RESEARCH PLAN PROPOSAL

PSYCHO-SOCIAL CONCOMITANTS OF SECONDARY TRAUMATISATION: A STUDY ON HIGH RISK GROUPS

For registration to the Degree of

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INTRODUCTION

Secondary trauma is defined as indirect exposure to trauma through a firsthand account or narrative of a traumatic event. The vivid recounting of trauma by the survivor and the clinician's subsequent cognitive or emotional representation of that event may result in traumatic stress symptoms(TSS). Secondary traumatisation is also referred to as compassion fatigue (Figley, 1995) and vicarious traumatisation (Pearlman and Saakvitne, 1995). The effect of trauma can be manifested either as secondary traumatisation, which includes the emotional response to the traumatic event, or vicarious traumatisation, which causes longterm cognitive changes in beliefs and attitudes that can affect self/professional identity, an individual's world view and psychological beliefs related to esteem, intimacy, and spirituality (Sabin-Farrell & Turpin, 2003). Secondary traumatisation (STS) is most often seen in populations such as survivors of homicide (Amick-McMullan et al., 1989), spouses and family members of veterans (Rosenheck & Nathan, 1985; Solomon et al., 1992), emergency responders (Andersen, Christensen & Peterson, 1991) and therapists of traumatised clients (McCann & Pearlman, 1990a, 1990b; Pearlman & MacIan, 1995) who have intimate contact with victims of trauma, and can also be found among healthcare workers and rescue personnel. For example, following the Omagh bombing in Northern Ireland, 25% of the physicians involved in treating victims fulfilled the criteria for posttraumatic stress disorder (PTSD) 4 months after the incident (Firth-Cozens, Midgley, & Burges, 1999).

Symptoms of Secondary Traumatisation :

- Re-experiencing Symptoms: Traumatised individuals often re-experience thoughts, feelings, or images that are strongly related to the traumatic material. This re experiencing commonly takes the form of intrusive thoughts, flashbacks, or nightmares.
- Avoidance Symptoms: Avoidance symptoms include any attempt to avoid thoughts or feelings associated with the traumatic material in order to decrease anxiety associated with these thoughts. In professionals, some examples of this behaviour may be avoidance of discussion of traumatic material with a shelter resident, coming to work late, or daydreaming often while at work.
- Physiological Arousal: Traumatised individuals often begin to show signs of elevated physiological arousal such as feeling overly alert or jumpy, having difficulty concentrating and sleeping, and experiencing an elevated startle response.
- Shifts in Cognitive Beliefs: Traumatised individuals may also undergo gradual shifts in beliefs characterized by decreases in feelings of safety, trust, intimacy and control of the self and others.

In many studies of Secondary traumatisation, the emphasis has been placed on how trauma impacts on previously existing cognitive schemata with the assumption that the traumatic event is the cause of the indirect trauma. It has been found in some studies that there was a correlation between levels of Traumatic stress symptoms and Post traumatic growth among those taking care of the victims of politically motivated violence (Shiri, Wexler, Alkalay, Meiner, & Kreitler, 2008a, 2008b). Posttraumatic growth refers to positive psychological change experienced as a result of the struggle with highly challenging life circumstances. These sets of circumstances represent significant challenges to the adaptive resources of the individual, and pose significant challenges to individuals' way of understanding the world and their place in it. Posttraumatic growth is not simply a return to baseline from a period of suffering; instead it is an experience of improvement that for some persons is deeply

profound (Tedeshi, R.G., & Calhoun, L.G., 2004). Results seen in people that have experienced posttraumatic growth include some of the following: greater appreciation of life, changed sense of priorities, warmer, more intimate relationships, greater sense of personal strength, and recognition of new possibilities or paths for one's life and spiritual development.(Tedeshi, R.G., & Calhoun, L.G., 1996).

VARIABLES OF THE STUDY

***** COGNITIVE ORIENTATION

Cognitive orientation can be best understood in the context of cognitive orientation (CO) theory, which suggests that human behaviour is a product of specific belief types. CO theory, which is a cognitive-motivational approach to understanding, predicting, and changing of behaviours, defines these belief types and provides a method for evaluating them (Kreitler & Kreitler, 1982; Kreitler, Shahar, & Kreitler, 1976).

CO theory is particularly relevant for the study of secondary trauma since it has been shown to predict a wide range of cognitive, emotional, behavioural, and physiological phenomena that are associated with various types of trauma and coping with stress (Figer, Kreitler, Kreitler, & Inbar, 2002; Kreitler, Kreitler, Len, Alkalay, & Barak, 2008; Kreitler, Weissler, & Bruner, 1991). Formally, four types of beliefs are defined:

- Beliefs about self,
- Belief about goals,
- Belief about norms,
- General beliefs.

As postulated by Kreitler (2004), the different types of beliefs differ in the subject (in beliefs about self and goals the subject is the self; in general beliefs and norms it is non self) and in the relation between subject and predicate. Beliefs about self and general beliefs are reality based ("what is"), in contrast to beliefs pertaining to norms and goals, which focus on the ideal or "what should be."

In terms of contents, the beliefs refer to themes reflecting the meanings of the studied behaviour identified and defined by a standard procedure of in-depth stepwise interviewing validated by empirical testing (Kreitler and Kreitler 1982). Thus, the beliefs represent themes that, although they do not refer directly to the behaviour, mirror the meanings underlying it, which ensures their relevance to the specific behaviour. Directionality and strength are the main characteristics of motivational disposition. While directionality determines the activity toward which the motivational disposition is oriented, strength is assessed by the number of belief types orienting toward the specific activity.

*** EMOTIONAL PROCESSING**

The concept of emotional processing was first introduced by Rachman in 1980 who put it forward as a promising explanatory concept with particular relevance and application to the anxiety disorders. In 2001, Rachman restated the concept and applied it to post traumatic stress disorder. Rachman (1980) used the term emotional processing to refer to the way in which an individual processes stressful life events. He defined emotional processing as:

"A process whereby emotional disturbances are absorbed, and declined to the extent that other experiences and behaviour can proceed without disruption"

In emotional processing, the shared meaning of "processing" refer to the psychological, psychophysiological and psychoneurological mechanisms by which distressed emotional reactions in individuals are converted or changed to non distressed reactions.

Possible mechanisms underlying Emotional Processing

A fundamental component of emotional processing may involve some form of restructuring of emotional information.

"This process requires both the activation of the existing emotion schemas and the generation of new information with which to reorganise the existing emotional processing network". (Greenberg & Safran, 1987)

Theorists from a variety of orientations have tended to converge in postulating two emotional (memory) processing systems. There is considerable conceptual overlap in their formulations:

1. An abstract, schematic, associative and implicit system that has connections with bodily response systems. This mode involves fast and automatic processes such as priming and spreading activation. It often involves large numbers of memories in parallel. It is not wholly dependent on verbal information – visual, kinaesthetic or other cues could provide the basis for priming or activating an emotional memory.

2. An abstract propositional 'rational' system that is analytical, reflective, logical and relies on high level executive functions. It is primarily based on verbally accessible semantic information.

* SOCIAL SUPPORT

Social support is the perception and actuality that one is cared for, has assistance available from other people, and that one is part of a supportive <u>social network</u>. These supportive resources can be emotional (e.g., nurturance), tangible (e.g., financial assistance), informational (e.g., advice), or companionship (e.g., sense of belonging). Social support can be measured as the perception that one has assistance available, the actual received assistance, or the degree to which a person is integrated in a social network. Support can come from many sources, such as family, friends, pets, organisations, coworkers, etc.

There are four common functions of social support :

- Emotional support is the offering of empathy, concern, affection, love, trust, acceptance, intimacy, encouragement, or caring. It is the warmth and nurturance provided by sources of social support. Providing emotional support can let the individual know that he or she is valued. It is also sometimes called esteem support or appraisal support.
- Tangible support is the provision of financial assistance, material goods, or services. Also called instrumental support, this form of social support encompasses the concrete, direct ways people assist others.
- Informational support is the provision of advice, guidance, suggestions, or useful information to someone. His type of information has the potential to help others problem-solve.

• Companionship support is the type of support that gives someone a sense of social belonging (and is also called belonging). This can be seen as the presence of companions to engage in shared social activities with.

Social support can be measured in terms of structural support or functional support. Structural support (also called social integration) refers to the extent to which a recipient is connected within a social network, like the number of social ties or how integrated a person is within his or her social network. Family relationships, friends, and membership in clubs and organisations contribute to social integration. Functional support looks at the specific functions that members in this social network can provide, such as the emotional, instrumental, informational, and companionship support listed above.

*** QUALITY OF LIFE**

The term quality of life is used to evaluate the general well-being of individuals and societies. The term is used in a wide range of contexts, including the fields of <u>international</u> <u>development</u>, healthcare, and politics. Quality of life should not be confused with the concept of <u>standard of living</u>, which is based primarily on income. Instead, standard indicators of the quality of life include not only wealth and employment, but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging.

Researchers have begun in recent times to distinguish two aspects of personal well-being:

Emotional well-being: In which respondents are asked about the quality of their everyday emotional experiences the frequency and intensity of their experiences of, for example, joy, stress, sadness, anger, and affection.

Life evaluation: In which respondents are asked to think about their life in general and evaluate it against a scale.

Ferell, who has carried out a large research programme on pain and quality of life, defined quality of life as well-being covering four areas: quality of life is physical, mental, social and spiritual well-being (Ferrell, 1995). Lindströ (1994) has presented a model where quality of life was divided in a different way into four life spheres : the global, external, interpersonal and personal sphere where the last one was represented by the physical, mental and spiritual dimension.

* PERSONALITY

To best understand the response to trauma, one must analyze the predisposing personality factors that form the cognitive substrate of an individual (Kreitler &Kreitler, 1988). Personality refers to an individual's unique and relatively stable patterns of behaviour, thoughts and emotions. The study of personality focuses on two broad areas:

- One understands individual differences in particular personality characteristics, such as sociability or irritability.
 - The other understands how the various parts of a person come together as a whole.

Personality has a broad and varied history in psychology, with an abundance of theoretical traditions. The major theories include dispositional (trait) perspective, psychodynamic, humanistic, biological, behaviourist and social learning perspective. At present, most research on personality by psychologists occurs within the context of the trait approach which underlines the specific dimensions along which individuals differ in consistent, stable ways. The basic idea behind this approach is as follows: Once we identify the key dimensions along

which people differ, we can measure how much they differ and can relate such differences to many important forms of behaviour.

REVIEW OF LITERATURE

Cognitive orientation and Secondary traumatisation

Shiri and Wexler (2009) studied cognitive orientation as predictor of posttraumatic growth after secondary exposure to trauma, to explore the motivational basis for posttraumatic growth following secondary trauma among rescuers, nurses, and rehabilitation teams. It was found that the majority of variables associated with posttraumatic growth were predicted by the scores of the four belief types and thematic factors. These findings support the validity of cognitive orientation theory for assessing motivation for posttraumatic growth following secondary exposure to trauma.

Shimon and Wexler (2010) examined the association between reality-based beliefs and indirectly experienced traumatisation. Study participants included 38 rescuers (body handlers), 37 nurses, and 31 rehabilitation workers who treated injured civilians that had been exposed to politically motivated violence. The Cognitive Orientation for Posttraumatic Growth Scale was used to assess beliefs about personal growth. The Revised Posttraumatic Stress Disorder Inventory was administered to evaluate indirect traumatisation. The results indicate that three of the four belief types related to personal growth were associated with the level of indirect traumatisation. Optimistic and positive beliefs about self and general beliefs were associated with a lower level of indirect traumatisation and stronger goal beliefs were associated with greater indirect traumatisation.

Social support and Secondary traumatisation

Macritchie (2010) explored the secondary traumatic stress, level of exposure, empathy and social support in trauma workers who work with victims of violent crimes. Both Figley's (1995) trauma transmission model and Dutton and Rubenstein (1995) ecological model were used to develop a refined trauma model for trauma workers in South Africa. Relevant information was gathered from 64 volunteer trauma workers using self-report measures. It was found that previous exposure to traumatic material, level of empathy, and level of perceived social support have a significant relationship with secondary traumatic stress. Social support was not found to have a moderating effect, but empathy emerged as a consistent moderator between the trauma worker's previous exposure to traumatic material and secondary traumatic stress.

Mikulincer and Florian (1995) compared secondary traumatisation and family support in a sample of 49 wives of Israeli veterans with combat stress reaction (CSR) from the 1982 Lebanon War with a sample of 31 wives of Israeli veterans who fought in the war without developing CSR. The results indicated that the wives of veterans with CSR who reported having received more support from their families after the war reported more anxiety and hostility than wives who received less support.

Hobfall and London (1986) conducted a study on the relationship between self concept and social support to emotional distress in 56 Israeli women whose loved ones were mobilized into the Israeli Defence Forces were evaluated. It was concluded that social support was related to greater psychological distress. The unexpected findings for social support are attributed to a "pressure-cooker" effect, whereby war rumors were spread rapidly and women with more intimate relationships were more exposed to the sorrows of others. Alternatively, social support may have been adversive to women with high self-esteem who chose to master life challenges independently. The importance of studying immediate resistance to massive stressors is discussed.

Hyman(2004) studied perceived social support and secondary traumatic stress symptoms in emergency responders. Ninety technicians from the Israeli Police Forensic Investigation Unit participated in the study. Intrusion and avoidance measured within the medium range of severity, whereas distress symptoms were below clinical threshold. It was found that intrusion was significantly related to avoidance, distress, and the perceived severity of prior personal and work-related exposure. No significant relationship was found between perceived social support and secondary traumatic stress symptoms.

Quality of life and Secondary traumatisation

A study conducted by Hook (2008) on quality of life, compassion fatigue and burnout in 182 child welfare workers with a variety of work assignments. The scale used was the Professional Quality of Life Survey (ProQOL). The Professional Quality of Life Survey is a 30 item scale divided into three equal sections: Compassion Satisfaction, Compassion Fatigue/Secondary trauma, and Burnout. It was found that a group of individuals (women, younger workers, and individuals with key responsibilities) were at heightened risk for compassion fatigue and burnout and thus can be at greater risk for leaving child welfare or being less effective in their work responsibilities. Compassion satisfaction was linked with decreased burnout and compassion fatigue.

Zdjelarević and Komar (2011) assessed quality of life in the population most affected by war - families of Croatian veterans including the sample of 126 female participants, into three groups as follows wife of war veteran suffering from PTSD, wife who lost her husband in war circumstances or wife of war veteran with physical disabilities resulting from war activities. World Health Organisation Quality of Life Questionnaire - short form (WHOQOL-BREF) was used. It was found that assumed intensity of secondary trauma is not associated with quality of life. The highest level of satisfaction was found in wives of the most seriously affected invalids of war, followed by the wives of deceased soldiers , while the lowest quality of life results were found in wives of veterans suffering from PTSD.

A study conducted by Majuta and Ronnie (2010) to find out the relationship between vicarious traumatisation and quality of life and purpose in life among healthcare providers of cancer patients. 83 health care providers of cancer patients were treated as participants. The three instruments used for data collection were; trauma and attachment belief scale (TABS), professional quality of life scale (ProQOL) and purpose in life test (PIL). Result showed that while holding PIL constant, vicarious trauma did not predict professional quality of life. By the same token, vicarious trauma did not predict purpose in life when professional quality of life was held constant.

Berry and Beder (2011) studied quality of life indicators in stateside military hospital to examine satisfaction, burnout and secondary traumatic stress in 481 staff members at Womack Army Medical Center (WAMC) as measured by the Professional Quality of Life Questionnaire (ProQoL). Results show that compared to national norms, staff at WAMC measured higher levels of compassion satisfaction and lower levels of burnout and compassion fatigue. Findings suggest that staff in Military Treatment Facility (MTF) are relatively satisfied with their work and working conditions.

Stevanovic (2012) examined the presence of Secondary traumatic stress symptoms, current psychological symptoms, and perceived quality of life among wives of war veterans with PTSD. IT was found that thirty-six percent of wives of PTSD affected veterans meet the criteria for STSD. Wives of veterans with PTSD have significantly higher level of STS symptoms than the wives of veterans without PTSD. Level of STS symptoms is positively correlated with psychological symptoms and negatively with perceived quality of life.

Personality factors and Secondary traumatisation

Jimenez (2008) studied the resistance and vulnerability to trauma: The moderator effect of personality variables on secondary traumatic stress in 175 emergency professionals of the community of Madrid. The scale used was the Secondary Traumatic Stress Measure (STSM). The results of the hierarchical multiple regression analysis provided evidence for the moderator role of personality variables in the secondary traumatic stress process. Lastly, the discussion emphasized the need to focus on the interaction between personality and job demand variables in order to advance the understanding of the process of trauma in emergency professionals.

A study conducted by Jimenez and Moreno (2006) on <u>the influence of personality variables</u> on <u>secondary traumatic stress</u>. This empirical study explores the process of secondary traumatic stress among 175 sanitary professional, focusing on the contribution and the degree of relevance of personality variables, such as comprehensibility, challenge, sense of humor and empathy. Secondary traumatic stress was measured with the Secondary Traumatic Stress Measure. Results indicated that these personality variables seem to have an important role in secondary traumatic stress.

Wall and Cindy (2007) evaluated the psychological consequences of work injury: Personality, trauma and psychological distress symptoms of noninjured workers and injured workers returning to, or remaining at work. Data from structured clinical interviews, psychological and self-report questionnaires were gathered from 29 workers. It was found that injured workers demonstrated higher levels of Neuroticism and lower Extraversion, indicating greater emotional instability and lower capacity for adaptively coping with stress when compared to non injured workers. They also reported subclinical elevations on scales of trauma symptoms, and greater levels of depressive symptoms, somatic complaints, anxiety and sleep disturbance in comparison with non injured workers.

Jimenez and Moreno (2007) studied <u>secondary traumatic stress</u>: Personality and shattered assumptions on a sample of 419 emergency professionals to examine the role of several personality variables (empathy, comprehensibility, challenge and sense of humor) as moderators of the relationship between job demands (traumatic task and overload) with shattered assumptions. Secondary traumatic stress was measured with measured with Secondary Traumatic Stress Measure. It was found that these personality variables seem to have an important role in the change of assumptions process.

Emotional Processing and Secondary traumatisation

Slatcher (2005) evaluated emotional processing of traumatic events. Participants in the experimental condition were asked to write about their deepest thoughts and feelings about the most traumatic event of their lives and those assigned to the control condition were asked to write about superficial topics, such as how they use their time. To measure the ways people use words that express emotions and thoughts, a computer program called the Linguistic Inquiry and Word Count (LIWC) was developed that could analyze essays in text format. It was found that participants — from children to the elderly, from honor students to maximum security prisoners — disclose a remarkable range and depth of traumatic experiences. Rape, family violence, lost loves, deaths, and tragic failures had been common themes in all of the studies. The writing paradigm illustrated people's readiness to disclose deeply personal aspects of their lives when given the opportunity. It was discovered that when a person share or inhibit his thoughts and feelings about a traumatic event, he has the power not only to determine how he cognitively and emotionally process the event, but also to shape the ways in which he interact with others and how others perceive him.

<u>Suozzia</u> and Motta (2004)_systematically investigated the relationship between intensity of Vietnam combat exposure and the transfer of trauma symptoms to adult children of veterans. Forty male combat veterans who comprised high and low combat intensity groups were administered, a series of measures designed to assess PTSD, depression, anxiety, intrusive thoughts, and avoidance responses. Veterans also completed an emotional Stroop procedure involving combat relevant and non-relevant stimuli. Offspring of veterans (n = 53) completed similar measures. It was found that offspring affective responses were impacted by level of combat intensity. The most pronounced effects occurred on the emotional Stroop, wherein children of high combat veterans showed the longest Stroop response latencies. Offspring of veterans were found to be relatively well adjusted despite many of their parent-veterans having PTSD. Results supported the Stroop paradigm as a valuable research tool for investigating the parent - child transfer of subtle emotional effects.

Cleirigh et al. (2008) conducted a study in which written emotional disclosure and processing of trauma among a relatively rare group of people with AIDS compared with atypically favourable disease status HIV+ comparison group. The study also examined the mediational role of emotional/cognitive processing and natural killer (NK) cells. It was found that healthy survivors had higher levels of emotional disclosure and emotional/cognitive processing than the comparison group. Emotional/cognitive processing mediated the relationship between emotional disclosure and group membership. NK cell number mediated the relationship between emotional/cognitive processing and 'healthy survival'.

Margola (2010) examined the Cognitive and emotional processing through writing among adolescents who experienced the death of a classmate. Twenty high school students wrote about their emotional reactions to the death on 3 consecutive days. The writings were coded using the Linguistic Inquiry and Word Count (LIWC) and analyzed using a mixed-methods software (T-LAB). A measure of posttraumatic stress symptoms (Impact of Events Scale–Revised) obtained at baseline (14 days after the death) was used to classify the students into four adjustment trajectories: Delayed Distress, Recovery, Stable-Negative, and Stable-Positive. The results indicated that the nature of the writing differed across adjustment trajectories. Specifically, students in the Stable-Positive and Recovery trajectories made greater mention of the deceased classmate and reflected greater emotional processing of the trauma. Students in the Stable-Negative and Delayed Distress trajectories used more self-

references and negative emotion words and showed a greater degree of inhibition. The results provided preliminary clues to adjustment processes in adolescent bereavement.

METHODOLOGY

RATIONALE

Previous studies have sought to identify predictors of vulnerability to secondary traumatisation, and many have focused on cognitive factors. In terms of demographic factors, Lerias and Byrne (2003), in an extensive review of secondary traumatisation, summarized the factors that are associated with greater vulnerability to secondary trauma. A history of previous trauma, psychiatric history, younger age, female gender, lower educational attainment, and low socioeconomic status are frequently associated with secondary traumatisation. (Lerias & Byrne, 2003). Cognitive predictors of secondary traumatisation associated with coping strategies have been addressed in several studies. However very few studies, conducted so far have investigated the role of personality factors, emotional processing and positive traits like social support and quality of life in secondary traumatisation. Therefore, it occurred to this investigator to take up these issues in the present study.

IMPLICATIONS OF THE STUDY

Clinically, the issue of whether beliefs, emotions, personality and positive factors like social support and quality of life shape the reaction to indirect trauma then there is a strong role for psychotherapy and its function in mitigating the impact of specific trauma and paving the way for post traumatic growth. The enhancement of positive emotional processing, personality factors and other variables have potential for improving the outcome of indirect traumatisation.

AIMS AND OBJECTIVES

- To study the role of cognitive orientation & the development of secondary traumatisation.
- To explore the role of emotional processing in secondary traumatisation.
- To examine the influence of social support and quality of life in secondary trauma.
- To investigate the importance of personality factors in secondary trauma.

HYPOTHESES

To fulfill the above aims the following hypotheses were formulated.

- Hypothesis 1: The influence of cognitive orientation will be significantly different in subjects with secondary trauma and normal controls.
- Hypothesis 2: The subjects with secondary traumatisation will differ significantly in emotional processing as compare to their normal counterparts.
- Hypothesis 3: The subjects with secondary trauma and normal controls will differ significantly on factors, such as social support and quality of life.
- Hypothesis 4: Some personality constellations will be significantly different in the subjects with secondary trauma and the normal controls.

SAMPLE OF THE STUDY

The study sample will consist of 50 cases in each of the four categories viz. police personnel, doctors in emergency wards, practising psychiatrists and normal controls. Total sample of 200 cases will be selected according to the following criteria of inclusion and omission:

Criteria of inclusion-

- a) All subjects will be between the age group of 30-50 years.
- b) Only male subjects will be taken.
- c) Minimum education at least graduation level.
- d) All subjects belonging to middle socio-economic background with urban domicile.
- e) Work experience will be at least 2 to 10 years.

Criteria of omission-

- a) People suffering from neurotic, psychotic and PTSD ailments will be excluded with the help of guidelines of clinical diagnosis suggested in DSM –IV TR.
- b) An attempt will be also made to take the help of the psychiatric consultants to rule out such disorders.
- In the present study, purposive sampling will be used to select the sample.

DESIGN OF THE STUDY

The present study will include two groups viz. experimental and control. The subjects suffering from secondary traumatisation will form the experimental group. There will be three sub categories of experimental group comprising subjects from-

a) Police department

- b) Doctors in emergency wards
- c) Practising psychiatrists.

Matched normal controls (in terms of age, sex, work experience & socio-economic background) will form the control group.

The cases of both experimental and control groups will be compared on the measures of dependent variables such as social support, quality of life, personality factors, emotional processing and cognitive orientation.

> Multi group design of the study :

	Police Personnel (50)	Doctors in emergency wards (50)	Practising psychiatrists (50)	Normal controls (50)
Cognitive- Orientation				
Emotional Processing				
Social -Support				
Quality of life				
Personality Factors				

MEASURES OF THE STUDY

- 1. SESSQ [Socio- Economic Status Scale Questionnaire] (Urban, Jalota, 1971)
- 2. NEO-FFI Questionnaire (Costa & Mccrae, 2004)
- 3. Social Support Appraisal [SS-A]scale (Vaux et al. 1986)
- 4. Professional Quality of Life Scale, version-5 [Pro QOL 5] (Stamm, 2009)

- 5. The Cognitive Orientation Of Growth Quesstionnaire [COQ-PTG] (Kreitler,2005)
- 6. The Emotional Processing Scale [EPS-25] (Baker, 2010)
- 7. Secondary Traumatic Stress Scale (Bride, 1999)

PROCEDURE

The study will be conducted in two phases. In the first phase, with the help of secondary traumatic stress scale (Bride, 1999), subjects in the three subcategories, experimental group will be identified. Based on the test results, criteria of inclusion & omission of the study, 50 subjects will be selected.

In the second phase, the subjects selected in the sample will be administered individually the psychological tools of the study.

STATISTICAL ANALYSIS

For the purpose of analysis following statistical measures will be obtained:

- Mean
- Standard deviation
- One way Analysis of variance
- Other relevant statistics

LIMITATIONS OF THE STUDY

- 1. The present study is going to be limited due to time restrictions therefore confined only to 200 cases.
- 2. Only objective tests will be used in the study without supplementing with some data obtained by using projective tests.
- 3. Sample is limited to doctors , police personnels and psychiatrists.

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