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# Examining the Impact of Crisis Assessment Training in the Triage Assessment Model, on the Self-Efficacy of Residential Treatment Facility Staff

Chad Snyder

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EXAMINING THE IMPACT OF CRISIS ASSESSMENT TRAINING IN THE  
TRIAGE ASSESSMENT MODEL, ON THE SELF-EFFICACY OF RESIDENTIAL  
TREATMENT FACILITY STAFF

by

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Submitted in partial fulfillment of

the requirements for the degree

Doctor of Counselor Education and Supervision Ph.D.

Counselor Education and Supervision

School of Education

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## Abstract

The differences between residential treatment facility staffs' self-efficacy levels post-crisis assessment training are investigated in order to identify alternative means to restraints as the primary crisis intervention strategy. In order to assess the participants' level of self-efficacy to deal with crises, the self-efficacy assessment tool for crisis (SEAT-C) was developed utilizing a semantic differential design. Through pilot testing, the SEAT-C was determined to be a reliable and valid instrument. Training in the Triage Assessment Model for crisis intervention was provided to 79 residential treatment facility staff employed at a child and adolescent residential treatment facility in the southwestern part of a Mid-Atlantic state. Following the training, participants completed the SEAT-C and the results of the experimental and control groups' level of self efficacy are compared across the four crisis concepts: crisis as danger, crisis as opportunity, crisis as assessment and crisis as intervention. The four crisis concepts are examined across the three timeframes of pre-crisis, crisis and post-crisis. The results indicate that significantly statistical differences exist within the sub-hypotheses of the concepts: pre-crisis as assessment, pre-crisis as opportunity, crisis as danger and crisis as assessment.

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## CHAPTER I

### INTRODUCTION

In 1998, the prevalence of childhood psychopathology was 12 to 22% of American children, approximately 14 million youth (Mohr, Mahon & Noone, 1998). In 1999, almost 21 percent of U.S. children ages 9 to 17 had a diagnosable mental or addictive disorder (U.S. Department of Health and Human Services, 1999). The Methodology for Epidemiology of Mental Disorders in Children and Adolescents study of 1999, further estimated that a total of 4 million youth suffer from a major mental illness that results in significant functional impairment at home, school, or in the community. A subsequent study by The National Alliance for the Mentally Ill in 1999, estimated that nearly half of the nation's 7.5 million children with a mental disorder had a condition producing serious disability. In 2000, The World Health Organization estimated that up to 20 percent of children and adolescents worldwide suffered from an impairing mental illness (Saraceno & Belfer, 2000). Furthermore, by the year 2020, childhood neuropsychiatric disorders have been predicted to rise by over 50% to become one of the five most common causes of morbidity, mortality and disability among children (World Health Organization, 2001, as cited in The National Alliance for the Mentally Ill, 2002).

The increasing statistical rate of children and adolescents diagnosed with severe mental health issues is a topic that requires public attention and resources in order to provide adequate treatment. Treatment services such as state hospitals, residential facilities, crisis facilities, halfway houses and other community services have been

around since the 1960s to provide treatment for children and adolescents with mental health issues (Fleishman, 2004). As a result of the depopulation of state hospitals in the 1960s, residential treatment facilities emerged as one of the systems of care to provide support and assistance for the hundreds of thousands of individuals released into the community (Fleishman, 2004). Beginning in 1982, it was estimated that 29,000 children lived in residential child-care facilities (Gilliland-Mallo & Judd, 1986), in 1990 the estimate increased to 65,000 children (Chamberlain, Ray, & Moore, 1996) and by 1997 approximately 117,720 children were treated in residential facilities (Spencer, Shelton, & Frank, 1997).

As a result of the population shifts, residential care staff are increasingly expected to provide intensive multidisciplinary psycho-educational treatment to seriously emotionally disturbed children and adolescents (Connor, Miller, Cunningham, & Melloni, 2002). However, without adequate staffing of knowledgeable, experienced and trained mental health professionals, these facilities provide nothing more than holding tanks for the cognitively, behaviorally or emotionally challenged individuals. Researchers have identified a discontinuity of care between children's mental health needs and the services provided to them (Lyons, Libman-Mintzer, Kisiel & Shallcross, 1998). The combination of inexperienced staffing and the need to provide intensive multidisciplinary psycho-educational treatment have led to deficiencies in a systematic means for creating treatment plans, assessment and diagnostic criteria, as well as the ability of staff to provide diverse individualized treatment or interventions (Connor et al., 2002, Lyons et al., 1998).

Residential treatment facilities (RTFs), the second most restrictive form of care next to inpatient hospitalizations, were developed to treat children and adolescents (clients), who suffer from mental health illnesses and crisis episodes (U.S. Department of Health and Human Services, 1999). Usually the clients are dealing with issues of impairment regarding family, school, community, or the overall adjustment to difficult periods of normal child and adolescent development (Durrant, 1993). In fact, most of these individuals are constantly operating in crisis mode because the severity of their mental health issues interferes with their ability to cope with daily life. The clients residing in RTFs range from 5 and 18 years of age (Stelzer & Elliott, 1990). Generally, treatment lasts approximately four to eight months and usually involves individual, group and family therapy (U.S. Department of Health and Human Services, 1999). The therapy focuses on developing coping strategies for the clients' deficit in cognitive, affective and behavioral functioning (Journal of the American Academy of Child and Adolescent Psychiatry, February 2002).

RTFs are staffed by individuals with different levels of work experiences, training and educational backgrounds (Klinge 1994; Delaney 1999). These direct care staff are assigned the task of providing daily care and treatment for the clients residing in the RTFs (Morrison, 1990). The direct care staff, who have bachelor level degrees or less and the least amount of mental health training, are the individuals spending the most time with the clients implementing the treatment recommendations in RTFs (Mohr, Mahon, & Noone, 1998). The direct care staff are confronted with clients, who are typically highly disturbed, volatile, and vulnerable (Mohr et al., 1998). Severe verbal and physically

aggressive tendencies are common forms of residents' behaviors directed towards peers and staff. Consequently, research by Fisher and Kane (1998) indicates that the majority of conflict and violent behavior displayed by the clients occurs during interactions with staff.

Throughout the history of psychiatric settings, such as RTFs, trainings on the use of passive physical restraints and seclusion have been the primary means of crisis intervention for controlling clients' aggression (Visalli, McNasser, Johnstone, Lazzaro, 1997). These types of restrictive measures are moderately successful in helping staff manage an immediate crisis (Visalli et al); however, they are generally less successful as educational tools for clients learning to manage their own behaviors (Murray & Sefchik, 1992). According to Jones & Timber (2003), physical restraints and seclusion do absolutely nothing to reduce or supplant the behaviors that precipitated the need for coercive interventions. Furthermore, when passive physical restraints are applied incorrectly, staff and client injuries can occur, and occasionally, client deaths can result (Jones & Timebers, 2003).

The use of passive physical restraints and seclusion, while necessary at times, are external means of controlling the client's behavior. Handling crises in this manner, creates a problem because the external behavioral management needs to continue in order to control the client's acting out or violent behavior in the future (Murray et al., 1992). As Glassman (2000) noted, when the external motivation that distinguished inappropriate client behavior is removed, the inappropriate behavior is likely to reoccur. Furthermore, James & Gilliland (2005) suggested that the internal response, such as an individual's

perception or experiencing of an event or situation, is a more crucial factor in determining a crisis experience or crisis situation. Therefore, training staff in only external physical management techniques for handling crisis situations tends to be reactive and inefficient.

Organizational trainings that primarily focus on teaching staff how to respond to client crises with physical management techniques unintentionally promote the philosophy and practice of utilizing external management techniques to solve clients internal problems. As Durrant (1993) noted, the problem that arises is that it is impossible for staff to separate how they think from what they do. In other words, staff primarily react and intervene in client issues based on their beliefs and opinions drawn from training and past experiences. The staffs' inexperience and lack of knowledge about providing more appropriate and efficacious treatment to this client population is further confounded by the staffs' preconceived thoughts and emotions surrounding their low self-efficacy as mental health professionals (Canatsey & Roper, 1996; Morrison, 1998; Williams & Myers, 2001). As a result, RTFs have one of the most severely disturbed and labile populations, who in turn, are being supervised by individuals with the least amount of mental health education and training (Murray et al., 1992; Mohr et al., 1998).

A limited amount of mental health education and training is prone to impact the staffs' confidence to intervene in client issues (Reich, Bickman & Heflinger, 2004; Paglis & Green, 2002; Wood & Bandura, 1989; Gist, 1987). When staff members lack self confidence in their actions, they will most likely be hesitant to act (Paglis & Green, 2002; Gist, 1987). The combination of staffs' low self confidence and hesitancy creates a very

tumultuous RTF environment. Gist (1987) noted that not only do self-beliefs predict motivation, but also self-beliefs predict task performance. The staffs' low self-confidence and lack of motivation to act directly impacts their self-efficacy. As a result, staff members with low levels of self-efficacy will not be as efficient and effective at providing appropriate treatment interventions in a timely manner.

As Delaney (1999) noted, it takes experience to tune into the nuances of a milieu situation and know what intervention will take adults and children to a more positive place. Staff experience is an important concept to consider because implicitly stated within Delaney's (1999) message is the notion that staffs' effectiveness is directly linked to their self confidence gained through work experiences. Unfortunately, staff are expected to deal with the clients volatile behaviors before developing the confidence that occurs through adequate training and work experiences (Nunno, Holden, Leidy, 2003). As a result, the staff are limited in their knowledge of what to expect during a crisis and how to intervene. When staff have limited ways of handling aggressive and volatile behaviors due to inexperience and lack of training, the occasions for the use of more restrictive external procedures are increased (Murray et al., 1992). In addition, the possibility exists for negative client interactions or outcomes to further reinforce the staffs' self-doubt that exists as a result of their already low self-confidence and self-efficacy. As Gist (1987) noted, negative experiences tend to decrease individuals' self-efficacy. Therefore, continued negative client interactions or outcomes can perpetuate a vicious cycle whereby the staff continue to lose self-confidence and begin to doubt their ability to provide successful interventions. The staffs' limited work experience, low self-

confidence level and decreased self-efficacy gained through negative client interactions will definitely impact the effectiveness of future work performance.

Wiger & Harowski (2003) noted the primary goal of crisis intervention is to cushion the effects of the stressful event by providing immediate emotional and environmental first aid. Myer (2001) also emphasized that time is a crucial factor in providing effective crisis intervention. The need to provide immediate intervention, however, is not something that novice or inadequately trained staff members are prepared to do (Delaney, 1999; Nunno et al., 2003). Although the staff will gain work experience and training over time, client crises occur regardless of staffs' work preparedness. Therefore, it appears logical that to avoid ineffective staff-client interactions, trainings that focus on the characteristics of crises and the reactions of a client in crisis need to occur prior to assigning a staff member to work in an RTF.

Effective crisis intervention requires that the true issue precipitating the client's crisis situation be addressed (James & Gilliland 2005, Myer 2001). However, without the proper training, RTF staff are not adequately prepared to assess a client's crisis situation, decipher the client domain most affected and/or provide crisis intervention (Hoff, 1995). According to the U.S. Department of Health and Human Services (1999), few models exist in which structured assessment and clinical guidelines are clearly delineated for staff to utilize. Providing the RTF staff with training in a crisis assessment model that prepares the staff to assess the complex interactions of a crisis would be beneficial and advantageous for the clients, staff and organization. This type of training increases the staffs' knowledge of crisis intervention, which could increase the staffs' level of self

confidence and self-efficacy with handling crisis situations. The Triage Assessment Model (Myer, 2001), which is a crisis assessment tool focusing on the affective, behavioral and cognitive domains affected during a crisis, would provide the proactive crisis training needed for staff to provide effective and efficient RTF treatment.

#### Statement of Problem

Residential treatment facilities provide treatment for children and adolescents with severe impairments in cognitive, emotional and behavioral functioning. Many of the clients residing in residential treatment facilities lack communication skills, social skills, problem solving skills and the ability to view problems or issues from another perspective (Journal of the American Academy of Child and Adolescent Psychiatry, February 2002). The mental health issues that clients experience can become exacerbated by over-sensitivity to subtle changes within the milieu and treatment. As a result, severe verbal and physical aggressive tendencies are common forms of behaviors displayed by clients. These behaviors can be directed internally, resulting in self-injurious behaviors, or externally resulting in aggression toward peers and staff (Mohr, Mahon & Noone, 1998).

The task of providing a consistent, stable and safe environment for these challenged individuals rests with the RTF staff. Whereas some of members of the RTF staff are formally trained to deal with such types of behaviors, the direct care staff, who spend the most time with the residents, are not formally trained in dealing with mental health issues. Therefore, the people most likely to initially intervene in a crisis in the RTF are the people with the least amount of knowledge and experience dealing with mental

health issues and especially crisis situations. With a lack of understanding about crisis situations and crisis interventions, self-efficacy levels are likely to be low amongst the staff. Most likely, the staff members' low self-efficacy will negatively impact the staff members' confidence to choose appropriate types of interventions for the crisis situation.

Therefore, training the staff in the Triage Assessment Model (TAM), will not only provide the staff with the tools to accurately measure the severity of the crisis situation but also will help the staff to identify where to focus treatment with the client during the crisis intervention. The Triage Assessment Model (TAM) is a crisis assessment instrument designed by Myer, Williams, Ottens, & Schmidt in 1992. The TAM was designed for use by anyone providing crisis intervention services and is applicable to any age group (Myer, Willow, & Peterson, 2002). According to Myer (2001), the TAM was developed to help guide the crisis assessment process by providing guidelines and organization to the intervention process. The model theorizes that individuals' reactions to crisis events can be assessed using three dimensions: affective (emotional), cognitive (thinking), and behavioral (actions). The assessment of the three dimensions helps the service provider to adapt the intervention process to the client's immediate needs (Myer, et al., 2002). A copy of the Triage Assessment Model can be found in Appendix A.

#### Purpose of the Study

The purpose of this study was to examine the impact of training residential treatment facility staff in the Triage Assessment Model for crisis intervention on their self-efficacy to intervene in crisis situations. Specifically, this study assessed residential treatment facility staff members' self-efficacy level, post training, to determine changes

in their beliefs to effectively assess crises. In addition, differences between the level of staffs' formal education and self-efficacy level were compared.

### Research Questions

Three research questions emerge that will be investigated by this research.

1. What are the differences in the post-test self-efficacy levels of residential treatment facility staff dealing with crises, who are in the treatment vs. the control group?
2. What are the differences in the post-test self-efficacy levels of residential treatment facility staff dealing with crises, who have bachelor vs. graduate education degrees?
3. What is the interaction effect between the education degrees in number of years of experience, age, or gender?

### Significance

This research is significant because residential treatment facilities need to provide a consistent, stable and therapeutic environment for the children and adolescents healthy development. While being supervised and supported 24 hours a day, 7 days a week by trained professions, the child and adolescents' crisis experience can provide prime opportunities for learning and growth. Although a crisis may be viewed in various ways, most definitions emphasize that it can be a turning point in a person's life (Roberts, 2000). This turning point will most likely end negatively if the proper support and interventions are not provided by the mental health staff.

Without the proper training in crisis assessment, staff are at a disadvantage when intervening in crisis situations. Crises involve a significant amount of chaos, which requires that the staff have a proactive approach to intervene appropriately. Quick and decisive decisions need to be made during crisis situations and without the proper knowledge and crisis skills, the crisis situation could be further exacerbated. With a lack of knowledge and skills, staffs' self-efficacy levels will mostly be low, resulting in indecisiveness and inability to effectively manage the crisis situation. Training the staff in the utilization of the Triage Assessment Model, provides the staff with an increased awareness of the affective, behavioral and cognitive domains effected during a crisis. This training would increase the staffs' preparedness in dealing with crisis situations. As a result, appropriate treatment interventions will be utilized that focus on the true issues precipitating the crisis.

#### Limitations

Within any study, two types of limitations exist that could possibly skew data, delimitations and limitations (Rudestam & Newton, 2001). Delimitations are limitations imposed on the research design by the researcher. Limitations are restrictions in the study over which the researcher has no control. In this study, both types of limitations need to be taken into consideration when designing and assessing the research.

In regard to delimitations (Ruderstam & Newton, 2001), this study restricts the findings to the population of residential treatment facility staff. Furthermore, the utilization of hypothetical scenarios during the training format limits the researcher's ability to accurately asses how the individuals will handle a real residential treatment

facility crisis within the moment. The use of hypothetical scenarios allows the target population to disregard a sense of urgency and pressure that accompanies crisis situations but may not be present during the training format.

The limitations that warrant the most attention during this study are personological effects, experimental effects, interaction between time of measurement and treatment effect (Houser, 1998) and the Hawthorne effect (Shaughnessy & Zechmeister, 1997). A personological effect defines the interaction between personal variables of the participants and the treatment (Houser, 1998). In this study, the backgrounds of the participants vary in education, training, work and life experiences. As a result, these variables could contribute to the research findings.

The interaction between time of measurement and treatment effect defines the occurrence of the treatment being greatest just after the intervention is implemented, whereas, the long term effect is unclear. Since the post test methodology of this study occurs within the same day, the result is the inability to determine if the training will have a lasting effect on the staffs' confidence level to handle future crises.

The Hawthorne effect refers to the research population changing their behaviors or performing differently on a task due to being assessed by the researcher or other significant authority figures (Shaughnessy & Zechmeister, 1997). The idea is that the individuals want to be viewed favorably by the observing party. In this research study, staff may feel the need to thoroughly invest themselves in the training due to future expectations of them having to handle crisis situations more effectively and being evaluated based on their work performance due to having had advanced crisis training.

## Definitions

1. Residential Treatment Facility (RTF) – A mental health agency, governed by state and federal laws, which provides children and adolescents with individual, group and family counseling.
2. RTF Staff – All the members of the treatment team that work at the residential treatment facility. Treatment team members consist of: psychiatrists, psychologists, counselors, social workers, nurses, case managers and direct care staff.
3. Direct Care Staff – Members of the treatment team, who have graduate level education or less. These individuals must be at least eighteen years of age and are the members of the treatment team who spend the most time with the clients.
4. Crisis – A perception or experience of an event or situation as an intolerable difficulty that exceeds the person's current resources and coping mechanisms (James & Gilliland, 2005).
5. Restraint – The involuntary immobilization of a person through the use of chemical, physical, or mechanical means (Journal of American Academy of Child and Adolescent Psychiatry, February 2002).
6. Seclusion – The involuntary confinement of a person in a room alone so that the person is physically prevented from leaving (Journal of American Academy of Child and Adolescent Psychiatry, February 2002).
7. Self-Efficacy – Refers to beliefs in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands (Wood & Bandura, 1989).

8. Triage Assessment Model – A multidimensional crisis assessment tool, which conceptualizes the human impact of crisis reactions across three domains: affective, cognitive and behavioral (Myer, 2001; Myer, Williams, Ottens & Schmidt, 1992).
9. Bachelor-For the purpose of this study, bachelor refers to any individual who has up to a four year degree from a university or college.
10. Post Graduate-Refers to an individual who has graduated from a university or college with a master's degree.

### Summary

This chapter included an introduction into the dynamics affecting residential treatment facility treatment for adolescents in crisis. The overuse of passive physical restraints and seclusion for the treatment of adolescent crises results in ineffective treatment and unsafe means of crisis intervention not only for the clients, but for the staff as well. Contributing to this complex and volatile situation is the staffs' lack of mental health knowledge due to limited education, work experience and low self-efficacy when handling crisis situations. The need to train RTF staff in the Triage Assessment Model was argued as an effective means to proactively handle this dilemma.

This chapter also included the statement of the problem, purpose of the study and research questions that could provide further support for RTF staff to be crisis trained in the Triage Assessment Model. The significance of the study was addressed in terms of the impact that this type of training could have on staffs' crisis intervention skills and overall treatment provided for the clients. Furthermore, the safety of both the clients and staff were considered with regard to significance. Finally, the limitations of the study

were reviewed and the definitions of obscure terminology were defined. A more thorough literature review of crisis intervention, RTF treatment and training in the Triage Assessment Model will be explored in chapter 2.

## CHAPTER II

### LITERATURE REVIEW

In this chapter, residential treatment facilities (RTFs) will be thoroughly explored in regard to the types of psychiatric symptomology and behaviors of clients treated at RTFs, as well as the overall impact that placement in RTFs has on the clients. A clarification of non-restrictive and restrictive interventions will be explored, with attention focused on the harmful and negative effects of restraints. A review of research literature will be presented demonstrating that factors such as staff demographics, experience and training history effect the staffs' overall choice of therapeutic interventions.

Following the review of RTFs, a clarification of crisis situations and definitions will be presented. The types of factors that lead to crisis and specifically, adolescent crisis will be addressed, as well as the result of the crisis on the individual. The need for training staff in crisis assessment and intervention will be explored as a way to diffuse the RTF clients' crisis and increase the therapeutic value of residential treatment facility services. The staffs' self efficacy in regard to handling crisis situations will be addressed. Also, a review of the self-efficacy research will be provided and support for the benefits of increasing the RTF staffs' self-efficacy to handle crisis will be provided too.

#### Residential Treatment Facilities

Residential treatment facilities (RTFs) are the second most restrictive form of care, next to inpatient hospitalization, for children and adolescents with severe mental disorders (U.S. Department of Health and Human Services, 1999). The therapeutic

environment of RTFs varies from highly structured ones, resembling psychiatric hospitals, to those that are less structured, such as group homes or halfway houses (U.S. Department of Health and Human Services, 1999). Usually these types of settings are seen as a last resort for clients who have not been successful in other less restrictive treatment environments (Durrant, 1993). Residential treatment facilities provide 24-hour therapeutic care, with treatment options ranging from psychoanalytic, psychoeducational, behavioral management, group therapies, and medication management (U.S. Department of Health and Human Services, 1999). Durrant (1993) further acknowledged the day-to-day programming, discipline, leisure activities, household tasks, visits and other therapies as integral parts of the treatment spectrum that impact the overall effectiveness of the therapeutic care. The treatments target the clients' severe impairments in cognitive, emotional, and behavioral functioning.

Typically, the clients range between 5 and 17 years of age (Stelzer & Elliott, 1990). The length of stay for clients varies from 1 month to 1 year depending on the severity of their treatment issues (U.S. Department of Health and Human Services, 1999). Usually the clients are dealing with issues of impairment in regard to family, school, community, or the overall adjustment to difficult periods of normal child and adolescent development (Durrant, 1993). Impairment issues or changes provide potentially stressful situations on a daily basis for the clients. These changes and stressors have a cumulative effect and make coping more difficult for the clients (Forman, 1993). As Forman (1993) noted, the overall level of psychiatric symptomatology has been related to life stress as well as specific psychological problems. At times of stress, clients in RTFs tend to

underestimate the level of their own aggressiveness and choose inappropriate behaviors as responses to challenging or difficult situations (Mohr, Mahon, & Noone, 1998). The client's inability to deal with stressful situations manifests itself through behaviors such as temper tantrums, shouting, throwing objects, defiance, threatening behaviors, verbal/physical aggressiveness and other oppositional behaviors (Durrant, 1993). Therefore, RTF clients are typically highly disturbed, volatile, vulnerable, disruptive, and violent (Mohr et al., 1998).

Mental health diagnoses that result in the clients experiencing crises in the forms of suicidal ideology, psychotic symptomology, aggressive tendencies and otherwise abnormal behaviors are common occurrences in RTFs (Stelzer & Elliott, 1990). Clients with psychopathology are often easily angered, slow to trust, utilize self-protective measures, become aggressive and may attack without provocation (Mohr et al., 1998). As a result, these frequently occurring aggressive and threatening behaviors have become recognized as significant problems in psychiatric settings (Morrison, 1998). Further exacerbating the already existing psychopathology and mental health issues that clients have when admitted is the negative impact on the clients' self-esteem and self-concept that can occur from reinforced views of failure and the need for out of home placement in RTFs (Durrant, 1993). As a result, institutionalization can be a traumatic event that involves an intrusion into normal development, and can be interrupted by the client as an assault on personal autonomy and self-direction (Mohr et al., 1998). Jambunathan & Bellaire (1996) noted that after institutionalization, clients usually become more agitated, uncooperative and potentially even more violent.

Although the RTF clients' negative behaviors can be self-injurious at times and even directed at peers, research indicates that the majority of conflict and violent behaviors occur during interactions with staff (Fisher & Kane, 1998). Therefore, safety becomes a primary concern for clients and staff members. Providing a safe RTF environment, while still facilitating overall effective treatment, requires finding the proper balance between using restrictive, overtly controlling interventions and more open, egalitarian methods (Canatsey & Roper, 1997).

#### Non-Restrictive Interventions versus Restrictive Interventions

RTF staff need to have knowledge of different levels of interventions to appropriately handle the clients' inappropriate behaviors (Durrant, 1993; U.S. Department of Health and Human Services, 1999; AACAP, 2002). Different levels of interventions utilized in RTF settings have been identified as nonrestrictive, restrictive and highly restrictive (AACAP, 2000). Techniques such as verbal prompting, modeling and role-playing would be considered nonrestrictive interventions, while techniques such as planned ignoring, time-outs and journaling would be considered restrictive (AACAP, 2002). While most researchers and mental health practitioners would agree that the use of nonrestrictive and restrictive measures are effective when appropriately utilize, highly restrictive interventions such as physical restraints or seclusion are a great source of debate with regard to their effectiveness (Murray & Sefchik, 1992; Canatsey et al., 1997; AACAP, 2002; and Nunno et al., 2003 ).

The argument against the use of highly restrictive measures in RTFs has gained attention the past several years due to complaints regarding injuries received by clients

while passive physical restraints were used (Jones & Timbers, 2003). Cuts, bruises, scrapes and carpet burns are minor injuries that occur during restraints; however, major injuries such as broken bones and even death have occurred from improperly applied restraints (Murray et al., 1992; Mullen, 2000; and Jones et al., 2003). Although restraints and seclusion are necessary interventions that are moderately successful at times in helping staff manage an immediate crisis (Murray et al., 1992; Canatsey et al, 1997; and Visalli et al., 1997), they appear to be less successful as educational tools for clients learning to manage their own behaviors.

Murray et al (1992) noted, restraints have no instructive value in teaching appropriate behavior and may promote an undesirable, implicit message that the use of force is an appropriate way to deal with conflict. Not only could this implicit message be confused by the clients, who are searching for appropriate coping strategies to deal with their mental health needs (Murray et al., 1992; Mohr et al., 1998), but the overall value of staff's genuineness, trustworthiness and role-modeling could be negatively impacted too (Canatsey et al, 1997; Bandura, 1997). In their research on the use of restraints, Mohr et al. (1998) noted that there was a remarkable lack of understanding by the clients about why restraints were implemented, or how they were supposed to be helpful. Furthermore, Canatsey et al. (1997) noted that the use of restrictive interventions tend to widen the gulf between staff and clients, creating an "us versus them" mentality.

Staff demographics, attitudes, client behaviors and diagnosis, client population, type of mental health setting, organizational mission and policies, as well as, administrative philosophies are factors that contribute to the use and overall impact that

restraints have on the individuals involved (Williams & Myers, 2001). As a result of these factors, restraints can have both personal and environmental effects (Mohr et al., 1998). Clients who experience restraints or witness peers being restrained are impacted in some negative or positive way. The theory of vicarious trauma (Trippany, Kress & Wilcoxon, 2004; Wiger et al., 2003; Bell, Kulkarni, & Dalton, 2003) suggests that clients and staff alike are affected in some manner by witnessing the restraints. The magnitude of the restraint affects all who were involved, physically and psychologically (Mohr et al., 1998). In order to decrease the physical and psychological effects of restraints on clients, the passage of the Children's Health Act of 2000 established national standards regarding the use of physical restraint with children in psychiatric facilities (Ryan & Peterson, 2004). The Children's Health Act of 2000, which legally requires each state to regulate the use of various child management interventions in facilities, specifically requires staff to acquire training and certification in the administration of physical restraints (Jones et al., 2003). Recent data suggests that these trainings result in a reduction of critical incidents and significantly reduce the use of physical restraints (Nunno, et al., 2003).

#### The Need for Staff Trainings

Although research continues to demonstrate promise for these types of staff trainings (Jones et al., 2003; Nunno et al., 2003), the focus of the trainings continue to be on external means of management. Focusing on external means of management, such as physical restraints, will only result in short term treatment effects, especially when the external means of management are removed (Glassman, 2000). While it may be argued that the purpose of restraints are for emergency circumstances only, designed to ensure

the immediate physical safety of the resident, staff, or others, when less restrictive interventions have been ineffective (Jones et al., 2003); treatment should be aimed at enabling the clients to develop internal controls, so that the desirable behaviors will occur in the absence of behavioral therapy (Murray et al., 1992). Staff need to be aware that restraints have limitations in helping youth gain long term control of their behaviors (Murray et al., 1992).

Although restraints are widely used procedures, often implemented for prevention of violence, self-injurious behaviors, injury, and property damage (Ryan & Peterson, 2004), the general consensus among child welfare practitioners is that restraints are not therapeutic (Murray et al., 1992). Unfortunately, the youth being admitted into care are reported to exhibit such violent and severe behaviors with enough frequency to warrant the need to train staff in physical interventions (Mullen, 2000). The utilization of restraints is legitimate only when clients engage in behavior that may bring harm to self or others (Mullen, 2000). Herein lies a major problem. Without appropriate training, the chance for staff to inappropriately apply or misuse restraints for unwarranted situations is increased. As Delaney (1999) noted, inexperienced staff might process acute behavioral situations inappropriately. It takes experience and training to tune into the nuances of a situation and gain the insight required to balance our emotions or counter-aggressive tendencies (Delaney, 1999; Mullen, 2000). Without adequate training and programming, staff risk reinforcing violence with counter-violence through the use of restraints (Nunno et al., 2003).

When staff has alternative ways of handling clients' aggressive behavior, the occasions for the use of restrictive procedures are minimized (Murray et al., 1992). Implicitly, Murray et al. (1992) seem to have acknowledged the need to educate staff in the application of different treatment modalities in order to better serve the clients. Inadequately educated staff, who are without the skills or knowledge to understand or assess the dynamics underlying a child's provocative or violent behavior, may retreat into authoritarian or restrictive styles of management (Mohr et al., 1998). The ability of staff to provide specific interventions depend on the staffs' knowledge and assessment of client behavior, length of time that staff have interacted with clients and the types of clients that are being treated (Jambunathan et al., 1996). Research has demonstrated that if staff are inexperienced, restraints may be chosen rather than other less restrictive interventions (Williams & Myers, 2001).

### Crisis

The prevalence of crisis and crisis intervention during the past two decades has been estimated at over 30 million crisis episodes annually (Roberts, 1996). Crisis intervention has become the most widely used form of brief treatment used by behavioral clinicians, counselors, psychiatric nurses, psychologists, social workers, and other mental health professionals worldwide (Roberts, 2000). Incidents such as floods, tornadoes, fires, hurricanes, financial loss, airline disasters and more recently the war in Iraq have been synonymous with the term crisis and crisis response. Although the media and communities have tended to link large-scale external events that overwhelm our resources as the epitome of crises, these incidents do not encapsulate nor define crisis.

Furthermore, large-scale disasters or events do not necessarily warrant crisis intervention for all individuals involved.

In the past, it was more acceptable to define crises as external events that overwhelm an individual (Jerry, 1998); however, the problem that arises from this concept is that many individuals will assign an external locus of control to crisis situations. The external events concept and external locus of control theory allows people to continue assuming that a crisis is always an unexpected, traumatic and negative event (Wiger & Harowski, 2003). While crisis episodes may be preceded by one or more stressful, hazardous, and/or traumatic events, not all stressed or traumatized individuals move into a crisis state (Lewis & Roberts, 2001). Essentially, conceptualizing crisis in this manner allows individuals to misperceive crisis as just an event or situation (Wiger & Harowski, 2003). When crises are conceptualized as unexpected large-scale events or situations outside of our control, the result is under-diagnosed crisis situations. As Wiger & Harowski (2003) suggested, crises can be predictable and expected, which implicitly implies that crises can occur on a daily basis as a result other than traumatic and negative events. Whereas these large-scale disasters or events can be quite tragic, problematic and may precipitate a crisis event, small-scale events can result in crises too.

Small-scale events, such as troubled personal relationships, loss of jobs, bills, life transitions, deaths, and terminal illnesses, are everyday life occurrences, which can result in crisis. These small-scale events can result in the same kind of emotions and sense of imbalances that are experienced from large-scale events. Intensely stressful life events can stretch a person's sense of well-being and equilibrium, thereby precipitating a crisis

(Roberts, 2002). There is an innate human nature in individuals to maintain homeostasis and when events occur that disrupt one's natural sense of balance, emotions arise, coping strategies and defense mechanisms are deployed and resources are tapped. When individuals have difficulty emotionally handling the distressing events and coping strategies fail, the disequilibrium will result in escalation (Wiger & Harowski, 2003). As stress and tension mounts in a person's life to unusual proportions and the individual's coping skills become increasingly ineffective, the potential for crisis arises (Greenstone & Leviton, 2002).

Everyday thousands of individuals quickly escalate into crisis states (Lewis & Roberts, 2001) as a result of these large and small-scale events. Robert's (2001) statement warrants attention for the likelihood that individuals will be faced with a crisis not as a possibility but as a reality. Furthermore, Myer (2001) noted that everyone will experience a crisis sometime in his/her life. Since individuals respond differently to these large and small-scale crisis events (Web, 1999), accurate assessment of an individuals' crisis requires some definitive way of identifying the individuals' crisis in the first place. James & Gilliland (2005) appeared to have accomplished this feat by identifying crisis as a perception or experiencing of an event or situation as an intolerable difficulty that exceeds the person's current resources and coping mechanisms. This definition allows both large and small-scale events to be interpreted as crisis for individuals; however, the external events themselves do not define the crisis, but instead the individuals' internal responses and reactions to the event do.

Among children and adolescents, crises take many forms and their impact can vary greatly among the individuals (O'Halloran & Copeland, 2000). Stressors such as puberty, new experiences, increased responsibilities, future-oriented plans/goals, educational disability, illness, divorce, death of a loved one and violence are all events that increase the child and adolescent's vulnerability to crises (O'Halloran & Copeland, 2000). The child and adolescent's inability to predict and control life events is discomfoting for him/her and it leads to feeling of helplessness, stress and invariably results in crisis (Long, Wood, & Fecser, 2001). Although individual stressors may be tolerated, the accumulation of multiple stressors may be too much disequilibrium with which to cope (Wiger & Harowski, 2003). Therefore, one should be able to assume that there is a greater predisposition to crises if the child and adolescent are experiencing mental health problems simultaneously with the onset of these large and small-scale events. As Wiger & Harowski (2003) noted, people with mental illness often live in a state of crisis due to their mental illness.

Divinyi (1997) noted that mental health issues have a significant impact on the children and adolescents' emotional, psychological and behavioral functioning. As a result of the impairment in functioning, children and adolescents' perceptions of events are often shortsighted or distorted; therefore, they frequently fail to understand how their behavior upsets others and their feelings take over their rational minds (Long, Wood, & Fecser, 2001). As Wiger & Harowski (2003) noted, a person is most vulnerable to a crisis when experiencing an imbalance of emotions and thoughts. As a result of this imbalance, it is not uncommon for children and adolescents with severe mental health issues to

experience crises in the forms of suicidal ideology, psychotic symptomology, aggressive tendencies and otherwise abnormal behavior (Stelzer & Elliott).

Children and adolescents, who reside in RTFs, experience these forms of crises on a daily basis due to their mental health issues. As a result of these behaviors, throughout the history of psychiatric settings, the use of restraints has been a primary means of crisis intervention (Visalli, McNasser, Johnstone, & Lazzaro, 1997). However, restraints have no instructive value in teaching appropriate behavior (Murray et al., 1992). While the restrictive measures of restraints are moderately successful in helping staff manage an immediate crisis (Visalli et al, 1997), they are still external means to internal problems. With crisis defined as perceptions of external events rather than by the external events themselves (James & Gilliland, 2005), residential treatment facility staff would be remiss if they did not utilize other forms of crisis intervention to target the specific issues that clients are struggling with. Although a child in crisis may physically be safe through the use of restraints (Nunno et al, 2003, Visalli et al, 1997; Murray et al., 1992), psychologically the child is still vulnerable to impact of the crisis. As Webb (1999) noted, unless the person obtains relief, the crisis has the potential to cause severe affective, cognitive and behavioral malfunctioning.

To lessen the impact of a crisis and decrease the reactive use of restraints as a primary means of crisis intervention, residential treatment facility staff need more thorough crisis trainings. Empirical studies have demonstrated that when staff are trained in other methods of crisis intervention, restraints are used less frequently and fewer clients and staff are injured (Murray et al., 1992). Even if it is impossible to prevent all

crises, their damage and the time required to recover from them can be minimized and shortened immensely (Mitroff, 2001). To accomplish lessening the impact of crises, residential treatment facility staff need to utilize proactive measures that begin first with understanding the development of a crisis situation.

Crisis is the result of stress mounting and usual coping mechanism failing to provide relief (Greenstone & Leviton, 2002). Explicitly, Greenstone & Leviton (2002) noted that stress has to mount or in other words accumulate. The notion of accumulation implicitly implies that crisis happens over time. Therefore, it is logical to assume that a crisis could be addressed or crisis intervention performed prior to the crisis escalating. As Mitroff (2001) noted, far in advance of their actual occurrence, all crises send out a trail of early warning signals. Precipitating events or signs occur before a crisis escalates (Kanel, 2003). In children and adolescence, regressive behaviors, sleep disturbances, night terrors, loss of or increase in appetite, immobility, rebelliousness, physical problems and common fears or anxieties are general indicators that a crisis could be occurring (Greenstone & Leviton, 2002). Specifically, children and adolescents in RTFs tend to display temper tantrums, aggression, property destruction, elopement, psychosomatic symptoms, withdrawal, isolation and even suicidal ideation when experiencing a crisis (Nunno et al., 2003; Greenstone & Leviton, 2002; Durrant, 1993; Murray et al., 1992). If these signals or signs can be noticed and acted upon prior to the occurrence of a crisis, then a crisis can be prevented (Mitroff, 2001). The staffs' ability to detect these signals or signs relies upon their crisis assessment skills.

All crisis intervention and trauma treatment specialists are in agreement that crisis assessment is an important and necessary skill that needs to occur before staff can intervene in a crisis situation (Roberts, 2002). Crisis assessment is the first step in crisis intervention (Lewis & Roberts, 2001), and it is often considered the most important aspect of crisis intervention (Wiger & Harowski, 2003). In actual practice, however, crisis situations almost never lend themselves to a methodical, thorough data collection (Webb, 1999). The information obtained during a crisis assessment is not comprehensive (Wiger & Harowski, 2003). Often crisis workers must quickly evaluate clients' reactions and initiate treatment, sometimes having only minutes to do so (Myer, 2001). The crisis worker generally does not have time to even gather or analyze all the background and other assessment data that might be available under normal conditions (Webb, 1999). Crisis assessment is an ongoing process that requires the crisis worker to reevaluate the client every so often in order to determine the clients' stability and current treatment needs (Roberts, 2000).

Unfortunately, most professionals learn the needed skills through a trial-and-error method while helping a client through a crisis situation (Myer, 2001). As a result, uninformed staff can contribute to and escalate the crisis situation thereby producing a non-therapeutic environment (Mohr et al., 1997). Staff members with inadequate knowledge of crisis situations and limited intervention skills, will become alarmed, angry and fearful when challenged by an unfamiliar or chaotic situations (Mohr et al, 1998). A sense of discomfort may make the staff become overly directive and controlling, driving the direction of the interactions while building a power-imbalance between client and

staff (Mead & Hilton, 2003). As Canatsey & Roper (1997) noted, a client's psychotic symptoms can cause others to react with fear and annoyance, propelling the staff member to utilize coerce or controlling measures to manage the situation. As a result, the staff will utilize restraints to control exacerbated crisis situations, placing the client in the victim role and fostering a corrosive atmosphere of patient-caregiver mistrust and alienation (Canatsey & Roper, 1997). Studies in the *Journal of American Child & Adolescent Psychiatry* (2002) and Mohr et al. (1998) further support that restraint experiences can be perceived by the clients as aversive and coercive experiences. There is a remarkable lack of understanding by clients about why a restraint was implemented or how it was suppose to be helpful (Mohr et al., 1998).

Although, mental health professionals are typically trained to help clients with the symptoms and impairments of their mental illness, they receive less training in helping them during times of crisis when behaviors are exacerbated (Wiger & Harowski, 2003). Whether the client comes out of the crisis state productively or unproductively depends on how he or she deals with crisis (Kanal, 2003) and processes the crisis afterwards (Long, Wood & Fecser, 2001). Kanal (2003) and Long et al. (2001) noted that addressing the crisis during and after it has already begun is more of a reactive attempt at problem solving the issue. As a result, the client is affected by the crisis to some degree before an intervention is started. As Mead & Hilton (2003) found, proactive attempts to crisis intervention are the best approaches in all circumstances. If the staff are able to de-escalate a crisis before it becomes exacerbated, there is a less likelihood of a negative impact on the client. Experts in the field of crisis are in agreement that the estimated

length of time that a person is exposed to a crisis impacts the overall affect that the crisis can have on the individual (James & Gilliland 2005; Roberts, 2002; Myer, 2001).

Therefore, the staffs' ability to recognize the signals of a pending crisis and assess the severity of the situation is a crucial factor in the crisis intervention process. As Wiger & Harowski (2003) noted, an incorrect assessment could lead to an inaccurate level of treatment, misdiagnosis, or an inadequate understanding of the nature of the crisis.

### Self-Efficacy

Self-efficacy is a construct derived from social cognitive theory, a theory positing a triadic reciprocal causation model in which behavior, cognitions, and the environment all influence each other in a dynamic fashion (Gist & Mitchell, 1992). According to social cognitive theory, individuals possess a self-system that enables them to exercise a measure of control over their thoughts, feelings, motivation, and actions (Pajares, 1977). This self-system is the result of self-regulatory function that occurs due to the interplay between one's behavior, cognitions, and environment. Simply put, how people interpret the results of their own performance attainments informs and alters their environments and their self-beliefs; which in turn, inform and alter subsequent performances (Pajares, 1977).

Self-efficacy concerns individuals' beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives or produce given goal attainments (Wood & Bandura, 1989; Bandura, 1997). As individuals engage in a behavior, they interpret the results of the actions, use these interpretations to create and develop beliefs about their capability to

engage in subsequent behaviors in similar domains, and behave in concert with the beliefs created (Pajares, 1977). The beliefs created result in the development of an individual's self efficacy. Specifically, self-efficacy develops from a cyclical association whereby, the reciprocal relationship between an individual's behavior, cognitions, and environment interact with an individual's experiences and feedback to produce a sense of individual confidence in one's ability to perform a specific task (Gist et al., 1992; Bandura, 1977). The individual's level of self-efficacy that results after a successful or failed performance then in turn affects the individual's self beliefs about future performances on other tasks (Gist, 1987). Therefore, self-efficacy is a powerful determinant of an individual's overall approach to endeavors encountered throughout life.

Bandura (1997) noted that people's beliefs in their efficacy influence the courses of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, and the level of accomplishments they realize. Therefore, self-efficacy could be considered a strong predictor of an individual's ability to be successful in different situations. Research has demonstrated that self-efficacy correlates positively with performance (Gist, 1989). One could infer from Gist's (1989) statement that by altering an individual's self-efficacy through some type of training regimen that ultimately the outcome of the individual's work performance could be improved. Neck, Neck, Manz & Godwin (1999) noted, if given the proper consideration in the training design, the construct of self-efficacy has the potential to yield positive outcomes in the individuals work performance.

Research has demonstrated that self-efficacy is not a fixed entity (Gist, Stevens, & Bavetta, 1991; Bandura et al., 1989; Gist, 1987); therefore, the notion that self-efficacy can change through training becomes more self-evident. This notion provides tremendous support and value for employee training. Within the residential treatment facility context, trainings focusing on improving staffs' self-efficacy with handling crisis situations could improve the overall treatment that is provided to the clients. Many childcare workers have not necessarily specialized in working with disturbed youth and very few enter the field having relevant work experience; therefore, training is needed (Pazaratz, 2000). Through enactive mastery, vicarious experience, verbal persuasion and emotional arousal (Bandura, 1997; Wood et al., 1989; Gist, 1987), a staff member's self-efficacy could be influenced.

Enactive mastery defined as repeated performance accomplishments (Bandura, 1982), has been shown to enhance self-efficacy more than any other influence (Gist, 1987). Enactive mastery experiences are the most influential source of efficacy information because they provide the most authentic evidence of whether one can muster whatever it takes to succeed (Bandura, 1997). Simply put, individuals gauge the effects of their actions, and their interpretations of these effects help create their efficacy beliefs (Pajare, 1977). Mastery is facilitated when gradual accomplishments build the skills, coping abilities, and exposure needed for task performance (Gist, 1987).

Performance successes generally raise beliefs of personal efficacy, whereas, repeated performance failures lower them (Bandura, 1997). Although a person may assess the task demands, the environmental constraints and support, personal attributes

and feelings when forming self-efficacy beliefs; individuals normally refer to previous performance levels as reference points when determining their self-efficacy (Gist & Mitchell, 1992). Also, other factors such as situational impediments, assistance provided by others, the adequacy of the resources or equipment available, and the circumstances under which an activity is performed impacts whether strong or weak self-efficacy beliefs are developed (Bandura, 1997). Individuals, who have experienced past mastery, are more likely to feel efficacious when faced with other situations (Gist, 1987). Therefore, the more beliefs of personal efficacy are increased by means of mastery experiences, the better individuals will perform (Bandura, 1997). Overall, mastery experiences provide individuals with the opportunity to gain self-assurance and proficiency in using or developing their knowledge and skills to produce goal attainments (Bandura, 1997).

However, if knowledge and skills could be acquired only through direct experience, the process of human development would be greatly hindered (Wood et al., 1989). Fortunately people can expand their knowledge and skills on the basis of information conveyed by modeling influences (Wood et al., 1989). Modeling serves as another effective tool for promoting a sense of personal efficacy (Bandura, 1997). This source of information is weaker than the interpreted results of mastery experiences, but when people are uncertain about their own abilities or have limited prior experience, they become more sensitive to vicarious experiences (Pajares, 1977). Vicarious experiences are the effects on person A resulting from the actions of person B, whereby, through social comparisons person A appraises his/her capabilities in relation to the attainments of person B (Bandura, 1997; Pajares, 1977). Through social comparative inferences, the

attainments of others who are similar to oneself are judged to be diagnostic of one's own capabilities (Bandura, 1997). The greater the assumed similarity, the more persuasive are the models' successes and failures (Bandura, 1997).

Modeling is more effective when the models succeed after overcoming difficulty than when they exhibit initially facile performance (Bandura, Adams, Hardy, & Howells, 1980 cited in Gist 1987). Seeing others perform activities without adverse consequences can generate expectations in observers that they too will improve if they intensify and persist in their efforts (Bandura, 1977). However, observers are also discouraged from pursuing behaviors that they have seen often result in adverse consequences (Wood et al., 1989). Therefore, through modeling, self-efficacy is an important motivational construct (Gist, 1992).

Modeling influences do much more than simply provide a social standard against which to appraise personal capabilities (Bandura, 1997). By their behavior and expressed ways of thinking, competent models transmit knowledge and teach observers effective skill and strategies for managing environmental demands (Bandura, 1986a, in Bandura 1997). Effective modeling teaches people general rules and strategies for dealing with different situations, rather than specific responses (Wood et al., 1989).

Social persuasion serves as a further means of strengthening people's beliefs that they possess the capabilities to achieve what they seek (Bandura, 1997). Through suggestion or verbal persuasion, people are led into believing they can cope successfully with what has overwhelmed them in the past (Bandura, 1977). By receiving realistic encouragements, people are more likely to exert greater effort, sustain the effort and as

result have a better chance of becoming successful than if they are troubled by self-doubts and dwell on personal deficiencies (Bandura, 1997; Wood et al., 1989). The crux of verbal persuasion is to convince a person of his or her capability of performing a task (Gist, 1987). However, although verbal persuasion is believed to influence efficacy perceptions in some situations, it is viewed as less effective than enactive master or modeling (Bandura, 1982 in Gist 1987).

Since persuasions involve exposure to the verbal judgments that others provide (Pajares, 1977), certain factors are important to consider when measuring the impact of the verbal persuasions on an individual. Persuatory efficacy appraisals have to be weighted in terms of who the persuaders are, their credibility, and how knowledgeable they are about the nature of the activities (Bandura, 1997). Successful motivators and efficacy builders do more than convey positive appraisals; they assign tasks to individuals in ways that bring success and avoid placing individuals prematurely in situations in which they are likely to fail (Wood et al., 1989). Attempts to raise personal competence through persuasion without arranging conditions to facilitate effective performance will most likely lead to failures that discredit the persuaders and further undermine the recipients' perceived self-efficacy (Bandura, 1977). Furthermore, skepticism develops from personal experiences that often run counter to what one has been told; therefore, the impact of social appraisals vary in how discrepant they are from people's own beliefs about their capabilities (Bandura, 1997). Just as positive persuasions may work to encourage and empower, negative persuasions can work to defeat and weaken self-beliefs (Pajares, 1977).

When assessing capabilities, individuals also rely on their physiological states and emotional arousal as indicators of potential success or failure (Bandura, 1997; Wood et al., 1989; Gist, 1987). Physiological states such as anxiety, stress, arousal, fatigue, and mood states provide information about one's efficacy beliefs (Pajares, 1977). Since high arousal can debilitate performance, people are more inclined to expect success when they are not beset by aversive arousal than if they are tense and viscerally agitated (Bandura, 1997). People read their emotional arousal and tension as signs of vulnerability to poor performance (Wood et al., 1989). Thus, an individual in an aroused state may interpret the arousal as debilitating fear and feel excessively vulnerable to failure (Gist, 1987). As the aroused state progresses, individuals conjuring up aversive thoughts about their ineptitude and stress reactions, which results in them elevating their levels of distress that produce the very dysfunctions they fear (Bandura, 1997). When people experience aversive thought and fears about their capability, those negative affective reactions can themselves further lower perceptions of capability and trigger the stress and agitation that help ensure an inadequate performance (Pajares, 1977).

Although an individual's strong emotional reactions to a task provide cues about the anticipated success or failure of the outcome (Pajares, 1977), people differ in their proneness to dwell on their somatic states and reactions (Bandura, 1997). Individuals also vary on whether they give more attention to internal or external factors that lead to their sensory experiences (Bandura, 1997). Since activities are often performed in environments full of ambiguity, identifying the cause of an individual's physiological reaction, whether internal or external, is of importance to the further development of a

person's self-efficacy (Bandura, 1997). Furthermore, the interpretation of the physiological state and personal meaning assigned to the situational factors influencing the individual's performance impacts one's self-efficacy. If an individual is unable to distinguish the reason for the emotional factors occurring prior or during a task, the mixed emotional arousal or residual arousal from a prior experience may be misassigned to a prominent element in the new situation and result in coping deficiencies (Bandura, 1997). Therefore, one's ability to diminish emotional arousal or decrease attention to personal triggers that lead to aroused states will result in increased performance or successful outcomes (Bandura, 1997; Bandura, 1977).

In forming their efficacy judgments, individuals have to weight and integrate efficacy information from the diverse sources of enactive mastery, vicarious experience, verbal persuasion and emotional arousal (Bandura, 1997). These sources vary in their informativeness and degree of interrelatedness (Bandura, 1997). Furthermore, to complicate matters, the impact that the sources of information will have on the individual depends on how the information is cognitively appraised (Bandura, 1977). However, the integration rules that people use in forming their efficacy judgments vary according to the individual's ability to self regulate and persuade oneself, focus on internal vs. external factors, attention to past successes or failures, feedback, perceived controllability and other situational/environmental factors (Bandura, 1997; Gist & Mitchell, 1992; Wood et al., 1989; Gist, 1987).

Understanding this process is important because human behavior is governed largely by perceptions of personal efficacy (Bandura & Wood, 1989). One's judgments of

personal efficacy affect one's choice of activities and environments (Wood et al., 1989). Also, self-efficacy beliefs influence the choices people make and the courses of action they pursue (Pajares, 1977). Furthermore, an individual's judgment of self-efficacy influences the initiation, intensity, and persistence of behavior (Paglis & Green, 2002). Researchers have noted that beliefs of personal competence help to determine how much effort people will expend on an activity, how long they persevere when confronting obstacles, and how resilient they will prove in the face of adverse situations (Wood et al., 1989; Pajares, 1977). When faced with difficulties, people who have self doubts about their capabilities slacken their efforts, abort their attempts prematurely, quickly settle for mediocre solutions (Wood et al., 1989), or they avoid the situations all together (Bandura, 1977). However, individuals tend to get involved in activities and behave assuredly when they judge themselves capable of handling situations that would otherwise be intimidating (Bandura, 1977).

## CHAPTER III

### METHOD

#### Purpose Statement

The purpose of this study was to examine the impact of training residential treatment facility staff in the Triage Assessment Model for crisis intervention on their self-efficacy to intervene in crisis situations. Specifically, this study assessed residential treatment facility staff members' self-efficacy level, post training, to determine changes in their beliefs to effectively assess crises. In addition, differences between the level of staffs' formal education and self-efficacy level were compared.

In this chapter, the methodology for the study is reviewed. First, details of the sample and target populations' impact on the ability to generalize the research results are explored. Second, the development of an instrument with a semantic differential design utilized to assess differences in self-efficacy levels of residential staff is addressed. Third, a thorough review of the one way, between-subjects experimental research design along with the procedures for implementing the design is reviewed. Finally, the statistical procedure used for the data analysis, an analysis of variance, is discussed.

#### Pilot Sample

Within this research study, a pilot study was conducted to assess the validity and reliability of scores of the Self-Efficacy Assessment Tool for Crisis (SEAT-C). The SEAT-C is an instrument created to assess the self-efficacy levels of the participants in the study. The target population for the pilot study was any mental health expert who had a Bachelor's Degree level of education and five or more years experience dealing with

crisis situations. Participants with five or more years of experience were selected to ensure that they would have past professional experiences with crises on which to base their clinical judgments.

The convenience sample selected consisted of 20 mental health experts from a psychiatric hospital located in a Mid-Atlantic state. The mental health experts had at least a Bachelor's Degree level of education and their mental health expertise varied according to their discipline and the total number of years that they have been in the mental health field. However, all of them had at least five years of mental health experience dealing with crisis situations post-graduation.

The second sample, a control group, for the pilot study consisted of 20 undergraduate students not studying a subject related to the mental health field from a university also located in the Mid-Atlantic state. The undergraduate students were a minimum age of 18 years old with no higher than an Associate's Degree level of education. None of the undergraduate students had any professional mental health work experience.

### Research Sample

Individuals typically think of a population as a well-defined set of people; however, technically a population is a set of observations (Heppner et al., 1999). Since it is highly unlikely that an entire population's observations about a certain topic could be captured from a single experiment, inferences about the population are made on the basis of samples selected from the population (LaFountain & Bartos, 2002; Heppner et al., 1999). The target population for this study consisted of any employee in a child and

adolescent residential treatment facility that provides crisis intervention for the clients. However, the accessible sample selected to represent this population were employees from a child and adolescent residential treatment facility located in the southwestern part of a Mid-Atlantic state. The sample of individuals consisted of a heterogeneous mixture of gender, age, experience and education levels.

The sample utilized in this study was a convenience sample. Although, utilizing a convenient sample reduces costs and the amount of effort in conducting a study, the potential for generalizing the results of the study back to the population is limited (Houser, 1998). Heppner et al. (1999) noted that studies utilizing a convenience sample can rationally be generalized to the larger population but difficulty in statistically proving the generalization occurs due to the possibility of homogeneous groups being selected. Therefore, it has been noted that a wide variety of individual characteristics of heterogeneous groups helps to increase the support for generalizing the results of a study (Heppner et al., 1999). Thus, the accessible sample selected for this study consisted of a heterogeneous mixture of individuals. Furthermore, to help account for some of the decreased ability to generalize the results due to convenience sampling, the number of participants selected for the study was increased from 40 to 79 participants. By increasing the number of participants, the probability that the sample is representative of the population was increased (Gravetter & Wallnau, 2004; Heppner et al., 1999).

The 79 participants for this study consisted of both males and females ages 18 years or older. The responsibilities of the participants varied according to their job titles which include: clinical administrator, director, clinical coordinator, master's level

clinician, case manager, and direct care staff. The clinicians and administrators' had a minimum of a bachelor's degree level of education and the direct care staffs' level of education varied from high school diplomas to bachelor degrees. All of the individuals in sample had at least 8 hours of training in Therapeutic Crisis Intervention (TCI). Built on crisis management, prevention and de-escalation theory, TCI curriculum teaches RTF workers strategies to manage clients' aggressive behaviors therapeutically without physical force or with physical management techniques if need be (Nunno, Holden & Leidy, 2003). Furthermore, the staffs' number of years of mental health experience, specifically RTF work experience varied from less than 30 days to over 12 years.

#### Instrument

A thorough review of the research literature, using Health and Psychosocial Instruments (HaPI), Mental Measurement Yearbook, Cumulative Index to Nursing and Allied Health Literature (CINHAL), PsychInfo, ProQuest, Ebsco Host, and Google Scholar yielded one article pertaining to instruments measuring an individual's self-efficacy level to deal with crisis situations. The instrument was designed by Nunno et al. (2003) utilizing a Likert type design to measure staffs' confidence levels to apply a crisis intervention system in a residential child care facility. The instrument's reliability was reported using Cronbach Alpha measure of 0.69 for the pre-implementation test population and 0.52 for the post-implementation test population. Although the confidence scale scores were determined to be reliable by the authors, the reliability of the scale was based on a limited sample of the population that it was designed to measure. Although Nunno et al. (2003) utilized 120 employees for their study, only 62 direct care staff

completed the instrument and of the 62 individuals only 44% or 27 individuals were full time employees in a residential setting. Furthermore, only three of the ten questions utilized to measure staffs' confidence levels focused on an individual's self-efficacy to deal with crisis situations. Therefore, the brevity of scale in combination with the researchers' attempts to measure individuals' confidence levels across four different perceptual domains calls into question the validity of the instrument. The limited number of questions restricts the inferences that can be drawn from the test scores (Henerson, Morris & Gibbon, 1987; Cohen & Swerdlik, 1999). Also, the variation in the pretest and posttest Cronbach Alpha scores does not provide solid evidence of reliability of the instrument. Field (2005) notes that 0.7 - 0.8 are generally accepted values when utilizing a Cronbach Alpha and sometimes values below 0.7 can be acceptable, however, the post-implementation test for the Nunno et al. (2003) study was 0.52. Therefore, according to Cronbach Alpha score of 0.52, the instrument is not consistently assessing the confidence construct. Nunno et al. (2003) noted that they utilized the instrument with caution due to limited testing and the newness of the questions.

Although other instruments were identified that were designed to measure self-efficacy of other constructs, none of the constructs were similar enough to crisis intervention in philosophy or functioning to be utilized for the present study. Some researchers may argue that scales measuring constructs such as self esteem, locus of control, and outcome expectancy are similar enough in nature to be utilized in place of self-efficacy, which would result in a large pool of instruments to select (Judge, Erez & Bono 1998). However, these constructs differ in operational definition as well as what

they measure (Paglis & Green, 2002; Bandura, 1997; Gist & Mitchell, 1992). While self-esteem is concerned with judgments of self-worth, locus of control is concerned with whether internal/external actions affect outcomes (Bandura, 1997; Gist & Mitchell, 1992; Pajares, 1977). In addition, outcome expectancy is concerned with judgments of the likely consequence that a behavior will produce and it has been noted that self-efficacy may represent a more comprehensive formulation of the rationale underlying the expectancy theory (Bandura, 1997; Gist & Mitchell, 1992; Pajares, 1977). In contrary to the definitions for self-esteem, locus of control and outcome expectancy; self-efficacy is concerned with a self-perceived capability for performing a specific task (Bandura, 1997; Gist & Mitchell, 1992). Furthermore, Bandura (1997) noted that scales of perceived self-efficacy must be tailored to the particular domain of functioning that is the object of interest. In other words, efficacy items should accurately reflect the construct to be studied. Therefore, an assessment tool with specific focus on self-efficacy items related to crisis intervention had to be developed.

In order to assess the participants' level of self-efficacy to deal with crises, an assessment tool utilizing a semantic differential design (Osgood, Suci, & Tannenbaum, 1975) was developed by the author for this study. A copy of the Self-Efficacy Assessment Tool for Crisis (SEAT-C) can be found in Appendix A.

A semantic differential is a highly generalizable technique of measurement that is adapted to the requirement of each research problem to which it is applied (Osgood et al., 1975). There are no standard concepts and no standard scales; rather, the concepts and scales used in a particular study depend upon the purposes of the research (Osgood et al.,

1975). The philosophy that the semantic differential scales need to be customized to the specific topic under research is synonymous with Bandura's philosophy that no all purpose measure of perceived self-efficacy exists; as a result, self-efficacy scales need to be tailored to the particular domain of functioning that is the object of interest (Bandura, 1997).

Whereas originally designed to measure meaning by how individuals encode or make sense of communication through words (Heise, 1970; Osgood et al., 1975), the semantic differential has also become the leading instrument used to measure attitudes (Arnold, McCroskey, & Prichard, 2005). The fact that the semantic differential measures attitudes provides the relevance for utilizing the semantic differential design for the present study. Attitudes consist of positive and negative affective reactions that combine with cognitions to form the intensity and direction of behaviors (Homer, 2006; Bandura, 1997; Gist & Michell, 1992; Pajares, 1977). In other words, individuals develop feelings and beliefs regarding some task or topic; as a result, based on the attitude and beliefs, they either approach or avoid the task or topic. As Bandura (1997) noted, self-efficacy is derived from people's beliefs in their capabilities to produce given attainments. Furthermore, Bandura (1977) noted that a person's self-efficacy guides an individual to approach and explore situations within their perceived capabilities, while avoiding situations they think exceed their ability. Review of the research literature on attitudes, beliefs and self-efficacy explicitly and implicitly demonstrates that attitudes and beliefs are the building blocks that lead to the formation of self-efficacy beliefs. Whereas attitudes and beliefs tend to focus on more global or general plain (Homer, 2006;

Geoffrey, Alexander & Norbert, 1996), self-efficacy is more task specific (Bandura, 1997). In other words, self-efficacy takes the impact of an individual's general attitudes and beliefs regarding a certain behavior one step further by narrowing the focus of that behavior to one particular aspect of the individual's capability to function.

The semantic differential measures people's reactions to stimulus words and concepts in terms of ratings on bipolar scales defined with contrasting adjectives at each end of a continuum (Heise, 1970). The bipolar scale consists of seven positions, which denote the directionality and intensity of the individual's reaction to the concepts being measured (Osgood et al., 1975, Heise, 1970). In order to organize and simplify the differences amongst the bipolar adjectives being utilized, three categories of scales are identified that distinguish the adjectives according to their meaning. Evaluation, potency and activity are the three basic categories that adjectives are assigned to before the scales are correlated and summed (Heise, 1970).

The evaluation category is associated with adjective contrasts of positive and negative social judgments such as good/bad, beautiful/ugly, and valuable/worthless (Heise, 1970; Osgood et al., 1975). The potency category is associated with power and intensity poles such as large/small, strong/weak, and heavy/light (Heise, 1970; Osgood et al., 1975). The activity category is associated with adjective contrasts of sharpness or abruptness such as fast/slow, active/passive, and hot/cold (Heise, 1970; Osgood et al., 1975). According to most studies of evaluation, potency and activity scales, the evaluative factor plays a more dominant role in meaningful judgments (Osgood et al., 1975). Furthermore, while the potency and activity categories require more scales to

measure a dimension, the evaluation scales are always found to be more reliable instruments of measurement than potency or activity scales; thus, requiring fewer scales or adjectives to be as precise (Heise, 1970; Osgood et al., 1975). Therefore, for the purpose of this study, evaluation will be the only dimension of focus.

The design of the Self-Efficacy Assessment Tool for Crisis (SEAT-C) was constructed to assess an individual's level of self-efficacy to handle crisis at different crisis timeframes and according to four specific factors associated with crisis situations. Therefore, within the instrument, crisis is divided into three timeframes of pre-crisis, crisis, and post-crisis. The four specific concept headings of crisis as danger, crisis as opportunity, crisis as assessment, and crisis as intervention are used to represent crisis factors based on their construct representation of crisis intervention terminology (James & Gilliland, 2005; Wiger et al., 2003; Roberts 2002; Long et al., 2001, Myer, 2001). Lastly, bipolar adjectives that could be used to describe crisis situations or terminology are provided as scales of measurement. Furthermore, 3 of the 10 pairs of bipolar adjectives approach/avoid, safety/threat, and soft/loud were selected based on their representation of the crisis literature and the behavioral, cognitive, and affective domains of the Triage Assessment Model (Myer, 2001).

The bipolar adjectives of approach/avoid were chosen to represent the extreme ends of the continuum for approach, immobile, and avoid within the behavioral domain. The bipolar adjectives of safety/threat were chosen to represent the extreme ends of the continuum for transgression, loss, and threat within the cognitive domain. The bipolar adjectives of soft/loud were chosen to represent the extreme ends of the continuum for

the range of intensity levels between anger/hostility, anxiety/fear, and sadness/melancholy within the affective domain. The remaining seven pairs of bipolar adjectives were selected based on numerous research studies that showed a high loading factor between the adjectives for the evaluation scales (Osgood et al., 1975). Also, the adjectives utilized in the present study were selected based on the author's opinion that the adjectives provided descriptive characteristics of crises from both a positive and negative viewpoint. The selection of the adjectives chosen by the participants will identify the participants' attitudes regarding that crisis concepts that the participants are assessing themselves against. As previously discussed, attitudes help to identify one's beliefs about topics or activities that the individual starts to formulate self-efficacy beliefs in regard to. The combination of participants responses on the semantic differential scales and responses on the Likert scales, which are also built into the assessment tool, will provide an overview of the participants' self-efficacy regarding crisis situations.

As a result of having to develop the Self-Efficacy Assessment Tool for Crisis, a pilot study was conducted to test the validity and reliability of the scores obtained with the instrument. The pilot study consisted of 20 mental health experts and 20 undergraduate students not studying a subject related to the mental health field assess themselves utilizing the SEAT-C. The responses of the scoring patterns between the experts and non-experts provided discriminant evidence of construct validity (Cohen & Swerdlik, 1999). The experts and non-experts (undergraduate students) rated their level of self-efficacy to deal with crisis similarly within their own groups. In other words, all of the experts' self-efficacy scores were similar to one another and all of the non-experts

scores were similar to one another. As a result, response patterns were formed within and between the groups. Hence, these response patterns identified a distinct difference in the experts and non-experts scoring based on the groups' familiarity with the concepts of crisis as danger, as opportunity, as assessment and as intervention. Furthermore, the groups' experience with mental health and crisis intervention impacted the response patterns.

Upon closer examination of the response patterns, a distinction could easily be identified between which responses belonged to each group. The response patterns of the undergraduate students consisted of more questions being skipped throughout the assessment, the neutral score of four being selected more when assessing themselves, and a tendency to skip the entire sections of pre/post crisis assessment. These findings suggest that the undergraduates either did not understand the questions or the questions were not relevant to the individual's knowledge or past experiences. Furthermore, the increased selection of the neutral scores and skipping of the pre/post crisis sections suggested that the undergraduates were unable to conceptualize the concepts of crisis as a danger, as an opportunity, as assessment, and as intervention along the continuum of pre-crisis, crisis and post-crisis. Students' written comments further supported the notion that the students were unfamiliar with the concepts and crisis. Student comments included issues of not understanding what the concepts meant, how the terms applied to crisis, or what was being assessed by answering the questions. These findings differed from the experts' responses in that the responses of the experts consisted of less questions skipped throughout the assessment, a greater variety of scores being selected for the different

concepts along the crisis continuum, and the completion of all the sections. The experts' written comments integrated issues of application of the assessment tool across different populations and within different situations such as crises in emergency procedures and therapeutic effectiveness. Overall, the experts' comments had more of an abstract reasoning associated with the application of the assessment tool, whereas the undergraduate students' comments were more concrete in nature.

Reliability of the scores was assessed in terms of internal consistency among the experts and undergraduates responses (Houser, 1998). The homogeneity of response patterns within the groups demonstrated similar scoring among the items of the instrument, resulting in inter-item consistency (Cohen & Swerdlik, 1999; Houser, 1998). In other words, certain items within the instrument scored similarly by the individuals rating themselves among the bipolar adjectives under the different concept headings within pre-crisis, crisis, and post-crisis timeframes. The heterogeneity between the groups crisis intervention experience demonstrated a difference in response patterns with the experts' response patterns being more dispersed when assessing the concepts against pre-crisis, crisis, and post-crisis, whereas the undergraduates' response patterns grouped closer together.

Table 1

*Cronbach Alpha Scores of Experts and Students in Pilot Study*

<b>Concept Headings</b>	<b>Cronbach Alpha Scores Experts</b>	<b>Cronbach Alpha Scores Students</b>
Pre-crisis as danger	.798	.434
Pre-crisis as opportunity	.676	.762
Pre-crisis as assessment	.825	.685

Table 1 (continued).

Pre-crisis as intervention	.768	.748
Crisis as danger	.793	.702
Crisis as opportunity	.845	.515
Crisis as assessment	.822	.706
Crisis as intervention	.803	.903
Post-crisis as danger	.824	.654
Post-crisis as opportunity	.853	.844
Post-crisis as assessment	.736	.850
Post-crisis as intervention	.814	.754

Table 2

*Cronbach Alpha Scores from Research Sample*

<b>Concept Headings</b>	<b>Cronbach Alpha Scores Experts</b>
Pre-crisis as danger	.829
Pre-crisis as opportunity	.815
Pre-crisis as assessment	.786
Pre-crisis as intervention	.787
Crisis as danger	.807
Crisis as opportunity	.814
Crisis as assessment	.810
Crisis as intervention	.798
Post-crisis as danger	.784
Post-crisis as opportunity	.860
Post-crisis as assessment	.862
Post-crisis as intervention	.826

Research Design

This study was a quantitative experiment that utilized a one way, between-subjects experimental design. Participants were randomly assigned to the treatment (X), which consisted of participating in a training to utilize the Triage Assessment Model for crisis intervention. The randomization of participants to the treatment and no treatment

control groups resulted in the most adequate all-purpose assurance of a lack of initial biases between groups (Campbell & Stanley, 1963). Therefore pre-testing was unnecessary and as a result, a posttest-only control group design was utilized.

Posttest-only control group designs are considered to be internally valid (Houser, 1998). Internal validity refers to the relationship between the independent and dependent variable, whereas external validity refers to whether the relationship is generalizable to other people, settings, and circumstances (LaFountain & Bartos, 2002). Threats to internal validity of a study would be issues of history, maturation, testing, instrumentation, statistical regression, differential selection, mortality/attrition and selection-maturation interactions (LaFountain et al., 2002; Houser, 1998). The utilization of a posttest-only control group design controls for most threats to internal validity, thus resulting in a powerful experimental design (Heppner, Kivilighan & Wampold, 1999). In this study, the history of the participants was a possible threat to internal validity that could not be fully protected against due to the heterogeneous mix of individuals. However, random assignment of the individuals to the treatment and control group, as well as simultaneous facilitation of the treatment and control sessions helped decrease the possibility of history impacting the results (Heppner et al., 1999).

In terms of external validity issues, generalizability of the study to another population and adequately controlling for history effects are the two main concerns when using a posttest-only control group design (Heppner et al., 1999). However, as LaFountain & Bartos (2002) noted, if a sample has been determined to represent the accessible population, findings from the sample can be generalized to that population.

The convenience sample utilized for this research study was a heterogeneous group of individuals from a child and adolescent residential treatment facility. Therefore, the sample in this research study was representative of the accessible population. Furthermore, if an investigator conducts the experimental and control session simultaneously, as was the procedure for this study, there is less likelihood of confounding history effects occurring (Heppner et al., 1999). Although threats to external validity are a concern, minimal threats exist with posttest-only control group designs (La Fountain et al., 2002; Houser, 1998). According to Cook & Campbell (1979), posttest-only control group designs most closely reflect the characteristics needed to attribute a causal relationship from the independent variable to the dependent variable.

Once participants were randomly assigned to the treatment and control groups, training on how to utilize the Triage Assessment Model for crisis intervention was initiated. Following the training, a post-test (O) measuring the participants' level of self-efficacy to deal with crises occurred. An illustration of this design can be found in Figure 1.



*Figure 1.* The Design of The Study Illustration, where **R** = (Random Assignment), **X** = (Treatment) and **O** = (Observation).

## Procedure

### *Pilot Study*

First, approval to conduct the pilot and research study was sought through the Institutional Review Board (IRB) at Duquesne University. Secondly, permission to facilitate the pilot study and research was sought through the administrative boards of the psychiatric hospital and residential treatment facility. The appropriate guidelines that have been outlined by the American Counseling Association's Code of Ethics, specifically *Section G: Research and publication* (Welfel, 2002) were followed.

The procedure for the collection of the pilot study data first consisted of identifying the 30 mental health experts through a discussion with the administrative board of the child and adolescent division of the psychiatric hospital. Although only 20 mental health experts were needed for the pilot study, additional experts were identified in case some of the experts chose not to participate. Upon the identification of the 30 mental health experts, the author arranged to attend a monthly staff meeting in order to conduct the pilot study. On the day of the staff meeting, the researcher explained the reason for his presence and then distributed the research material to identified mental health experts. The participants, after having read and signed the consent form (Appendix B), assessed themselves using the Self-Efficacy Assessment Tool for Crisis. The participants were asked to write any feedback or additional comments regarding questions or concerns surrounding the items on the instrument. The participants were given approximately one hour to complete the self-assessment and return their material to the author

A second sample of participants from a local university was identified in order to facilitate the completion of the pilot study. A class of undergraduate students not studying

a subject related to the mental health field was identified. Permission to utilize class time to address the students regarding the study was sought from the professor of the class. Once an available date had been approved for the author to address the students, copies of the consent forms and Self-Efficacy Assessment Tool for Crisis were provided to the students by the researcher on the day of the study. After having read and signed the consent form, the students were asked to assess themselves using the Self-Efficacy Assessment Tool for Crisis. The students were asked to write any feedback or additional comments regarding questions or concerns surrounding the items on the instrument. The students then returned the completed material to the researcher before the end of class.

#### *Research Study*

Once the reliability and validity of the Self-Efficacy Assessment Tool for Crisis were assessed from the response patterns and scores of participants in the pilot study, the facilitation of research study at the residential treatment facility began. A discussion between the administrative board of the residential treatment facility and the researcher occurred in order to determine the number of participants available for the study, the number of trainings that would need to occur, the site of the trainings, and the date/time of the trainings. The identified participants were then randomly assigned to the treatment and control groups using a table of random numbers (Heppner et al., 1999).

On the day of the training, participants were introduced to the study and informed of any potential risks or benefits that may occur from participating in the research study. After the participants had time to read the consent form and ask questions, time was allotted for them to opt out of the study if they chose not to participate. Participants who

chose to participate signed the consent form and the training material was provided to them. A copy of the Triage Assessment Model training material can be found in Appendix C. The training was facilitated by Rick A. Myer, Ph.D., the developer of the Triage Assessment Model, and Chad Snyder, doctoral candidate. The training was approximately three hours in length.

The training consisted of the following information. The Triage Assessment Model is a crisis assessment instrument designed by Myer, Williams, Ottens, & Schmidt in 1992. The design of this instrument allows for use with all types of crisis intervention services and is applicable to any age group (Myer, Willow & Peterson, 2002). This model theorizes that it is necessary to assess individuals' reactions to crisis in three domains: affective (emotional), cognitive (thinking), and behavioral (actions) (Myer, 2001).

Assessment of the three domains is further broken into three types of responses that represent the range of reactions clients experience in crisis situations for that particular domain (Myer, 2001). In the affective domain, clients are assessed to determine the presence of three primary reactions, (a) anger/hostility, (b) anxiety/fear, and (c) sadness/melancholy. Research supports that closing off or ignoring emotional reactions to a crisis may result in long-term mental health issues (James & Gilliland, 2001), therefore, it is imperative that crisis workers assess the clients' affective needs in order to effectively intervene.

In the cognitive domain, the main task of the crisis workers is to understand and view the crisis from the client's perception of the event (Myer, 2001). Since the client's time orientation of the event provides useful information regarding the severity of the

emotional reactions and extent in which beliefs are ingrained, the cognitive reactions are divided into transgression (present), loss (past), and threat (future). Transgression occurs when people perceive that their rights are currently being violated (Ellis & Harper, 1975; Slaikeu, 1990). Loss refers to a belief that the crisis has caused something to be irretrievable (Myer, 2001). Clients believe the object or relationship to be gone forever, with no hope of recovering it. Threat refers to the perception that a catastrophe is approaching (Myer et al., 2002) or that the crisis event has the potential to harm the client in some area of his/her life in the future (Myer, 2001).

In the behavioral domain, clients primarily react to crisis using one of three behaviors in attempt to resolve the crisis: (a) approach, (b) avoidance, or (c) immobility (Myer et al., 2002). Clients who react with approach behaviors to a crisis actively seek to resolve the problems caused by the situation (Myer, 2001). These behaviors can be overt or covert attempts to address the crisis event. Avoidance behaviors are defined as active attempts to escape or bypass problems associated with the crisis (Myer et al., 2002). Clients using avoidance behaviors attempt to move away from the crisis. Immobility refers to behaviors that are nonproductive, disorganized, or self-defeating attempts to cope with the crisis (Myer, 2001). Clients behaving in this manner either do nothing or make self-canceling attempts to resolve the crisis.

Once completed, the TAM distinguishes the type of reaction in each dimension, the severity of each reaction, and the overall magnitude of the reactions (Myers et al., 2002). This assessment provides the crisis worker with a blue print of the client's crisis experience and thereby allows the crisis worker to tailor treatment interventions.

Specifically, the assessment of the three domains helps the service provider to adapt the intervention process to the client's immediate needs (Myer et al., 2002).

Once the participants were provided with a background of the Triage Assessment Model and an overview of the crisis assessment process, the participants applied the TAM assessment to three case scenarios. A group discussion between the participants and facilitators of the training occurred after completion of each case scenario in order to facilitate the participants understanding of the appropriate case scenario assessment.

Following the completion of the three case scenario assessments, participants were provided with a copy of the self-efficacy assessment tool for crisis and asked to assess themselves using the SEAT-C. Participants were allotted 45 minutes to complete and return their self-assessment to the author.

#### Data Analysis

Three research questions were investigated by this research.

1. What are the differences in the post-test self-efficacy levels of residential treatment facility staff dealing with crises, who are in the treatment vs. the control group?
2. What are the differences in the post-test self-efficacy levels of residential treatment facility staff dealing with crises, who have bachelor vs. graduate education degrees?
3. There will be no main interaction effect between the education degrees in number of years of experience, age, or gender?

## Null Hypotheses

- Ho1. There will be no statistically significant differences in the post-test self-efficacy levels of the treatment and control group.
- Ho2. There will be no statistically significant differences in the post-test self-efficacy levels of residential treatment facility staff dealing with crises that have bachelor vs. graduate education degrees.
- Ho3. There will be no statistically significant main interaction effect between the education degrees in number of years of experience, age, or gender.

To test the research hypotheses listed above, a factorial design was utilized.

Factorial designs are used when two or more independent variables are employed simultaneously to study their independent and interactive effects on a dependent variable (Heppner et al., 1999). The status variables of education, years of experience, age and gender are considered additional independent variables within the design resulting in a study with two or more independent variables (Heppner, Kilighan, & Wampold, 1999). Therefore, a 2 (Bachelor vs. Masters Degree) x 2 (treatment vs. no treatment) factorial design was utilized in this study. An illustration of the design can be seen in Figure 2.

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	Training in TAM	No Training in TAM
Bachelor Degree		
Masters Degree		

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*Figure 2.* Illustration of the Data Analysis

In this study, there were four groups being compared: participants with bachelor degrees and training, participants with bachelor degrees and no training, participants with master's degrees and training, and participants with master's degree and no training. To determine whether or not mean differences exist between and within the groups, an analysis of variance (ANOVA) was conducted. Analysis of variance is a hypothesis testing procedure that is used to evaluate mean differences between two or more treatments or populations (Gravetter & Wallnau, 2004). In this study, there were four groups being compared, so an ANOVA was an appropriate statistical test to utilize. In this study, the use of an ANOVA provides an advantage over the use of a t-test, by helping to control for experimentwise error and thereby decreasing the chance of committing a Type I error (Gravetter & Wallnau, 2004; Field, 2000). While the use of t-tests for pairwise comparisons of more than two groups inflate the chance of experimentwise error (Gravetter & Wallnau, 2004; Field, 2000). Therefore, utilizing an ANOVA instead of a t-test is a better statistical approach for this research study. By using a statistic such as an ANOVA, information on how the independent variables interact with each other and what effects these interactions have on the dependent variables are

identified (Field, 2000). In other words, the use of the ANOVA will identify if the training had a main effect on the self-efficacy levels of the participants.

Analyses of variances were conducted to determine whether or not mean differences exist between and within the groups for the status variables of graduate vs. post-graduate degrees, years of mental health work experience, age and gender. The analyses of these individual variables will identify whether they were a contributing factor affecting the self-efficacy levels of the participants. However, the use of multiple analyses of variances increase the chance for committing a Type I error. Therefore, the .05 alpha level was divided by the number of analyses of variance conducted, thereby producing a testwise alpha level that decreased the chance of a Type I error being committed (Gravetter & Wallnau, 2004).

Since the possibility of within and between sources of variation and error exist in any study, the analysis of variance is an appropriate statistical measure to use because it analyzes different sources of variation in the experiment (Shaughnessy & Zechmeister, 1997; Field, 2000). Systematic variance refers to the variability in the data that can be accounted for due to procedure issues (Gravetter & Wallnau, 2004; Field, 2000). Error variance refers to the variability in the data for which there is no systematic or predictable explanation (Gravetter & Wallnau, 2004). Within this study, it is possible that by chance, the participants randomly assigned to the treatment group are more intelligent and experienced than the participants assigned to the control group. As a result, the data may mislead an individual to believe that the treatment or training produced higher levels of self-efficacy in the participants; when in reality, the source of variation in intelligence

and experience of the participants resulted in the different levels of self-efficacy.

Therefore, before the data can be safely accepted or rejected, the probability of a main or interaction effect occurring by chance is an issue, which requires attention.

To address the issue of systematic variance, ANOVAs produces an F-statistic or F-ratio, which compares that amount of systematic variance in the data to the unsystematic variance (Field, 2000). The F-statistic will clarify whether the variation is larger than would be expected on the basis of error variation alone (Shaughnessy & Zechmeister, 1997). If there is no systematic variation, the resulting F-ratio has an expected value of 1.00; however, as the amount of systematic variation increases the expected F-value becomes greater than 1.00 (Shaughnessy & Zechmeister, 1997; Field, 2000). In other words, the use of ANOVA will help to clarify that the experimental manipulation of training participants in the TAM was generally successful, as opposed to the results occurring because of systematic variance/error. To be statistically significant, the F value needs to be large enough so its probability of occurring if the null hypothesis were true is less than the chosen level of significance, usually .05 (Shaughnessy & Zechmeister, 1997).

In order for the results to be statistically significant, the observed phenomenon has to demonstrate a significant departure from what might be expected by chance alone (LaFountain et al., 2002). Null-hypothesis testing utilizes the laws of probability to estimate the likelihood of an outcome occurring when chance factors are the sole cause of the outcome (Shaughnessy & Zechmeister, 1997). The consensus of the scientific community is that outcomes associated with probabilities of less than .05 or less is judged

to be statistically significant (Shaughnessy & Zechmeister, 1997). Due to the unlikelihood, that a more stringent alpha level would result in findings that promote a safer environment for staff and clients, a .05 alpha level was also utilized for this study. However, due to multiple analyses of variances being conducted throughout the research, a Bonferroni Correction method was implemented to correct for familywise error rate (Field, 2005). As LaFountain et al. (2002) noted, it has been conventional in behavioral science research work to use .05 level of significance. This means that there is a 5% or 1 in 20 risk of falsely acknowledging the TAM training as having a significant impact on the participants' level of self-efficacy (Gravetter & Wallnau, 2004). However, in this research study, the odds of falsely acknowledging the TAM training as having a significant impact on the participants' level of self-efficacy was significantly inflated due to the number of multiple analyses of variances being conducted; hence the significance of utilizing a Bonferroni Correction method.

When a significant F-ratio results in a rejection of the null hypothesis, thereby identifying that the results did not occur by chance alone, further data analysis is required. Since the ANOVA is an omnibus test, specific information about which groups were affected is not provided (Fields, 2000). In other words, if it found that the TAM training impacted the participants' level of self-efficacy, the results of the ANOVA will not clarify where the significant impact lies within the four groups. Therefore, it will be necessary to compare the means in order to determine where the differences are within the four groups.

## Summary

This chapter described the methodology used in the present study. A review of the participants, the instruments, research design, procedure, data analysis, and hypotheses were examined. Specifically, the statistical measure of the ANOVA was discussed in terms of its application to the data analysis.

## CHAPTER IV

### RESULTS

This chapter describes the results of the data analyses. The purpose of this study was to examine the impact of training residential treatment facility staff in the Triage Assessment Model for crisis intervention on their self-efficacy to intervene in crisis situations. Specifically, this study assesses residential treatment facility staff members' self-efficacy level, post training, to determine changes in their beliefs to effectively assess crises. In addition, differences between the level of staffs' formal education and self-efficacy level were compared.

In order to have a better understanding of the data analysis, it is helpful to have a description of the sample utilized during the study. There were a total of 79 participants, 27 males and 52 females. There were 48 individuals in the experimental group and 31 individuals in the control group. The distribution of the participants' ages, education, and years of experience can be found in Table 1, Table 2, and Table 3.

Table 3

*Distribution of Participants' Age*

<b>Age</b>	<b>f</b>	<b>P</b>
22 - 27	38	48.10
28 – 33	29	36.71
34 – 39	4	5.06
40 – Over	8	10.13

Table 4

*Distribution of Participants' Education*

<b>Education</b>	<b>f</b>	<b>P</b>
Master's Degree	21	26.58
Bachelor's Degree	41	51.90
Associate's Degree	10	12.66
High School Diploma/GED	7	8.86

Table 5

*Distribution of Participants' Years of Experience*

<b>Years of Experience</b>	<b>f</b>	<b>P</b>
0 – 5	54	68.35
6 – 10	15	18.99
11 – 15	7	8.86
16 – 20	3	3.80

## Hypothesis

*There will be no statistically significant difference in the post-test self-efficacy levels of the treatment and control group.*

The data failed to reject the above general null hypothesis. However, the results of the study did produce some significant results within the different crisis timeframes of pre-crisis and crisis. See Tables below:

Table 6

*Analysis of Variance for Pre-Crisis as Danger*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b><math>\eta^2</math></b>
Exp vs Con	948.18	1	948.18	13.99*	.000	.16
Error	5083.22	75	(67.78)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \* $p < .004$

There was a statistically significant difference between the experimental and control group in the pre-crisis as danger category. The mean for the experimental group was 41.42 with a standard deviation of 6.94 and the control group mean was 33.23 with a standard deviation of 9.72. Therefore, a mean difference was assessed between the groups resulting in the ANOVA summary table for this data (Table 4) indicating that there was a statistically significant main effect. As a result, one could infer that the crisis assessment training had an impact on the experimental group.

Table 7

*Analysis of Variance for Pre-Crisis as Opportunity*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	547.88	1	547.88	9.60*	.003	.11
Error	4278.47	75	(57.05)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was a statistically significant difference between the experimental and control group in the pre-crisis as opportunity category. The mean for the experimental group was 37.00 with a standard deviation of 6.80 and the control group mean was 30.48 with a standard deviation of 8.74. Therefore, a mean difference was assessed between the groups resulting in the ANOVA summary table for this data (Table 5) indicating that there was a statistically significant main effect. As a result, one could infer that the crisis assessment training had an impact on the experimental group.

Table 8

*Analysis of Variance for Pre-Crisis as Assessment*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b><math>\eta^2</math></b>
Exp vs Con	267.95	1	267.95	4.93	.029	.06
Error	4076.02	75	(54.35)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \* $p < .004$

There was no statistically significant difference between the experimental and control group in the pre-crisis as assessment category. The mean for the experimental group was 35.58 with a standard deviation of 6.20 and the control group mean was 30.90 with a standard deviation of 8.72. Therefore, the mean difference was not large enough between the groups resulting in the ANOVA summary table for this data (Table 6) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 9

*Analysis of Variance for Pre-Crisis as Intervention*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b><math>\eta^2</math></b>
Exp vs Con	129.39	1	129.39	2.19	.143	.03
Error	4431.28	75	(59.08)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \* $p < .004$

There was no statistically significant difference between the experimental and control group in the pre-crisis as intervention category. The mean for the experimental group was 35.15 with a standard deviation of 6.66 and the control group mean was 32.55 with a standard deviation of 8.94. Therefore, the mean difference was not large enough

between the groups resulting in the ANOVA summary table for this data (Table 7) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 10

*Analysis of Variance for Crisis as Danger*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	932.38	1	932.38	11.93*	.001	.14
Error	5863.56	75	(78.18)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was a statistically significant difference between the experimental and control group in the crisis as danger category. The mean for the experimental group was 43.31 with a standard deviation of 7.80 and the control group mean was 34.84 with a standard deviation of 10.02. Therefore, a mean difference was assessed between the groups resulting in the ANOVA summary table for this data (Table 8) indicating that there was a statistically significant main effect. As a result, one could infer that the crisis assessment training had an impact on the experimental group.

Table 11

*Analysis of Variance for Crisis as Opportunity*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	450.27	1	450.27	5.96	.017	.07
Error	5662.20	75	(75.496)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was no statistically significant difference between the experimental and control group in the crisis as opportunity category. The mean for the experimental group was 38.92 with a standard deviation of 7.49 and the control group mean was 32.39 with a standard deviation of 10.12. Therefore, the mean difference was not large enough between the groups resulting in the ANOVA summary table for this data (Table 9) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 12

*Analysis of Variance for Crisis as Assessment*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b><math>\eta^2</math></b>
Exp vs Con	1006.49	1	1006.49	13.80*	.000	.16
Error	5469.59	75	(72.93)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \* $p < .004$

There was a statistically significant difference between the experimental and control group in the crisis as assessment category. The mean for the experimental group was 39.38 with a standard deviation of 7.19 and the control group mean was 31.90 with a standard deviation of 10.19. Therefore, a mean difference was assessed between the groups resulting in the ANOVA summary table for this data (Table 10) indicating that there was a statistically significant main effect. As a result, one could infer that the crisis assessment training had an impact on the experimental group.

Table 13

*Analysis of Variance for Crisis as Intervention*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	124.01	1	124.01	1.38	.244	.02
Error	6754.61	75	(90.06)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was no statistically significant difference between the experimental and control group in the crisis as intervention category. The mean for the experimental group was 36.50 with a standard deviation of 9.48 and the control group mean was 32.71 with a standard deviation of 9.31. Therefore, the mean difference was not large enough between the groups resulting in the ANOVA summary table for this data (Table 11) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 14

*Analysis of Variance for Post-Crisis as Danger*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	120.64	1	120.64	1.79	.185	.02
Error	5058.01	75	(67.44)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was no statistically significant difference between the experimental and control group in the post-crisis as danger category. The mean for the experimental group was 36.83 with a standard deviation of 6.94 and the control group mean was 32.87 with a standard deviation of 9.74. Therefore, the mean difference was not large enough between

the groups resulting in the ANOVA summary table for this data (Table 12) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 15

*Analysis of Variance for Post-Crisis as Opportunity*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	24.85	1	24.85	.258	.613	.00
Error	7217.64	75	(96.24)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was no statistically significant difference between the experimental and control group in the post-crisis as opportunity category. The mean for the experimental group was 30.65 with a standard deviation of 9.84 and the control group mean was 30.90 with a standard deviation of 9.67. Therefore, the mean difference was not large enough between the groups resulting in the ANOVA summary table for this data (Table 13) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 16

*Analysis of Variance for Post-Crisis as Assessment*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	3.78	1	3.78	.046	.832	.00
Error	6223.39	75	(82.98)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was no statistically significant difference between the experimental and control group in the post-crisis as assessment category. The mean for the experimental group was 31.35 with a standard deviation of 8.73 and the control group mean was 31.74 with a standard deviation of 9.42. Therefore, the mean difference was not large enough between the groups resulting in the ANOVA summary table for this data (Table 14) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

Table 17

*Analysis of Variance for Post-Crisis as Intervention*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Exp vs Con	3.67	1	3.67	.049	.825	.00
Error	5590.45	75	(74.54)			

*Note.* Values enclosed in parentheses represent mean square errors. Exp = Experimental Group; Con = control group. \*p<.004

There was no statistically significant difference between the experimental and control group in the post-crisis as intervention category. The mean for the experimental group was 31.44 with a standard deviation of 8.38 and the control group mean was 31.23 with a standard deviation of 8.77. Therefore, the mean difference was not large enough between the groups resulting in the ANOVA summary table for this data (Table 12) indicating that there was no statistically significant main effect. As a result, one would have to infer that the crisis assessment training had no impact on the experimental group.

*There will be no statistically significant differences in the post-test self-efficacy levels of residential treatment facility staff dealing with crises that have bachelor vs. graduate education degrees.*

The data failed to reject the above general null hypothesis. There was no significant difference indicated within any of the 12 sub-hypothesis categories. Mean and standard deviations scores for each category (Table 16) and factor analysis demonstrated that the participants' level of education had no significant impact on their assessment of crisis. See ANOVA Summary Tables 17-28. As a result, the null hypothesis will not be rejected.

Table 18

*M & SD Results for Bachelor and Graduate Scores Across Categories*

<b>Categories</b>	<b>Bachelor</b>		<b>Graduate</b>	
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>Sd</b>
Pre-Crisis as Danger	38.33	9.22	37.86	8.72
Pre-Crisis as Opportunity	35.19	8.52	32.38	7.10
Pre-Crisis as Assessment	33.45	8.11	34.57	6.04
Pre-Crisis as Intervention	33.76	7.73	35.14	7.61
Crisis as Danger	39.71	10.20	40.76	7.99
Crisis as Opportunity	36.26	9.88	36.62	6.87
Crisis as Assessment	36.66	8.55	35.86	11.00
Crisis as Intervention	34.48	9.86	36.48	8.64
Post-Crisis as Danger	35.10	8.76	35.76	7.18
Post-Crisis as Opportunity	31.24	10.27	29.38	8.00
Post-Crisis as Assessment	31.81	9.64	30.67	6.81
Post-Crisis as Intervention	31.14	8.75	31.95	7.87

Table 19

*Bachelor vs. Graduate - Analysis of Variance for Pre-Crisis as Danger*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	17.32	1	17.32	.256	.615	.00
Error	5083.22	75	(67.78)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 20

*Bachelor vs. Graduate - Analysis of Variance for Pre-Crisis as Opportunity*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	131.89	1	131.89	2.31	.133	.03
Error	4278.47	75	(57.05)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 21

*Bachelor vs. Graduate - Analysis of Variance for Pre-Crisis as Assessment*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	11.40	1	11.40	.210	.648	.00
Error	4076.02	75	(54.35)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 22

*Bachelor vs. Graduate - Analysis of Variance for Pre-Crisis as Intervention*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	10.82	1	10.82	.183	.670	.00
Error	4431.28	75	(59.08)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 23

*Bachelor vs. Graduate - Analysis of Variance for Crisis as Danger*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	4.19	1	4.19	.054	.818	.00
Error	5863.56	75	(78.18)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 24

*Bachelor vs. Graduate - Analysis of Variance for Crisis as Opportunity*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	1.66	1	1.66	.022	.882	.00
Error	5662.20S	75	(75.50)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 25

*Bachelor vs. Graduate - Analysis of Variance for Crisis as Assessment*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	52.65	1	52.65	.722	.398	.01
Error	5469.59	75	(72.93)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 26

*Bachelor vs. Graduate - Analysis of Variance for Crisis as Intervention*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	62.34	1	62.34	.692	.408	.01
Error	6754.61	75	(90.06)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 27

*Bachelor vs. Graduate - Analysis of Variance for Post-Crisis as Danger*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	12.11	1	12.11	.180	.673	.00
Error	5058.01	75	(67.44)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 28

*Bachelor vs. Graduate - Analysis of Variance for Post-Crisis as Opportunity*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	18.56	1	18.56	.193	.662	.00
Error	7217.64	75	(96.24)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 29

*Bachelor vs. Graduate - Analysis of Variance for Post-Crisis as Assessment*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	13.97	1	13.97	.168	.683	.00
Error	6223.39	75	(82.98)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

Table 30

*Bachelor vs. Graduate - Analysis of Variance for Post-Crisis as Intervention*

<b>Source</b>	<b>Sum of Squares</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>	<b>n<sup>2</sup></b>
Bac vs Grad	4.97	1	4.97	.067	.797	.00
Error	5590.45	75	(74.54)			

*Note.* Values enclosed in parentheses represent mean square errors. Bac = Bachelors Group; Grad = Graduate group. \*p<.004

*There will be no statistically significant interaction effect between the education degrees in number of years of experience, age, or gender.*

As a result of a low number of participants and the need to adjust the alpha score to correct for the familywise error rate (Field, 2005) when testing the first two hypotheses, this hypothesis was unable to be addressed within the present study. The

initial alpha level which was set at .05 had to be divided utilizing a Bonferroni correction method, which resulted in the sample size being too low to correctly address this hypothesis (Field, 2005). Therefore, any attempt at analyzing the years of experience, age or gender data would result in the data being compared to an alpha level that is so low that no significant difference would be found.

### Summary

This chapter described the results of the present study. Specifically, the first two general hypotheses were analyzed utilizing an ANOVA. Although the null hypotheses were accepted for the two general hypotheses, a few significant differences among the sub-hypotheses were found in regard to pre-crisis as danger and opportunity, as well as crisis as danger and assessment when comparing the experimental group to the control group. Although it appears that the crisis assessment training had an impact on the experimental groups' answers in regard to the above mentioned categories, education level did not have any effect on the experimental or control groups answers. The failure to obtain a sufficient number of participants and an inability to demonstrate adequate statistical power resulted in the third hypothesis not being tested.

## CHAPTER V

### DISCUSSION

#### Summary of Major Findings

This study investigated the impact of training residential treatment facility staff in the Triage Assessment Model for crisis intervention on their self-efficacy to intervene in crisis situations. Specifically, this study assessed residential treatment facility staff members' self-efficacy level, post training, to determine changes about their ability to effectively assess crises. In addition, differences between the level of staffs' formal education and self-efficacy level were compared.

#### Summary of the Study

This author began the study with the hope of finding a way to decrease passive physical restraints utilized by residential treatment facility staff. In order to achieve this goal, the residential treatment facility staff, in the experimental group, were trained in an alternative method of crisis training that focused on crisis assessment rather than physical crisis intervention. The Triage Assessment Model for Crisis Intervention was the selected training format. Through this training, it was hypothesized that the staffs' self-efficacy levels with assessing crises would increase and thereby decrease their reliance on physical interventions as the only means for crisis intervention.

In order to assess the training impact on the experimental group, the self-efficacy assessment tool had to be developed and pilot tested for reliability and validity purposes. Through inter-item consistency and discriminate evidence this was achieved. Following the pilot testing, training was provided to the experimental groups and an analysis of

variance was utilized to determine any significant differences in the experimental and control groups' self-assessment responses to four different crisis concepts: crisis as danger, crisis as opportunity, crisis as assessment and crisis as intervention. These four concepts were analyzed according to the pre-crisis, crisis and post-crisis timeframes. As a result of analyzing four different concepts across three time domains required that a Bonferroni correction method be utilized to correct for familywise error rate. Therefore an alpha level of .004 was used to determine if there were any significant differences between the experimental and control groups. All of the null hypotheses were accepted, although some significant difference existed among the sub-hypotheses.

### Discussion

The overall general null hypotheses were accepted. Analysis of pre-crisis as assessment, pre-crisis as intervention, crisis as opportunity, crisis as intervention, post-crisis as danger, post-crisis as opportunity, post-crisis as assessment and post crisis as intervention yielded no significant differences between the experimental and control groups (See Tables 6, 7, 9, and 11 – 15). There were no significant differences in mean scores (See Table 16). However, the experimental groups' mean scores differed significantly in pre-crisis as danger, pre-crisis as opportunity, crisis as danger and crisis as assessment domains.

### Perceived Negativity of Crisis

In the experimental vs. control group measures of pre-crisis as danger, pre-crisis as opportunity and crisis as danger there were statistically significant main effects (See Tables 4, 5 and 8). The experimental groups' mean scores were higher than that of the

control groups (See Table 16). This signifies that those individuals in the experimental group perceive crises as danger and opportunity as more negative than the control group. When trying to logically understand this finding, a couple of explanations are warranted. First, individuals who received the Triage Assessment Model training spent a considerable amount of time discussing the affective, behavioral and cognitive spectrums of a crisis event. During the discussion of the affective domain, the emotional reactions of an individual in crisis were examined. The three emotions of anger/hostility, fear/anxiety and sadness/melancholy were discussed in accordance with the model's philosophy that one of the three emotions is a client's primary response to a crisis situation (Myer, 2001). Furthermore, commonly used affective words such as hostile, overwhelmed, frightened, and miserable were discussed as they relate to describing a client in crisis and then were linked and categorized to fit into one of the three primary emotions. This assimilation process of the commonly used words supports the philosophy that one of the three emotions is a client's primary response to a crisis. The relevance of this training piece regards that fact that the three primary emotions and commonly used affective words tend to have an unpleasant or pessimistic connotation which could have led to the participants having a more negative view of crises.

Secondly, individual participants shared stories of crisis situations that they were witness to or involved. These stories tended to focus on the negative aspects associated with the crisis event such as chaotic environments, destruction of property, client's verbal and physical aggression, and client and staff injuries. As a result, these recollections of entire crisis experiences, whether personal or vicariously lived, were fresh on the minds

of these individuals when completing the assessment. This factor could have also led to the participants in the experimental group having a more negative view of crisis.

Thirdly, through the training format and group discussions, individuals in the experimental group were subjected to analyzing crises in more depth thereby debunking their perspectives that a crisis situation is a simple, obvious, clear cut event. Participants were introduced to the more involved, complex, chaotic situation that exists within a crisis event. As a result, individuals who were thinking of crisis in this manner would be more apt to score higher on the self-efficacy assessment scales due to the location of adjectives reflecting these beliefs, which tend to rest more on the higher side or right side of the scale.

#### Crisis Assessment

When analyzing the experimental vs. control group measure, crisis as assessment, there was a statistically significant main effect. Analysis of crisis as assessment in the pre and post crisis time frame demonstrated no significant difference; however, in the crisis timeframe a mean difference occurred between the groups. In trying to understand this phenomenon, a few explanations seem appropriate. First, when the participants were charged with conceptualizing crisis as assessment strictly in the semantic sense, they had a hard time completing the task. Most of the assistance that participants asked for when completing the self-assessment tool regarded clarification of this concept, crisis as assessment. Participants verbalized difficulty conceptualizing the concept or abstractly applying the notion of crisis as assessment to their own experiences.

The semantic structure of crisis as assessment, whether observed as pre-crisis as assessment, crisis as assessment or post-crisis as assessment, were sections that a lot of participants had trouble conceptualizing. It appeared as though participants were able to abstractly think about crisis as a danger and as an opportunity, because crises can produce such situations without human interaction. In other words, crises that arise due to natural disasters can produce dangerous and opportunistic environments without any man made interference or interaction. These types of crisis, whether earthquakes, floods, or hurricanes such as Katrina, occur regularly and remain in the public eye due to media coverage. The impacts of these events make it easier for individuals to conceptualize crises as danger and opportunity. However, conceptualizing crisis as assessment was a harder concept to grasp because even though a crisis can produce an environment or atmosphere that requires someone to complete an assessment, a human interaction is required for the assessment to be completed. Without a human interaction, a crisis cannot produce an assessment.

Second, the notion of conceptualizing crisis as assessment along the pre-crisis, crisis and post-crisis timeframes exacerbated the situation even more. Conceptualizing crisis along the timeframe continuum seemed to be a unique concept for most participants due to a lack of specialized education and training in the crisis and mental health field. Although most of the participants had some type of post-secondary education, it is not an employment requirement that the focus of the staffs' education be specifically psychology, counseling, or even mental health related. Therefore, the education backgrounds of the participants' did not necessarily support their understanding of the

Triage Assessment Model training or crisis concepts. Furthermore, some of the participants were novice staff with vary little work experience, some less than 30 days, which would further confound their understanding of the crisis as assessment concept.

The combination of the first and second explanations provide logical support regarding the findings of no statistical differences between the experimental and control groups in the pre-crisis as assessment and post-crisis as assessment; however, there was a significant difference when comparing crisis as assessment. Although participants did not necessarily have some form of specialized education or extensive training in the mental health field or a related subject, all of the participants in the study did have prior training in Therapeutic Crisis Intervention (Nunno et al, 2003). Therapeutic Crisis Intervention training is a required training protocol for all residential treatment facility staff employed at the RTF where the training and research was conducted. The Therapeutic Crisis Intervention training stresses the need for crisis assessment of safety factors during the crisis situation (Nunno et al, 2003). The stressing of assessing the safety factor during the actual crisis is synonymous with the present study's middle timeframe of crisis as assessment. Therefore, prior training in the Therapeutic Crisis Intervention combined with the Triage Assessment Model training stressing the crisis timeframes and importance of completing the assessment throughout ones interaction with the crisis situation could have provided a springboard that helped the participants to understand and conceptualize crisis as assessment in the crisis timeframe.

### Crisis Opportunity

Although there was a mean difference between the groups when assessing crisis as opportunity in the pre-crisis time frame, no difference in means was established in the crisis or post-crisis time frame. An explanation for this finding could be that participants believed that a crisis presented as an opportunity during pre-crisis because the full negative effects or trauma associated with a crisis was not fully experienced yet by the individual in crisis. As a result, the participants might believe that the factors associated with the crisis in the pre-crisis time frame provide enough motivation for the individual facing the pre-crisis to make changes prior to the crisis becoming further exacerbated. Hence, the crisis results in an opportunity. However, when an individual is in the actual crisis or post-crisis timeframe, the participants' mindset may be that the negative effects or trauma associated with the crisis has already made an impact on the individual, thereby, purging the situation of an opportunity for change.

### Crisis Intervention

When assessing intervention across the pre-crisis, crisis and post-crisis timeframes, no significant differences were found. A logical explanation for this outcome stems from the fact that all of the participants in the study received training in Therapeutic Crisis Intervention (Nunno et al., 2003) upon being hired at the residential treatment facility. The Therapeutic Crisis Intervention training focused on how to diffuse and intervene in a crisis situation (Nunno et al., 2003). The art of utilizing passive physical restraints as a mean of intervention during crises were demonstrated and practiced by the participants. As a result, it is possible that these trainings instilled a

similar mindset among the participants that intervention is a critical skill when dealing with a crisis situation. Therefore, the experimental and control groups rated the concept of crisis as intervention similarly.

A significant outcome that warrants attention from the present study regards the fact that not a single significant difference was found within the post-crisis timeframe. Although some of the previous mention arguments provide support for why the outcome resulted as they did, another factor could be that the length of the instrument was too great. As result, participants may have become bored or tired with the repetitive format of the assessment and quit attempting to differentiate their responses. A participant's inability to conceptualize the different factors associated with the pre-crisis, crisis and post-crisis timeframes would only exacerbate their frustration and boredom.

#### Implications of the Study

The importance of this study is twofold. First, it is a pioneering effort in targeting residential treatment facility staffs' level of self-efficacy through crisis assessment training. The implications of accomplishing such a task provides a new avenue for not only increasing the effectiveness of treatment the clients receive but also decreasing the need for the use of passive physical restraints. For example, the staffs' introduction to the pre-crisis, crisis and post-crisis timeframes provided the staff with a new way of conceptualizing the crisis as an event that has a beginning, middle and end. As a result, staff was made aware that the crisis intervention process begins before the actual crisis arises. If staff adheres to this knowledge and begins to address clients' issue sooner in the timeframe continuum, there is a greater chance of the issue being resolved by more

passive rather than physical means such as restraints. This would be considered a more positive and successful crisis intervention outcome and as Gist (1987) noted, incidents of successful performance then in turn affects the individual's self-beliefs about future performances on other tasks (Gist, 1987).

While the null hypotheses were accepted in this research study; the author believes that improvements to the research design and Self-Efficacy Assessment Tool for Crisis will provide a better forum for future research, which could yield further insight into the present research questions or expand on the topic all together. Further insights into the training protocol for residential treatment facility staff could provide answers to the type of training(s) that would result in staff having a more sensitive awareness of the clients' affective, cognitive and behavioral domains affected during crisis. This type of knowledge would help staff to effectively assess and address the clients' primary needs while utilizing appropriate treatment interventions.

In addition, the present study calls to attention the need to develop, implement and maintain ongoing trainings for educational and therapeutic advancement in the field of mental health, especially within the residential treatment context. As the literature review suggests, novice staff are inadequately trained to deal with the complex mental health and crisis issues that client's experience. This situation creates a volatile, unsafe environment where clients and staff are put at risk not only emotionally but physically too. Moreover, this study highlights the ethical and professional dilemma that such a situation poses.

### Recommendations for Further Study

It was this author's intention to build a foundation for future research regarding the impact crisis training could have on a residential staff members' level of self-efficacy, which would thereby improve the overall treatment that clients receive. Once again, although the general null hypotheses were accepted, findings within the sub-hypotheses suggest that training effects exist. Therefore, future research is needed to explore these findings due to the aforementioned implications that such findings could produce.

A couple of limitations hindered the results of the present study but provide a foundation for other researchers to begin easily replicating the present study with improved research measures to clarify the present studies findings. Initially, an argument could be made that the present study's research data is unsound due to the limited psychometric properties of the self-efficacy assessment tool that was created for the present study. Although the author found the instrument to be reliable and valid, future research could focus on augmenting the reliability and validity of the instrument thereby producing more valid support for use of the instrument and the research findings. Furthermore, the current format of the instrument could use revising that may help to improve outcome measures too. Results in the present study's post-crisis timeframe suggest that some unknown factor or factors were influencing the participants' responses. It is this author's contention that the length of the assessment tool was the unknown factor. Therefore, by decreasing the length of the self efficacy assessment tool, a researcher could avoid participants becoming bored or tired of completing the assessment

tool and thereby measure more accurate responses reflective of the participants' true feelings. Finally in regard to the revising of the instrument, the participants' inability to conceptualize crisis as assessment and possibly even crisis as intervention due to the semantic disparities of the language requires that either the language structure is changed or new concept headings are utilized.

Other recommendations for improving the present study and future research would be to address the limited number of participants involved in the study. The number of participants for the present study was low and as a result, a low statistical power impeded the author's ability to answer the third hypothesis of whether a difference or interaction effect existed between the staffs' level of education and years of experience, age, or gender. Furthermore the unequal difference in the number of participants within the experimental and control group combined with the low statistical power may have resulted in a type II error occurring.

A goal of the present study was the hope that the impact of the crisis assessment training would increase the residential treatment staff's knowledge of crises, thereby, increasing the level of self-efficacy to deal with crisis situations. The present study's post-test only design did not permit the author to identify the staffs' level of self-efficacy prior to the crisis assessment training in order to measure individual changes pre and post training. Therefore, a pre and post test design would provide a researcher with the opportunity to identify the impact that the crisis training has on a single staff member's level of self-efficacy as well as identifying the amount of increase in self-efficacy. Ultimately this information could authenticate the training format and provide support for

future use of the training. Furthermore, a time series design would allow the researcher to measure lasting effects of the training on the participants. This information would be beneficial to organizations when attempting to support cost ratio benefits of providing such training to the staff.

Finally, another goal of the present study was the hope that the impact of the crisis assessment training would increase the residential treatment staff's knowledge of crises and decrease their reliance on utilizing passive physical restraints as the only means to deal with crisis situations. However, the author did not collect data on the number of restraints utilized before or after the crisis training was facilitated, so it is unknown whether the staff who received the crisis assessment training decreased their reliance on utilizing restraints to intervene in crisis situations. Once again, this type of information would provide cost ratio benefit support for facilitating such training.

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## Appendix A

### Self-Efficacy Assessment Tool for Crisis

# Demographic Information

The purpose of this survey is to collect your perceptions and opinions about crisis. The following questions are demographic questions that provided some information about your feelings and experiences dealing with crisis situations.

1. Age \_\_\_\_\_
2. Gender (Circle): Male                      Female
3. Years of professional work experience in the mental health field \_\_\_\_\_
4. How many months have you worked for your current employer? \_\_\_\_\_
5. Academic degrees (Check highest degree earned):  

<input type="checkbox"/> High School Diploma OR GED	<input type="checkbox"/> Associate Degree
<input type="checkbox"/> Bachelor's Degree	<input type="checkbox"/> Master's Degree
<input type="checkbox"/> Doctoral Degree	
6. Current job title (Check appropriate box):  

<input type="checkbox"/> Clinical Administrator	<input type="checkbox"/> Director
<input type="checkbox"/> Clinical Coordinator	<input type="checkbox"/> Program Coordinator
<input type="checkbox"/> Master's level clinician	<input type="checkbox"/> Case Management
<input type="checkbox"/> Direct Care Staff	<input type="checkbox"/> Other _____
7. Current job status (Check appropriate box):  

<input type="checkbox"/> Regular full time	<input type="checkbox"/> Temporary full time
<input type="checkbox"/> Regular part time	<input type="checkbox"/> Casual (only as needed)
8. Number of crisis trainings attended (Check appropriate box):  

<input type="checkbox"/> None	<input type="checkbox"/> 1 – 2
<input type="checkbox"/> 3 – 4	<input type="checkbox"/> 5 - 6
<input type="checkbox"/> 6 or more	
9. If you have had any kind of course work related to crisis or crisis intervention, please list the names of the courses below:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
10. Approximate number of physical restraints that you have been involved in since your hire date (Check appropriate box):  

<input type="checkbox"/> None	<input type="checkbox"/> 1 - 5
-------------------------------	--------------------------------



19. I can effectively prevent pre-crisis situations from escalating into crisis situations (Circle appropriate number):

1	2	3	4	5	6	7	8	9	10
Cannot do at all				Moderately certain can do					Highly certain can do

20. I can effectively manage any crisis situation (Circle appropriate number):

1	2	3	4	5	6	7	8	9	10
Cannot do at all				Moderately certain can do					Highly certain can do

## **Crisis Survey**

The remaining questions about crisis have been divided according to three time periods: pre-crisis, crisis and post-crisis. Each time period is further divided into four crisis concept headings: crisis as danger, crisis as opportunity, crisis assessment and crisis intervention.

You should rate the general crisis concepts on each of the ten polar opposite adjectives that are listed below each concept. To facilitate the ratings of intensity, each scale is divided into 7 scale positions. You should check the scale position that best reflects your feelings. For example, if your impression of crisis as a danger within the pre-crisis time period was extremely good, you would check column number 1. However, if your impression of crisis as a danger within the pre-crisis time period was extremely bad, you would check column 7.

Please respond based on your first impression after reading the crisis concept heading under the specific time period. There is no right or wrong answer. Assess the concepts on first impressions only.

## Pre-Crisis

<b>Concept: Crisis as Danger</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Opportunity</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Assessment</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Intervention</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

## Crisis

<b>Concept: Crisis as Danger</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Opportunity</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Assessment</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Intervention</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

## Post-Crisis

<b>Concept: Crisis as Danger</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Opportunity</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Assessment</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

<b>Concept: Crisis as Intervention</b>								
	<b>Scales</b>							
	<i>Extremely</i> 1	<i>Quite</i> 2	<i>Slightly</i> 3	<i>Neutral</i> 4	<i>Slightly</i> 5	<i>Quite</i> 6	<i>Extremely</i> 7	
1. Good								Bad
2. Valuable								Worthless
3. Chaotic								Ordered
4. Smooth								Rough
5. Simple								Complex
6. Obvious								Subtle
7. Clear								Hazy
8. Approach								Avoid
9. Safety								Threat
10. Soft								Loud

Appendix B  
Consent Forms



# DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

## CONSENT TO PARTICIPATE IN A PILOT STUDY

- TITLE:** Examining the impact of crisis assessment training, in the Triage Assessment Model, on the self-efficacy of residential treatment facility staff.
- INVESTIGATOR:** Chad Snyder  
147 Hallock Street Apt 1  
Pittsburgh, PA, 15211  
412-606-6223
- ADVISOR:** Dr. Rick Myer  
School of Education  
412-396-6093
- SOURCE OF SUPPORT:** This study is being performed as partial fulfillment of the requirements for the doctoral degree in Counselor Education and Supervision at Duquesne University.
- PURPOSE:** You are being asked to participate in a research project that seeks to evaluate the accuracy of an assessment tool created to assess an individual's self-belief about dealing with crisis. Completing the assessment will require you to report your reactions to contrasting word pairs/concepts. This is the only request that will be made of you. The completion of the survey will take approximately 45 minutes of your time.
- RISKS AND BENEFITS:** The minimal risks for the participants of this study do not exceed anything more than naturally occurring daily risks of life. Participants may benefit from this study by acquiring a better

understanding of crisis intervention and crisis assessment skills needed to intervene in crisis situations.

**COMPENSATION:**

Participants will not be compensated in any way for their participation in this study. Furthermore, no monetary costs will be incurred by the participants.

**CONFIDENTIALITY:**

No identifying information will be requested on the survey or research instruments; all data gathered will be held confidential. All written materials and consent forms will be stored in a locked file in the researcher's home. Your response(s) will only appear in statistical data summaries, and your specific responses will not be known to anyone. All materials will be destroyed five years following the completion of the research. Your clinical director will not know whether you participated and this research is not a work requirement, nor will your job be affected should you choose not to participate.

**RIGHT TO WITHDRAW:**

You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time. If you choose to withdraw, any data you provide will not be used in the data analysis. There will be no consequence related to your job should you choose to withdraw your participation.

**SUMMARY OF RESULTS:**

A summary of the results of this research will be supplied to you, at no cost, upon request.

**VOLUNTARY CONSENT:**

I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. I understand that this research is not related to my work requirements and will not affect my job in any way. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I may call the investigator, his advisor, or Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board (412-396-6326).

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Participant's Signature

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Date

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Researcher's Signature

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Date



# DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

## CONSENT TO PARTICIPATE IN A PILOT STUDY UNDERGRADUATE STUDENT CONSENT FORM

- TITLE:** Examining the impact of crisis assessment training, in the Triage Assessment Model, on the self-efficacy of residential treatment facility staff.
- INVESTIGATOR:** Chad Snyder  
147 Hallock Street Apt 1  
Pittsburgh, PA, 15211  
412-606-6223
- ADVISOR:** Dr. Rick Myer  
School of Education  
412-396-6093
- SOURCE OF SUPPORT:** This study is being performed as partial fulfillment of the requirements for the doctoral degree in Counselor Education and Supervision at Duquesne University.
- PURPOSE:** You are being asked to participate in a research project that seeks to evaluate the accuracy of an assessment tool created to assess an individual's self-belief about dealing with crisis. Completing the assessment will require you to report your reactions to contrasting word pairs/concepts. This is the only request that will be made of you. The completion of the survey will take approximately 45 minutes of your time.
- RISKS AND BENEFITS:** The minimal risks for the participants of this study do not exceed anything more than naturally occurring daily risks of life. Participants may benefit from this study by acquiring a better understanding of crisis intervention and crisis

assessment skills needed to intervene in crisis situations.

**COMPENSATION:**

Participants will not be compensated in any way for their participation in this study. Furthermore, no monetary costs will be incurred by the participants.

**CONFIDENTIALITY:**

No identifying information will be requested on the survey or research instruments; all data gathered will be held confidential. All written materials and consent forms will be stored in a locked file in the researcher's home. Your response(s) will only appear in statistical data summaries, and your specific responses will not be known to anyone. All materials will be destroyed five years following the completion of the research. Your instructor will not know whether you participated and this research is not a course requirement, nor will your grade be affected should you choose not to participate.

**RIGHT TO WITHDRAW:**

You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time. If you choose to withdraw, any data you provide will not be used in the data analysis. There will be no consequence related to this course should you choose to withdraw your participation.

**SUMMARY OF RESULTS:**

A summary of the results of this research will be supplied to you, at no cost, upon request.

**VOLUNTARY CONSENT:**

I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. I understand that this research is not related to my course requirements and will not affect my grade in this class in any way. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I

may call the investigator, his advisor, or Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board (412-396-6326).

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Participant's Signature

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Date

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Researcher's Signature

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Date



# DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

## CONSENT TO PARTICIPATE IN A RESEARCH STUDY

- TITLE:** Examining the impact of crisis assessment training, in the Triage Assessment Model, on the self-efficacy of residential treatment facility staff.
- INVESTIGATOR:** Chad Snyder  
147 Hallock Street Apt 1  
Pittsburgh, PA, 15211  
412-606-6223
- ADVISOR:** Dr. Rick Myer  
School of Education  
412-396-6093
- SOURCE OF SUPPORT:** This study is being performed as partial fulfillment of the requirements for the doctoral degree in Counselor Education and Supervision at Duquesne University.
- PURPOSE:** You are being asked to participate in a research project that seeks to investigate how residential treatment facility staff are affected by participation in a crisis assessment training. If you choose to participate, you may be required to attend crisis training on the Triage Assessment Model and complete a survey following the training. The entire training and survey will take approximately three hours of your time. However, you may be asked to just complete the survey. This task will take approximately 45 minutes of your time. These are the only requests that will be made of you.
- RISKS AND BENEFITS:** The minimal risks for the participants of this study do not exceed anything more than naturally

occurring daily risks of life. Participants may benefit from this study by acquiring a better understanding of crisis intervention and crisis assessment skills needed to intervene in crisis situations.

**COMPENSATION:**

Participants will not be compensated in any way for their participation in this study. Furthermore, no monetary costs will be incurred by the participants.

**CONFIDENTIALITY:**

No identifying information will be requested on the survey or research instruments. All information will be held confidential. All written materials and consent forms will be stored in a locked file in the researcher's home. Your response(s) will only appear in statistical data summaries, and your specific responses will not be known to anyone. All materials will be destroyed five years following the completion of the research.

**RIGHT TO WITHDRAW:**

You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time. If you choose to withdraw, any data you provide will not be used in the data analysis.

**SUMMARY OF RESULTS:**

A summary of the results of this research will be supplied to you, at no cost, upon request.

**VOLUNTARY CONSENT:**

I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I may call the investigator, his advisor, or Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board (412-396-6326).

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Participant's Signature

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Date

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Researcher's Signature

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Date

## Appendix C

### The Triage Assessment Model Training

The Triage Assessment Model is a crisis assessment instrument designed by Myer, Williams, Ottens, & Schmidt in 1992 and will be used as the crisis training model for the participants. The design of this instrument allows for use with all types of crisis intervention services and is applicable to any age group (Myer, Willow & Peterson, 2002). This model theorizes that it is necessary to assess individuals' reactions to crisis in three domains: affective (emotional), cognitive (thinking), and behavioral (actions) (Myer, 2001).

Assessment of three domains is further broken into three types of responses that represent the range of reactions clients experience in crisis situations for that particular domain (Myer, 2001). In the affective domain, clients are assessed to determine the presence of three primary reactions: (a) anger/hostility, (b) anxiety/fear, and (c) sadness/melancholy. Research supports that closing off or ignoring emotional reactions to a crisis may result in long-term mental health issues (James & Gilliland, 2001), therefore, it is imperative that crisis workers assess the clients' affective needs in order to effectively intervene.

In the cognitive domain, the main task of the crisis workers is to understand and view the crisis from the clients' perception of the event (Myer, 2001). Since the client's time orientation of the event provides useful information in regard to the severity of the emotional reactions and extent in which beliefs are ingrained, the cognitive reactions are divided into transgression (present), loss (past), and threat (future). Transgression occurs when people perceive that their rights are currently being violated (Ellis & Harper, 1975;

Slaikeu, 1990). Loss refers to a belief that the crisis has caused something to be irretrievable (Myer, 2001). Clients believe the object or relationship to be gone forever, with no hope of recovering it. Threat refers to the perception that a catastrophe is approaching (Myers et al., 2002) or that the crisis event has the potential to harm the client in some area of his/her life in the future (Myer, 2001).

In the behavioral domain, clients will be primarily reacting using one of three behaviors with respect to attempting to resolve the crisis: (a) approach, (b) avoidance, or (c) immobility (Myer et al., 2002). Clients who react with approach behaviors to a crisis actively seek to resolve the problems caused by the situation (Myer, 2001). These behaviors can be overt or covert attempts to address the crisis event. Avoidance behaviors are defined as active attempts to escape or bypass problems associated with the crisis (Myers et al., 2002). Clients using avoidance behaviors attempt to move away from the crisis. Immobility refers to behaviors that are nonproductive, disorganized, or self-defeating attempts to cope with the crisis (Myer, 2001). Clients behaving in this manner either do nothing or make self-canceling attempts to resolve the crisis.

Once completed, the TAM distinguishes the type of reaction in each dimension, the severity of each reaction, and the overall magnitude of the reactions (Myers et al., 2002). This assessment provides the crisis worker with a blue print of the client's crisis experience and thereby allows the crisis worker to tailor treatment interventions. Specifically, the assessment of the three domains helps the service provider to adapt the intervention process to the client's immediate needs (Myer et al., 2002).