A PROGRAMME TO ASSIST NURSES EXPOSED TO VICARIOUS TRAUMATISATION

by

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This dissertation (in article format) is being submitted in accordance with the partial requirements for the degree

MAGISTER SOCIETATIS SCIENTIAE

(CLINICAL PSYCHOLOGY)

in the

FACULTY OF HUMANITIES

DEPARTMENT OF PSYCHOLOGY

at the

UNIVERSITY OF THE FREE STATE

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March 2004

I (José Francisco Ribeiro) declare that the article hereby submitted by me for the M.Soc.Sc. degree in Clinical Psychology at the University of the Free State is my own independent work and has not previously been submitted by me at another university/faculty. I furthermore cede copyright of the article in favour of the University of the Free State.

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José Ribeiro 01/03/04

ACKNOWLEDGEMENT

My sincere thanks to the following people:

- Loni, my caring and supporting wife.
- My family who supported me through my studies.
- My supervisor Dr Henriette Van Den Berg for her patience and support during this study.
- Dr Karel Esterhuyse for the statistical analysis.
- Mr Melamu, head of nursing at the Free State Psychiatric Complex.
- Chanell Cuyler-Greeff for her role as co-therapist.
- The nursing staff at the Free State Psychiatric Hospital.

J.F.RIBEIRO

Bloemfontein

March 2004

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Abstract

Nurses comprise the largest group of health workers in South Africa. They provide the main connection with patients and have the most direct one-to-one contact with patients. This intensive caring by nurses can result in their experiencing of vicarious traumatisation (VT). This is not only a short-term reaction to working with patients' traumatic material but also a long-term alteration in the nurses' own cognitive schemas, beliefs, expectations, and assumptions about the self and others. Consequently nurses are less likely to provide optimal patient care, thus affecting their ability to provide for patients' well-being. In addition, the consequences of VT also extend to the nurses' psychological and physical well-being. The objective of this study was to determine the levels of VT and burnout experienced by a group of nurses, and to develop, implement and evaluate an intervention programme in order to promote the use of effective coping strategies to reduce the impact of VT and burnout. The researcher used the model of social constructivism to explore the social interactions between people as the basic factor that forms and influences behaviour, thought and emotion. Sixty nurses working at the Free State Psychiatric Complex participated in this study. They were randomly assigned and divided into control and experimental groups and then completed questionnaires to gather background information (biographical questionnaire) and to assess the characteristics of VT and burnout. The measurements used in this study include the Traumatic Stress Inventory (TSI) Belief Scale, the Traumatic Stress Inventory (TSI) Inner Experience Questionnaire, and the Maslach Burnout Inventory. A comparison of the mean scores on the characteristics indicated that experimental groups had significantly higher mean scores than the control group as far as connection and personal accomplishment are concerned. However, scores relating to affect tolerance, self-worth, trauma symptoms belief, emotional exhaustion, and depersonalisation did not differ significantly. This suggests that the programme implemented in this study was effective in improving a sense of connection and personal accomplishment in nurses. The aim of this programme was to assist nurses in understanding VT, to aid in transforming and addressing VT, to identify signs, symptoms and contributing factors of VT, and to develop a personal resource list in order to ensure the development of a healthy self.

Keywords: *Vicarious traumatisation, burnout, secondary stress disorder, stress, nurses, Traumatic Stress Inventory (TSI) Belief Scale, Traumatic Stress Inventory (TSI) Inner Experience Questionnaire, Maslach Burnout Inventory, coping strategies, intervention programme.*

Samevatting

Verpleegkundiges is die grootste groep gesondheidswerkers in Suid-Afrika. Hulle verskaf die mees direkte hoof toegang met pasiente en die mees een-tot-een kontak met patiente. Hierdie intensiewe sorg wat deur verpleegkundiges verskaf word kan lei tot ‘n ervaring genaamd vikariese traumatisering (VT). VT behels nie slegs ‘n korttermyn reaksie op die aard van hul werk met pasiente se trauma nie, maar ook langtermyn veranderings in hul eie kognitiewe skemas, gelowe, verwagtings en aannames oor hulself en ander. Gevolglik is verpleegkundiges minder geneig om optimale pasiente-sorg te verskaf sodat hulle vermoe om in pasiente se welsyn te voorsien benadeel word. Bykomend beinvloed die gevolge van VT die psigologiese en fisiese welsyn van die verpleegkundiges. Die doel van hierdie ondersoek was eerstens om ‘n groep verpleegkundiges se vlak van VT en uitbranding te bepaal. Tweedens is ‘n intervensie programme ontwikkel om die gebruik van doeltreffende hanteringsvaardighede te bevorder en die impak van VT en uitbranding te verminder, waarna hierdie program geimplementer en geevalueer is. Sestig vrywiligers wat by die Vrystaat Psigiatriese Kompleks werk het aan die ondersoek deelgeneem. Hierdie groep is in ‘n eksperimentele en kontrole groep opgedeel waarna hul vraelyste vir die versameling van agtergrond inligting (biografiese vraelyse) en die assessering van VT en uitbranding. Die meetinsinstrumente wat in hierdie ondersoek gebruik is sluit die Traumatic Stress Inventory (TSI) Belief Scale, the Traumatic Stress Inventory (TSI) Inner Experience Questionnaire and the Maslach Uitbrandings Vraelys in. Nadat die gemiddelde tellings op die verskei eienskappe met mekaar vergelyk is, is gevind dat die eksperimentele groepe beduidend hoer gemiddelde tellings rakende konneksie en persoonlike verrigting as die kontrolegroepe gehad het. Dit impliseer dat die program wat in hierdie ondersoek aangewend was doeltreffend om ‘n gevoel van konneksie en persoonlike verrigting by verpleegkundiges te bevoerder. Die doel van die program self was om verpleegkundiges te assisteer in hul begrip van VT, om transformasie te fasiliteer en VT aan te spreek, om tekens, simptome en faktore bydraend to VT te identifiseer en om ‘n persoonlike lys van hulpbronne te ontwikkel en sodoende die ontwikkeling van ‘n gesonde individu te verseker.

Sleutelwoorde: *Vikariese traumatisering, uitbranding, stres, verpleegkundiges,, Traumatic Stress Inventory (TSI) Belief Scale, Traumatic Stress Inventory (TSI) Inner Experience Questionnaire, Maslach Uitbrandings Vraelys, copingstrategiee, intervensieprogram.*

Saakvitne (1998) indicates that "working with trauma survivors changes us profoundly" (p.1). She states that health workers whose work involves empathic connection with individuals who have experienced traumatic life experiences suffer a significantly adverse impact on their personal well-being. These workers often feel less grounded, find it difficult to maintain an inner sense of balance, and report a negative impact on their self-concept because of the vicarious traumatisation they experience. Although health care workers are qualified and trained, including supervision in the treatment of victims, they are not immune to the painful images, thoughts, and feelings associated with exposure to their clients' traumatic memories (McCann & Pearlman, 1990).

Nurses form the largest group of health workers in South Africa (Levert, Lucas & Ortlepp, 2000, p.36). They provide the main connection with patients, act as patient advocates with other care providers, have the most direct one-to-one contact with patients, give physical care to patients, and give emotional support to both patients and families (Leiter, Harvie & Frizzell, 1998). This intensive caring by nurses can lead to the experience of vicarious traumatisation which is a short-term reaction to working with patients' traumatic material. It can cause a long-term alteration in the nurses' own cognitive schemas, beliefs, expectations, and assumptions about the self and others. The highly demanding nature of caring for others and the physically and emotionally taxing nature of nurses' work contribute to nursing being identified as a high-risk occupation for burnout (Allen & Mellor, 2002; Figley, 1995; Sabin-Farrell & Turpin, 2003).

In South Africa, the considerable contribution by nursing staff to the well-being of patients and to the hospital system as a whole is to a large extent neither acknowledged nor recognized. This may play a role in the overwhelming number of nurses feeling a lack of personal accomplishment. Despite the essential services they provide, their long hours and strenuous work, they are regarded as playing an inferior role, having inferior status and receiving inferior remuneration (Levert et al., 2000). In addition, nurses and psychiatric nurses are often characterised as being unmotivated and insensitive towards patients, exacerbating problems such as the lack of resources and understaffing faced by hospitals. These behaviours, however, typify burnout and are often a consequence of

these conditions.

Levert et al. (2000) elaborated on this, stating that nurses who are overwhelmed or emotionally exhausted by their jobs are less likely to provide optimal patient care. Nurses thus distance themselves from their patients as a reaction to their feeling emotionally drained by their job. As this distancing contradicts the requirements of the nursing role which emphasizes care, it ultimately leads to lower efficacy (Greenglass, Burke & Fiksenbaum, 2001). Likewise, nurses' highly salient responses to the stress associated with greater proximity to, and on-going contact with patients' physical and emotional problems and their associated negativity towards patients result in emotional fatigue and ultimately experiences of depersonalisation (Kalliath, O'Driscoll & Gillespie, 1998).

Burnout is a common problem in nurses as they bear the major burden of health care professions. This study of nursing burnout and vicarious traumatisation (VT) is crucial as it impacts on the well-being of nurses and their families, and on the quality of patient-care (Miller et al., 1995). This research will therefore focus on the determination of the level of VT experienced by a group of nurses, as well as the development and evaluation of an intervention programme that attempts to promote the use of coping resources and strategies aimed at the effective management of vicarious traumatisation.

BURNOUT, STRESS, VICARIOUS TRAUMATISATION (VT) AND SECONDARY TRAUMATIC STRESS (STS)

Job stress is a broad field of study that includes a number of concepts such as stress, burnout, STS and VT. *Burnout* refers to a condition caused by chronic emotional and interpersonal work stressors (Maslach et al., 2001), whereas Lazarus and Folkman (1984) define *stress* as a "provocative relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being." (p. 19). Burnout and stress are related to chronic tedium in the workplace rather than exposure to specific kinds of patient problems such as trauma (Schauben & Frazier, 1995). *STS* and *VT*, on the other hand, refer to reactions to the

emotional demands made on health care workers from exposure to traumatised patients' terrifying, horrifying, and shocking images; strong, chaotic affect, and intrusive traumatic memories. VT differs from STS in that it results from the cumulative exposure to traumatised patients over time and is manifested in emotional expressions and interpersonal contact as well as covert changes in thinking. The symptoms of STS are similar to those of post-traumatic stress disorder except for the indirect nature of the exposure to the traumatic event. Burnout, STS, VT and stress are similar in that they result from exposure to emotionally engaging patients via interpersonally demanding jobs, and represent debilitation that can obstruct the services provided by health care workers.

SYMPTOMS OF VICARIOUS TRAUMATISATION

Exposure to the traumatic situations and vulnerabilities of victims may illicit concerns about the helpers' own sense of power or efficacy of the world. Nurses exposed to persons who are violated or harmed by the uncaring intentions of others may also find that their view of human nature becomes more pessimistic. Nurses who viewed life in an idealistic way can experience a painful shattering of their belief system after working in an institution for a short period of time. Because their schemas are continuously challenged by patients' reports of traumatic experiences, they can experience an overall sense of disorientation.

Saakvitne and Pearlman (1996) further suggest that VT can lead to changes in both self- and professional identity, one's view of the world, spirituality, self-capacities and abilities, and psychological needs and beliefs relating to safety, trust, esteem, intimacy and control. Baird and Jenkins (2003) state that there is growing clinical and research evidence that helpers who work with traumatised clients may develop reactions specific to the nature of the clients' material. Not only are the schemas of victims affected by the experience of violence, but those of helpers working with these victims are also challenged by the process of vicarious traumatisation. Disruptions in cognitive schemas may be associated with certain emotions or thoughts in the helper. McCann and Pearlman

(1990) emphasize that disruption in schemas is associated with these feelings and/or thoughts of vulnerability. Helpers who work with victims exposed to cruelty start to undermine those who depend upon them. This may disrupt their schemas about *trust*, resulting in the helper becoming suspicious about the motives of others, and becoming more distrustful. Images involving loss of safety, including harm to innocent people, may challenge the helpers' schemas within the area of *safety* (McCann et al., 1990). Exposure to patients' memories may evoke concerns about their own *sense of power* or efficacy in the world. Strongly independent nurses may experience the identification with patients who have lost a sense of personal control and freedom as especially painful. Individuals experience a lower feeling of *esteem* (competence and achievement) when working with people due to high levels of burnout (Parker & Kulik, 1995), and nurses may experience a sense of alienation from parents, family members and friends, causing problems of *intimacy* due to exposure to horrific imagery and cruel realities. Alteration in the *frame of reference* can also be very distressing. If nurses' schemas are continuously challenged by patients' reports of traumatic experiences, they can experience an overall sense of disorientation. When nurses are not offered the opportunity to process their experiences, they, like patients, can respond to this with a pervasive and unsettling sense of uneasiness. Nurses who cannot cope with the rigours of their work cease to pull their weight, argue with colleagues, and create an unhealthy atmosphere. They become ill, fail to turn up for work, or leave the profession (Burke, 2002; Erasmus, Poggenpoel & Gmeiner 1998; Greenglass et al., 2001; Jenkins et al., 2002).

A combination of these factors contributes to nurses being more likely to experience emotional exhaustion, which is indicative of the emotional toll taken on individuals who experience stress. According to Maslach (1982), 'a person gets overly involved emotionally, overextends him-or herself, and feels overwhelmed by the emotional demands imposed by other people. The response to this situation is emotional exhaustion' (p.3). This results in nurses feeling drained and not having the energy to face another day at work. Once emotional exhaustion sets in, individuals no longer feel that they can give their best to others. Consequently boundaries become vague, leading to feelings of fatigue, apathy, and a loss of motivation.

Apart from the abovementioned symptoms, nurses who experience VT may also experience emotional symptoms such as depression, fear, anxiety, anger, sadness and horror, as well as cognitive symptoms such as dissociation, poor concentration and amnesia. If these feelings are not openly acknowledged and resolved, the helper risks feeling numb or emotionally distant, thus becoming unable to maintain a warm, empathetic, and responsive stance with clients (Baird 2003; Knight, 1997; McCann et al., 1990; Ortlepp & Friedman, 2002). Leiter et al. (1998) state that the strain of exhaustion, the lack of meaningfulness in one's work, and the desire to quit may all be readily sensed in the way in which nurses interact with patients. Nurses to a large extent influence patient satisfaction by the affective nature of their interactions. This cost of caring involves the psychological impact of transformation that occurs within health workers as a result of their engagement with clients' traumatic experiences on an empathetic level. People who work with victims may find that their cognitive schemas and imagery system of memory become altered or disrupted by long-term exposure to the traumatic experiences of their victimised clients. This inability to cope with these work-related symptoms/stressors can in extreme cases result in higher rates of suicide-related deaths among nurses (Hingley, 1984; Harris, 1989). Burnout affects not only the ability of nurses to provide optimal patient care, but also their psychological and physical health.

CAUSES OF VICARIOUS TRAUMATISATION IN NURSES

Nurses face a wide range of chronic non-patient care-related stressors that lower their job satisfaction and may place them at risk for burnout. Miller, Reesor, McCarrey and Leikin (1995) identified various stressors that contribute to nurses' stress, including patient-nurse communication, lack of personal accomplishment, and aversive contact with patients' families. Previous findings by Descamp and Thomas (1993) state that stressors experienced by nurses also include work overload, inadequate preparation to meet emotional needs of patients and family, and exposure to death and dying.

Helpers who work with victims of random violence may experience a heightened sense of vulnerability and an enhanced awareness of the fragility of life. McCann and Pearlman

(1990) suggest that exposure to these stressful and traumatic experiences of victims may be hazardous to the mental health of people close to the victim, including helpers involved in the victim's healing process. Counter-transference usually follows whereby the nurses incorporate the painful feelings, images and thoughts associated with working with trauma survivors. Without the opportunity to express their emotions, nurses can respond with a pervasive and unsettling sense of uneasiness. In addition, due to the high personal standards of nursing staff, nurses take on too much responsibility and become indifferent or overly involved, thus making themselves vulnerable to subsequent negative effects (Johnson & Hunter, 1997). Briere (1989) also confirms that continual and exclusive work with people who have been exploited by others is almost guaranteed to twist one's perceptions, resulting in views of relationships as being adversarial, and of the world being inherently dangerous. The chronic lack of support and the unfulfilled need for recognition in their work environment, contribute to the nurses' experience of emotional fatigue. This has a negative impact on patients and health services.

COPING STRATEGIES OF NURSES

When nurses face exhaustion they develop an armour of detachment, which eventually leads to depersonalisation. Nurses begin to do things in order to protect themselves from being overwhelmed by their situation. They detach themselves emotionally from their patients, and experience less attachment to patients who are demanding, resulting in their resenting the people they are supposed to be helping (Pines et al., 1998; Harris, 1989; Vlerick, 1996).

Other aspects such as social withdrawal from family and friends, substances abuse, negative emotional ventilation on fellow workers and family, and resigning prematurely are all ineffective ways in which nurses try to cope with their work-related stressors. Thus it is important to assist nurses in coping with their trauma, especially with regard to their ability to cope with the pain and suffering of others on a daily basis, as well as their ability to distantiate themselves from their work once they are off duty (Figley, 1995).

Nurses need to learn to identify their own reactions that elicit strong countertransference reactions, develop an awareness of the specific somatic signals of distress, understand early warning signs of VT in themselves, and accurately name and articulate those trauma-related inner experiences and feelings. They must understand personal tolerance for hearing traumatic material and remain positive that strong emotions will subside, rather than being overwhelmed by emotions. This realisation can assist nurses in staying empathically engaged rather than resorting to defensive countertransference reactions. Nurses need to acknowledge that their personal history of traumatic events, as well as other unprocessed negative experiences are likely to interact destructively with the client's trauma and leave them vulnerable to the effects of vicarious trauma.

When feeling vulnerable nurses should take some time to heal and recover (Danieli, 1994). Nurses should also be aware of major life stressors that make them vulnerable to the effects of VT. It is important that nurses maintain a fulfilling personal life and keep clear boundaries with their work in order to counteract the effects of VT. This requires identifying creative, regenerating and healing activities (such as art, music, time with family, friends and children), exercise, hobbies, meditation, and other recreational activities (Sexton, 1999).

McCann and Pearlman (1990) suggest that nurses could also avoid professional isolation by keeping contact with other professionals who work with victims. These contacts can provide opportunities for emotional support groups which can focus on three major issues: normalizing the reactions helpers experience in the course of their work, applying constructive self-development theory to understanding one's specific reactions, and providing a safe environment in which helpers feel free to share and process reactions that are painful or disruptive. These high levels of subjective personal accomplishment sustained by adequate structural supports may allow nurses to tolerate moderate levels of emotional exhaustion without needing to distance themselves from clients (Jenkins et al, 2002).

Saakvitne and Pearlman (1996) have made other useful and practical contributions to the

management of VT. They emphasized the importance of the ability to identify symptoms of VT, as well as insight into personal conflicts that increase susceptibilty to feelings of vulnerability and loss. They suggest that intervention programmes aimed at effective coping with VT should include activities that address affect tolerance and an understanding of personal resources that can be used to counteract work-related stressors. According to them, such a programme should focus on promoting the self-knowledge of nurses, resulting in them enhancing the connection with the self and others, deepening their own awareness, and balancing their work and personal life.

RESEARCH METHOD

The objective of this study was to determine the levels of VT and burnout on the experiences of a group of nurses and to develop, implement and evaluate an intervention programme to promote the use of effective coping strategies in order to reduce the impact of VT and burnout. The concept of VT is based in on the constructivist self-development theory (CSDT) which describes the aspects of self that are affected by traumatic events. Understanding which aspects of the self are vulnerable to disruption helps to identify and then transform one's particular experiences of VT. CSDT defines five major needs that are sensitive to traumatic events, namely safety, esteem, trust, control and intimacy. These are reflected in beliefs about oneself and others. Thus, CSDT stipulates that VT events impact a person in the context of the developing self. In the face of traumatic incidents people will adapt and cope given their experiences, interpersonal, intrapsychic, familial, cultural and social attributes. Meaning and adaptation are also emphazised whereby adaptation relates to the context in which an event occurs and its meaning regarding the individual. This theory assumes that distorted beliefs reflect an attempt to protect oneself and one's meaning system from the possible harmful effects of trauma. Thus, helpers need to understand the meaning of symptoms in order to identify internal conflicts and anxiety. The theory also postulates that helpers need to develop an underlying sense of identity, and to understand and integrate significant events in their life and their feelings associated with these events. Ego resources as stipulated in the theory will also give the individual the ability to negotiate interpersonal situations and

make good decisions such as foreseeing consequences as well as establish healthy boundaries between oneself and others. Finally, CSDT recognises that any traumatic experience is processed and recalled by means of cognitive, visual, affective, somatic, sensory and interpersonal modalities. Thus, traumatic memories can involve the disconnection of different aspects of the experience. (Saakvitne & Pearlman, 1996). With the aid of the CSDT model the programme will assist nurses in enhancing their awareness so that they begin to create solutions, whereby they will focus on goals to encourage constructive solutions in order to cope with their traumatic experiences.

Research design

Solomon's four-group design was implemented in this study (Braver & Braver, 1988). The four groups consisted of two experimental and two control groups. The first experimental group completed a pretest, participated in the intervention programme and completed a post-test. The second experimental group participated in the intervention programme and only completed a post-test. The first and second control groups did not participate in the intervention programme. The first control group completed the pre- and post-test questionnaires whereas the second control group completed only the post-test. The aim was to ensure that pretest sensitisation would not influence the effectiveness of the intervention programme.

Data gathering

Approval to conduct the study was obtained from the Ethics Committee of the Faculty of Medicine, University of the Free State, and the Free State Psychiatric Complex. The Psychiatric Complex was chosen as a large number of psychiatric nurses as well as the researcher are in the employ of the institution. Sixty nurses who work at the Free State Psychiatric Complex participated in the study. Thirty nurses were randomly assigned to complete a pre- and post-test and the remaining 30 nurses were randomly assigned to complete a post-test only. These nurses were then randomly divided into four groups (two experimental and two control groups) consisting of 15 nurses each. A letter of introduction (Appendix B) was included with the questionnaires (Appendix C). Stating the purpose of the study, the voluntary participation of the participants, and outlining the

nature of the activities included in the intervention programme.

The researcher then scheduled a meeting with the experimental groups, whereby the intervention programme was implemented. The intervention programme was scheduled over two sessions of three hours each, with a time lapse period of two weeks for the completion of the post-tests.

Participants

The target group consisted of both male and female nurses of all age groups from the Free State Psychiatric Complex.

Table 1: Distribution of nurses according to the biographical variables for the total group and separately for the four groups

Biographical variables	Group 1		Group 2		Group 3		Group 4		Total	
	N	%	N	%	N	%	N	%	N	%
Number of years experience:										
Less than 2 years	1	6,7	0	0,0	1	6,7	4	26,7	6	10,0
2 – 5 years	3	20,0	6	40,0	2	13,3	1	6,7	12	20,0
6 – 10 years	2	13,3	3	20,0	7	46,7	4	26,7	16	26,7
More then 10 years	9	60,0	6	40,0	5	33,3	6	40,0	26	43,3
Highest qualification:										
Grade 10 – 11	3	20,0	2	13,3	2	13,3	7	46,7	14	23,3
Grade 12	2	13,3	0	0,0	3	20,0	5	33,3	10	16,7
Grade 12 and 1 – 3 years'	2	13,3	1	6,7	5	33,3	2	13,3	10	16,7
Grade 12 and more than 3 yrs'	8	53,3	12	80,0	5	33,3	1	6,7	26	43,3
Marital status:										
Single	1	6,7	6	40,0	2	13,3	3	20,0	12	20,0
Married	8	53,3	8	53,3	11	73,3	9	60,0	36	60,0
Divorced	5	33,3	1	6,7	2	13,3	2	13,3	10	16,7
Widow	1	6,7	0	0,0	0	0,0	1	6,7	2	3,3
Children										
No	0	0,0	3	20,0	2	13,3	0	0,0	5	8,3
Yes	15	100	12	80,0	13	86,7	15	100	55	91,7
Total	15	25,0	15	25,0	15	25,0	15	25,0	60	100,0

Note: group 1 = experimental group 1; group 2 = control group 1; group 3 = experimental group 2 and group 4 = control group 2

The frequencies of the biographical variables for the sample are displayed graphically in Table 1. Compared to the other groups, Group 4 had the highest percentage (26,7%) of participants with less than 2 years' experience. Group 2 had no participants with less than 2 years' experience. Regarding 2 to 5 years' experience, Group 2 had the highest percentage of participants in this category (40%). Regarding 6 to 10 years' experience,

group 3 had the highest percentage with (46.7%) and with more than 10 years experience, group 1 had 60% of participants in this category. For the sample as a whole, most participants (38.3%) had more than 10 years' experience. Likewise, the highest percentage of participants (43,3%) had a higher qualification than grade 12 and more than 3 years' experience. The proportion of participants within each group reflecting the separate levels of qualification was very similar to that of years of experience already discussed. The biggest difference was found for group 2 where 80% of the participants had a grade 12 qualification and more than 3 years experience.

Regarding marital status, most of the participants (60%) were married. This tendency was reflected within each group. Next to being married, being single was the marital status category with the second highest percentage within each group. Nearly all participants indicated that they had children. Compared to group 4 where all the participants had children, the lowest percentage of children was found in group 1.

Measuring instruments

The following measuring instruments were used:

- ***Biographical Questionnaire***. This self-compiled questionnaire consists of 9 questions to gather information regarding the age, gender, years of work experience, marital status and level of appointment of the participants.
- ***The Traumatic Stress Inventory (TSI) Belief Scale***. The TSI (Pearlman, 1996) is an 80 item questionnaire that measures disruptions in the five psychological need areas hypothesized to be sensitive to trauma – safety, trust, intimacy, control and power – relative to self and others. Only the total score was used in this study. The overall reported reliability (Cronbach's alpha) of the TSI is 0.98 (Pearlman, 1996). The TSI yields a total score, which represents the overall extent of cognitive disruption, with higher scores representing greater levels of disturbance associated with VT.
- ***The Traumatic Stress Inventory (TSI) Inner Experience Questionnaire***. The TSI Inner Experience Questionnaire measures the following aspects associated with VT: affect tolerance, self-worth and connection. This questionnaire consists of 24 items

measured on a six-point Likert scale (1 = disagree strongly, 6 = agree strongly). Acceptable reliability coefficients ranging from 0.76 to 0.92 have been reported (Saakvitne & Pearlman, 1998).

- ***The Maslach Burnout Inventory (MBI)***. The MBI (Maslach, Jackson & Leiter, 1996) is a 22-item questionnaire designed to assess the three central aspects of burnout: emotional exhaustion, depersonalisation and decreased sense of personal accomplishment. The MBI has Cronbach's alpha reliability coefficients of 0.90 for the Emotional Exhaustion subscale, 0.79 for Depersonalisation and 0.71 for Personal Accomplishment (Maslach, Jackson & Leiter, 1996). It has been used widely with mental health professionals.

Intervention programme

The aim of this programme was to assist nurses in understanding VT, to help in transforming and addressing VT, to identify signs, symptoms and contributing factors of VT, and to develop a personal resource list in order to ensure the development of a healthy self. It would assist nurses to become aware of their thoughts, actions and feelings in order to deepen their self-awareness and enhance their connection with themselves and other people. The intervention focused on the use of personal resources in order to reduce the negative effects of VT and to promote the ability to cope effectively with trauma-related stressors in the work environment.

The programme was implemented over one six-hour period divided into two sessions. The programme endeavoured to transform nurses' views of self-awareness and connection with others by means of facilitating discussions in which nurses could share their experiences. By sharing their experiences they deepened their own awareness and decreased their sense of isolation. This ensured that they could begin to break down the barriers of isolation and silence.

Mind exercises

After addressing and defining VT, signs and symptoms including general (hopelessness) and specific changes (identity changes) to oneself were discussed. This included the

nurses making a commitment to themselves to address VT in their professional, organizational and personal lives. The nurses also had to develop a personal resources list, consisting of internal and external resources, which helped to identify the necessary resources they will need in order to transform the pain of VT. Lastly, the nurses were asked to make two columns to identify their needs. On the left-hand side they had to indicate ways in which they experience VT at work and home, and on the right hand column they had to identify the need represented by the disruption (safety, trust, esteem, control, intimacy). The essence of these thinking exercises thus ensured that participants catalogued signs of VT and brainstormed ideas for effective strategies in order to deal with VT and improve self-care.

Body exercises

Body exercises served to increase the nurses' awareness of the impact of VT on the body (stress and tension) and to identify resources for self-care and connection to self. The following aspects were addressed. First, relaxation exercises helped the nurses to develop a sense of comfort. Secondly, focal exercises aided in the development of imagined future wellness. The purpose of guided visualisation was to practise relaxation skills, improve inner attunement and focus, and increase awareness of inner resources.

Experiential exercises

The aim of these exercises was to invite the nurses to notice and address feelings related to VT. These exercises were designed to illicit feelings and to make sense of these feelings, and to promote the integration of conflicting or distressing emotions. They aimed to improve affect tolerance and help participants to examine their relationship to their own feelings, allowing them to see the benefits as well as hardships of experiencing certain feelings. These exercises invited the nurses to be in touch with their feelings by means of guided visualisations. Sculpture techniques and guided visualisations were used to increase their awareness of inner resources. A detailed discussion of the intervention programme is included in Appendix A.

Programme evaluation.

At the end of the last session of the intervention programme participants completed an evaluation form (Appendix D) to evaluate the impact of the various topics addressed in the intervention programme. After a two-week period they also completed a post-test consisting of the same measures of VT as they completed during the pretest phase.

STATISTICAL ANALYSIS

Before analysing the statistics, the statistical design will be discussed. The Solomon four-group design was used for this investigation (Braver & Braver, 1988).

It is clear that four groups are relevant, i.e. two experimental groups and two control groups. Two of the groups were exposed to pretesting (one experimental and one control group) whereas the remaining two groups (one experimental and one control group) were not exposed to pretesting. However, participants of all four groups were exposed to a post-test regarding the dependent variable. The design can be clarified by means of the following graphical representation (figure 1):

Figure 1: Graphical representation of the Solomon four-group design

Group	Pretest	Intervention	Post-test
1	M_1	X	M_2
2	M_3		M_4
3		X	M_5
4			M_6

Note. M = measurement of dependent variable; X = experimental intervention

Group 1: Experimental group with pretesting

Group 2: Control group with pretesting

Group 3: Experimental group without pretesting

Group 4: Control group without pretesting

The main advantage of the Solomon four-group design is that the effect of pretest sensitisation can be investigated. Pretest sensitisation implies that if exposed to a pretest (on the dependent variable) participants become sensitive to the experimental

intervention. Consequently, the generalisability of the results of a sample that was in fact exposed to a pretest, to a population where no pretest occurred, is restricted. This design thus adds a degree of external validity to its existing high level of internal validity.

Although the techniques of statistical analysis used in this design are relatively complex (as indicated by Braver & Braver, 1988), they are very useful for investigating the effect of the experimental intervention as well as the pretest sensitisation. The initial phase of the analysis necessitates the investigation of the possible effect of pretest sensitisation. Thus, M is only influenced by X if a pretest takes place. If pretest sensitisation is evident, M_2 will be higher than M_4, but M_5 will not be higher than M_6 (see Figure 1). The statistical test implemented for this is a 2 x 2 within group analysis of variance on the post-test scores of the four groups. The two factors (main effects) that are relevant, are intervention (yes / no) and pretest (yes / no). The interaction between these two factors needs to be investigated in order to determine whether pretest sensitisation exists.

If the interaction produces statistically significant results, the analysis is followed by two tests. First, the two main effects (intervention and pretest) are investigated on groups 1 and 2 (with pretesting) and then on groups 3 and 4 (without pretesting). If statistically significant results are found, it implies that the intervention has had an effect on both the groups that underwent pretesting and the groups without pretesting. If no statistically significant results are obtained in this case, pretest sensitisation is present and the intervention only has an influence when pretesting is present.

If the interaction produces no statistically significant results, no pretest sensitisation is present. Consequently it should be investigated whether the intervention itself has an effect. To do this, the analysis is followed by investigating the influence of the one main effect (intervention) on the post-test scores. Should this main effect be statistically significant, the intervention indeed has an effect and this effect exists without any prerequisites. The intervention programme thus has a significant effect on the vicarious trauma experienced by nurses despite the presence or absence of a pretest. If the main effect (intervention) is, however, not significant, the analysis is followed by an Analysis

of Covariance (ANCOVA) on the post-test scores with the pretest scores as covariants. If statistically significant results are obtained with this method, the conclusion is that the intervention (programme) indeed has an influence on the dependent variable (vicarious trauma and burnout), despite the presence or absence of pretesting.

If no significant results are obtained with the ANCOVA, the analysis is followed up with a *t*-test for independent groups on the post-test scores of groups 3 and 4. If significant differences between the means are then obtained, the intervention has a significant effect and no further analysis is necessary. Should no significant differences in the means be present, the last step is performed by using a meta-analysis technique. This technique makes it possible to statistically combine the results of non-similar and independent tests of the same hypothesis (Rosenthal, 1978). With this technique the *p*-level of the respective statistical tests is transformed to a normal deviation score (*z*). These *z*-values are then combined into a single z_{meta} value by means of the following formula:

$$z_{meta} = ?_i z_{pi} / \sqrt{k}$$

where z_{pi} is the corresponding *z*-value of the one-sided *p*-value of the *i*th statistical test and *k* is the number of such statistical tests.

Both the 1% and 5% levels of significance were used in the investigation. The SAS-programme (SAS Institute, 1983) was used for analysing the data.

RESULTS

The research results include the results of the investigation of the research hypothesis as well as the subjective evaluation of the nurses regarding the topics covered in the programme.

Hypothesis testing

As the Solomon four-group design was used to test the formulated research hypothesis,

the effect of pretest sensitisation will continually be investigated first. Table 2 illustrates the means (X) and standard deviations (s) of the vicarious trauma symptoms and burnout in respect of pre- and post-test scores for the four groups. Since groups 3 and 4 did not undergo any pretesting, no descriptive statistics will be provided for them.

Table 2: Means and standard deviations of the pre- and post-test scores of the trauma symptoms for the four groups separately

Trauma symptoms	Pre/Post-test	Group 1		Group 2		Group 3		Group 4	
		X	s	X	s	X	s	X	s
Affect tolerance	Pre	20,40	4,56	19,20	4,90	-	-	-	-
	Post	20,13	5,04	18,47	5,30	19,67	5,14	22,13	5,62
Self-worth	Pre	14,00	4,57	13,80	4,26	-	-	-	-
	Post	13,80	4,92	14,53	4,47	15,00	3,55	17,27	5,54
Connection	Pre	18,93	4,46	18,07	5,17	-	-	-	-
	Post	17,60	4,97	17,00	4,47	16,07	3,31	20,13	4,55
TSI Beliefs	Pre	261,73	21,03	258,00	12,69	-	-	-	-
	Post	259,80	18,32	259,47	14,68	258,53	17,25	271,47	24,63
Emotional exhaustion	Pre	24,73	9,98	19,07	7,14	-	-	-	-
	Post	23,87	10,83	17,40	7,68	21,00	10,64	21,13	8,17
Personal accomplish-	Pre	33,47	6,81	28,27	9,74				
ment	Post	32,87	7,61	32,27	5,68	33,20	7,24	26,27	7,68
Depersonalization	Pre	11,13	5,08	8,13	2,53	-	-	-	-
	Post	9,53	4,42	8,00	3,78	8,67	5,09	10,53	4,76

Note: group 1 = experimental group 1; group 2 = control group 1; group 3 = experimental group 2 and group 4 = control group 2

It is expected that the nurses who were exposed to the programme will tend to have a lower post- than pretest score, except for the variable *personal accomplishment*. From Table 2 it is clear that the two groups that were exposed to the programme (groups 1 and 3) had a lower mean than the other two groups (control groups) only in terms of the variable *self-worth.* Of the four groups Group 2 (control group with pretesting) in general had the lowest means. The exception for this group is *personal accomplishment* where a higher mean was obtained compared to the other groups. Table 2 indicates that great differences exist in the variances of the various groups regarding the relative trauma symptoms. Upon further investigation of the mean scores, it seems at this stage that the intervention (*X*) didn't have a significant effect on the trauma symptoms of the nurses. Compared to previous research on burnout by Beckstead (2002), the mean scores obtained for *personal accomplishment, depersonalisation and emotional exhaustion* (with mean scores of 38.1, 6.97 and 22.81respectively) in his study compare favourably with the average of the mean post-test scores for both experimental groups on the

corresponding variables obtained within this study (with mean scores of 33.03, 9.1 and 22.4 respectively). This effect will, however, be statistically investigated in the ensuring paragraphs.

Influence of the programme on affect tolerance

A 2 x 2 within group ANOVA analysis was performed on the affect tolerance post-test scores for the four groups in order to determine the possible effect of pretest sensitisation. The results are given in Table 3.

Table 3: Results of the ANOVA on the post-test scores of affect tolerance

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	38,40	1	1,38	0,2454
Intervention vs No intervention (I)	2,40	1	0,09	0,7702
P x I	64,07	1	2,30	0,1351
Error	27,87	56		

From the results in Table 3 it is clear that no significant interaction (p = 0,1351) between the two main effects (intervention and pretesting) was found. It can be concluded that no pretest sensitisation is present. Consequently the analysis was followed by an investigation of the influence of the intervention on the post-test scores. As reflected in Table 3, it is clear that no statistically significant result was obtained (p = 0,7702). As a result, the effect of the intervention on the post-test scores of groups 1 and 2 (the two groups with pretesting) was compared. An ANCOVA was performed on the post-test scores of the variable *affect tolerance* with the pretest scores of this variable as covariant. The results are presented in Table 4.

Table 4: Results of the ANCOVA on the post-test scores of affect tolerance for groups 1 and 2

Source	***MS***	n	***F***	***p***
Intervention vs No Intervention	3,52	1	0,28	0,5983
Error	12,37	27		

It is clear from the p-value of 0,5983 that no significant F-value was obtained on the ANCOVA. This value is not significant on the 1%-level. As mentioned in the discussion of the statistical analysis, the analysis will be followed by an independent t-test on the post-test scores of this independent variable for groups 3 and 4 because these groups only

have post-test scores on the dependent variables. This test has a *t*-value of -1,2551 for 28 degrees of freedom and a corresponding *p*-value of 0,2198. It is clear that in this instance again no significant result was obtained. Consequently the researcher proceeded with the meta-analysis technique. The results of the ANCOVA and the *t*-test are combined with this technique. The result of the meta-analysis was computed as follows: (0,52 + 1,23)/v2 = 1,24; p = 0,22. As with the previous computations, no significant result was obtained and it was concluded that the intervention had no significant effect on the nurses' variable *affect tolerance*.

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Influence of the programme on self-worth

In order to obtain the results, a 2 x 2 within-group ANOVA analysis was performed on the self-worth post-test scores for the four groups. The results are given in Table 5.

Table 5: Results of the ANOVA on the self-worth post-test scores

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	58,02	1	2,66	0,1087
Intervention vs No Intervention (I)	33,75	1	1,55	0,2190
P x I	8,82	1	0,40	0,5278
Error	21,84	56		

The results in Table 5 clearly indicate that no significant interaction (p = 0,5278) exists between the two main effects (intervention and pretesting). It can thus be concluded that no pretest sensitisation exists. The influence of the intervention on the post-test scores was thus investigated. Again, as indicated in Table 5, no statistically significant result was obtained (p = 0,2190). Consequently, the effect of the intervention on the post-test scores of groups 1 and 2 (the two groups with pretesting) was compared using the ANCOVA. The latter analysis was performed on the post-test scores of the variable *self-worth* with the pretest scores of this variable as covariant. The results are presented in Table 6.

Table 6: Results of the ANCOVA on the self-worth post-test score for groups 1 and 2

Source	***MS***	n	***F***	***p***
Intervention vs No Intervention	5,81	1	0,49	0,4907
Error	11,91	27		

The *F*-value on the ANCOVA was also not significant with a *p*-value of 0,4907. This value is not significant on the 1%-level. Since groups 3 and 4 only had post-test scores on the dependent variables, the latter analysis was followed by an independent *t*-test on the post-test scores for this variable for groups 3 and 4. A *t*-value of -1,3355 for 28 degrees of freedom and a corresponding *p*-value of 0,1925 were obtained. In this instance, the result was not significant and the meta-analysis technique was thus used. The result of the latter technique was computed as follows: (0,67 + 1,34)/v2 = 1,42; *p* = 0,16. Again, no significant result was obtained leading to the conclusion that the intervention did not have any signicifant effect on the participants' *self-worth.*

Influence of the programme on connection

In order to obtain the results a 2 x 2 within-group ANOVA analysis was performed on the connection post-test scores of the four groups and the results are given in Table 7.

Table 7: Results of the ANOVA on the connection post-test scores

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	9,60	1	0,50	0,4810
Intervention vs No Intervention (I)	45,07	1	2,36	0,1299
P x I	71,67	1	4,02	0,0532
Error	19,08	56		

The results in Table 7 indicate that there is no significant interaction (p = 0,0532) between the two main effects (intervention and pretesting), and thus no evidence for pretest sensitisation. Thus, the researcher proceeded with an investigation into the influence of the intervention on the post-test scores. As with the previous analysis, no statistically significant result (p = 0,1299) was obtained (see Table 7). Next, the effect of the intervention on the post-test scores was compared between groups 1 and 2. To do this, an ANCOVA was performed on the post-test scores of the *connection* variable with the pretest scores of this variable as covariant. The results are presented in Table 8.

Table 8: Results of the ANCOVA on the connection post-test scores for groups 1 and 2

Source	***MS***	n	***F***	***p***
Intervention vs No Intervention	0,01	1	0,001	0,9740
Error	13,19	27		

Similar to previous findings, the ANCOVA produced no significant *F*-value (*p*-value = 0,9740). This value is not significant on the 1%-level. An independent *t*-test was thus performed on the post-test scores of this variable for groups 3 and 4 since these groups only have post-test scores on the dependent variables. The result of the latter analysis is a *t*-value of -2,801 for 28 degrees of freedom and a corresponding *p*-value of 0,0091. The *t*-test result indicated that the intervention had a significant effect (on the 1%-level) on the nurses' connection and that the effect exists without any prerequisite. The intervention programme thus significantly improved the connection of the nurses (the mean post-test score for the experimental group is lower than the mean post-test score for the control group) whether a pretest was present or absent.

Influence of the programme on trauma symptom belief scores

A 2 x 2 within-group ANOVA analysis was performed on the belief post-test scores of the four groups. The results are given in Table 9.

Table 9: Results of the ANOVA on the trauma symptom belief post-test scores

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	432,02	1	1,19	0,2806
Intervention vs No Intervention (I)	595,35	1	1,64	0,2061
P x I	660,02	1	1,81	0,1835
Error	363,89	56		

No significant interaction (*p* = 0,1835) could be found between the two main effects (intervention and pretesting) and no pretest sensitisation is thus present. Next, the influence of the intervention on the post-test scores was investigated and again no statistically significant result (*p* = 0,2061) was obtained. Consequently, the effect of the intervention on the post-test scores of group 1 was compared with the corresponding effect on the post-test scores of group 2 (the two groups with pretesting). To compare the latter, an ANCOVA was performed on the post-test scores of the *belief* variable with the pretest scores of this variable as covariant. See Table 10 for the results.

Table 10: Results of the ANCOVA on the post-test of belief for groups 1 and 2

Source	***MS***	n	***F***	***P***
Intervention vs No Intervention	42,73	1	0,36	0,5521
Error	117,88	27		

With a *p*-value of 0,5521, no significant F-value was obtained with the ANCOVA. This value is not significant on the 1%-level. Consequently, the analysis was followed by an independent *t*-test on the post-test scores for this variable for groups 3 and 4. As previously indicated, the reason for this is that these groups only have post-test scores on the dependent variables. The *t*-test produced a *t*-value of -1,6656 for 28 degrees of freedom and a corresponding *p*-value of 0,1069. In this instance, the result was clearly not significant and the researcher proceeded with the meta-analysis technique. The meta-analysis result was computed as follows: (0,58 + 1,65)/v2 = 1,58; p = 0,12. Again, no significant result was obtained leading to the conclusion that the intervention did not have any signicifant effect on the nurses' variable *trauma symptom belief*.

Influence of the programme on emotional exhaustion

To obtain the results a 2 x 2 within-group ANOVA analysis was performed on the emotional exhaustion post-test scores of the four groups. The results are given in Table 11.

Table 11: Results of the ANOVA on the emotional exhaustion post-test scores

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	2,82	1	0,03	0,8595
Intervention vs No Intervention (I)	150,42	1	1,69	0,1991
P x I	163,35	1	1,83	0,1811
Error	89,05	56		

The results in Table 11 clearly indicate that no significant interaction (p = 0,1811) between the two main effects (intervention and pretesting) was found. It can therefore be assumed that pretest sensitisation is absent. As a result, an investigation was conducted on the influence of the intervention on the post-test scores, but again, no statistically significant result was found (p = 0,1991). As a result, the effect of the intervention on the post-test scores of group 1 was compared with the corresponding effect on the post-test scores of group 2 (the two groups with pretesting). The ANCOVA was performed on the post-test scores of the variable *emotional exhaustion* with the pretest scores of this variable as covariant. See Table 12 for the results of the ANCOVA.

Table 12: Results of the ANCOVA on the emotional exhaustion post-test scores for groups 1 and 2

Source	***MS***	n	***F***	***P***
Intervention vs No Intervention	67,92	1	1,04	0,3159
Error	65,04	27		

Since a *p*-value of 0,3159 was obtained, the F-value on the ANCOVA was not significant. This value is not significant on the 1%-level. As a result, the analyses were followed by an independent *t*-test on the post-test scores of this variable for groups 3 and 4 since these two groups only have post-test scores on the dependent variables. The result is a *t*-value of -0,0385 for 28 degrees of freedom and a corresponding *p*-value of 0,9696. Since no significant result was obtained, the last step of the Solomon four-group design was again used. The result of this meta-analysis was computed as follows: (0,99 + 0,05)/v2 = 0,74; p = 0,46. Again, no significant result was obtained. In conclusion, the intervention did not have a significant effect on the nurses' *emotional exhaustion* variable.

Influence of the programme on personal accomplishment

A 2 x 2 within-group ANOVA was performed on the personal accomplishment post-test scores of the four groups and the results are given in Table 13.

Table 13: Results of the ANOVA on the personal accomplishment post-test scores

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	120,42	1	2,39	0,1279
Intervention vs No Intervention (I)	212,82	1	4,22	0,0446*
P x I	150,42	1	2,98	0,0897
Error	50,43	56		

* $p \leq 0,05$

The results in Table 13 clearly indicate that no interaction exists between the two main effects, namely intervention and pretesting. Consequently, the conclusion is drawn that no pretest sensitisation exists for this variable (personal accomplishment). Thus, an investigation followed on the presence or absence of an effect regarding the intervention. In order to accomplish this, the analyses were followed by investigating the effect of the particular main effect (intervention) on the post-test scores.

Table 13 clearly indicated a statistically significant result due to the computed *F*-value of

4,22 being significant on the 5% significance level. This implies that the intervention had an effect and that this effect exists without any prerequisite. The intervention programme thus significantly improved the *personal accomplishment* of the nurses (the mean post-test scores are higher than the mean pretest scores) despite a pretest being present or absent.

Influence of the programme on depersonalization

In order to obtain the results, a 2 x 2 within-group ANOVA was performed on the depersonalization post-test scores of the four groups. Table 14 gives the results of this analysis.

Table 14: Results of the ANOVA on the depersonalization post-test scores

Source	***MS***	n	***F***	***p***
Pretest vs No Pretest (P)	10,42	1	0,51	0,4802
Intervention vs No Intervention (I)	0,42	1	0,02	0,8875
P x I	43,35	1	2,10	0,1527
Error	20,62	56		

Based on the the absence of any significant interaction (p = 0,1527) between the two main effects (intervention and pretesting) the assumption can be made that no pretest sensitisation exists (see Table 14). As a result, the influence of the intervention on the post-test scores was investigated. Again, no statistically significant result was obtained (p = 0,8875). Next, a comparison was drawn between the post-test scores of groups 1 and 2 (the two groups with pretesting) regarding the effect of the intervention on these scores. An ANCOVA was thus performed on the post-test scores of the *depersonalization* variable with the pretest scores of this variable as covariant. The results are given in Table 15.

Table 15: Results of the ANCOVA on the depersonalization post-test scores for groups 1 and 2

Source	***MS***	n	***F***	***p***
Intervention vs No Intervention	7,92	1	0,46	0,5031
Error	17,20	27		

The ANCOVA result also indicates that the *F*-value was not significant since the *p*-value is 0,5031. This value is not significant on the 1%-level. The analyses was followed by an independent *t*-test on the post-test scores of this variable for groups 3 and 4 (which only have post-test scores on the dependent variables). A *t*-value of -1,0365 for 28 degrees of freedom and a corresponding *p*-value of 0,3088 were obtained. Clearly, no significant result was obtained and the meta-analysis technique was thus again used. This technique combines the results of the ANCOVA and the *t*-test and was computed as follows: (0,67 + 1,04)/v2 = 1,21; p = 0,22. Again, no significant result was found, thus concluding that the intervention had no significant effect on nurses' *depersonalization* variable.

NARRATIVE EVALUATION

At the end of each session, the programme was subjectively evaluated by the nurses to assess the programme's effectiveness in addressing and managing VT. The following results were obtained:

After session 1, 93% of the respondents indicated that after completing the programme they had a clear understanding of VT; 90% of respondents reported having learnt new strategies to cope with work-related stressors and that they could identify signs and symptoms of VT; 87% of the respondents stated that they could make a commitment to the organisation, to their profession and to themselves. They also felt that they could develop a personal resource plan, could identify any needs that are disrupted by VT, and commit themselves to address and manage VT. After session 2, 77% of the nurses indicated that they could discover their own resources for wisdom, spiritual renewal and transformatiom, and that they can become aware of inner resources by means of evoking feelings which they integrated into healing imagery; 93% of the nurses also stated that they have learned to cope more effectively with VT.

In general based on the responses of those who participated in the programme, it seems that most nurses benefited from the intervention, in particular from the exercises that addressed VT and integrating emotional experiences.

DISCUSSION

This study was devised to examine the presence of VT, to implement a programme to address VT in a group of nurses at a psychiatric hospital, and to ultimately evaluate the effectiveness of the programme in alleviating symptoms of VT and burnout. Although the programme did not result in statistically significant changes in terms of various aspects related to VT and burnout (e.g. self-worth, affect tolerance, belief, emotional exhaustion and depersonalisation), it was effective in changing the connection and personal accomplishment of nurses exposed to it.

As far as connection (with a *p*-value of 0.0091)is concerned, it was evident that the programme contributed towards improving the nurses' connection. Saakvitne and Pearlman (1996) state that maintaining connection to others, to ourselves, and to something larger than ourselves provides an antidote to the isolation that is a hallmark of VT. Inner connection affords the nurses the opportunity to experience a greater awareness of needs, experience and perception. It is crucial that trauma workers are connected to others, personally and professionally, in order to effectively deal with traumatic incidents at work. The development of a healthier connection can also be attributed to their sharing and connecting with others in the group, giving them the opportunity to realise that they were not isolated in their experiences of VT and burnout. The nurses could also work with each other for mutual support and to learn from each other. Saakvitne and Pearlman (1996) indicate that communication is an important component of connection. It was evident that the nurses connected with each other in the group, as they participated within the groups and communicated with each other during the intervention programme. This made them feel less isolated and more able to share their experiences. In one study on the relationship between work-related social support and burnout of staff nurses and their supervisors at a private medical hospital in California, United States of America, it was found that support in the form of positive feedback resulted in reduced levels of emotional exhaustion for the treatment group (Eastburg et al, 1994). Similarly, McCann and Pearlman (1990) found that personal discussions in a supportive, safe context on the meaning of exposure to victims and

individuals' responses to victims' painful experiences are especially meaningful. As stated earlier, if these feelings are not openly acknowledged and resolved, the helper may run the risk of feeling numb or emotionally distant, thus unable to maintain a warm, empathetic, and responsive stance with clients (Baird 2003; Knight 1997; McCann et al., 1990; Ortlepp & Friedman 2002; Steele, 1989). In this regard, the programme gave nurses the oppurtunity to discuss their feelings of sadness and anger, without alienating themselves.

In addition, once they realise that they can discuss their feelings without fear of alienation, nurses may improve their sense of personal accomplishment as they are able to maintain connection with others and the self. This was indeed reflected in this study, with a significant improvement in this area, in particular regarding nurses' sense of competence and improved patient care (with a *F*-value of 4,22 and a 5%-significance level on the meta-analysis). With regard to the subscale of self-worth which indicated no significant attributes to improved self-worth, it could however be suggested that a sense of self-worth should follow personal accomplishment, as nurses begin to feel more confident and competent. A feeling of reduced personal accomplishment results in a decline in the nurses' feelings of competence and successful achievement in working with people (Parker et al., 1995). In previous discussions it was mentioned that nurses in general experience a lack of personal accomplishment. Despite the essential services they provide, their long hours and strenuous work, nurses are regarded as playing an inferior role, having inferior status and receiving inferior remuneration (Levert et al., 2000). In addition, nurses and psychiatric nurses are often characterized as being unmotivated and insensitive towards patients, exacerbating problems such as lack of resources and understaffing in hospitals. Such behaviours, however, are characteristic of burnout and are often a consequence of chronic stressful work conditions. Should their sense of personal accomplishent be improved (as was found with the implementation of the intervention programme in this study), it is expected that nurses could be more motivated, sensitive to the needs of patients and fellow nurses, and could view themselves as playing an important role. This may in turn result in greater commitment to the organization. In this regard, Kalliath et al. (1998) found that nurses who had greater commitment to the

organization experienced a reduction in emotional exhaustion and depersonalization.

With regard to the other subscales (affect tolerance, self-worth, belief, depersonalisation and emotional exhaustion) which did not change significantly, it may be suggested that the short time frame period of the intervention was not significant in addressing these aspects effectively. With no significant improvements in respect of depersonalisation and emotional exhaustion, nurses may due to existing social support within the unit have sufficient emotional resources, and thus do not feel overtaxed. Such support may act as a moderate buffer on the impact of burnout. However, the fact that no significance was attained could also be due to self-presentation biases or differences in available information, resulting in the nurses' self-perceptions of performance not corresponding to that of others (Parker et al., 1995).

Even though no statistically significant improvement in affect tolerance was found, the subjective evaluation by the nurses indicated that they experienced the sessions as beneficial in terms of improving their ability for emotional expression, and thus reduced negative affect. In addition to the sample size, time limitations may have hampered the improvement in their affect tolerance. The nurses could have been given more time to develop their ability to reduce negative affect, which might become evident in further evaluations. In future, the programme may have to be adjusted to provide in these needs.

CONCLUSION

Available research acknowledges the pervasive and deleterious effects of empathic engagements with survivors of trauma, and emphasizes its serious implications it has health and well-being of nurses. The symptoms experienced by nurses and organisations match the traumatic sequelae experienced by patients. While the impact on the nurses is unavoidable, it can be alleviated by proactive intervention programmes. In addition, nurses should take time to reflect on their experiences and to develop self-awareness of their reactions to their work. It is recommended that nurses maintain a range of

supportive relationships with fellow nurses and family members. It is also beneficial for nurses to balance the demands of work with an active and fulfilling personal life. Finally, it is essential that nurses attend regular supervision in order to maintain the commitment to manage VT and burnout at work.

This study has a number of limitations that should be considered in the interpretation of the results. The group sizes (15 persons in each) played an important role in this respect and would definitely influence the results. For practical and logistical reasons, and for the purposes of this research it was not possible to involve larger groups of nurses. The fact that the programme was implemented in one day may also have restricted the impact of the programme. More sessions over a longer period of time would be beneficial, as it should be considered that the negative impact on the nurses' personal thoughts, feelings and behaviour was the result of a long period of exposure to work-related stressors. It could therefore be expected that this condition could not be altered over a short period of time. For future studies larger group of nurses would be more beneficial. The time period could be extended in order to gain more significant indications concerning the success of an intervention programme as well as to reduce and transform VT and burnout. In spite of these limitations, this research indicated the importance for more research on intervention programmes that address VT and coping strategies for work-related stress experienced nurses.

For future research it would be more beneficial to increase the time-lapse of the programme over a few weekly sessions in order to ensure that nurses develop all the necessary strategies required to cope with VT over time. A larger number of participants would also be more advisable, as it would ensure greater statistical accuracy concerning the various components of VT and burnout. Research on coping strategies for VT should also be investigated in more detail to ensure that the nurses develop the necessary coping skills required to overcome VT and burnout. With regard to human resource practices in the health industry, it is recommended that supervision be held on a weekly basis to ensure that nurses are coping well with job-related stressors, and that support groups are held in which nurses can support each other with respect to burnout.

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APPENDIX A

Session 1

Activity 1.1: Vicarious Traumatisation?

Question: "What is Vicarious Traumatisation?"

Goal

To assist nurses in understanding signs and symptoms of VT.

The following characteristics are discussed concerning the signs of VT which included *general* changes (no time or energy for oneself, disconnection with loved ones, social withdrawal, despair, hopelessness and nightmares) and s*pecific* changes (disrupted frame of reference, changes in identity and diminished self capacities).

This is followed by a discussion concerning the contributing factors of VT which include the *situation* (nature of the work, nature of the patients, and exposure to traumatic material) and *individual* factors (personality and defense styles, coping style, supervision).

Activity 1.2: Addressing and Transforming VT

Question: "What can you do to address and lessen your stress level?"

This activity will help the nurses to distinguish between addressing and transforming VT. Each nurse will leave the exercise with several suggestions concerning him- or herself.

After the introduction the psychologist will ask the following questions to the nurses:

- "What can you do to address and lessen your stress level?"
- "What strategies for self-care, nurture, or escape do you use?"

Next, the group has time to brainstorm some ideas, which is then followed by the psychologist asking:

- "In what way do you think do these strategies transform VT?"

- "What else can you do to transform the pain associated with VT?"
- "How can one challenge negative beliefs concerning VT?"

Thinking Exercises

Activity 2.1: Making a commitment to yourself

Goal

After addressing aspects concerning VT, which were dealt with in Activity 1, the following questions will be presented to aid the nurse in making a commitment to him- or herself.

"Write down three things you could do to address VT for each aspect": *Professional, Organizational, Personal,* after this has been completed, the psychologist asks the nurses to place an asterisk next to each strategy that they could implement during the next month.

Activity 2.2: ***Personal Resource List***

Each nurse will be asked to make a list of his or her current resources. Aspects such as internal and external resources, people, places, or things that are hope giving, spiritual, creative and playful. The nurses will then be asked to choose some things that include the following; body, health, tears, voice, laughter and connection. This will aid the nurses in identifying the necessary resources that they will need in the transformation of their pain of VT.

Activity 2.3: Identifying and meeting of needs

During this activity the nurses will be asked to make two columns. On the left-hand side they will indicate ways in which they experience VT at work and home. On the right hand column identify the need represented by the disruption (safety, trust, esteem, control, intimacy). The group then discusses the disruption of their needs for (a) safety, (b) trust, (c) self-esteem, (d) control, (e) intimacy and (f) identity. This will help the nurses to gain understanding of their experiences of VT.

After the completion of Session 1 the nurses were given the opportunity to evaluate the effectiveness of the session in understanding and identifying VT and on ways to cope and manage VT.

Session 2

Body Exercises

Activity 1: Relaxation, Focal and Wind down Exercises / Future Self

Goal

These techniques will be used to aid the nurses' in developing a sense of comfortableness whereby they will explore their future professional self. During this exercise you will visit your future self to see what wisdom you can gain from yourself. After the nurses have experienced a sense of calmness, the therapist will ask the person/group to imagine their future self's workplace, which will be followed by a wind down phase whereby the nurses will be guided back to the present.

After this exercise a discussion will be held to address the following questions:

- "What did your future self look like?"
- "What is it like to see yourself in the future?"
- "What changes did you notice?"
- "What did you learn about your future self?"
- "How did you respond/react to feelings?"

Feeling Exercises

Activity 1: Sculpture and Guided Visualisations

Goal

Experiential exercises invite the nurses to notice and address feelings related to VT. This exercise is designed to bring forth feelings whereby they will integrate these feelings with

healing imagery. During this exercise, group members work in pairs. Each nurse will be asked to “sculpt” their partner into a representative image of themselves. This exercise is useful for improving affect-tolerance. It will help the nurses to examine their relationship to their own feelings and allows them to see the benefits as well as hardships of certain feelings.

After the completion of Session 2 the nurses were given the opportunity to evaluate the effectiveness of the programme to practice relaxation skills, improve inner attunement and focus, and increase awareness of inner resources.

APPENDIX B

Department of Psychology
University of the Free State

Dear Nurse

Thank you for your willingness to participate in this project. The researcher is trying to involve sixty nurses' in this study to evaluate the work experiences of nursing staff.

The purpose of this research is to study nurses' experiences of their personal and work environment. Of special interest are the factors that enable nurses to adjust to the demanding lifestyle of working with patients. Volunteers will be asked to participate in-groups whereby stress related factors and effective management skills will be addressed. Participation will be beneficial as it will enhance personal well being and reduce work-related stressors that affect the well-being of nurses.

To cover the whole field of work experience a great number of questions are needed. It takes approximately 60 minutes to complete the questionnaire. You don't have to complete the questionnaire in one session, but try not to interrupt the process too often. When you answer the questions don't ponder on them, give the first response that comes to mind. Your answers will be treated with the strictest confidence.

Thank you very much for your cooperation.

José Ribeiro
Researcher

Dr Henriette Van den Berg
Supervisor

APPENDIX C

Biographical Information **Protocol Number:**

Write your particulars in the space provided:

Today's date: ……..

Name: ……..

Age: ……. | | | 3 4

Job Title: ……. | | 5

Cross out the block with the information that applies to you

1. Number of year's service in your current position:

Less than 2 years	2 -5 years	6 - 10 years	more than 10 years		6
1	2	3	4		

2. Number of year's service in your current employer:

Less than 2 years	2 - 5 years	6 -10 years	more than 10 years		7
1	2	3	4		

3. Highest qualification:

St 8 – 9	St 10	St 10 = 1to 3 years training	St 10 = 3 and more years training		8
1	2	3	4		

4. Race

White	Black	Asian	Coloured		9
1	2	3	4		

5. Marital status

Single	Married	Divorced	Widow		10

1 2 3 4

6. Number of children

		11

7. Ages of children

		12

Please answer the following questions as honestly as possible.

TSI INNER EXPERIENCE SCALE

Please encircle each item below which you feel most clearly matches your own beliefs about yourself and your world. Try to complete every item. There are no right or wrong answers.

1 = Disagree strongly

2 = Disagree

3 = Disagree somewhat

4 = Agree somewhat

5 = Agree

6 = Agree Strongly

	DISAGREE	DISAGREE	DISAGREE	AGREE SOMEWH	AGREE	AGREE STRONGL	OFFICE USE	
1. I know that my feelings will not destroy me	1	2	3	4	5	6		13
2. I have a place in the world	1	2	3	4	5	6		14
3. When I'm alone, I'm not aware of other people's love	1	2	3	4	5	6		15
4. I have to get away from my strong feelings	1	2	3	4	5	6		16

5. I have a positive sense of self	1	2	3	4	5	6		17
	DISAGREE STRONGLY	**DISAGREE**	**DISAGREE SOMEWHA**	**AGREE SOMEWHA**	**AGREE**	**AGREE STRONGLY**	**OFFICE USE**	
6. I often feel a deep sense of aloneness	1	2	3	4	5	6		18
7. I can make sense of my feelings	1	2	3	4	5	6		19
8. I am a person who is bad for the world	1	2	3	4	5	6		20
9. When I'm alone I feel desolate	1	2	3	4	5	6		21
10. I'm so ashamed of myself to let people get to know me	1	2	3	4	5	6		22
11. I deserve to be alive	1	2	3	4	5	6		23
12. I am an island, unconnected to others	1	2	3	4	5	6		24
13. When I'm upset, I can soothe myself gently	1	2	3	4	5	6		25
14. When I make a mistake, I feel worthless	1	2	3	4	5	6		26
15. Knowing someone loves me, comforts me	1	2	3	4	5	6		27
16. I feel angry much of the time	1	2	3	4	5	6		28
17. Maybe I should not have been born	1	2	3	4	5	6		29
18. When I feel bad, I can think of someone who believes I'm worthwhile	1	2	3	4	5	6		30
19. If I let myself cry I'll never stop	1	2	3	4	5	6		31
20. I deserve to be loved	1	2	3	4	5	6		32
21. I need frequent reminders of others' caring	1	2	3	4	5	6		33

22. If I don't follow my own rules, my feelings will be out of control	1	2	3	4	5	6		34
	DISAGREE STRONGLY	DISAGREE	DISAGREE SOMEWHA	AGREE SOMEWHA	AGREE	AGREE STRONGLY	OFFICE USE	
23. I am toxic to others	1	2	3	4	5	6		35
24. I know there is someone who cares about me	1	2	3	4	5	6		36

TSI BELIEF SCALE

Please encircle each item below which you feel most clearly matches your own beliefs about yourself and your world. Try to complete every item. There are no right or wrong answers.

1 = Disagree strongly

2 = Disagree

3 = Disagree somewhat

4 = Agree somewhat

5 = Agree

6 = Agree Strongly

	DISAGREE STRONGLY	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE	AGREE STRONGLY	OFFICE USE	
1. I believe I am safe	1	2	3	4	5	6		37
2. You can't trust anyone	1	2	3	4	5	6		38
3. I don't feel like I deserve much	1	2	3	4	5	6		39
4. Even when I'm with friends and family, I don't feel like I belong	1	2	3	4	5	6		40
5. I can't be myself around people	1	2	3	4	5	6		41

6. I never think anyone is safe from danger	1	2	3	4	5	6		42
7. I can trust my own judgement	1	2	3	4	5	6		43
	DISAGREE STRONGLY	**DISAGREE**	**DISAGREE SOMEWHAT**	**AGREE SOMEWHAT**	**AGREE**	**AGREE STRONGLY**	**OFFICE USE**	
8. People are wonderful	1	2	3	4	5	6		44
9. When my feelings are hurt, I can make myself feel better	1	2	3	4	5	6		45
10. I'm uncomfortable when someone else is the leader	1	2	3	4	5	6		46
11. I feel like people are hurting me all the time	1	2	3	4	5	6		47
12. If I need them, people will come through for me	1	2	3	4	5	6		48
13. I have bad feelings about myself	1	2	3	4	5	6		49
14. Some of my happiest times are with other people	1	2	3	4	5	6		50
15. I feel like I cannot control myself	1	2	3	4	5	6		51
16. I could do serious damage to someone	1	2	3	4	5	6		52
17. When I'm alone, I don't feel safe	1	2	3	4	5	6		53
18. Most people ruin what they care about	1	2	3	4	5	6		54
19. I don't trust my instincts	1	2	3	4	5	6		55
20. I feel close to lots of people	1	2	3	4	5	6		56
21. I feel good about myself most days	1	2	3	4	5	6		57
22. My friends don't listen to my opinion	1	2	3	4	5	6		58
23. I feel hollow inside when I'm alone	1	2	3	4	5	6		59
24. I can't stop worrying about others' safety	1	2	3	4	5	6		60

25. I wish I didn't have feelings	1	2	3	4	5	6		61
26. Trusting people is not smart	1	2	3	4	5	6		62
	DISAGREE STRONGLY	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE	AGREE STRONGLY	OFFICE USE	
27. I would never hurt myself	1	2	3	4	5	6		63
28. I often think the worst of others	1	2	3	4	5	6		64
29. I can control whether I harm others	1	2	3	4	5	6		65
30. I'm not worth much	1	2	3	4	5	6		66
31. I don't believe what people tell me	1	2	3	4	5	6		67
32. The world is dangerous	1	2	3	4	5	6		68
33. I am often in conflict with other people	1	2	3	4	5	6		69
34. I have a hard time making decisions	1	2	3	4	5	6		70
35. I feel cut off from people	1	2	3	4	5	6		71
36. I feel jealous of people who are always in control	1	2	3	4	5	6		72
37. The important people I'm my life are in danger	1	2	3	4	5	6		73
38. I can keep myself safe	1	2	3	4	5	6		74
39. People are no good	1	2	3	4	5	6		75
40. I keep busy to avoid my feelings	1	2	3	4	5	6		76
41. People shouldn't trust their friends	1	2	3	4	5	6		77
42. I deserve to have good things happen to me	1	2	3	4	5	6		78
43. I worry about what other people will do to me	1	2	3	4	5	6		79
44. I like people	1	2	3	4	5	6		80

45. I must be in control of myself	1	2	3	4	5	6		81
46. I feel helpless around adults	1	2	3	4	5	6		82
	DISAGREE STRONGLY	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE	AGREE STRONGLY	OFFICE USE	
47. Even if I think about hurting myself, I won't do it	1	2	3	4	5	6		83
48. I don't feel much love for anyone	1	2	3	4	5	6		84
49. I have good judgement	1	2	3	4	5	6		85
50. Strong people don't need to ask for help	1	2	3	4	5	6		86
51. I am a good person	1	2	3	4	5	6		87
52. People don't keep their promises	1	2	3	4	5	6		88
53. I hate to be alone	1	2	3	4	5	6		89
54. I feel threatened by others	1	2	3	4	5	6		90
55. When I'm with people, I feel alone	1	2	3	4	5	6		91
56. I have problems with self-control	1	2	3	4	5	6		92
57. The world is full of people with mental problems	1	2	3	4	5	6		93
58. I can make good decisions	1	2	3	4	5	6		94
59. I often feel people are trying to control me	1	2	3	4	5	6		95
60. I am afraid of what I might do to myself	1	2	3	4	5	6		96
61. People who trust others are stupid	1	2	3	4	5	6		97
62. I am my own best friend	1	2	3	4	5	6		98
63. When people I love aren't with me, I believe they are in danger	1	2	3	4	5	6		99
64. Bad things happen to me because I'm a bad person	1	2	3	4	5	6		100

65. I feel safe when I'm alone	1	2	3	4	5	6		101
66. To feel okay, I need to be in charge	1	2	3	4	5	6		102
	DISAGREE STRONGLY	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE	AGREE STRONGLY	OFFICE USE	
67. I often doubt myself	1	2	3	4	5	6		103
68. Most people are good at heart	1	2	3	4	5	6		104
69. I feel bad about myself when I need help	1	2	3	4	5	6		105
70. My friends are there when I need help	1	2	3	4	5	6		106
71. I believe that someone is going to hurt me	1	2	3	4	5	6		107
72. I do things that put other people in danger	1	2	3	4	5	6		108
73. There is an evil force inside me	1	2	3	4	5	6		109
74. No one really knows me	1	2	3	4	5	6		110
75. When I'm alone, it's as if there's no one there, not even me	1	2	3	4	5	6		111
76. I don't respect the people I know best	1	2	3	4	5	6		112
77. I can usually figure out what's going on with people	1	2	3	4	5	6		113
78. I can't do good work unless I'm the leader	1	2	3	4	5	6		114
79. I can't relax	1	2	3	4	5	6		115
80. I have physically hurt people	1	2	3	4	5	6		116
81. I am afraid I will harm myself	1	2	3	4	5	6		117
82. I feel left out everywhere	1	2	3	4	5	6		118
83. If people really knew me, they wouldn't like me	1	2	3	4	5	6		119
84. I look forward to time I spend alone	1	2	3	4	5	6		120

BURNOUT QUESTIONNAIRE

Please indicate how often and to what extent the following statements apply to you by ranking yourself on a 0 to 6 scale. Encircle your response in the space provided.

How often:

1 = A few times a year or less

2 = Once a month or less

3 = A few times a month

4 = Once a week

5 = A few times a week

6 = Every Day

	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day	OFFICE USE	
1. I feel emotionally drained from my work	1	2	3	4	5	6		121
2. I feel used up at the end of the workday	1	2	3	4	5	6		122
3. I feel fatigued when I get up in the morning and have to face another day on the job	1	2	3	4	5	6		123
4. Working with people all day is really a strain for me	1	2	3	4	5	6		124
5. I feel burned out from my work	1	2	3	4	5	6		125
6. I feel frustrated by my job	1	2	3	4	5	6		126
7. I feel I'm working too hard for my job	1	2	3	4	5	6		127
8. Working with people directly puts too much stress on me	1	2	3	4	5	6		128
9. I feel like I'm at the end of my rope	1	2	3	4	5	6		129
10. I can easily understand how my subordinates feel about things	1	2	3	4	5	6		130
11. I deal very effectively with the problems of my subordinates	1	2	3	4	5	6		131

12. I feel I'm positively influencing other people's lives through my work	1	2	3	4	5	6		132
	A few times a year or less	**Once a month or less**	**A few times a month**	**Once a week**	**A few times a week**	**Every day**	**OFFICE USE**	
13. I feel very energetic	1	2	3	4	5	6		133
14. I can easily create a relaxed atmosphere with my subordinates	1	2	3	4	5	6		134
15. I feel exhilarated after working closely with my subordinates	1	2	3	4	5	6		135
16. I have accomplished many worthwhile things in my job	1	2	3	4	5	6		136
17. In my work, I deal with emotional problems very calmly	1	2	3	4	5	6		137
18. I feel I treat some subordinates as if they were impersonal 'objects'	1	2	3	4	5	6		138
19. I have become more callous towards people since I took this job	1	2	3	4	5	6		139
20. I worry that this job is hardening me emotionally	1	2	3	4	5	6		140
21. I don't really care what happens to my subordinates	1	2	3	4	5	6		141
22. I feel subordinates blame me for some of their problems	1	2	3	4	5	6		142

Thank you very much for your cooperation and for spending valuable time on this project.

APPENDIX D

Evaluation of Module 1

Evaluation Sheet

Please encircle your response

1. Do you have a clear understanding of VT?

Yes **No**

2. Can you identify signs and symptoms of VT?

Yes **No**

3. Have you learned any new strategies to cope with your stressors?

Yes **No**

4. Did you learn anything about yourself?

Yes **No**

If yes, please indicate what. (below)

5. Any suggestions?

Evaluation of Module 2

Evaluation Sheet

Please encircle your response

1. Do you have the resources to develop a personal resource plan?

   Yes **No**

2. Can you identify any needs that are disrupted by VT?

   Yes **No**

3. Can you make a commitment to yourself to address and manage VT in your workplace?

   Yes **No**

4. Did you learn anything about yourself?

   Yes **No**

   If yes, please indicate what. (below)

5. Any suggestions?

Evaluation of Module 3

Evaluation Sheet

Please encircle your response

1. Did the relaxation exercises aid you in relieving your stress?

Yes **No**

2. Could you identify and visualize your future self?

Yes **No**

3. Are you satisfied with your future self?

Yes **No**

4. Are you willing to strive towards your future self?

Yes **No**

5. Did you learn anything about yourself?

Yes **No**

If yes, please indicate what. (below)

6. Any suggestions?

Evaluation of Module 4

Evaluation Sheet

Please encircle your response

1. Did you discover your own inner resources for wisdom, spiritual renewal and transformation?

   Yes **No**

2. Could you improve inner attunement and focus, and increase awareness of your inner resources?

   Yes **No**

3. Did you learn anything about yourself?

   Yes **No**

   If yes, please indicate what. (below)

4. Any suggestions?

Evaluation of Module 5

Evaluation Sheet

Please encircle your response

1. Can you identify and manage VT successfully at your workplace?

Yes **No**

2. Did you improve your awareness of your inner resources and on ways to cope effectively with VT?

Yes **No**

3. Did you learn anything about yourself?

Yes **No**

If yes, please indicate what. (below)

4. Did you learn anything from the programme to contribute towards your well- being?

Yes **No**

If yes, please indicate what. (below)

5. Any suggestions for the programme?