 items, 20 (55.5%) met Criteria A, B, or C. Fifteen of those 20 items (75%) displayed the pattern discussed previously, with the majority of the subjects answering in the correct direction. The ratio changes from 5:1 to 4:1, but the pattern is still evident – Table 10 presents the questions answered in the 4:1 pattern.

The first question to generate varying data was "Do you know if you have been assigned any particular diagnosis?" The correct answer is "yes," three subjects (60%) answered correctly and two subjects (40%) answered incorrectly. Related to this question was the question "What diagnosis were you assigned?" The data is consistent with the prior question, three subjects (60%) correctly answered "depression," and two subjects (40%) did not answer the question. The odd answer pattern to the question "Major events going on in life recently?" occurs again; the correct answer is "yes," but only three subjects (60%) answered this question correctly. The data presented in this mild analogue client's case is still enough to warrant a clinician categorizing events in the client's life as major.

Questions about suicidal ideation for this analogue client generated consistent data, with one subject (20%) indicating (a) that the client had a wish to die, (b) that the client had been thinking about it for a few hours/days, and (c) that the client had not thought about how they would hurt themselves. The correct answer to all three of these questions, however, is "no," because this client did not exhibit suicidal ideation. It is not surprising, however that one subject interpreted the client as having some mild, passive ideation. The pattern of one subject in each item (20%) answering in the incorrect direction appeared throughout the questions "Do you really want to do this?" and "If you had the ability to hurt/kill yourself right now, would you do it?" The one subject was able to correctly answer that the client was not suicidal in the last question.

Table 10. Questions Answered in the 4:1 Ratio for the Mildly Depressed and Possibly Suicidal White Female Analogue Client.

Analogue Client Type	The questions below were correctly answered by four out of 5 subjects, an 80% correct rate vs. a 20% incorrect rate.
Mildly Depressed and Possibly Suicidal White Female N=5	1. Hurt self/kill self/want to die?
	2. How long have you been thinking about it?
	3. Have you been thinking about how you might do this to yourself?
	4. What ways have you thought about doing this?
	5. Do you really want to do this?
	6. If you had the ability to hurt/kill yourself right now, would you do it?
	7. Family history of suicide?
	8. How close were they to you?
	9. Where do you see yourself in 5, 10, or 20 years?
	10. On a scale of 1-10, how do you feel right now?
	11. Have you had any trouble sleeping in the past month or so?
	12. Do you find yourself sleeping too little or too much?
	13. Do you wake up early and find it difficult to get back to sleep?
	14. Have you had any trouble eating too little or too much in the past month or so?
	15. Do you feel depressed?

There were some odd inconsistencies in the next few questions, all of which fell into the 4:1 ratio (Criteria A). For example, none of the subjects answered "yes" to "Family history of suicide?" though one subject (20%) then answered the question "How close were they to you?" with "perceived/actual nuclear family," even though there was no family history of suicide. The next several questions were all answered with the 4:1 ratio, and it appears as if each time an item was answered incorrectly that there were consistent answers in that direction from at least one subject.

Finally, two items displayed varying data, "Have you/gained any weight at all?" and "How much weight have you lost/gained in about how long of a time?" For the former question the correct answer was "not applicable," which three subjects (60%) answered, while one subject (20%) answered "yes" and another subject (20%) answered "no." The question about how much weight gained/lost was not quite consistent with the data from the previous question, with two subjects (40%) answering the question (i.e., recording data in the space provided) and three subjects (60%) answering "not applicable." Table 11 presents the questions not answered in the 4:1 ratio for the mild severity female.

In summary, the CISSI, as utilized by clinicians-in-training observing a videotaped analogue client, appears to have performed acceptably for the "mildly depressed and possibly suicidal white female" client analogue. Several items in the General Scale generated incorrect answers, although the analogue was designed to communicate relatively clear information. For several of the items on the Depression/Suicide scale incorrect answers were provided, though this mostly occurred for one subject (20%) on each item. For the items where more than one subject answered incorrectly, the data in question was not vital.

Analogue Client #2 – Psychotic and Possibly Homicidal Black Male

Across all three severity levels. Table 12 presents a summary of correct and incorrect answers to the CISSI across the mild, moderate, and severely psychotic and possibly homicidal black male client analogue.

Severely psychotic and possibly homicidal black male. There were five subjects included in this dataset. The combined scales examined for this analogue (General Scale and Psychosis/Homicide Scale) total 32 items; the General Scale consists of 12 items, and the Psychosis/Homicide Scale consists of 20 items. Out of the 32 items, 3 items (9.4%) met Criteria A, B, or C. The results for this client analogue are good, with 91.6% of the items in the surveyed scales answered correctly by all subjects. Table 13 presents the incorrectly answered questions for the severely psychotic client.

The first item with incorrect answers was in the General Scale, "Major events going on in life recently?" The correct answer to this item was "no," yet only two subjects (40%) answered it correctly. The next question to display variability was from the Psychosis/Homicide Scale, "Using or detoxing from drugs/alcohol when you see/hear these things?" The purpose of this question is to discern whether psychosis is chemical or organic in nature, and is meant to separate those who are mentally ill from those who are substance abusers. Though the client analogue in this vignette is a habitual marijuana smoker, this fact does not have clinical significance for his hallucinations. Four of the five subjects (80%) answered this question correctly, possibly indicating that only one subject interpreted the habitual marijuana use as a contributor to the client's hallucinations. The final question for this client analogue, which had an incorrect response was "Do they tell you to hurt yourself?" This question refers to the hallucinations the analogue client is reporting. The correct answer to this question was "no," and four of five subjects (80%) answered this question correctly.

In summary, the CISSI performed acceptably in the "severely psychotic and possibly homicidal black male" client analogue. The General Scale as utilized by subjects was accurate, and the Psychosis/Homicide Scale performed acceptably, with only one subject answering two items incorrectly on the entire scale. However, one of the items, which was incorrectly answered by a subject, could result in the unnecessary hospitalization of the client.

Table 11. Questions Not Answered in the 4:1 Ratio for the Mildly Depressed and Possibly Suicidal White Female Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Mildly Depressed and Possibly Suicidal White Female n=5	1. Do you know if you have been assigned any particular diagnosis?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%
	2. What diagnosis were you assigned?	3 subjects; 60%	1 subjects; 20%	1 subjects; 20%
	3. Major events going on in life recently?	3 subjects; 60%	2 subjects; 20%	0 subjects; 0%
	4. Have you lost/gained any weight at all?	3 subjects; 60%	1 subject; 20%	1 subject; 20%
	5. Have you lost or gained any weight at all?	4 subjects; 66.7%	1 subject; 16.7%	1 subject 16.7%
	6. How much weight in how much time?	2 subjects; 40%	3 subjects; 60%	0 subjects; 0%

Table 12. Range of Responses for the Psychotic and Possibly Homicidal Black Male.

Analogue Client Type	Analogue Client Severity	Subscale Under Examination	Number and Percentage of Items Answered Completely Correctly	Number and Percentage of Items with 1 Incorrect Answer	Number and Percentage of Items with More Than 1 Incorrect Answer
Psychotic and Possibly Homicidal Black Male n=15	Severe n=5	General – 12 items	11 items, 91.7%	0 items, 0%	1 item, 8.3%
		Psychosis/Homicide – 20 items	18 items, 90%	0 items, 0%	2 items, 10%
	Moderate n=5	General – 12 items	7 items, 58.3%	3 items, 25%	2 items, 16.7%
		Psychosis/Homicide – 20 items	18 items, 90%	1 item, 5%	1 item, 5%
	Mild n=5	General – 12 items	11 items, 91.7%	1 item, 8.3%	0 items, 0%
		Psychosis/Homicide – 20 items	18 items, 90%	1 item, 5%	1 item, 5%

Table 13. Incorrectly Answered Questions for the Severely Psychotic and Possibly Homicidal Black Male Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Severely Psychotic and Possibly Homicidal Black Male n=5	1. Major events going on in life recently?	2 subjects; 40%	3 subjects; 60%	0 subjects; 0%
	2. Using or detoxing from drugs/alcohol when you see/hear these things?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	3. Do they tell you to hurt yourself?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%

Moderately psychotic and possibly homicidal black male. There were five subjects included in this data set. The combined scales examined for this analogue (General Scale and Psychosis/Homicide Scale) total 32 items; the General Scale consists of 12 items, and the Psychosis/Homicide Scale consists of 20 items. Out of the 32 items, 7 items (21.9%) met Criteria A, B, or C. Like the moderate client analogue from the prior section (the depressed and possibly suicidal white female), the moderate client analogue in this section was conceptualized as being the most difficult client about which for subjects to make decisions, because of the mixed complexity and severity of their presenting symptoms. Table 14 presents the incorrectly answered questions for the moderately psychotic client.

The first item with incorrect answers was "When is the last time you saw them?" This item refers to the client's prior clinician. The correct answer was "within several months," which four out of five subjects (80%) answered correctly. The fifth subject answered "within weeks," which conceivably falls within the bounds of "within several months," but the severity in this item is being rated along the lines of how long it has been since the client has actually been in treatment. The second item with incorrect answers was "Have you worked with someone in the past?" This item was straightforward, and the correct answer, "Not Applicable," was provided by two subjects (40%), as the client had already answered about recent clinical experience. Similarly, the next question, "Do you know if you were assigned any particular diagnosis then?" did not need to be answered, yet two subjects (40%) also answered this question. Finally, the question "Were you taking any medication specifically for or related to that diagnosis?" did not need to be answered, yet one subject (20%) answered it. It is possible that subjects became confused by the presence of these questions and were detail-oriented in providing answers, because theoretically, the analogue client, earlier in the interview, gave these answers when they discussed the last time they had seen their clinician. However, these questions were "grayed out" on the subject's answer sheet, indicating that they did not need to be answered, which makes it more curious that they were answered.

The next question with incorrect responses was the last item from the General Scale, “Major events going on in life recently?” The correct answer to this question is “no,” but one subject (20%) answered “yes.” The final two questions with incorrect responses were on the Psychosis/Homicide Scale, and dealt with the analogue client’s hallucinations. The correct answer to the first question, “Do you think they’re real?” was “no;” two subjects (40%) answered the question correctly, while three subjects (60%) answered it incorrectly, indicating “yes.” This was designed to be a confusing area of inquiry with the client for subjects, but the client clearly notes in his interview that he knows the hallucinations are not real. The final question was “Do they tell you to hurt yourself?” The correct answer to this question is “no,” and four subjects (80%) answered the question correctly, with one subject (20%) answering it incorrectly, with “yes.”

In summary, the CISSI, as utilized by clinicians-in-training observing a videotaped analogue client, performed acceptably for the moderately psychotic and possibly homicidal black male analogue client. Several items on the General scale seemed to generate incorrect responses; subjects answered several items even though they did not need to be answered. However, the data provided was consistent with the answers provided by the client, it appears that the structure of the instrument may have simply confused subjects. As noted in the previous moderate analogue discussion, this moderate client was conceptualized as being difficult to assess, yet subjects utilizing the CISSI generated consistent data. Two important items on the Psychosis/Homicide Scale demonstrated variability, yet only one of these items could adversely impact the client, “Do they tell you to hurt yourself?” The other item with incorrect responses, “Do you think they’re real?” is closely related to the “hurt yourself” item, and several subjects answered it incorrectly. Still, the Psychosis/Homicide Scale performed acceptably for the moderately psychotic analogue client, where much more variability was expected.

Mildly psychotic and possibly homicidal black male. There were five subjects included in this data set. The combined scales examined for this analogue (General Scale and Psychosis/Homicide Scale) total 32 items; the General Scale consists of 12 items, and

Table 14. Incorrectly Answered Questions for the Moderately Psychotic and Possibly Homicidal Black Male Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Moderately Psychotic and Possibly Homicidal Black Male n=5	1. When is the last time you saw them?	4 subjects; 80%	1 subjects; 20%	0 subjects; 0%
	2. Have you worked with someone in the past?	2 subjects; 40%	3 subjects; 50%	0 subjects; 0%
	3. Do you know if you were assigned any particular diagnosis then?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%
	4. Were you taking any medication specifically for or related to that diagnosis?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	5. Major events going on in life recently?	4 subjects; 80%	1 subject; 20%	0 subjects 0%
	6. Do you think they're real?	2 subjects; 40%	3 subjects; 60%	0 subjects; 0%
	7. Do they tell you to hurt yourself?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%

the Psychosis/Homicide Scale consists of 20 items. The results for this client analogue, similar to the severely psychotic client analogue, are also acceptable, with 91.6% of the items in the surveyed scales answered correctly by all subjects. Out of the 32 items, three (9.8%) met Criteria A, B, or C. Table 15 presents the incorrectly answered questions for the mildly psychotic client.

The first incorrectly answered item was from the General Scale, "Major events going on in life recently?" The correct answer was "no," and four out of the five subjects (80%) answered the item correctly. The second and third items with incorrect responses were from the Psychosis/Homicide Scale; the first item was "Using or detoxing from drugs/alcohol when you see/hear things?" Similar to the severely psychotic male, four out of five subjects (80%) answered this question correctly, indicating that one subject (20%) may have interpreted the client's marijuana use as contributive to the psychosis, though it is not. The final question with incorrect responses was "Do you think they're real?" which refers to the client's hallucinations. The correct answer to this question was "no," with three subjects (60%) answering correctly, and two subjects (40%) answering it incorrectly, with "yes." There appears to be confusion as to whether the client believed his hallucinations were real, yet this was a very mildly psychotic client who clearly declared that he did not believe that his hallucinations were real. The data generated by this question are curious and currently unexplainable.

In summary, the General Scale and the Psychosis/Homicide Scale performed acceptably for the "mildly psychotic and possibly homicidal black male" analogue client. The only item which caused concern dealt with the severity of the client's hallucinations, which should not have demonstrated as much variability as it did, because this analogue client made his answer very clear in the interview.

Analogue Client #3 – Alcoholic and Possibly Depressed White Male

Across all three severity levels. Table 16 presents a summary of the correct and incorrect answers to the CISSI across the mild, moderate, and severely alcoholic and possibly depressed white male client analogue.

Table 15. Incorrectly Answered Questions for the Mildly Psychotic and Possibly Homicidal Black Male Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Mildly Psychotic and Possibly Homicidal Black Male n=5	1. Major events going on in life recently?	4 subjects; 80%	1 subjects; 20%	0 subjects; 0%
	2. Using or detoxing from drugs/alcohol when you see/hear these things?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	3. Do you think they're real?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%

Severely alcoholic and possibly depressed white male. There were five subjects included in this dataset. The combined scales examined for this analogue client (General Scale, Substance Abuse Scale, and Depression/Suicide Scale) total 49 items; the General Scale consists of 12 items, the Substance Abuse Scale consists of 12 items, and the Depression/Suicide Scale consists of 24 items. Out of the 49 items, six items (12.2%) met Criteria A, B, or C. For the current client analogue only one of the 12 items (8.3%) on the Substance Abuse Scale met Criteria A, B, or C, which is a positive result. Table 17 presents the incorrectly answered questions for the severely alcoholic client.

The first item with incorrect responses was from the General Scale, "Are you currently seeing a mental health professional?" The correct answer to this item is "no," which three subjects (60%) answered correctly. This item supposed to be clear-cut, the client discusses past treatment yet doubts that anyone can help him currently. It is possible that subjects may have misinterpreted the client's complaint about past clinicians as referring to a current clinician. The next item with incorrect responses was the first item from the Substance Abuse Scale, "Do you use any drugs or alcohol on a regular basis?" For this item, the wording in the interview was changed to "Do you use any kind of drugs besides alcohol on a regular basis?" which seems to have caused some confusion among subjects. The item in the actual CISSI is "Do you use any drugs or alcohol on a regular basis?" but it is obvious that this analogue client uses alcohol, so the clinician in the video changes the wording to reflect any other substances the client might use. However, the item should have been answered "yes," even though the client answers "no" to the question in the video, because the client has already indicated his alcohol use. Three of the subjects (60%) endorsed the correct answer, while two subjects (40%) endorsed the incorrect answer, possibly confused by the difference between the actual CISSI and its use in the video.

Flexibility is seen as one of the key elements of the CISSI. The CISSI is a semi-structured interview, which enables clinicians to ask questions that may reflect knowledge they already have, while also allowing them to ask the questions in a "ready-

Table 16. Range of Responses for the Alcoholic and Possibly Depressed White Male Analogue Client.

Analogue Client Type	Analogue Client Severity	Subscale Under Examination	Number and Percentage of Items Answered Completely Correctly	Number and Percentage of Items with 1 Incorrect Answer	Number and Percentage of Items with More Than 1 Incorrect Answer
Alcoholic and Possibly Depressed White Male n=15	Severe n=5	General – 12 items	10 items, 83.3%	0 items, 0%	2 items, 16.7%
		Substance Abuse – 12 items	11 items, 91.7%	0 items, 0%	1 item, 8.3%
		Depression/Suicide – 24 items	20 items, 80%	2 items, 8%	3 items, 12%
	Moderate n=5	General – 12 items	8 items, 66.7%	3 items, 25%	1 item, 8.3%
		Substance Abuse – 12 items	8 items, 66.7%	3 items, 25%	1 item, 8.3%
		Depression/Suicide – 24 items	24 items, 96%	0 items, 0%	1 item, 4%
	Mild n=5	General – 12 items	10 items, 83.3%	1 item, 8.3%	1 item, 8.3%
		Substance Abuse – 12 items	8 items, 66.7%	3 items, 25%	1 item, 8.3%
		Depression/Suicide – 24 items	24 items, 96%	1 item, 4%	0 items, 0%

made" manner if they need to. The CISSI taps into one of the essential elements in a good intake interview, which is the ability to conversationally "flow" with the client while extracting the maximum amount of data in the minimum amount of time. As noted above, the item "Do you use any drugs or alcohol on a regular basis?" is the only item from the Substance Abuse Scale that was answered incorrectly by subjects. The rest of the items on the Substance Abuse Scale were answered correctly by all subjects, which is a positive result.

The next item with incorrect responses was from the Depression/Suicide Scale, "Have you been thinking about how you might do this to yourself?" which refers to the client's suicidal ideation. The correct answer to this item was "no," and four of five subjects (80%) answered this item correctly. For the item "What ways have you been thinking about doing this?" the correct answer was "not applicable" because the item should not have been answered. Four out of the five subjects (80%) answered this item correctly by skipping it; it is likely, though, that the person that answered "yes" to the prior item also answered this item, marking "other" as their answer. It is possible that this client can be viewed as drinking himself to death, so the inference can be made that he has thought about this as a possible suicide route, but it is far from active suicidal ideation and the item should not have been answered. The item "Have you ever tried to hurt/kill yourself in the past?" was answered correctly, with "yes," by four of five subjects (80%); one subject did not answer the item.

The last item with incorrect responses for this analogue client was "Where do you see yourself in 5, 10, or 20 years?" This item is meant to assess the client's time horizon, with "no plans" indicating the client does not look towards a future with them in it. The correct answer for this client was "no plans," and three subjects (60%) answered the item correctly, while two subjects (40%) did not. The client's answer for this question was "I can't think that far ahead. I need to do this one day at a time, work the program. I just want to try and see if I can save my family and get back to work," which could indicate

Table 17. Incorrectly Answered Questions for the Severely Alcoholic and Possibly Depressed White Male Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Severely Alcoholic and Possibly Depressed White Male n=5	1. Are you currently seeing a mental health professional?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%
	2. Do you know if you were assigned any particular diagnosis then?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%
	3. Do you use any drugs or alcohol on a regular basis?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%
	4. Have you been thinking about how you might do this to yourself?	4 subjects; 80%	1 subjects; 20%	0 subjects; 0%
	5. What ways have you thought about doing this?	3 subjects; 60%	1 subject; 20%	1 subject 20%
	6. Have you ever tried to hurt/kill yourself in the past?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	7. Where do you see yourself in 5, 10, or 20 years?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%
	8. How much weight in how long of a time?	2 subjects; 40%	3 subjects; 60%	0 subjects; 0%

both answers, either that he has no plans for the future, or that his plans for the future are to get his life back together.

In summary, the General Scale fared acceptably with the "severely alcoholic and possibly depressed white male" client analogue. One item generated incorrect responses, even though the client clearly communicated the data to the clinician. The Substance Abuse Scale performed similarly well, with one item that had an incorrect response. The incorrect answers to this item are thought to be the result of the modification of the item by the clinician in the video, rather than a problem with the item as originally written. Finally, the Depression/Suicide Scale also fared acceptably for this client analogue. Several of the items that generated variability only did so with one subject each, which is a positive result, and the one item with several incorrect answers appears to be the result of the client providing somewhat conflictual information.

Moderately alcoholic and possibly depressed white male. There were five subjects included in this data set. The combined scales examined for this analogue (General Scale, Substance Abuse Scale, and Depression/Suicide Scale) total 49 items; the General Scale consists of 12 items, the Substance Abuse Scale consists of 12 items, and the Depression/Suicide Scale consists of 24 items. Out of the 49 items, nine items (18.4%) met Criteria A, B, or C. As with previously discussed scales, the "moderate" client was designed to be the most difficult client to work with, which in turn should generate the most variability in answers to the CISSI; however, this moderate analogue client appears to have fared acceptably in terms of accurate data collection by the subjects. Table 18 presents the incorrectly answered questions for the moderately alcoholic client.

The first item to meet Criteria A was "Are you currently seeing a mental health professional?" The correct answer was "no," which four of five subjects (80%) answered correctly. The next item was "Have you worked with someone in the past?" The correct answer to this item is "yes," which four of five subjects (80%) answered correctly. The item "Do you know if you were assigned any particular diagnosis then?" which refers to when the client worked with prior clinicians, generated several different responses. All of

the responses, however, fell within the boundaries of the correct answer. The correct answer was conceptualized as “depression,” which one subject (20%) answered; three subjects (40%) answered “depression” and “other,” which refers to depression and alcoholism; finally, one subject (20%) answered “other,” which does not catch the depression information but does catch the alcoholism information. The data gathered for this item demonstrates the need for a more checklist-oriented approach to this section, as complicated diagnostic patterns may not be accurately reflected.

The next item with incorrect responses was “Major events going on in life recently?” The correct answer for this item was “yes,” with only one subject (20%) answering the item correctly. As with prior client analogues, this client has clear-cut major events going on in his life, both recently and long-term, so it is unclear why subjects would answer “no” to this item. The next three items were answered according to Criteria A, i.e., they were answered correctly by four of five subjects (80%). The first item was “Do you use an drugs or alcohol on a regular basis?” Similar to the severe client analogue discussed above, this question was asked differently than it is written in the CISSI, because the clinician already has the primary information about the client’s substance abuse. In this instance the item appeared to be less confusing to subjects. The second item meeting Criteria A was “What drugs/alcohol do you use?” The one incorrect subject (20%) did not answer the item at all. Finally, the item “When is the last time you have used?” was not answered by one subject (20%), while four subjects (80%) answered the item correctly.

The next item, “Have you ever been in treatment for substance abuse?” was essentially answered correctly by all subjects, yet a subtle distinction kept this item from a 100% success rate. The “yes” answers in this item were divided into “yes” and “yes currently, as well as past treatment.” This differentiation is meant to help determine severity by parceling out those clients who are currently in treatment, and, presumably, are at higher risk because they are in treatment and are still abusing substances. Three subjects (60%)

Table 18. Incorrectly Answered Questions for the Moderately Alcoholic and Possibly Depressed White Male Analogue Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Moderately Alcoholic and Possibly Depressed White Male n=5	1. Are you currently seeing a mental health professional?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	2. Have you worked with someone in the past?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	3. Do you know if you were assigned any particular diagnosis then?	1 subject; 20%	4 subjects; 80%	0 subjects; 0%
	4. Major events going on in life recently?	1 subject; 20%	4 subjects; 80%	0 subjects; 0%
	5. Do you use any drugs or alcohol on a regular basis?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	6. What drugs/alcohol do you use?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	7. When is the last time you have used?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	8. Have you ever been in treatment for substance abuse?	2 subjects; 40%	3 subjects; 60%	0 subjects; 0%
	9. Have you ever tried to hurt/kill yourself in the past?	3 subjects; 60%	2 subjects; 40%	0 subjects; 0%

answered this item incorrectly, choosing “yes,” while two subjects (40%) answered this item correctly, choosing “yes currently and past treatment.”

The final item meeting Criteria A was “Have you ever tried to hurt/kill yourself in the past?” The correct answer to this item was “no,” which three subjects (60%) answered correctly. Two subjects (40%) answered “yes,” which is not surprising given the ambiguous nature of the client’s answer to this question: “When my drinking got really bad, when I went into rehab, I got real depressed and thought about it, and thought maybe I’d down a bottle of pills with the beers and just drift off. I even stole prescription pills from my mother, she takes these really good pills for her back, but I never went through with it.” However, the clinician notes that the client never actually went through with the ideation, warranting a “no” answer for this item. The ambiguity inferred from the data may present the argument for an additional question about past suicidal ideation so as to differentiate past suicidal ideation from past suicidal action.

In summary, the Substance Abuse and Depression/Suicide Scales fared positively in the “moderately alcoholic and possibly depressed white male” client analogue. The General Scale demonstrated some variability, with the continued anomaly of subjects under-interpreting what constitutes a “major event” for a client. The only item to demonstrate significant variability in this scale assessed prior diagnostic information, and the subjects appeared to be taking into account data that was not fully accounted for by the answers provided. As noted in the two previous discussions about the “moderate” client, this client was conceptualized as being the most difficult to assess, yet the CISSI performed acceptably in this situation.

Mildly alcoholic and possibly depressed white male. There were five subjects included in this dataset. The combined scales examined for this analogue (General Scale, Substance Abuse Scale, and Depression/Suicide Scale) total 49 items; the General Scale consists of 12 items, the Substance Abuse Scale consists of 12 items, and the Depression/Suicide Scale consists of 24 items. Out of the 49 items, 7 items (14.3%)

met Criteria A, B, or C. Table 19 presents the incorrectly answered items for the mildly alcoholic client.

The first item with incorrect responses from the General Scale, “Do you know if you were assigned any particular diagnosis then?” refers to when the client was seen by a clinician in the past. This item appeared to confuse subjects, because the analogue client provides no clear-cut answer. The correct answer to this item is “other,” which three subjects (60%) answered correctly; one subject (20%) answered “depression” and one subject (20%) did not answer the question. The correct answer is “other” because the client in this scenario identifies that he does not know whether he had previously been assigned a diagnosis, but he noted in a prior sentence that he had sought counseling when he had trouble drinking several years ago. The final item with incorrect responses from the General Scale was “Major events going on in life recently?” The correct answer to this item was “yes,” and four of the five subjects (80%) answered the item correctly. The item “Do you use any drugs or alcohol on a regular basis?” from the Substance Abuse Scale demonstrated variability across all three of the “alcoholic and possibly depressed white male” client analogues, as the clinician in the video re-worded the question to account for information he already knew. The correct answer to this item is “yes,” which four of the five subjects (80%) answer correctly. The next question with incorrect responses is “When is the last time you have used?” The correct answer to the item is “yesterday,” which four of the five subjects (80%) answered correctly. One subject (20%) answered “last week,” which, although theoretically correct (the client did drink last week), this answer does not accurately reflect the last time the client drank. The next item with incorrect responses from the Substance Abuse Scale was “Have you ever been in treatment for substance abuse?” The correct answer to this item is “yes,” which three subjects (60%) answered correctly; two subjects (40%) answered the item incorrectly, endorsing “yes currently and past treatment,” which is untrue, because the client is not currently in treatment. The next item with incorrect responses from the Substance Abuse Scale is “Have you ever had any periods of abstinence, not using anything?” The correct

Table 19. Incorrectly Answered Questions for the Mildly Alcoholic and Possibly Depressed White Male Client.

Analogue Client Type	Question	Number/Percentage Correct Answer	Number/Percentage Incorrect Answer	Number/Percentage No Answer
Mildly Alcoholic and Possibly Depressed White Male n=5	1. Do you know if you were assigned any particular diagnosis then?	3 subjects; 60%	1 subject; 20%	1 subject; 20%
	2. Major events going on in life recently?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	3. Do you use any drugs or alcohol on a regular basis?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	4. When is the last time you have used?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	5. Have you ever been in treatment for substance abuse?	2 subjects; 40%	3 subjects; 60%	0 subjects; 0%
	6. Have you ever had any periods of abstinence, not using anything?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%
	7. Do you think that you would be safe enough that you would not hurt yourself?	4 subjects; 80%	1 subject; 20%	0 subjects; 0%

answer to this item is clearly "yes," which four of five subjects (80%) answered correctly. The final item with incorrect responses in this client analogue is "Do you think you would be safe enough that you would not hurt yourself?" This item is clearly answered by the client, and the correct answer is "yes." Four of the five subjects (80%) answered this item correctly, and it is unclear why a subject would answer this item incorrectly unless they were not paying attention at this point of the videotape. This client is the least severe of the three "alcoholic and possibly depressed white males" and is a clear candidate for outpatient treatment from the outset.

In summary, the CISSI performed acceptably in the "mildly alcoholic and possibly depressed white male" client analogue. Two items from the General Scale demonstrated variability, one of which was problematic throughout the data; the other item required the subjects to demonstrate good listening and inferential skills with the client, which may help explain some variability in answers. Several of the items from the Substance Abuse Scale had incorrect responses, but four out of five subjects (80%) answered almost all items correctly. All of the Depression/Suicide Scale items were answered correctly (100%), which is a positive result.

Overall, the CISSI performed acceptably in serving as a semi-structured assessment for novice clinicians to utilize in crisis intervention as structured in the analogue protocol in the present study. Table 20 presents the average percentage of items answered completely correctly across all client analogues. For the depressed and possibly suicidal white female client, on the General scale, on average, subjects answered all items correctly 71.3% of the time. On the Depression/Suicide scale, on average, subjects answered all items correctly 45.3% of the time. However, when adding the items that were answered incorrectly by only one subject, the number increases significantly, to 80%. There were some alarming results for several pivotal questions for the severely depressed female analogue client. For the psychotic and possibly homicidal black male client, on the General Scale, on average, subjects answered all items correctly 80.6% of the time. On the Psychosis/Homicide scale, on average, subjects answered all items

Table 20. Average Results Across All Client Analogues.

Analogue Client Type	Subscale Under Examination	Average Percentage of Items Answered Completely Correctly
Depressed and Possibly Suicidal White Female n=17	General – 12 items	71.3%
	Depression/Suicide – 24 Items	45.3%; 80% when combined with questions answered incorrectly by only 1 subject
Psychotic and Possibly Homicidal Black Male n=15	General – 12 items	80.6%
	Psychosis/Homicide – 20 Items	90%
Alcoholic and Possibly Depressed White Male n=15	General – 12 items	77.8%
	Substance Abuse – 12 items	75%
	Depression/Suicide – 24 items	90.7%

correctly 90% of the time. For the alcoholic and possibly depressed white male client, on the General scale, on average, subjects answered all items correctly 77.8% of the time. On the Substance Abuse scale, on average, subjects answered all items correctly 75% of the time. On the Depression/Suicide scale, on average, subjects answered all items correctly 90.7% of the time.

Comparison of Unassisted Clinician Decision-Making Outcomes with CISSI-Assisted Outcomes

The fourth and final set of data analyzed in the current study consists of questions answered by subjects after they watched a second video vignette. The content of this second video vignette was one of the nine possible analogue clients, but the client performed a monologue, instead of being interviewed by a clinician. The monologue the client performed contains the exact same symptoms exhibited by the client in their semi-structured interview, but without the structure of a clinician asking them questions. The subjects watched the monologue, then answered the following questions.

1. Would you make an inpatient or outpatient referral for this client?
2. Would you seek immediate supervision or consultation on this decision?
3. If you do seek consultation/supervision, why?
4. If you do not seek consultation/supervision, why not?

Depressed and possibly suicidal white female. Table 21 presents the results of the comparison of the CISSI to clinical judgment alone with the depressed and possibly suicidal white female client analogue. For the severely depressed and possibly suicidal white female, the correct course of action was an inpatient referral. This analogue client is suicidal and cannot guarantee her safety. Utilizing the CISSI, four out of six subjects (66.7%) achieved the correct scale score on the Depression/Suicide Scale. For this client analogue, clinician judgment alone fared well compared with the CISSI – five out of the six subjects (83.3%) made the appropriate inpatient referral decision for the client, slightly besting the CISSI. Four of the six subjects (66.7%) would seek supervision or

Table 21. Comparison of the CISSI to Clinical Judgment Alone with the Depressed and Possibly Suicidal White Female Client.

Client Analogue	Subscale Under Consideration	Number and Percentage of Correct Judgments with the CISSI	Number and Percentage of Incorrect Judgments with the CISSI	Number and Percentage of Correct Judgments with Clinician Judgment	Number and Percentage of Incorrect Judgments with Clinician Judgment
Severe n=6	Depression/Suicide	4 subjects; 66.7%	2 subjects; 33.3%	5 subjects; 83.3%	1 subject; 16.7%
Moderate n=6		5 subjects; 83.3%	1 subject; 16.4%	6 subjects; 100%	0 subjects; 0%
Mild n=5		5 subjects; 100%	0 subjects; 0%	2 subjects; 40%	3 subjects; 60%

consultation on their choice, with one subject unsure of his/her decision, while the remaining three subjects were sure of their decision, though desired a second opinion. For the two subjects who opted not to receive supervision/consultation, both felt they knew what decision to make.

For the "moderately depressed and possibly suicidal white female" the correct course of action was an outpatient referral. This analogue client may have some passive suicidal ideation, but she is able to guarantee her safety. Utilizing the CISSI, five out of the six subjects (83.3%) achieved the correct scale score on the Depression/Suicide Scale. For this client analogue, clinician judgment alone fared well when compared with the CISSI. Six out of the six subjects (100%) made the appropriate outpatient referral decision for the client, slightly besting the CISSI. Six of the six subjects (100%) would seek consultation/supervision on their decision. Five of the subjects had some idea of what decision to make, but wanted a second opinion, while one subject was sure of their choice, but still wanted a second opinion. For the "mildly depressed and possibly suicidal white female," the correct course of action was an outpatient referral. This client does not have suicidal ideation and is able to guarantee her safety. Utilizing the CISSI, five of the five subjects (100%) achieved roughly the correct scale score on the Depression/Suicide Scale. For this client analogue clinician judgment fared poorly compared to the CISSI. Three of the five subjects (60%) made an inappropriate inpatient referral, while only two subjects (40%) made the appropriate outpatient referral. All five of the subjects (100%) chose to receive supervision/consultation on their decision, with four of the five subjects having some idea of what decision to make but still desiring a second opinion. One subject knew what decision to make, but still wanted a second opinion.

In summary, the CISSI and unassisted clinician decision-making performed somewhat equally for the severe and moderate client analogues, with clinical judgment producing a better record. The CISSI did not achieve a 100% success rate for the severe analogue client, which suggests that the Depression/Suicide Scale may need further refinement. The numbers are reversed for the mild client analogue, with CISSI

performance at 100% and clinical judgment at 40%. These results are unusual, and merit further data collection.

Psychotic and possibly homicidal black male. Table 22 presents the results of the comparison of the CISSI to clinical judgment alone with the psychotic and possibly homicidal black male client. For the "severely psychotic and possibly homicidal black male," the correct course of action was an inpatient referral. This analogue client is psychotic and cannot guarantee others' safety. Utilizing the CISSI, five out of five subjects (100%) achieved the correct scale score on the Psychosis/Homicide Scale. For this client analogue, clinician judgment alone fared poorly compared with the CISSI – four out of the five subjects (80%) made the inappropriate outpatient referral decision for the client, while only one subject (20%) made the appropriate inpatient referral. Four of the five subjects (80%) would seek supervision/consultation on their choice, with two subjects being somewhat unsure of their decision, while the remaining two subjects were sure of their decision though desired a second opinion. For the one subject who opted not to receive supervision/consultation, they felt they knew what decision to make.

For the "moderately psychotic and possibly homicidal black male," the correct course of action was an outpatient referral. Though this analogue client may be somewhat psychotic, he is able to guarantee his own and others' safety. Utilizing the CISSI, five out of the five subjects (100%) achieved the correct scale score on the Psychosis/Homicide Scale. For this client analogue, clinician judgment fared moderately compared with the CISSI. Three out of the five subjects (60%) made the appropriate outpatient referral decision for the client, while two subjects (40%) made an inappropriate inpatient referral. Five of the five subjects (100%) would seek consultation/supervision on their decision. Three of the subjects had some idea of what decision to make but wanted a second opinion, while two subjects were sure of their choice, but still wanted a second opinion.

For the "mildly psychotic and possibly homicidal black male," the correct course of action was an outpatient referral. This client exhibits only mild psychosis and is able to guarantee his and others' safety. Utilizing the CISSI, five of the five (100%) subjects

Table 22. Comparison of the CISSI to Clinical Judgment Alone with the Psychotic and Possibly Homicidal Black Male Client.

Client Analogue	Subscale Under Consideration	Number and Percentage of Correct Judgments with the CISSI	Number and Percentage of Incorrect Judgments with the CISSI	Number and Percentage of Correct Judgments with Clinician Judgment	Number and Percentage of Incorrect Judgments with Clinician Judgment
Severe n=5	Psychosis/Homicide	5 subjects; 100%	0 subjects; 0%	1 subject; 20%	4 subjects; 40%
Moderate n=5		5 subjects; 100%	0 subjects; 0%	3 subjects; 60%	2 subjects; 40%
Mild n=5		5 subjects; 100%	0 subjects; 0%	2 subjects; 40%	3 subjects; 60%

achieved roughly the correct scale score on the Psychosis/Homicide Scale. For this client analogue clinician judgment fared poorly compared to the CISSI. Three of the five subjects (60%) made an inappropriate inpatient referral, while only two subjects (40%) made the appropriate outpatient referral. All five of the five subjects (100%) chose to receive supervision/consultation on their decision, with four of the five having some idea of what decision to make but still desiring a second opinion, while one subject knew what decision to make, but still wanted a second opinion.

In summary, the CISSI performed acceptably compared to clinical judgment alone for the psychotic and possibly homicidal black male analogue client. For the severe client, the CISSI achieves 100% accuracy, while 80% of subjects made inaccurate referrals for this client, possibly endangering the client and/or others. For the moderate and mild client analogues the CISSI continues to achieve a 100% success rate, whereas clinical judgment alone improves, though remains only moderately effective with 60% of clinicians making appropriate referrals and 40% making inappropriate referrals.

Alcoholic and possibly depressed white male. Table 23 presents the results of the comparison of the CISSI to clinical judgment alone with the alcoholic and possibly depressed white male client analogue. For the "severely alcoholic and possibly depressed white male," the correct course of action is an inpatient referral. This analogue client is a severe alcoholic in need of medical detoxification, and he is also very depressed. Utilizing the CISSI, five out of the five subjects (100%) achieved roughly the correct scale score on the Substance Abuse and Depression/Suicide Scales. For this client analogue, clinician judgment alone fared poorly compared with the CISSI – five out of the five subjects (100%) made the inappropriate outpatient referral for the client. Three of the five subjects (60%) would seek supervision/consultation on their choice, with two subjects being somewhat unsure of their decision, while the remaining one subject was sure of their decision, though desired a second opinion. For the two subjects who opted not to receive supervision/consultation, they both felt they knew what decision to make.

Table 23. Comparison of the CISSI to Clinical Judgment Alone with the Alcoholic and Possibly Depressed White Male Client.

Client Analogue	Subscales Under Consideration	Number and Percentage of Correct Judgments with the CISSI	Number and Percentage of Incorrect Judgments with the CISSI	Number and Percentage of Correct Judgments with Clinician Judgment	Number and Percentage of Incorrect Judgments with Clinician Judgment
Severe n=5	Substance Abuse Depression/Suicide	5 subjects; 100%	0 subjects; 0%	0 subjects; 0%	5 subjects; 100%
Moderate n=5		5 subjects; 100%	0 subjects; 0%	5 subjects; 100%	0 subjects; 0%
Mild n=5		4 subjects; 80%	1 subject; 20%	5 subjects; 100%	0 subjects; 0%

For the “moderately alcoholic and possibly depressed white male,” the correct course of action is an outpatient referral. This analogue client has a drinking problem, but does not need medical detoxification and is able to guarantee his safety. Utilizing the CISSI, five out of the five subjects (100%) achieved roughly the correct scale score on the Substance Abuse Scale and on the Depression/Suicide Scale. For this client analogue clinician judgment fared well compared with the CISSI. Five out of the five subjects (100%) made the appropriate outpatient referral decision for the client. Five of the five subjects (100%) would seek consultation/supervision on their decision. Four of the subjects had some idea of what decision to make, but wanted a second opinion, while one subject was sure of their choice but still wanted a second opinion. For the “mildly alcoholic and possibly depressed white male,” the correct course of action is an outpatient referral. This client does not need medical detoxification and is able to guarantee his safety. Utilizing the CISSI, five of the five subjects (100%) achieved roughly the correct scale score on the Substance Abuse Scale and four of the five subjects (80%) achieved roughly the correct scale score on the Depression/Suicide Scale, with one subject (20%) recommending an inpatient referral based on a critical answer on the Depression/Suicide Scale. For this client analogue clinician judgment fared slightly better when compared to the CISSI. Five of the five subjects (100%) made an appropriate outpatient referral. Three of the five subjects (60%) chose to receive supervision/consultation on their decision, with one of the three subjects having some idea of what decision to make but still desiring a second opinion, while two subjects knew what decision to make, but still wanted a second opinion. For the two subjects who opted not to receive supervision/consultation, they both felt they knew what decision to make.

In summary, the CISSI performed acceptably compared to clinical judgment alone for the alcoholic and possibly depressed white male. For the severe client, the CISSI achieved 100% accuracy, while 100% of subjects made inaccurate referrals for this client, possibly endangering the client. For the moderate client analogue both the CISSI and unassisted clinical judgment achieved 100% accuracy. For the mild client analogue

the CISSI continues to achieved a 100% success rate, except for one subject who finds reason to give a full scale score to the client on the Depression/Suicide Scale, which would be equivalent to recommending an inpatient referral. Clinical judgment alone performs well, achieving a 100% accuracy rate with an outpatient referral.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Introduction

The present chapter will first focus on a summary of the current study. The research hypotheses presented at the outset of the study are then presented. The research hypotheses are followed by summaries of the results obtained through the data analyses. A discussion about the results follow, based upon the data gathered in the course of the study. Implications of the results of the present study for the practice and research of crisis intervention are then discussed. Finally, limitations of the current study are discussed, along with suggestions for future research.

Summary

The purpose of this study was to determine the psychometric properties of a newly constructed crisis intervention assessment instrument designed to be accurate and complex enough for use by experienced clinicians, and also concrete and reliable enough to be used by beginning clinicians and others inexperienced in crisis intervention. A thorough review of the literature failed to yield evidence of the existence of a comprehensive crisis intervention assessment instrument. Thus, the Crisis Intervention Semi-Structured Interview (CISSI; Kulic, 2001) was created.

The CISSI was created from theoretical constructs and practical experience in crisis intervention, combined with a thorough review of the literature on crisis intervention. Three crisis intervention experts reviewed the original item pool developed for the CISSI and revisions were incorporated into the instrument. After the revisions were completed, the CISSI was subjected to validity and reliability tests, utilizing data gathered from 47 subjects, all of whom were master's- or doctoral-level counseling students.

Each subject first completed a pilot assessment, The Crisis Intervention Self-Efficacy Scale (CISES; Kulic, 2001), designed to measure crisis intervention self-efficacy. The CISES was analyzed for reliability utilizing Cronbach's alpha and Spearman-Brown's split-half reliability analyses. The subject then watched a videotape of a clinician utilizing the CISSI in an interview with one of nine possible analogue

clients. The subject completed the CISSI based on answers given by the analogue client in the video. The answers to all of the items on the CISSI within each of the nine analogue client scenarios were then analyzed to determine reliability.

The subject then answered a normed, valid, and reliable scale that was conceptually similar to one of two scales on the CISSI. A correlation was then calculated and analyzed between the normed, valid, and reliable scale and the specific subscale of the CISSI hypothesized to correspond to it, to determine convergent validity for that CISSI subscale. Finally, the subject watched a second videotape, which presented another one of the nine possible analogue clients. The client presented a monologue, which the subject used to determine whether the client needed hospitalization, based solely on the subject's clinical judgment. The results of the clinical judgment hospitalization decision were then compared with the results achieved by clinicians utilizing the CISSI to make a hospitalization decision for the client presenting with the same symptoms.

An analysis was conducted to determine whether a clinician's level of crisis intervention self-efficacy had an effect on their ability to make appropriate client disposition decisions in a crisis situation when using (1) a structured interview constructed for the current study, and (2) clinical judgment alone. An analysis was conducted to determine whether a clinician's level of crisis intervention self-efficacy had an effect on their decision to seek supervision of the hospitalization decision they made. Analyses were also conducted to determine whether gender, ethnicity, level of education, or prior crisis intervention experience had an effect on the level of a clinician's crisis intervention self-efficacy.

Three research questions were posed in the current study. The primary research question focused on the assessment of the psychometric properties of a newly constructed crisis intervention semi-structured interview. The second research question called for an assessment of the reliability of a newly constructed crisis intervention self-efficacy scale. The third research question examined the interaction of the hypothesized construct of crisis intervention self-efficacy with the performance of a clinician involved in crisis

intervention. Specific research hypotheses emanating from the research questions guided the present study and formed the outline for the presentation of summaries of the data, discussions, and conclusions.

Research Hypotheses and Results

Following are the research hypotheses posed at the outset of the current study, followed by a summary of the results of the data analyses.

The Crisis Intervention Self-Efficacy Scale.

1. The Crisis Intervention Self-Efficacy Scale subscales and full scale will achieve acceptable levels ($r > .70$) of internal reliability as determined by coefficient alpha.

The full scale, and two of the four subscales of the CISES (Correct and Multi), once analyzed and adjusted according to the data, demonstrated acceptable levels of reliability. Preliminary data analysis helped refine the final form of the instrument. One item was examined to determine why it had a significant negative effect on the subscale Correct. The item "I think I would not be able to effectively handle most client crisis situations," is one of three negatively worded items in the Correct subscale. It is possible that the initial wording of the item, "I think I would not be able to" is confusing or unclear. No other item in the scale utilizes that wording, though they all tap into the same concept of one's belief of whether or not they will be able to successfully resolve a client crisis situation. Based on the significant negative effect this item had on this subscale's Cronbach alpha, it was removed from the scale. Removal of this item resulted in Cronbach's alpha = .75.

One subscale, consisting of six items (Perspective), was deleted from the instrument. The six statements from subscale Perspective were: (1) crisis intervention skills are as important as other counseling skills, (2) professionals who have good crisis intervention skills with deal well with crises, (3) crisis intervention is an integral component of counseling, (4) crisis intervention is a learned skill that many practice, (5)

counselors help clients in crisis, and (6) using crisis intervention skills is better than "winging it" with clients.

It is possible that too many diverse statements were made about others' use of crisis intervention in a single subscale and that the concept was diluted. The fact that the split-half coefficient was greater than the alpha coefficient may indicate that two groups of the statements are related, but the correlation is still too low to be considered meaningful. Perhaps the belief that others effectively utilize crisis intervention with clients is not an important component of crisis intervention self-efficacy. The inconsistencies in this scale forced a re-thinking of the concept of crisis intervention self-efficacy and this subscale was removed from the full scale. The removal of the Perspective subscale resulted in an instrument comprised of 19 items and three scales. The full scale achieved an alpha = .90. Of the three subscales, the third subscale (Multi) achieved an alpha = .89, the second subscale (Correct) achieved an alpha = .75, and the first subscale (Composed) achieved an alpha = .69.

2. The Crisis Intervention Self-Efficacy Scale subscales and full scale will achieve acceptable levels of internal reliability (r >.70) as determined by split-half reliability.

The full scale, and two of the three subscales of the CISES (Correct and Multi), once analyzed and adjusted according to the data, demonstrated acceptable levels of reliability for split-half reliability. The full scale achieved a split-half reliability = .94. Of the three subscales, the third subscale (Multi) achieved a split-half reliability = .89, the second subscale (Correct) achieved a split-half reliability = .72, and the first subscale (Composed) achieved a split-half reliability = .64. Bases on the results of the analyses, the CISES appears to possess acceptable internal reliability as determined by Spearman-Brown's split-half reliability, and appears to possess acceptable internal reliability as determined by Cronbach's alpha.

The Crisis Intervention Semi-Structured Interview.

3. The Crisis Intervention Semi-Structured Interview Subscale "Depression/Suicide" will achieve acceptable levels of convergent validity (r>.70) as determined by correlation with Beck, Kovacs, and Weissman's (1979) Scale for Suicide Ideation.

A one-tailed correlation of the Depression/Suicide Scale with the SSI revealed a correlation of r = .70. These results are statistically significant at the .01 level of significance. The conclusion drawn, given these results, is that the Depression/Suicide Scale of the CISSI possesses significant convergent validity with the SSI, and, therefore, measures what it is intended to measure, i.e., depression that is severe enough that a client considers suicide as a possible behavior.

4. The Crisis Intervention Semi-Structured Interview subscale "Psychosis/Homicide" will achieve acceptable levels of convergent validity (r > .70) as determined by correlation with Krawiecka, Goldberg, and Vaughan's (1977) Manchester Scale.

A one-tailed correlation of the Psychosis/Homicide Scale with the Manchester Scale revealed a correlation of r = .81. These results are statistically significant at the .01 level of significance. The conclusion drawn, given these results, is that the Psychosis/Homicide Scale of the CISSI possesses significant convergent validity with the Manchester Scale, and, therefore, measures what it is intended to measure, i.e., psychosis that is severe enough that a client may place themself or others in danger.

5. Individual items of The Crisis Intervention Semi-Structured Interview will be endorsed correctly by a majority of raters when presented with symptom-based video analogues, as determined through analysis of the percentage of correctly and incorrectly answered items.

Hypothesis five met with mixed results. Overall, it appears that clinicians who watched the analogue client videos answered the items of the CISSI with some degree of accuracy. The CISSI fared better in some situations than in others. The most variability

among subject responses to the CISSI was found when subjects utilized the CISSI to assess the depressed and possibly suicidal white female client analogue. Subjects who assessed this client analogue made several important errors, including the omission of pivotal answers, and incorrect answers on questions clearly designed to be answered in a certain direction for the particular client being assessed, such as suicidal ideation. Difficulties with items that assess suicidality may indicate that the DS Scale needs refinement. However, the majority of the subjects often answered the items correctly, and, often, only one subject per item answered items incorrectly (the 5:1 ratio mentioned earlier). The amount of errors made by subjects who used the CISSI for the depressed and possibly suicidal white female client analogue suggest that the Depression/Suicide Scale is moderately reliable, and it should be further evaluated to determine if changes to the structure or content of the scale will help it to become a more reliably answered subscale.

The CISSI performed acceptably when subjects used it to assess the psychotic and possibly homicidal black male client analogue. Subjects made relatively few errors endorsing the items for this client analogue, which suggests that the items in the Psychosis/Homicide Scale are highly reliable.

The CISSI also performed acceptably when subjects used it to assess the alcoholic and possibly depressed white male client analogue. Subjects made relatively few errors endorsing the items for this client analogue, and only one subject per item made many of the errors that occurred. The data suggests that the items in the Substance Abuse Scale are highly reliable.

6. Raters utilizing The Crisis Intervention Semi-Structured Interview will more successfully differentiate between video analogue severity levels than raters not utilizing the CISSI, who rely solely upon clinical judgment.

There were mixed results for the CISSI in the current analysis with the first set of analogue clients. For the severely depressed and possibly suicidal white female analogue client, clinical judgment alone performed better than the CISSI. Eighty-three percent of clinicians utilizing clinical judgment alone made the correct decision, while only 67% of

clinicians utilizing the CISSI made the correct decision. One particularly disturbing result occurred in the data for the severe client, where the majority of subjects omitted the answer or answered incorrectly for two pivotal questions on suicidal ideation. It is unclear why subjects would have omitted the answers to these serious questions, unless they became lost or confused in completing the instrument. Further data collection may help to ascertain whether these results are anomalous, or if they signify a deficit in the construction of the CISSI.

For the moderately depressed and possibly suicidal white female analogue client, all subjects using clinical judgment alone made the right choice, while the CISSI achieved an 83% rate of accuracy. Oddly, for the mildly depressed and possibly suicidal white female client analogue, clinical judgment did not perform well, with a 40% accuracy rate, while clinicians utilizing the CISSI achieved a 100% accuracy rate. It appears that for depression alone, novice counselors' clinical judgment is often accurate in serious and moderately serious situations, though it oddly drops in accuracy in a mild severity situation. More importantly, the CISSI, though not 100% correct in each situation, was accurate between 67%-100% of the time. In comparison, the accuracy of clinical judgment alone dropped below 50% at one point. The lower accuracy of the CISSI for the severe and moderate clients was unexpected and merits further assessment.

There were positive results for the CISSI with the second set of analogue clients in the analysis. For the severely psychotic and possibly homicidal black male client analogue, the CISSI achieved a 100% accuracy rate, while clinical judgment achieved only a 60% accuracy rate. The CISSI's performance continued with the moderately psychotic and possibly homicidal black male analogue client. The CISSI achieved a 100% accuracy rate, and clinical judgment alone achieved only a 60% accuracy rate. The CISSI's 100% accuracy rate continued with the mildly psychotic and possibly homicidal black male analogue client, while clinical judgment alone fell to a 40% accuracy rate. It appears that the CISSI serves as an good assessment of psychosis, and dangerousness as a result of psychosis, especially when compared against clinical judgment alone.

There were positive results for the CISSI with the third set of analogue clients in the analysis. For the severely alcoholic and possibly depressed white male analogue client, the CISSI achieved a 100% success rate, while clinical judgment alone achieved a 0% accuracy rate. For the moderately alcoholic and possibly depressed white male analogue client, both the CISSI and clinical judgment were 100% accurate. For the mildly alcoholic and possibly depressed white male analogue client, both the CISSI and clinical judgment were 100% accurate for substance abuse. On the CISSI, though, one subject made an inappropriate inpatient referral based on the analogue client's depressive symptoms. Overall, the CISSI appears to serve as a good assessment for substance abuse, and dangerousness to self as a result of substance abuse, when compared to clinical judgment alone.

7. There will be a significant difference on crisis intervention effectiveness between individuals with high and low levels of crisis intervention self-efficacy, as determined through both utilization of the Crisis Intervention Semi-Structured Interview and clinical judgment alone.

Hypothesis seven was not supported by the data. There were no significant crisis intervention performance differences between individuals with high and low levels of crisis intervention self-efficacy. The hypothesis was tested in three ways: (1) for the subject's full-scale score of the CISSI, (2) for the subject's critical subscale score of the CISSI (Depression/Suicide, Psychosis/Homicide, and Substance Abuse), and (3) for the clinical decision the subject made for the client depicted in the video monologue.

Discussion and Implications

The Crisis Intervention Self-Efficacy Scale.

The CISES was created and incorporated into the current study to determine whether crisis intervention self-efficacy affects clinical accuracy in crisis intervention. From the data gathered in the current study, crisis intervention self-efficacy does not appear to affect clinical accuracy in crisis intervention. Gender, race, and level of education (master's vs. doctoral) did not significantly affect subjects' scores on the Crisis Intervention Self-Efficacy Scale. There

was one significant result from the analyses of the CISES data, which indicated that prior experience in crisis intervention significantly, positively affected a clinician's crisis intervention self-efficacy. However, higher levels of crisis intervention self-efficacy did not affect actual clinician performance of crisis intervention.

The implication for crisis intervention is that confidence is not equivalent to performance, but prior experience inspires confidence. Clinicians with lower levels of crisis intervention self-efficacy perform as well as clinicians with higher levels of crisis intervention self-efficacy. It may be important to expose novice clinicians to crisis intervention early in their development, to inspire self-confidence in the ability to handle crises. However, it may be more important to train the novice clinician well, as crisis intervention self-efficacy appears to have little to do with actual performance in crisis intervention.

Inclusion of the CISES in the current study's data collection provided the opportunity to begin the validation process for a crisis intervention self-efficacy instrument, which did not appear in the literature at the time of the review. No validity analyses were undertaken with the CISES in the current study, therefore no statements can be made about how well the CISES measures what it is intended to measure. Face validity would suggest that the instrument appears to measure crisis intervention self-efficacy as determined by the content of the items. Reliability analyses of the scale indicate moderate to excellent reliability, so it can confidently be said that the CISES consistently measures a construct.

Important work has been completed in creating a crisis intervention self-efficacy scale, with theory informed by the data. Initially conceptualized as four discrete concepts, the measurement of crisis intervention self-efficacy has been altered in accordance with the data. The "internal" components of crisis intervention, i.e., the beliefs a clinician has about their own abilities in a crisis situation, appear to be integral to measuring self-efficacy. The "external" component of the scale, i.e., the beliefs a clinician has about others involved in crisis intervention, was not supported by the data. This data may

indicate either one of two possibilities: (1) it is not important whether clinicians believe that crisis intervention is an important skill that other clinicians use, or (2) the items that were used in creating this subscale were confusing and did not measure what they were intended to measure. The latter explanation seems most plausible. A ceiling effect may account for the difficulties with the Perspective subscale, because the scale's mean of 25.88 out of a possible score of 30 indicates that subjects all scored highly on the scale. The construct measured by the Perspective subscale may not be useful to measure because subjects all scored highly on the scale, indicating that subjects are all fundamentally alike in this particular area, even though the construct was not reliably measured.

Self-efficacy as a field of inquiry was not the focus of the current study, though it is an important component in the successful completion of almost any behavior, especially a complex behavior such as crisis intervention. Future research on the CISES ought to focus on the validity of the instrument, including content validity and convergent validity. Reliability of the instrument as it stands is quite good, and the next logical steps are to (1) reconfigure the instrument according to the current data and administer it to a larger sample of clinicians-in-training to determine if the subscales remain as they are currently configured, and (2) obtain a larger sample to increase the power of the analyses.

The Crisis Intervention Semi-Structured Interview. There are several implications for the development of a valid and reliable crisis intervention semi-structured interview. Crisis intervention, as conceptualized by the current author, contains nine components: (1) recognition of a crisis or crisis-in-development with a client, (2) assessment of the client through their thoughts, feelings, and behaviors, (3) assessment of the client through reports from significant others (4) consultation about the client with other professionals (5) deciding whether the crisis has precipitated an emergency situation, (6) Intervention with the client based on the full assessment, (7) follow-through of intervention implementation, (8) outcome assessment of crisis assessment and intervention, and (9) follow-up assessment of crisis assessment, crisis intervention, and treatment outcome at a

later date. Deciding whether an individual may be a danger to self or others can often be difficult. Once that decision has been made, many of the remaining dispositional decisions are a matter of routine, either outpatient referral or inpatient hospitalization/short-term stabilization. The current study appears to provide support for the use of The Crisis Intervention Semi-Structured Interview to assist in making critical decisions about clients in crisis.

The Crisis Intervention Semi-Structured Interview (Kulic, 2001) was constructed to serve an important need in clinical service. Crises in clinical work are expected, yet there is little training in traditional graduate programs to account for crisis intervention training needs, such as how to deal with a suicidal client (Bongar & Harmatz, 1989, 1991). The accurate assessment of other clinical syndromes, such as psychosis and substance abuse, are similarly important. Training in crisis intervention is more often obtained during the delivery of clinical services, through accidental exposure rather than through intentional experiences. If a student clinician does not obtain experience in crisis intervention while being trained, it is unlikely that they will pursue that training on their own, which may leave them ill-equipped to effectively deal with crises.

In the course of the current study, two of the three major scales of the Crisis Intervention Semi-Structured Interview (Depression/Suicide and Psychosis/Homicide) were shown to possess convergent validity. Correlation of the Depression/Suicide Scale with the Scale for Suicide Ideation (Beck, et al., 1979) demonstrates good convergent validity for the Depression/Suicide Scale. Strong correlations of the Psychosis/Homicide Scale with the Manchester Scale (Krawiecka, et al., 1977) further strengthen convergent validity.

For two of the three analogue clients (the psychotic male and the alcoholic male), the CISSI proved to be an acceptable clinical assistant in helping clinicians-in-training make disposition decisions. For the depressed female analogue client, efficacy of the CISSI appeared to drop somewhat, though results were somewhat confusing. The CISSI's effectiveness never dropped below 67%, while the accuracy of clinical judgment

alone dropped below 50%. It appears that clinicians more reliably utilized the CISSI to make critical clinical decisions, such as whether to hospitalize a client, than they did utilizing clinical judgment alone. This result has important implications for the delivery of crisis intervention services. If the use of a structured clinical instrument can help the practicing clinician gather the most amount of relevant data in the shortest time possible, allowing for the best clinical decision to be made, then it possesses utility for use in practice. Though the CISSI is currently a research instrument, it shows promise for use in both training and practical settings.

Crisis intervention as a field of study has remained largely atheoretical, enabling clinicians to practice crisis intervention as an extension of their therapeutic modality, rather than having to learn a new way of working with clients. However, the conceptualization of crisis intervention as atheoretical is not entirely accurate. It is possible to integrate the core principles of crisis intervention into almost any theoretical model, yet there is a specific skill-set that a clinician needs to learn to effectively engage in crisis intervention. This skill-set is largely congruent with brief therapy or solution-focused models, and entails that the clinician is quick, efficient, and accurate in their thoughts and actions. Time is of the essence in crisis intervention. Traditional dynamic approaches are not at odds with crisis intervention, but the timeframe must be considerably shortened when working with a client in crisis, whether the clinician has been working with that client for several years, or has only known the client for several minutes.

The Crisis Intervention Semi-Structured Interview provides a symptom-based framework within which any clinician can work, regardless of their theoretical orientation. The novice clinician, who may be just forming a theoretical identity, can rely on the CISSI to assist them with the assessment of a client in crisis. The structure of the CISSI, because of its clearly outlined scales and decision-tree approach, may provide a guideline for the clinician to be effective in crisis situations. Standardization helps the

CISSI to provide the structure of an effective clinical interview, while also allowing the clinician freedom to build rapport with the client.

The advanced clinician, if not well versed in crisis intervention, can integrate the CISSI into their practice, with the knowledge that the CISSI is another point of assessment which can assist the clinician in their decision-making process. The structured format and decision-tree modeling ensures that all relevant data is collected. Even the knowledgeable crisis interventionist can use the CISSI to standardize their practice. More data about the client is always an advantageous situation for the clinician. Additionally, having the same type of data available about clients, each time a clinician engages in crisis intervention, can provide a sense of structure and process to what can be an unstructured and chaotic situation.

Training uses. Baldwin (1979) noted that although crisis intervention as a standard of care was, at the time, on the rise, it was not being strongly emphasized in graduate psychology training. Bongar and Harmatz' (1989) survey helped them to conclude that, although the study of suicide was important for graduate training in clinical psychology, and that this was an appropriate time in the student's professional development to undergo the training, only 35% of the training departments they surveyed were engaged in this type of training. Fauman (1983) lamented the absence of crisis intervention training for psychiatrists, noting that psychiatrists often learn what crisis intervention skills they have through luck, and that emergency services in psychiatry is typically accorded a lower level of prestige than other areas of professional psychiatric practice.

There is a slowly widening selection of training materials to choose from in crisis intervention, mostly small texts. The CISSI can be used as an important tool in the training of new clinicians. The current data shows that when utilizing the CISSI, novice clinicians more reliably make the correct dispositional decision about some types of clients in crisis, as opposed to the utilization of clinical judgment alone. As scope of practice becomes an increasingly important issue, and as ethical and legal responsibility

for clients increasingly takes center stage in the public and professional awareness, it will be more important than ever to thoroughly train clinicians in crisis intervention. King, Price, Telljohann, and Wahl (1999) noted that only 38% of the school counselors they surveyed believed that they could identify a student at-risk for a suicide attempt; this statistic is further evidence of the need to improve crisis intervention competencies for clinicians. With school violence on the rise in the late 20th and the early 21st century, clinicians in schools, as well as many other settings, will continue to need improved crisis intervention skills, especially preventive ones.

The CISSI and its accompanying videos could be used as an assessment tool for counseling students at the graduate level. Competencies in crisis intervention could be tested by requiring students to go through a process similar to that experienced by the subjects in this study. After students have learned particular content areas, such as substance abuse, depression and suicide, and psychosis, they could be tested in their ability to accurately assess for these clinical issues. The mild symptom severity videos could be utilized to help students recognize the signs of symptomatology, while the moderate and severe videos could be used to thoroughly test students' assessment and crisis intervention abilities. By comparing students' clinical judgment with their CISSI-assisted judgments, assessments could be made about students' abilities, both strengths and weaknesses. Instructors could create their own videos if they wanted to specify different symptoms severity levels, or could simply substitute symptoms in role-plays with students.

Professional Uses. The assessment of risk in crisis intervention is critical to the success of the clinician in protecting the client, the public, and themselves. Mulvey and Lidz (1998) noted that the current era of managed care and community management of patients ushered in a new realm of responsibility in violence assessment and prediction, and that accuracy of assessment was paramount in these efforts. The CISSI represents an attempt to integrate three primary areas of assessment in crisis intervention: depression and suicidal ideation, psychosis and homicidal ideation, and substance abuse. At the time

the literature was reviewed for the current study, instruments existed to measure the primary content areas of crisis intervention areas separately, but few instruments existed that combined these content areas into one comprehensive crisis intervention assessment. No instrument existed that combined the necessary content areas into a comprehensive crisis intervention semi-structured interview that could be used by clinicians at all skill and training levels. The CISSI effectively fills this gap in the professional literature, and can serve as the basis for creating a valid and reliable suite of crisis intervention assessment instruments for use by mental health professionals with clients and their social support systems.

Limitations

There are several limitations in the current study. The first limitation lies in the methodology. It was not possible at the time of the study to test the CISSI with real clients, because of the complexities involved with interfacing with the mental health system where clients in crisis are usually seen. This process was determined to be too difficult for the current initial validation study, so an analogue methodology was used instead. Though the analogue methodology included three different types of clients across three levels of severity, it would have contributed greatly to external validity for the instrument to be piloted with actual clients, instead of with analogue clients on videotape. However, using the analogue clients provided the study with internal validity, because total control was retained over the clients' characteristics. Actors were used in the filming of the videos, and these actors were coached and directed through multiple "takes," to create the exact conditions that clinicians would encounter with clients in crisis. The next logical step in the validation of the CISSI is to pilot the instrument with real clients, whether as an assessment for clients in crisis, or as part of the client intake process. Testing the CISSI with real clients will help to eliminate concerns about the artificiality of the analogue design, and will serve to extend the generalizability of study results.

A second limitation of the current study also lies in the design. During the client analogue videos, the clinician is often forced to interpret what the client has said, because

they are unable to interact with the client. It is common when interviewing clients for specific information to hear elaborate stories instead of discrete, concrete answers to questions. The analogue clients in the videos were intentionally scripted so that they sometimes rambled instead of giving simple answers, yet concrete symptoms were always provided in the rambling. It is up to the clinician, however, to harness that data and reflect it in the CISSI. The CISSI is intended to assist the clinician in consistently catching assessment data, though it is apparent from the results with one of the analogue clients, the depressed and possibly suicidal white female, that this task may sometimes be difficult.

The third limitation is also related to the design of the study. Because the study's design involved the use of analogue videotapes instead of live clients, the important element of clinician affect may have been blunted or eliminated. Clinicians watching a videotape of a suicidal client rather than being in the room with a suicidal client are likely to have a lower level of affect and anxiety related to their performance with that client. The perceived costs to making a mistake with the videotape client are likely lower than that made with a real client, so the element of performance anxiety and clinician affect may have been somewhat removed from the study. Some of that blunted affect may be evident in the results, as demonstrated by subjects who made glaring mistakes in their assessment of suicidal clients, where very clear answers to the question of suicide were provided by the client, but not recorded by several subjects. The omission may indicate subjects' waning attention, which is not likely to happen if a clinician is working with an actual client as opposed to watching a videotape analogue client. An additional concern with the analogue videotapes is that the depressed client was portrayed by a female, which may have introduced gender bias into subjects' severity ratings. In future studies it would be helpful to have all roles portrayed by both genders to eliminate any gender bias concerns.

The fourth limitation of the current study is the sample size. Data for forty-seven subjects was gathered for the current study, so each client analogue was observed by at

least five clinicians. It would be helpful to increase the sample by at least threefold, in order to increase the power of the study. It would also be helpful to gather data from two different populations, novice clinicians and experienced clinicians, to test for differences between them. The sample size for each analogue client was also small. Though the overall sample consisted of 47 subjects, each of the nine analogue clients were observed by only five or six subjects. Two of the nine analogue clients had a sample size of six subjects, and the remaining seven analogue clients had a sample size of five subjects. Though adequate for the current study, this small sample size for each analogue client limits the generalizability of the conclusions that can be drawn from the data. The data was reported in percentages in order to make comparisons across and within analogue clients, yet the conclusions drawn may not be as meaningful, for example, when the difference between 60% and 80% of a sample represents 1 subject. It would be worthwhile to increase the sample size per analogue client in order to increase the power of the analyses.

A fifth limitation of the current study was ascertained after the study was completed. Subjects who watched an analogue video of a client in the semi-structured interview did not watch the same client in the monologue video. Therefore, the subjects did not make judgments about the same client. It was reasoned that as long as the questions were answered by subjects with approximately the same level of clinical experience, the data would be fine, which was true. However, it would have been interesting to see if subjects made the same referral decisions with the same client seen in the two different presentations. This would have provided a good demonstration of the difference between the two conditions. However, such a design may have caused difficulty if the subjects ascertained that they were watching the same client, being presented in two different ways. It was for this reason that subjects watched two different clients in the two videos. Instead of comparing subjects to themselves, they are compared with other subjects, which enables analysis for this set of data at the group level only. It

would be helpful to be able to analyze the CISSI's performance at the level of the individual clinician for particular client types.

Future Directions

The Crisis Intervention Self-Efficacy Scale was designed to measure the hypothesized construct of crisis intervention self-efficacy. Refinement of the instrument resulted in significant changes that help to make it a reliable measure. Future research on the CISES should focus on (1) strengthening the reliability results, and (2) validity concerns, to determine that instrument measures the constructs it is hypothesized to measure.

The Crisis Intervention Semi-Structured Interview was created to enable both novice and experienced clinicians to make more informed decisions when working with a client in crisis. It is intended that the end result of the research on the CISSI will result in a valid and reliable instrument to help clinicians accurately assess clients in crisis. The current study lays the foundation for both the validity and the reliability of the Crisis Intervention Semi-Structured Interview. Future research on the CISSI should focus on (1) implementing the instrument with an actual client population, rather than with client analogues, in order to measure real-world effectiveness, (2) validation of the remaining scales, specifically the Substance Abuse Scale, and (3) use of the instrument with clinicians of widely varying skill levels and practice foci, so comparisons may be made between them. When it is determined that the CISSI is fully psychometrically sound, it may serve as both a critical training aid for the novice clinician, and a valuable addition to the practicing clinician's toolbox.

REFERENCES

Aguilera, D. C. (1998). Crisis Intervention: Theory and Methodology. St. Louis: Mosby - Year Book, Inc.

Allen, N. H. (1981). Homicide prevention and intervention. Suicide and Life-Threatening Behavior, 11(3), 167-179.

American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders – Text Revision (4th ed.). Washington, D.C.: Author

American Psychological Association. (1991). Award for Distinguished Contributions to Research in Public Policy: 1990: John Monahan. American Psychologist, 46(4), 318-319.

American Psychological Association. (1992). Ethical principles of psychologists and code of conduct. American Psychologist, 47, 1597-1611.

Arman, J. F. (2000). In the wake of tragedy at Columbine High School. Professional School Counseling, 3(3), 218-220.

Armstrong, B. (1978). Society V. the mentally ill: Exploring the roots of prejudice. Hospital & Community Psychiatry, 29(9), 602-607.

Baldwin, B. A. (1977). Crisis intervention in professional practice: Implications for clinical training. American Journal of Orthopsychiatry, 47(4), 659-670.

Baldwin, B. A. (1979). Training in crisis intervention for students in the mental health professions. Professional Psychology, 10(2), 161-167.

Barlow, D. H. (1974). Psychologists in the emergency room. Professional Psychology: Research and Practice, 5(3), 251-256.

Beck, A. T, & Steer, R. A. (1991). Manual for the Beck Scale For Suicide Ideation. San Antonio: Harcourt Brace & Company.

Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: The Scale for Suicidal Ideation. Journal of Consulting and Clinical Psychology, 47(2), 343-352.

Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. American Journal of Psychiatry, 142(5), 559-563.

Beck, A. T., Steer, R. A., & Ranieri, W. F. (1988). Scale for Suicide Ideation: Psychometric properties of a self-report version. Journal of Clinical Psychology, 44, 499-505.

Bengelsdorf, H., Levy, L. E., Emerson, R. L., & Barile, F. A. (1984). A crisis triage rating scale: Brief dispositional assessment of patients at risk for hospitalization. The Journal of Nervous and Mental Disease, 172(7), 424-430.

Bernard, J. M., & Goodyear, R. K. (1998). Fundamentals of Clinical Supervision (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Bickman, L. (1996) A continuum of care: More is not always better. American Psychologist, 51(7), 689-701.

Bickman, L. Karver, M. S., & Schut, J. A. (1997). Clinician reliability and accuracy in judging appropriate level of care. Journal of Consulting & Clinical Psychology, 65(3), 515-520.

Bongar, B. M. (1992). The ethical issue of competence in working with the suicidal patient. Ethics & Behavior, 2(2), 75-89.

Bongar, B. M., & Harmatz, M. (1989). Graduate training in clinical psychology and the study of suicide. Professional Psychology: Research and Practice, 20(4), 209-213.

Bongar, B. M., & Harmatz, M. (1991). Clinical psychology graduate education in the study of suicide: Availability, resources, and importance. Suicide and Life-Threatening Behavior, 21(3), 231-244.

Bongar, B. M., Lomax, J. W., & Harmatz, M. (1992). Training and supervisory issues in the assessment and management of the suicidal patient. In B. M. Bongar (Ed.), Suicide: Guidelines for assessment, management, and treatment (pp. 253-267). New York: Oxford University Press.

Borum, R. (2000). Improving high risk encounters between people with mental illness and the police. Journal of the American Academy of Psychiatry and the Law, 28(3), 332-337.

Borum R., Deane, M. W., Steadman, H. J., & Morrissey, J. (1998). Police perspective on responding to mentally ill people in crisis: Perceptions of program effectiveness. Behavioral Sciences & the Law, 16(4), 393-405.

Breakey, W. R. (1996). The rise and fall of the state hospital. In W. R. Breakey (Ed.), Integrated mental health services: Modern community (pp. 15-28). New York: Oxford University Press.

Buchanan, A. (1999). Risk and dangerousness. Psychological Medicine, 29(2), 465-473.

Campbell, D. T., & Fiske D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-105.

Caplan, G. (1964). Principles of preventive psychiatry. London: Rutledge and Kegan Paul.

Caplan, G., & Grunebaum, H. (1967). Perspectives on general prevention: A review. Archives of General Psychiatry, 17, 331-346.

Carroll, N., Rosenberg, H., & Funke, S. (1988) Recognition of intoxification by alcohol counselors. Journal of Substance Abuse Treatment, 5(4), 239-246.

Carter, S. P., & Stewin, L. L. (1999). School violence in the Canadian context: An overview and model for intervention. International Journal for the Advancement of Counselling, 21(4), 267-277.

Centers for Disease Control and Prevention. (1999a). 10 Leading Causes of Death, United States. National Center for Health Statistics (NCHS) annual mortality tapes. Retrieved March 10, 2000, from the World Wide Web: http://www.cdc.gov/ncipc/osp/states/10lc97.htm

Centers for Disease Control and Prevention. (1999b). Years of Potential Life Lost Before Age 65 (YPLL) by Cause of Death, U.S., 1995. Retrieved March 10, 2000, from the World Wide Web: http://www.cdc.gov/ncipc/images/ypll95.gif.

Centers for Disease Control and Prevention. (2001a). National Center for Injury Prevention and Control Homepage. Retrieved June 7, 2001, from the World Wide Web: http://www.cdc.gov/ncipc/factsheets/suifacts.htm

Centers for Disease Control and Prevention. (2001b). National Center for Health Statistics. Retrieved May 21, 2001, from the World Wide Web: http://www.cdc.gov/nchs/nvss.htm

Cole, D. A. (1988). Hopelessness, social desirability, depression, and parasuicide in two college student samples. Journal of Consulting and Clinical Psychology, 56(1), 131-136.

Cole, D. A. (1989). Validation of the Reasons for Living Inventory in general and delinquent adolescent samples. Journal of Abnormal Child Psychology, 17(1), 13-27.

Cotton, C. R., & Range, L. M. (1992). Reliability and validity of the Suicide Intervention Response Inventory. Death Studies, 16(1), 79-86.

Cotton, C. R., & Range, L. M. (1993). Suicidality, hopelessness, and attitudes toward life and death in children. Death Studies, 17(2), 185-191.

Craig, T., & Timms, P. W. (1992). Out of the wards and into the streets? Deinstitutionalization and homelessness in Britain. Journal of Mental Health (UK), 1(3), 265-275.

Davis, D. L., Davis, H. L., & Davis, T. L. (1999). The further perils of psychotherapy practice: Ohio expands the duty to warn. American Journal of Forensic Psychology, 17(2), 25-39.

Davison, S. (1997). Risk assessment and management: A busy practitioner's perspective. International Review of Psychiatry, 9(2-3), 201-206.

Dawes, R. M., & Corrigan, B. (1974). Linear models in decision making. Psychological Bulletin, 81, 95-106.

Delfin, P. E. (1978). Components of effective telephone intervention: A critical incidents analysis. Crisis Intervention, 9(2), 50-68.

Dencker, S. J., & Dencker, K. (1994). Does community care reduce the need for psychiatric beds for schizophrenic patients? Acta Psychiatrica Scandinavia, 89, 74-79.

Donnelly, M., McGilloway, S., Mays, N., Perry, S., & Lavery, C. (1997). A 3- to 6-year follow-up of former long-stay psychiatric patients in Northern Ireland. Social Psychiatry & Psychiatric Epidemiology, 32(8), 451-458.

Douglas, K. S., Cox, D. N., & Webster, C. D. (1999). Violence risk assessment: Science and practice. Legal & Criminological Psychology, 4 149-184.

Dolan, M., & Doyle, M. (2000). Violence risk prediction: Clinical and actuarial measures and the role of the Psychopathy Checklist. British Journal of Psychiatry (177), 303-311.

Doyle, W. W., Foreman, M. E., & Wales, E. (1977). Effects of supervision in the training of nonprofessional crisis-intervention counselors. Journal of Counseling Psychology, 24(1), 72-78.

Draine, J., & Solomon, P. (2000). Anxiety and depression symptoms and quality of life among clients of a psychiatric probation and parole service. Psychiatric Rehabilitation Journal, 24(1), 38-45.

Dupont, R., & Cochran, S. (2000). Police response to mental health emergencies—Barriers to change. Journal of the American Academy of Psychiatry and the Law, 28(3), 338-344.

Eddins, C. J., & Jobes, D. A. (1994). Do you see what I see? Patient and clinician perceptions of underlying dimensions of suicidality. Suicide and Life-Threatening Behavior, 24(2), 170-173.

Egan, G. (1994). The skilled helper: A problem management approach to helping (5th ed.). Pacific Grove: Brooks/Cole.

Egeland, B., Carlson, E., & Sroufe, A. (1993). Resilience as process. Development and Psychopathology, 5, 517-528.

Elkins, R. L., & Cohen, C. R. (1982). A comparison of the effects of prejob training and job experience on nonprofessional telephone crisis counselors. Suicide and Life-Threatening Behavior, 12(2), 84-89.

Erickson, E. (1950). Childhood and society. New York: Norton.

Erickson, E. (1959). Identity and the life cycle. Psychological Issues Monographs, 1(1).

Erickson, E. (1963). Childhood and society. New York: Basic Books.

Erickson-Cornish, J. A., Riva, M. T., Cox-Henderson, M., Kominars, K. D., & McIntosh, S. (2000). Perceived distress in university counseling center clients across a six-year period. Journal of College Student Development, 41(1), 104-109.

Estroff, T. W., & Gold, M. S. (1986). Psychiatric presentations of marijuana abuse. Psychiatric Annals, 16(4), 221-224.

Ewing, C. P. (1990). Crisis intervention as brief psychotherapy. In R. A. Wells (Ed.), Handbook of Brief Psychotherapies (pp. 277-294). New York: Plenum Press.

Fauman, B. J. (1983). Psychiatric residency training in the management of emergencies. Emergency Psychiatry, 6(2), 325-334.

Feinstein, R., & Plutchik, P. (1990). Violence and suicide risk assessment in the psychiatric emergency room. Comprehensive Psychiatry, 31(4), 337-343.

Ferris, L. E., Sandercock, J., Hoffman, B., Silverman, M., Barkun, H., Carlisle, J., & Katz, C. (1997). Risk assessments for acute violence to third parties: A review of the literature. Canadian Journal of Psychiatry, 42(10), 1051-1060.

Fisher, J. A. (1994). Dual diagnosis in the Walter B. Jones Alcohol and Drug Treatment Center. Alcohol, 11(6), 461-465.

Flynn, H. R., & Henisz, J. E. (1975). Criteria for psychiatric hospitalization: Experience with a checklist for chart review. American Journal of Psychiatry, 132(8), 847-850.

Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-mental state: A practical method for grading the cognitive state of patients for the clinician. Journal of Psychiatric Research, 12(3), 189-198.

France, K. (1977). Crisis service paraprofessionals: Expectations, evaluations, and training. Crisis Intervention, 8(1), 2-18.

Fremoux, W. J., de Perczel, M., & Ellis, T. E. (1990). Suicide risk: Assessment and response guidelines. Elmsford, NY: Pergamon Press.

Fuller, J., & Cowan, J. (1999). Risk assessment in a multi-disciplinary forensic setting: Clinical judgment revisited. Journal of Forensic Psychiatry, 10(2), 276-289.

Gardner, W., Lidz, C. W., Mulvey, E. P., & Shaw, E. C. (1996). Clinical versus actuarial predictions of violence in patients with mental illness. Journal of Consulting & Clinical Psychology, 64(3), 602-609.

Garmezy, N. (1976). Vulnerable and invincible children: Theory, research, and intervention. Catalog of Selected Documents in Psychology, 6(6).

Gillig, P. M., Grubb, P., Kruger, R., Johnson, A., Hillard, J. R., & Tucker, N. (1990). What do psychiatric emergency patients really want and how do they feel about what they get? Psychiatric Quarterly, 61(3), 189-196.

Goldman, H. H. (1998). Deinstitutionalization and community care: Social welfare policy as mental health policy. Harvard Review of Psychiatry, 6(4), 219-222.

Groth-Marnat, G. (1997). Handbook of psychological assessment (3rd ed.). New York: John Wiley and Sons.

Hardwick, P. J., & Rowton-Lee, M. A. (1996). Adolescent homicide: Towards assessment of risk. Journal of Adolescence, 19(3), 263-276.

Hare, R. (1991). Manual for the Hare Psychopathy Checklist - Revised. Toronto: Multi- Health Systems.

Harper, F. D., & Ibrahim, F. A. (1999). Violence and schools in the USA: Implications for counseling. International Journal for the Advancement of Counselling, 21(4), 349-366.

Harris, S. A., & Kranz, P. (1991). Small college counseling centers: Changing trends for a new decade. Journal of College Student Psychotherapy, 5(3), 81-89.

Harris, G. T., Rice, M. E., & Quinsey, V. L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. Criminal Justice and Behavior, 20(4), 315-335.

Hatipoglue-Suemer, Z., & Aydin, G. (1999). Incidence of violence in Turkish schools: A review. International Journal for the Advancement of Counselling, 21(4), 335-347.

Haynes, S. N., Richard, D. C. S., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. Psychological Assessment, 7, 238-247.

Hendricks, J. E., & McKean, J. B. (1995). Crisis Intervention: contemporary issues for on-site interviewers. Springfield: Charles C. Thomas.

Hickling, F. W. (1994). Community psychiatry and deinstitutionalization in Jamaica. Hospital and Community Psychiatry, 45(11), 1122-1126.

Howard, K. A., Flora, J., & Griffin, M. (1999). Violence-prevention programs in schools: State of the science and implications for future research. Applied and Preventive Psychology, 8(3), 197-215.

Hyde, C. E. (1989). The Manchester Scale. British Journal of Psychiatry, 155(Suppl 7), 46-48.

Ivanoff, A., Jang, S. J., Smyth, N. L., & Linehan, M. M. (1994). Fewer reasons for staying alive when you are thinking of killing yourself: The Brief Reasons for Living Inventory. Journal of Psychopathology & Behavioral Assessment, 16(1), 1-13.

Jackson, H. J., Burgess, P. M., Minas, I. H., & Joshua, S. D. (1990). Psychometric properties of the Manchester Scale. Acta Scandinavia Psychiatrica, 81(2), 108-113.

Jobes, D. A., Jacoby, A. M., Cimbolic, P., & Hustead, L. A. T. (1997). Assessment and treatment of suicidal clients in a university counseling center. Journal of Counseling Psychology, 44(4), 368-377.

Johnson, R. W., Ellison, R. A., & Heikkinen, C. A. (1989). Psychological symptoms of counseling center clients. Journal of Counseling Psychology, 36(1), 110-114.

Joiner, T. E., Rudd, M. D., & Rajab, H. M. (1999). Agreement between self- and clinician-rated suicidal symptoms in a clinical sample of young adults explaining discrepancies. Journal of Consulting and Clinical Psychology, 67(2), 171-176.

Juhnke, G. A. (1994). Teaching suicide risk assessment to counselor education students. Counselor Education and Supervision, 34(1), 52-57.

Juhnke, G. A. (1996). The adapted SAD-PERSONS: A suicide assessment scale designed for use with children. Elementary School Guidance and Counseling, 30(4), 252-258.

Junginger, J. (1990). Predicting compliance with command hallucinations. American Journal of Psychiatry, 147(2), 245-247.

Junginger, J. (1995). Command hallucinations and the prediction of dangerousness. Psychiatric Services, 46(9), 911-914.

Kalafat, J. (1984). Training community psychology for crisis intervention. American Journal of Community Psychology, 12(2), 241-251.

Kaplan, M. L., Asnis, G. M., Sanderson, W. C., & Keswani, L. (1994). Suicide assessment: Clinical interview vs. self-report. Journal of Clinical Psychology, 50(2), 294-298.

Kaplan, Z., Benbenishty, R., Waysman, M., & Solomon, Z. (1992). Clinicians' assessment of suicide risk: Can self-report measures replace the experts? Israel Journal of Psychiatry & Related Sciences, 29(3), 159-166.

King, K. A., Price, J. H., Telljohann, S. K., & Wahl, J. (1999). How confident do high school counselors feel in recognizing students at risk for suicide? American Journal of Health Behavior, 23(6), 457-467.

Kiracofe, N. M. (1993). Changing demands on counseling centers: Problems and possibilities. Journal of College Student Psychotherapy, 7(4), 69-83.

Kleespies, P. M., Deleppo, J. D., Gallagher, P. L., & Niles, B. N. (1999). Managing suicidal emergencies: Recommendations for the practitioner. Professional Psychology: Research and Practice, 30(5), 454-463.

Knop, J., & Schjodt, T. (1999). Staff supervision in emergency psychiatry. New Trends in Experimental and Clinical Psychiatry, 15(2-3), 83-86.

Koocher, G. P., & Keith-Spiegel, P. (1998). Ethics in Psychology: Professional Standards and Cases. New York: Oxford University Press.

Korn, M. L., Plutchik, R., & Van Praag, H. M. (1997). Panic-associated suicidal and aggressive ideation and behavior. Journal of Psychiatric Research, 31(4), 481-487.

Kranz, P. L. (1985a). Crisis Intervention: A new training approach to crisis intervention: A mentor training mode. Crisis Intervention, 14(4), 107-114.

Kranz, P. L. (1985b). Crisis work: The stressed clinician. Crisis Intervention, 14(3), 93-100.

Krawiecka, M., Goldberg, D., & Vaughan, M. (1977). A standardized psychiatric assessment scale for rating chronic psychotic patients. Acta Psychiatrica Scandinavia, 55(4), 299-308.

Kulic, K. R. (2001). The Crisis Intervention Semi-Structured Interview: A study to establish norms, reliability, and validity. Unpublished manuscript, The University of Georgia.

Lamb, D., Boniello, D., Bowen, D., Isabelli, K., & McCormack, S. (1983). Crisis intervention training at a predoctoral internship in professional psychology. Professional Psychology: Research and Practice, 14(6), 714-717.

Lamb, H. R. (1993). Lessons learned from deinstitutionalization in the US. British Journal of Psychiatry, 162, 587-592.

Lamb, H. R. (1998). Deinstitutionalization at the beginning of the new millennium. Harvard Review of Psychiatry, 6(1), 1-10.

Lamb, H. R., & Shaner, R. (1993). When there are almost no state hospital beds left. Hospital & Community Psychiatry, 44(10), 973-976.

Larson, J. (1994). Violence prevention in the schools: A review of selected programs and procedures. School Psychology Review, 23(2), 151-164.

Lillibridge, E. M., & Klukken, P. G. (1978). Crisis intervention training. Tulsa: Affective House.

Lindemann, E. (1944). Symptomatology and management of acute grief. American Journal of Psychiatry, 101(2), 141-148.

Linehan, M. M., Goodstein, J. L., Nielsen, S. L., & Chiles, J. A. (1983). Reasons for staying alive when you are thinking of killing yourself: The Reasons for Living Inventory. Journal of Consulting and Clinical Psychology, 51(2), 276-286.

London, S. (1999). Guns and Day Trading: Mark Barton. Retrieved from the World Wide Web, May 18, 2001: http://www.sondralondon.com/tales/barton/barton6.html

Lyons, J. S., Coleta, J., Devens, M., & Finkel, S. I. (1995). The validity of the Severity of Psychiatric Illness in a sample of psychogeriatric patients. International Journal of Psychogeriatrics, 7(3), 407-416.

Lyons, J. S., O'Mahoney, M. T., Doheney, K., Dworkin, L. N., & Miller, S. I. (1995). Prediction of short stay psychiatric inpatients. Administration and Policy in Mental Health, 23(1), 17-25.

Lyons, J. S., Stutesman, J., Neme, J., Vessey, J. T., O'Mahoney, M. T., & Camper, H. J. (1997). Predicting psychiatric emergency admissions and hospital outcome. Medical Care, 35(8), 792-800.

Manchanda, R., Saupe, R., & Hirsch, S. R. (1986). Comparison between the Brief Psychiatric Rating Scale and the Manchester Scale for the rating of schizophrenic symptoms. Acta Scandinavia Psychiatrica, 74(6), 563-568.

Marchese, M. C. (1992). Clinical versus actuarial prediction: A review of the literature. Perceptual and Motor Skills, 75(2), 583-594.

Mallet, P., & Paty, B. (1999). How French counselors treat school violence: An adult-centered approach. International Journal for the Advancement of Counselling, 21(4), 279-300.

Marson, S. M. (1985). Teaching crisis intervention at a university. Crisis Intervention, 14(2), 35-44.

Martin, D., Martin, M., & Barrett, C. (1987). A peer counselor crisis intervention program to prevent adolescent suicide. Techniques, 3(3), 214-218.

Martin, L. (1999). Violence in German schools: What school counselors can do. International Journal for the Advancement of Counselling, 21(4), 301-313.

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. American Psychologist, 53(2), 205-220.

McDonald, A., & Paitich, D. (1981). A study of homicide: The validity of predictive test factors. Canadian Journal of Psychiatry, 26(8), 549-554.

McGrew, J. H., Wright, E. R., Pescosolido, B. A., & McDonel, E. C. (1999). The closing of Central State Hospital: Long-term outcomes for persons with severe mental illness. Journal of Behavioral Health Services & Research, 26(3), 246-261.

Menzies, R., Webster, C., & Sepejak, D. (1985). The dimensions of dangerousness: Evaluating the accuracy of psychometric predictions of violence among forensic patients. Law and Human Behavior, 9, 49-70.

Mezzina, R., & Vidoni, D. (1995). Beyond the mental hospital: Crisis intervention and continuity of care in Trieste: A four year follow-up study in a community mental health center. International Journal of Social Psychiatry, 41(4), 1-20.

Miller, I. W., Norman, W. H., Bishop, S. B., & Dow, M. G. (1986). The Modified Scale for Suicidal Ideation: Reliability and validity. Journal of Consulting and Clinical Psychology, 54(5), 724-725.

Miller, N. S., & Ries, R. K. (1991). Drug and alcohol dependence and psychiatric populations: The need for diagnosis, intervention, and training. Comprehensive Psychiatry, 32(3), 268-276.

Miller, T. W., Clayton, R., Miller, J. M. & Kraus, R. F. (2000). Violence in the schools: Clinical issues and case analysis for high-risk children. Child Psychiatry & Human Development, 30(4), 255-272.

Monahan, J. (1997). Actuarial support for the clinical assessment of violence risk. International Review of Psychiatry, 9(2-3), 167-169.

Monahan, J., Steadman, H. J., Appelbaum, P. S., Robbins, P. C., Mulvey, E. P., Silver, E., Roth, L. H., & Grisso, T. (2000). Developing a clinically useful actuarial tool for assessing violence risk. British Journal of Psychiatry, 176, 312-319.

Mossman, D. (1997). Deinstitutionalization, homelessness, and the myth of psychiatric abandonment: A structural anthropology perspective. Social Science and Medicine, 44(1), 71-83.

Mossman, D. (2000). Commentary: Assessing the risk of violence—Are "accurate" predictions useful? Journal of the American Academy of Psychiatry & the Law, 28(3), 272-281.

Mulvey, E. P., & Lidz, C. W. (1998). Clinical prediction of violence as a conditional judgment. Social Psychiatry and Psychiatric Epidemiology, 33(Supplement), S107-S113.

Murdach, A. D. (1987). Decision making in psychiatric emergencies. Health and Social Work, 12(4), 267-274.

Murray, M. E., Guerra, N. G., & Williams, K. R. (1997). Violence prevention for the 21st century. In R. P. Weissberg and T. P. Gullotta (Eds.), Healthy Children 2010: Enhancing Children's Wellness (pp. 105-128). Thousand Oaks: Sage Publications, Inc.

Musto, D. G. (1977). Whatever happened to community health? Psychiatric Annals, 7(10), 30-55.

Nahmias, L. M., Beutler, L. E., Crago, M., Osborn, K., & Hughes, J. H. (1983). Use of the SCL-90R to assess health care staff's perceptions of patients' psychological states. Perceptual and Motor Skills, 57(3, Pt 1), 803-806.

National Institute of Mental Health (1999). Older adults: Depression and suicide facts. Washington, D. C. Retrieved March 10, 2000, from the World Wide Web: http://www.nimh.nih.gov/publicat/elderlydepsuicide.cfm

Neimeyer, R. A., & Diamond, R. J. (1983). Suicide management skills and the medical student. Journal of Medical Education, 58, 562-567.

Neimeyer, R. A., & Pfeiffer, A. M. (1994). The ten most common errors of crisis interventionists. In A. A. Leenars, & J. T. Maltberger (Eds.), Treatment of Suicidal People (pp. 207-224). Washington: Taylor & Francis.

Newhill, C. E. (1989). Psychiatric emergencies: Overview of clinical principles and clinical practice. Clinical Social Work Journal, 17(3), 245-258.

Official Code of Georgia Annotated. (2001). Official Code 37-3. Retrieved May 15, 2001, from the World Wide Web at: http://www.state.ga.us/cgi-bin/pub/ocode/ocgsearch?number=37-3&format=full.

Official Code of Georgia Annotated. (2001). Official Code 40-6-391. Retrieved May 15, 2001, from the World Wide Web at: http://www.state.ga.us/cgi-bin/pub/ocode/ocgsearch?number=40-6-391&format=full.

Orpinas, P., Kelder, S., Frankoweski, R., Murray, N., Zhang, Q., & McAlister, F. (2000). Outcome evaluation of a multi-component violence-prevention program for middle schools: The Students for Peace project. Health Education Research, 15(1), 45-58.

Orrell, M., Butler, R., & Bebbington, P. (2000). Social factors and the outcome of dementia. International Journal of Geriatric Psychiatry, 15(6), 515-520.

Osman, A., Gifford, J., Jones, T., & Lickiss, L. (1993). Psychometric evaluation of the Reasons for Living Inventory. Psychological Assessment, 5(2), 154-158.

Osman, A., Jones, K., & Osman, J. R. (1991). The Reasons for Living Inventory: Psychometric properties. Psychological Reports, 69(1), 271-278.

Osman, A., Kopper, B. A., Linehan, M. M., Barrios, F. X., Gutierrez, P. M., & Bagge, C. L. (1999). Validation of the Adult Suicidal Ideation Questionnaire and the Reasons for Living Inventory in an adult psychiatric sample. Psychological Assessment, 11(2), 115-123.

Overall, J. E., & Gorham, D. R. (1962). The Brief Psychiatric Rating Scale. Psychological Reports, 10, 799-812.

Patterson, W. M., Dohn, H. H., Bird, J., & Patterson, G. A. (1983). Evaluation of suicidal patients: The SAD PERSONS scale. Psychosomatics, 24(4), 343-349.

Pepper, B., Kirshner, M., & Ryglewicz, H. (2000). The young adult chronic patient: Overview of a population. Psychiatric Services, 51(8), 989-995.

Ponterotto, J. G. (1987). Client Hospitalization: Issues and considerations for the counselor. Journal of Counseling and Development, 65(10), 542-546.

Range, L. M., & Knott, E. C. (1997). Twenty suicide assessment instruments: Evaluation and recommendations. Death Studies, 21, 25-58.

Ray, B. M. (1985). The teacher's role in crisis intervention. Emotional First Aid: A Journal of Crisis Intervention, 2(1), 28-32.

Robinson, D. J., & Chapman, B. (1997). Brain calipers: A guide to a successful mental status exam. Gratiot: Rapid Psychler.

Rogers, J. R., Alexander, R. A., & Mezydlo-Subich, L. (1994). Development and psychometric analysis of the suicide assessment checklist. Journal of Mental Health Counseling, 16(3), 352-368.

Rosenberg, J. I. (1997). Expertise research and clinical practice: A suicide assessment and intervention training model. Educational Psychology Review, 9(3), 279-296.

Rubin-Wainrib, B., & Bloch, E. L. (1998). Crisis Intervention and Trauma Response: Theory and Practice. New York: Springer Publishing Company.

Rutter, M. (1985). Resilience in the face of adversity: Protective Factors and resistance to psychiatric disorder. British Journal of Psychiatry, 147, 598-611.

Schreter, R. K. (2000). Alternative treatment programs: The psychiatric continuum of care. Psychiatric Clinics of North America, 23(2), 335-346.

Schuckit, M. A. (1983). Alcoholism and other psychiatric disorders. Hospital & Community Psychiatry, 34(11), 1022-1027.

Scott, R. L. (2000). Evaluation of a mobile crisis program: Effectiveness, efficiency, and consumer satisfaction. Psychiatric Services, 51(9), 1153-1156.

Seabury, B. (1994). Interactive video disc programs in social work education: “Crisis counseling” and “organizational assessment.” Computers in Human Services, 11(3-4), 299-316.

Segal, S. P., Watson, M. A., Goldfinger, S. M., & Averbuck, D. S. (1988a). Civil commitment in the psychiatric emergency room: I. The assessment of dangerousness by emergency room clinicians. Archives of General Psychiatry, 45, 748-752.

Segal, S. P., Watson, M. A., Goldfinger, S. M., & Averbuck, D. S. (1988b). Civil Commitment in the psychiatric emergency room: II. Mental disorder indicators and three dangerousness criteria. Archives of General Psychiatry, 45, 753-758.

Sharkin, B. S. (1997). Increasing severity of presenting problems in college counseling centers: A closer look. Journal of Counseling and Development, 75(4), 275-281.

Shergill, S. S., Murray, R. M., & McGuire, P. K. (1998). Auditory hallucinations: A review of psychological treatments. Schizophrenia Research, 32(3), 137-150.

Shergill, S. S., & Zmukler, G. (1988). How predictable is violence and suicide in community psychiatric practice? Journal of Mental Health (UK), 7(4), 393-401.

Slonim, R. (1994). Emergency and crisis psychotherapy supervision. In S. E. Greben & R. Ruskin (Eds.), Clinical Perspectives on Psychotherapy Supervision (pp. 151-164). Washington: American Psychiatric Press, Inc.

Skovholt, T. M., & Ronnestad, M. H. (1992a). The evolving professional self: Stages and themes in therapist and counselor development. Chichester, England: Wiley.

Skovholt, T. M., & Ronnestad, M. H. (1992b). Themes in therapist and counselor development. Journal of Counseling & Development, 70, 505-515.

Smith, J. D., & Polloway, E. A. (1995). Patterns of deinstitutionalization and community placement: A dream deferred or lost? Education & Training in Mental Retardation & Developmental Disabilities, 30(4), 321-328.

Snow, D. L., & Swift, C. F. (1985). Consultation and education in community mental health: A historical analysis. Journal of Primary Prevention, 6(1), 3-30.

Sommers-Flanagan, J., & Sommers-Flanagan, R. (1995). Intake interviewing with suicidal patients: A systematic approach. Professional Psychology: Research and Practice, 26(1), 41-47.

Soto, C., & Jones, J. W. (1985). Brief report: Staff burnout and negligent counseling practices among crisis phone counselors. Crisis Intervention, 14(4), 133-139.

Southwest Academy of Crisis Interveners. (1985). Training in crisis intervention. Emotional First Aid, 2(2), 44-47.

Stancliffe, R. J., & Lakin, K. C. (1999). A longitudinal comparison of day program services and outcomes of people who left institutions and those who stayed. Journal of the Association for Persons with Severe Handicaps, 24 (1), 44-57.

Steinberg, D. (1989). Management of crises and emergencies. In L. K. G. Hsu & M. Hersen, (Eds.) Recent Developments in Adolescent Psychiatry (pp. 87-114). New York: John Wiley and Sons.

Stern, T. A., Schwartz, J. H., Cremens, M. C., & Mulley, A. G. (1991). The evaluation of homicidal patients by psychiatric residents in the emergency room: A pilot study. Psychiatric Quarterly, 62(4), 333-344.

Steadman, H. J. (2000). From dangerousness to risk assessment of community violence: Taking stock at the turn of the century. Journal of the American Academy of Psychiatry & the Law, 28(3), 265-271.

Strauss, D., Shavelle, R., Baumeister, A., & Anderson, T. W. (1998). Mortality in persons with developmental disabilities after transfer into community care. American Journal on Mental Retardation, 102(6), 569-581.

Sullivan-Taylor, L. (1985). Policemen and nursing students: Crisis Intervention Teams. Journal of Psychosocial Nursing & Mental Health Services, 23(9), 26-30.

Suslow, T., Schonauer, K., Ohrmann, P., Eikelmann, B., & Reker, T. (2000). Prediction of work performance by clinical symptoms and cognitive skills in schizophrenic outpatients. Journal of Nervous & Mental Disease, 188(2), 116-118.

Susnick, L. C., & Belcher, J. R. (1996). Why are they homeless? The chronically mentally ill in Washington, D. C. International Journal of Mental Health, 24(4), 70-84.

Swanson, J. W., Swartz, M. S., Borum, R., Hiday, V. A., Wagner, H. R., & Burns, B. J. (2000). Involuntary outpatient commitment and reduction of violent behaviour in persons with severe mental illness. British Journal of Psychiatry, 176, 324-331.

Takekawa, Y., Hori, A., Tsunashima, K., & Ishihara, I. (1994). The reliability and validity of the Japanese version of the Manchester Scale. Seishin Igaku (Clinical Psychiatry) 36(4), 389-394.

Taylor, R. D., Brady, M. P., & Swank, P. R. (1991). Crisis intervention: Longer term training effects. Psychological Reports, 68(2), 513-514.

Taylor, R. D., Hawkins, J., & Brady, M. P. (1991). Extent, type, preferences, and consequences of crisis intervention training for teachers. Educational Psychology, 11(2), 143-150.

Teyber, E. (1992). Interpersonal process in psychotherapy: A guide for clinical training (2nd ed.). Pacific Grove: Brooks/Cole.

Thienhaus, O. J., Ford, J., & Hillard, R. J. (1995). Factors related to patients' decisions to visit the psychiatric emergency service. Psychiatric Services, 46(12), 1227-1228.

Tierney, R. J. (1994). Suicide intervention training evaluation: A preliminary report. Crisis, 15(2), 69-76.

Tolman, H. C. (1999). The epidemic of violence in the U.S.A. International Journal of Adolescent Medicine & Health, 11(3-4), 135-151.

Torrey, E. F. (1995). Editorial: Jails and prisons – America's new mental hospitals. American Journal of Public Health, 85(12), 1611-1613.

Turner, P. M., & Turner, T. J. (1991). Validation of the Crisis Triage Rating Scale for psychiatric emergencies. Canadian Journal of Psychiatry, 36(9), 651-654.

U. S. Public Health Service. (1999). The Surgeon General's call to action to prevent suicide. Retrieved March 10, 2000, from the World Wide Web: http://www.surgeongeneral.gov/library/calltoaction/calltoaction.htm.

Wales, E. (1972). Crisis intervention in clinical training. Professional Psychology: Research and Practice, 3(4), 357-361.

Walsh, S. F. (1985). The psychiatric emergency service as a setting for social work training. Social Work in Health Care, 11(1), 21-31.

Warner, S. L. (1961). Criteria for involuntary hospitalization of psychiatric patients in a public hospital. Mental Hygiene, 45, 122.

Webster, C. D., Douglas, K. S., Eaves, D., & Hart, S. D. (1997). HCR-20: Assessing Risk for Violence. (Version 2). British Columbia: Mental Health, Law and Policy Institute Simon Fraser University.

Werner, E. E., & Smith, R. S. (1982). Vulnerable but invincible: A longitudinal study of resilient children and youth. New York: Adams-Bannister-Cox.

Westefeld, J. S., Cardin, D., & Deaton, W. L. (1992). Development of the College Student Reasons for Living Inventory. Suicide & Life-Threatening Behavior, 22(4), 442-452.

Whittington, H. G. (1966). Psychiatry in the American community. New York: International Universities Press.

Wise, P. S., Smead, V. S., & Huebner, E. S. (1987). Crisis intervention: Involvement and training needs of school psychology personnel. Journal of School Psychology, 25(2), 185-187.

WISC-TV. (1999). Atlanta Gunman's Notes Revealed. Available: http://www.channel3000.com/news/stories/news-990730-104753.html.

Wolber, G., & McGovern, T. V. (1977). A three component model for the evaluation of telephone counselor effectiveness. Crisis Intervention, 8(2), 36-55.

Wood, K. A., & Radwan, K. (1985). The psychologist's role in the emergency room: A comparative study. Professional Psychology: Research and Practice, 16(1), 106-113.

Wood, K. A., Rosenthal, T. A., & Khuri, R. (1984). The need for hospitalization as perceived by emergency room patients and clinicians. Hospital and Community Psychiatry, 35(8), 830-832.

Wu, T., & Serper, M. (1999). Social support and psychopathology in homeless patients presenting for emergency psychiatric treatment. Journal of Psychiatric Treatment, 55(9), 1127-1133.

Yufit, R. I. (1991). American Association of Suicidology presidential address: Suicide assessment in the 1990's. Suicide and Life-Threatening Behavior, 21(2), 152-163.

Zealberg, J. J., & Brady, K. T. (1999). Substance abuse and emergency psychiatry. Psychiatric Clinics of North America, 22(4), 803-817.

APPENDICES

APPENDIX A – THE CRISIS INTERVENTION SEMI-STRUCTURED INTERVIEW

The Crisis Intervention Semi-Structured Interview

"Hi, my name is _____. I'm an intake counselor here at the clinic. Before we get you started at the clinic, I have several pieces of paper that I need to fill out so that we can help you get the best service possible. Is it okay if I ask you a bunch of questions and write down your answers while we speak?" (Wait for client answer) "Why don't you tell me a little bit about what brings you to the clinic today?" (Let client begin to tell story)

1. "Are you currently seeing a counselor, psychologist, psychiatrist, or a combination of any types of mental health professional?"

   Yes _____ (1)
   No _____ (0)

IF NO, GO TO QUESTION #8.

IF YES:

2. "When is the last time you saw them?"

   Day(s) _____ (1)
   Week(s) _____ (2)
   Month(s) _____ (3)

3. "How long have you been working with them?

   Less than a month _____ (2)
   More than a month _____ (1)

4. "Do you know if you have been assigned any particular diagnosis?"

   Yes _____
   No _____

IF NO, THEN GO TO QUESTION #6.

IF YES:

5. "What diagnosis were you assigned?'

   Depression, any type _____ (2)

Anxiety, any type _____ (1)
Schizophrenia/Psychotic Disorder, any type _____ (3)
Other _____

6. "Are you currently taking any medications specifically for or related to that diagnosis?

Yes _____ (1)
No _____ (2)

IF YES (Documentation Only):

What Medication: _____
Dosage: _____

7. "Do you actually take the medication as prescribed?"

Yes _____ (0)
No _____ (2)

8. "Have you worked with someone in the past?

Yes _____ (1)
No _____ (0)

IF NO, GO TO QUESTION #11.

IF YES:

9. "Do you know if you were assigned any particular diagnosis then?"

Depression, any type _____ (2)
Anxiety, any type _____ (1)
Schizophrenia, any type _____ (3)
Other _____

10. "Were you taking any medications specifically for or related to that diagnosis?"

Yes _____ (1)
No _____ (0)

IF YES:

What Medication: _____
Dosage: _____

11. "Is there any history of metal illness in you family?

Yes _____ (1)
No _____ (0)

12. "Have their been any major events going on in your life recently, such as death or loss of a loved one, marriage, divorce, move, change in family structure, loss of a job, problems with family or friends, etc.?"

Yes _____ (1) Includes events the clients has already discussed
No _____ (0)

What Events (Documentation Only):
_____
_____
_____
_____

Client's Score:_____

TURN PAGE AND PROCEED TO NEXT SECTION

Section II: Drugs and Alcohol

1. "Do you use any kinds of drugs or alcohol on a regular basis?"

   Yes _____ (2)
   No _____ (0)

IF NO, GO TO Section III: Depression and Suicidal Ideation.

IF YES:

2. "What drugs/alcohol do you use?" (Documentation Only)

   Drugs: Type:
   Alcohol: Type:

3. "When is the last time you have used?"

   Today _____ (2)
   Yesterday _____ (1)
   Last Week _____ (0)
   Last Month or Longer _____ (0)

4. "How long have you been using?"

   Short Term _____ (1)
   Long Term _____ (2)

5. "How much do you generally use?" (Documentation Only)

   _____

6. "Have you ever been in treatment for substance abuse?"

   Yes _____ (1)
   No _____ (0)
   If Using Now (#1) And Past Treatment, Then _____ (2)

IF NO, GO TO QUESTION #8

IF YES:

7. Dates:_____

8. “Have you had any periods of abstinence, not using anything?” (Documentation Only)

Yes _____ (0)
No _____ (1)

IF NO, GO TO QUESTION #11.

IF YES:

9. “When did you start using again?” (Documentation Only)

_____

10. “Was there any particular event that may have encouraged you to start using again?” (Documentation Only)

_____

11. “When you stop using drugs/alcohol, do you go through withdrawal?”

Yes _____ (3)
No _____ (0)

IF NO, GO TO Section III: Depression and Suicidal Ideation

IF YES:

12. “Has withdrawal ever required medical attention or hospitalization in the past?”

Yes _____ (3)
No _____ (0)

Client’s Score:_____

TURN PAGE AND PROCEED TO NEXT SECTION

Section III: Depression and Suicidal Ideation

1. "Sometimes when people get really upset or depressed, they start to get thoughts of wanting to hurt themselves, to kill themselves, or just that they want to die. Have you had any thoughts like these in the past couple of days or weeks?"

Yes _____ (3)
No _____ (0)

IF NO, THEN ASK:

"You're sure that you haven't had any thoughts like these in the past few days or so? Sometimes people find it really hard to talk about this stuff, and I want you to be able to tell me anything that's on your mind."

IF STILL NO, GO TO QUESTION #9.

IF YES, THEN MARK "YES' ON #1 ABOVE, THEN PROCEED:

2. Document which choice is closest to client's wish:

Hurt Self _____ (2)
Kill Self _____ (3)
Want to Die _____ (1)

3. "How long have you been thinking about (hurting yourself/killing yourself/wanting to die)? Hours, days, weeks, months, or years?"

Few Hours/Days _____ (3)
Few Weeks _____ (2)
Months/Years _____ (1)

4. "Have you been thinking about how you might do this to yourself?

Yes _____ (3)
No _____ (0)

IF YES, GO TO QUESTION #5:

IF NO, THEN ASK:

"You haven't thought at all about ways to (hurt/kill yourself)?"

IF STILL NO, GO TO QUESTION #9.

5. "What way(s) have you thought about hurting/killing yourself? (score only highest)

Cutting	_____	(2)
Shooting	_____	(3)
Overdose	_____	(3)
Hanging	_____	(3)
Suffocation	_____	(2)
Jumping	_____	(2)
Vehicle	_____	(1)
Other	_____	

6. "Do you have the ability to get access to and use the thing(s) you want to hurt yourself with?"

Yes	_____	(2)
No	_____	(0)

7. "Are you really feeling like this is something that you want to do? Have you made up your mind that you want to hurt yourself/kill yourself?")

Yes	_____	(Full Score On This Scale)
No	_____	(1)

8. "How are you feeling right now – if you had the ability to hurt yourself/kill yourself right now, would you do it?"

Yes	_____	(Full Score On This Scale)
No	_____	(0)

9. "Have you ever tried to hurt yourself/kill yourself in the past?

Yes	_____	(2)
No	_____	(0)

IF NO, GO TO QUESTION #13.

IF YES:

10. "How many times have you tried this?"

Once	_____	(1)
More Than Once	_____	(3)

11. “How long ago did this happen?”

Within Last Year	_____ (3)
Within Last 5 Years	_____ (2)
5 Or More Years Ago	_____ (1)

12. “What was going on then in your life?” (Documentation Only)

Use this question to get client to tell more about life history, and to get a sense of how things have been going for them through the years. This question can also provide vital information about their childhood years, if this is when the event occurred. Make sure you keep the brief therapeutic alliance strong.

13. “Has anyone else in your family ever tried to, or attempted to, hurt or kill themselves?”

Yes	_____ (1)
No	_____ (0)

IF NO, GO TO QUESTION #15

IF YES:

14. “How close were they to you?”

Perceived/Actual Nuclear Family	_____ (2)
Perceived/Actual Extended Family	_____ (1)

15. “If you left here today/tonight, do you think you would be safe enough that you could guarantee that you would not hurt yourself?”

Yes	_____ (0)
No	_____ (Full Score On This Scale)

16. “Do you feel hopeless about the future?”

Yes	_____ (1)
No	_____ (0)

17. “Where do you see yourself in 5,10, or 20 years?”

Plans	_____ (0)
No Plans	_____ (1)

_____
_____
_____

18. "On a scale of 1-10, 10 being great and 1 being terrible, how do you feel right now?"

1-3 _____ (3)
4-6 _____ (1)
7-10 _____ (0)

19. "Have you had any trouble sleeping in the past month or so?"

Yes _____ (1)
No _____ (0)

IF NO, GO TO QUESTION #22.

IF YES:

20. "Do you find yourself sleeping too little or too much?" (Documentation Only)

Too Little _____
Too Much _____ IF TOO MUCH, GO TO QUESTION #22.

21. "Do you wake up early and find it difficult to get back to sleep?"

Yes _____ (1)
No _____ (0)

22. "Have you had any trouble eating either too little or too much in the past month or so?"

Yes _____ (1)
No _____ (0)

IF NO, GO TO QUESTION #25.

IF YES:

23. "Have you lost/gained any weight at all?"

Yes _____ (1)
No _____ (0)

24. "About how much weight have you lost/gained in about how long of a time?"

(Documentation Only)

_____

25. “Do you feel depressed?”

Yes _____ (1)
No _____ (0)

Client’s Score:_____

TURN PAGE AND PROCEED TO NEXT SECTION.

Section IV: Psychosis

If patient is extremely uncooperative, agitated, or appears psychotic to the point that they are unable to answer questions, provide the highest raw score possible on this scale and forgo all questions.

1. "Do you ever see or hear things that you know aren't there, or that you know shouldn't be there?"

   Yes _____ (2)
   No _____ (0)

IF NO, THEN ASK:

"You never have any type of hallucinations, or hear voices, or see people or things that you know aren't there, especially if you are home alone or if no one else can see them?"

IF STILL NO, THEN GO TO Section V: Social Support.

IF YES, THEN MARK "YES" ON #1 ABOVE AND PROCEED.

2. "Are you always intoxicated/using drugs, or detoxing from drugs/alcohol, when you see/hear these things?"

   Yes _____
   No _____ (2)

IF YES, THEN GO TO Section V: Social Support

IF NO:

3. "What kinds of things do you see/hear?" (Documentation Only)

   _____
   _____

4. "When do you see them?" (Documentation Only)

   _____
   _____

5. “What happens when they appear?” (Documentation Only)

_____
_____

6. “Do you think they’re real?”

Yes _____ (2)
No _____ (0)

7. “Do they talk to you?”

Yes _____ (2)
No _____ (0)

IF NO, GO TO QUESTION #21.

IF YES:

8. “Do they tell you to do things?”

Yes _____ (3)
No _____ (0)

9. “Do they tell you to hurt other people?”

Yes _____ (3)
No _____ (0)

IF NO, GO TO QUESTION #15.

IF YES:

10. “Whom do they tell you to hurt?” (Documentation Only)

_____

11. “Do they tell you how to hurt them?”

Yes _____ (3)
No _____ (0)

12. “Do you own or have access to the thing(s) you would use to do this?”

Yes _____ (3)
No _____ (0)

13. “Do you know why they tell you to do this?” (Documentation Only)

_____
_____

14. “Are you going to do it?”

Yes _____ (Full Score On This Scale)
No _____ (0)

15. “Do they tell you to hurt yourself?”

Yes _____ (3)
No _____ (0)

IF NO, THEN GO TO Section V: Social Support.

IF YES:

16. “Do they tell you how to hurt yourself?”

Yes _____ (3)
No _____ (0)

17. “Do you own or have access to the thing(s) you would hurt yourself with?”

Yes _____ (2)
No _____ (0)

18. “Do you know why they want you to do this?” (Documentation Only)

_____
_____

19. “Are you going to do it?”

Yes _____ (Full Score On Scale)
No _____ (0)

20. “Do you know when you are going to do this?” (Documentation Only)
_____

Client’s Score:_____

TURN PAGE AND PROCEED TO NEXT SECTION.

Section V: Social Support

1. Do you have anyone here with you today?

   Yes _____ (0)
   No _____ (1)

2. Do you have people in your life with whom you feel close?

   Yes _____ (0)
   No _____ (2)

3. Who is supportive in your life? (Documentation Only)

   _____

4. If you went home today/tonight, whom would you spend your time with?

   Friends _____ (1)
   Significant Other _____ (0)
   Family _____ (0)
   No One _____ (3)

Client's Score:_____

TURN PAGE AND PROCEED TO NEXT SECTION.

Section VI: Individual/Support Wishes

1. Is there anything that I haven't asked today/tonight that you think I should know about?

   _____

2. Do you have any questions?

   _____

3. Does the patient deny what the best course of action should be, even though it is relatively obvious given their current state of functioning?

   Yes _____ (2)
   No _____ (0)

4. Does the patient's significant other(s) agree with your disposition, and do they have any preference for what level of treatment the patient should receive?

   Yes _____ (0)
   No _____ (2)

   If No, What:
   _____
   _____

5. Does the patient appear motivated to help themselves in whatever way possible, that they will work on their problems if placed inpatient, or will follow up with a mental health professional if referred outpatient?

   Yes _____ (0)
   No _____ (2)

Client's Score:_____

APPENDIX B – THE CRISIS INTERVENTION SELF-EFFICACY SCALE

The Crisis Intervention Self-Efficacy Scale

Please fill out the following 25 items circling the best answer in the provided 5-point answer scale.

1. I believe that I can remain composed during a crisis situation.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

2. I don't think I would be able to make the right choices when faced with a crisis.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

3. If presented with a suicidal client, I would be able to work with the client and help to resolve the situation in a safe manner.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

4. Crisis intervention skills are no more important than the counseling skills I use every day.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

5. I think that I may not be able "hold it together" when dealing with a crisis client.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

6. I know I have the training and experience to handle a crisis situation appropriately.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

7. If one of my clients were suicidal, I would not want to be the clinician to deal with it – I would want to have my supervisor handle the situation.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

8. Professionals who are well versed in crisis intervention are likely to deal effectively with most any crisis situation.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

9. It is important for me to present a composed demeanor to clients during a crisis.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

10. I would likely make poor choices when faced with a client's crisis situation.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

11. If I had a homicidal client, I think that I could assess the client and figure out the best course of action to take to ensure their and others' safety.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

12. Crisis intervention is an integral component of good counseling.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

13. I probably wouldn't be able to stay calm when dealing with crisis situations.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

14. I believe I can effectively deal with most types of client crises.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

15. If one of my clients told me they were homicidal, I would probably not know what to do next.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

16. Crisis intervention is a learned skill that many professionals practice effectively on a daily basis.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

17. I believe that I'll be able to stay calm the next time I deal with a client's crisis.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

18. I think I would not be able to effectively handle most client crisis situations.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

19. A psychotic client would not be an overwhelming challenge for me – I would simply deal with the situation appropriately, making sure that the client and others are safe.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

20. I don't think counselors help clients in crisis too much – things generally tend to get better on their own in a little while.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

21. It is difficult for me to stay calm when I am dealing with client crises.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

22. I am confident in my ability to successfully resolve client crisis situations.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

23. If faced with a psychotic client, I think I might not be equipped to deal with the situation.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

24. It is important for me to learn crisis intervention skills because they can be more helpful than simply “winging it’ during a client’s crisis.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

25. I think I could probably deal with a variety of client crisis problems.

1	2	3	4	5
Agree Completely	Agree Somewhat	Neutral	Disagree Somewhat	Disagree Completely

APPENDIX C – SCORING SYSTEM FOR THE CRISIS INTERVENTION SEMI-STRUCTURED INTERVIEW

	GRF-20	SA-15	DS-40	PH-28	SS-6	ISW-6	
Scaled Score	Raw Scores						Scaled Score
Severe Range							
100	20	15	40	28	6	6	100
90	18	13.5	36	25.2	5.4	5.4	90
80	16	12	32	22.4	4.8	4.8	80
Moderate Range							
70	14	10.5	28	19.6	4.2	4.2	70
60	12	9	24	16.8	3.6	3.6	60
50	10	7.5	20	14	3	3	50
40	8	6	16	11.2	2.4	2.4	40
Mild Range							
30	6	4.5	12	8.4	1.8	1.8	30
20	4	3	8	5.6	1.2	1.2	20
10	2	1.5	4	2.8	0.6	0.6	10
0	0	0	0	0	0	0	0
Scaled Score	Raw Scores						Scaled Score
	GRF-20	SA-15	DS-40	PH-28	SS-6	ISW-6	

Full Scale	
Scaled Score	Raw Score
Severe Range	
100	115
90	103.5
80	92
Moderate Range	
70	80.5
60	69
50	57.5
40	46
Mild Range	
30	34.5
20	23
10	11.5
0	0

APPENDIX D – SUBSCALES OF THE CRISIS INTERVENTION SELF-EFFICACY SCALE

Subscale Composed

1. I believe that I can remain composed during a crisis situation.
5. I think that I may not be able "hold it together" when dealing with a crisis client.*
9. It is important for me to present a composed demeanor to clients during a crisis.
13. I probably wouldn't be able to stay calm when dealing with crisis situations.*
17. I believe that I'll be able to stay calm the next time I deal with a client's crisis.
21. It is difficult for me to stay calm when I am dealing with client crises.*

Subscale Correct

2. I don't think I would be able to make the right choices when faced with a crisis.*
6. I know I have the training and experience to handle a crisis situation appropriately.
10. I would likely make poor choices when faced with a client's crisis situation.*
14. I believe I can effectively deal with most types of client crises.
18. I think I would not be able to effectively handle most client crisis situations. (item omitted)*
22. I am confident in my ability to successfully resolve client crisis situations.

Subscale Multi

3. If presented with a suicidal client, I would be able to work with the client and help to resolve the situation in a safe manner.
7. If one of my clients were suicidal, I would not want to be the clinician to deal with it – I would want to have my supervisor handle the situation.*
11. If I had a homicidal client, I think that I could assess the client and figure out the best course of action to take to ensure their and others' safety.

15. If one of my clients told me they were homicidal, I would probably not know what to do next.*
19. A psychotic client would not be an overwhelming challenge for me – I would simply deal with the situation appropriately, making sure that the client and others are safe.
23. If faced with a psychotic client, I think I might not be equipped to deal with the situation.*
25. I think I could probably deal with a variety of client crisis problems.

Subscale Perspective (omitted)

4. Crisis intervention skills are no more important than the counseling skills I use every day.
8. Professionals who are well versed in crisis intervention are likely to deal effectively with most any crisis situation.
12. Crisis intervention is an integral component of good counseling.
16. Crisis intervention is a learned skill that many professionals practice effectively on a daily basis.
20. I don't think counselors help clients in crisis too much – things generally tend to get better on their own in a little while.*
24. It is important for me to learn crisis intervention skills because they can be more helpful than simply "winging it' during a client's crisis.

Answers with an asterisk (*) are negatively scored