IMPLEMENTATION AND EVALUATION OF THE PSYCHO-SOCIAL THERAPEUTIC PROGRAMME (PTP) FOR POLICE OFFICIALS

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ABSTRACT

In this article, a Psycho-social Therapeutic Programme (PTP) empowering police officials to better deal with distress and prevent the development of post-traumatic stress (or any other co-morbid disorder) after exposure to traumatic events is evaluated both quantitatively and qualitatively. The quantitative data were obtained by means of the Critical Incident History Questionnaire (CIHQ), the Impact of Event Scale-Revised (IES-R), the Mental Health Continuum Short Form (MHC-SF) and the Post-Traumatic Cognitions Inventory (PTCI). Qualitative evaluation was done by means of self-developed questionnaires. The guidelines for selection and inclusion of respondents in the comparison and experimental groups are discussed, followed by an explanation of the measuring instruments before the results from both the quantitative and qualitative evaluations are explained. The article concludes with a discussion and recommendations.

Keywords: co-morbid disorder; evaluation; implementation; police officials; post-traumatic stress disorder; Psycho-social Therapeutic Programme

INTRODUCTION

The aim of this article is to evaluate and determine the effect of a compiled Psycho-social Therapeutic Programme (PTP) for police officials from a specialist unit of the South African Police Services (SAPS) in the North West. The Public Order Policing (POP) unit in Potchefstroom was identified for this study because its members provide maximum response efficiency in a variety of customary and unusual situations, which highlights the likelihood of repeated exposure to traumatic events. Both qualitative and quantitative approaches (Delport and Fouché 2011, 440; Rubin and Babbie 2010, 33) were used for the purposes of evaluating the PTP. Four structured measuring instruments were used for quantitative data collection, and the programme presenter used two self-developed schedules for the qualitative evaluation of the programme. According to Creswell and Plano Clark (2011, 21) and Delport and Fouché (2011, 442) the triangulation of data helps to better explain social phenomena and allows for greater accuracy in interpreting findings.

This programme is based on the following theoretical assumption: If a client-oriented PTP, which not only focuses on psychological debriefing as treatment method but is based on a trauma intervention process with both psychological and social components, is developed and implemented in the SAPS, the prevalence of post-traumatic stress disorder (PTSD) and other co-morbid disorders among police officials might be prevented or better managed. Empowering police officials through this programme includes aspects such as relaxation, trauma narrative, identifying feelings and emotions, rating feelings and affect modulation, and dealing with destructive and self-destructive behaviour. Also included are dealing with triggers, problem-solving, systems of care, systems advocacy and relapse prevention.

PROBLEM STATEMENT

Mthetwa (2013) emphasises the need for a specific focus on the psychological welfare of SAPS officials and for more research to enhance proactive programmes. The author implicitly explains the actual motivation and importance of the proposed PTP. To determine whether the designed PTP has, as a psycho-social intervention, produced the intended results, it is necessary to evaluate it. Programme evaluation includes the systematic collection of information on programme activities, characteristics and outcomes, to make judgements, improve effectiveness and suggestions regarding its future use. In evaluating a programme as a potential new technology, it should be borne in mind that it should produce the quantitative and qualitative information required to assess its progress towards achieving the desired outcomes. The research question thus is: How effective will the proposed PTP be to empower police officials to better deal with distress after exposure to traumatic events?

OBJECTIVE

The article aims to empirically evaluate the effectiveness of the developed PTP and to disseminate the information.

RESEARCH METHODOLOGY

The intervention design and developmental model utilised for this study consists of six phases (De Vos and Strydom 2011, 482). According to Fraser, Richman, Galinsky and Day (2009, 3), intervention research usually involves the design, development, implementation, evaluation and dissemination stages. In this article, the focus is on the evaluation and dissemination of the developed programme.

As far as the evaluation is concerned, a comparison group pre- and post-test design was used to demonstrate the influencing relationships between the PTP and the behaviours and related conditions targeted for change. During the formal evaluations of the intervention, data were collected and analysed one week prior to, at the closure of the programme and three weeks after the intervention. Post-evaluation, minor adaptations were made to the content to promote evidence-based practice (De Vos and Strydom 2011, 485). Once the intervention programme had been field tested and evaluated, it was disseminated to different specialised SAPS units across the provinces. The researchers also identified other target audiences, such as the Fire Brigade, ER24, Metro Police and Disaster Management as potential future markets.

Mixed-methods research – specifically the concurrent convergent strategy – was used to combine and mix qualitative and quantitative approaches in the same study, to obtain different yet complementary data on the same topic (Creswell 2014, 217; Creswell and Plano Clark 2011, 77). The mixed methods strategy serves as a way of triangulating data to improve validity (Delport and Fouché 2011, 442; Rubin and Babbie 2005, 181). For the evaluation of the programme, the researchers used the pre- and post-test comparison group design (Grinnell, Unrau and Williams 2011, 262; Marlow 2011, 102) involving an experimental and a comparison group. The latter received both the pre- (01) and the post-test (02) at the same time as the experimental group, but did not receive the independent variable.

POP, which was purposively selected for the study (Patton 2015, 265; Strydom 2011, 232), is a specialised unit responsible for crowd management in the North West. All members are therefore continuously deployed and exposed to traumatic incidents. As a result of members facing different work demands at different times, and the fact that the primary researcher was not allowed to interfere with service delivery, it would have been extremely difficult (or even unlikely) to involve a selection of participants representing all the different specialised units at one venue and time, hence the selection of this unit. It should therefore be noted that the outcome of this study is only applicable to POP. A total of 36 police officials stationed at POP in Potchefstroom were purposively selected based on their availability and the fact that they had been exposed to traumatic

events. The recruited participants were exposed to the measuring instruments by the social worker responsible for POP by means of the group-administered method. A total of 28 police officials showed minimal risk for PTSD, thus qualifying for participation in this study.

The experimental group consisted of 13 police officials of whom eight were male and five female. Their ages ranged between 30 and 40. The comparison group consisted of the remaining police officials (n = 15), of whom 12 were male and three female, with ages ranging between 25 and 40. From a total of 28 police officials who participated in the study, 15 were constables, one was a sergeant and 12 were warrant officers. Non-commissioned officers also participated in the study: the largest number (22) had a grade 12 qualification, while six of the police officials had obtained a higher qualification. Most of the group members were in committed relationships, with 18 being married, two in committed relationships and one divorced. Only six were single. Years of experience ranged from five to 25+ years, suggesting that this was a more experienced group of police officials. The group comprised individuals of different ethnic and linguistic origins, with six white and two brown police officials, of whom seven were Afrikaans and one was English speaking, 20 black police officials, of whom 18 were Setswana and two were isiXhosa. However, all the participants spoke English well and the programme was thus presented in English.

The Provincial Head of POP in Potchefstroom was approached with the aim of obtaining permission for the research project. He acted as gatekeeper, while the social worker responsible for POP acted as mediator and assisted the researcher with the initial selection, during which the process was explained. All the participants had to sign informed consent forms to declare their willingness to voluntarily participate in the study. The programme was presented over a period of 12 weeks, for a total duration of 18 hours.

The quantitative data in this study were captured and statistically analysed by the North-West University's Statistical Consultation Services. Frequency tables were drawn up to reflect the socio-demographic variables of the study population, and Cronbach alpha reliability coefficients were computed for the constructs of each measuring instrument. Tailed tests were used because the goal was to determine whether the two groups had improved from pre- to post-test, and whether the experimental group fared better than the comparison group after participating in the programme. Differences between the experimental and comparison groups were also evaluated beforehand, and showed marked differences in terms of most variables. Statistical analyses were done so that pre-differences between the groups would not influence the statistical evaluation of the programme on the experimental group. Open-ended questions (Greeff 2011, 343) were used so as not to predetermine the answers, and this allowed room for participants to respond in-depth and on their own terms. The questions were developed with the goal of enriching the statistical comparisons by providing possible additional explanations of differences pre- and post-programme. The qualitative focus should therefore be

considered supportive of the quantitative data and findings, to further explore the finer details and nuances of the participants' behaviour, which could not be explored by the statistics as indicated. Comments made were therefore carefully interpreted and used only when clear trends had emerged. The qualitative data collected during this study were transcribed and analysed according to the eight steps proposed by Tesch (as quoted in Creswell 2014, 198). The findings were categorised according to the resulting themes, which allowed the researcher to interpret the meaning of the data (Creswell 2014, 4).

Rubin and Babbie (2010, 231) are of the opinion that trustworthiness is the prime focus in evaluating the rigour of a qualitative study. It focuses on the extent to which a study can take steps to maximise objectivity and minimise bias. Qualitative data analysis, which is a particularly subjective procedure, depends largely on the interaction between the participants and the presenter, and the latter's interpretation of verbal and non-verbal communication during the programme. Trustworthiness was mainly increased by applying critical self-reflection, subsequently avoiding the subjective influences of the interpretation process. The researcher furthermore ensured trustworthiness by spending adequate time observing various aspects of the police as an organisation, becoming oriented to their exposure to traumatic incidents as a result of their unique working conditions in order to appreciate and better understand the context. In the process the primary researcher was able to rise above his own preconceptions and was able to build trust with the participants. Persistent observation was necessary to identify those characteristics and elements in the SAPS that are most relevant to trauma being pursued. Furthermore, the researcher made use of member checking to establish the validity of accounts. Preliminary findings were summarised with the intention of asking group members to confirm or refute the accuracy of the research observations and interpretations, thus giving participants the opportunity to correct errors, volunteer additional information and assess the adequacy of data and preliminary results. The principle of confirmation was adhered to through the archiving of a complete recording of reflective notes.

The study was approved by the ethical committee of North-West University's Potchefstroom Campus. The allocation of an experimental and comparison group caused problems because all police officials attached to POP are, as a result of the specialised and sensitive nature of their work, continuously exposed to traumatic incidents. It would therefore have been unethical to expose one group to the programme while depriving the other. However, it was necessary to use a comparison group to evaluate the programme, thus the group of police officials who could not attend the programme due to work demands was selected as the comparison group. According to Rodriguez (2013, 360) it is important to avoid the unethical, immoral and impractical traps associated with concurrent convergent studies. This can be accomplished by ensuring that comparison group participants eventually receive the same benefits of an intervention. The researcher offered to present the same programme to this group

after completion of the intervention process, but unfortunately, no one was interested or available to attend.

RESULTS

Descriptive statistics

Descriptive statistics for both groups pre- and post-intervention, as well as the Cronbach's alpha for reliability of the subscales, are presented in Table 1.

Table 1:   Descriptive statistics and reliability

Constructs	Experimental group				Control group				Cron-bach's alpha
	Before		After		Before		After		
	M	Std	M	Std	M	Std	M	Std	
MHC-SF									
EWB	10.23	3.17	12.23	2.24	10.33	3.90	12.53	1.85	0.74
SWB	13.38	4.91	14.96	5.35	16.60	5.36	16.93	6.77	0.80
PWB	21.69	6.99	24.14	4.85	24.60	3.94	24.27	4.61	0.87
Total	45.35	13.67	51.38	11.32	51.47	10.54	53.68	12.30	0.90
CIHQ									
Incident	49.39	22.02	46.46	12.93	89.38	55.67	81.49	53.88	0.96
Cope	62.44	35.89	69.92	40.93	84.28	29.62	87.54	31.54	0.87
IES-R									
Avoidance	2.03	0.97	1.11	0.75	1.84	0.96	1.28	0.85	0.87
Intrusion	1.63	0.81	1.00	0.66	1.40	0.93	1.23	0.95	0.89
Hyperarousal	1.72	1.07	0.69	0.65	1.07	0.89	1.02	0.91	0.84
Total	5.39	2.68	2.80	1.96	4.31	2.65	3.53	2.62	0.94
PTCI									
Self	2.42	1.36	1.58	0.59	1.77	0.89	1.82	0.80	0.95
World	4.48	1.26	3.59	1.43	4.24	1.42	4.59	1.34	0.71
Self-blame	3.12	1.60	2.23	1.10	2.28	0.91	2.71	1.27	0.73
Total	10.03	3.62	7.40	2.42	8.29	2.56	9.11	2.91	0.77

Note: M = Mean; Std = Standard of difference; MHC-SF = Mental Health Continuum (Short Form); CIHQ = Critical Incident History Questionnaire; IES-R = Impact of Event Scale-Revised; PTCI = Posttraumatic Cognitions Inventory

EWB = Emotional well-being; SWB = Social well-being; PWB = Psychological well-being

From Table 1 it is clear that all subscales show satisfactory reliability, with coefficients greater than 0.5. The Cronbach's alpha for the MHC-SF and the different constructs in this study are more or less in agreement with what Keyes, Wissing, Potgieter, Temane, Kruger and Van Rooy (2008) found with a group of adolescents (aged 12–18) and adults in the United States, the Netherlands and South Africa. In the South African study the MHC-SF showed excellent internal consistency and validity (>.80).

Cronbach's alpha for the CIHQ and the different constructs in this study are higher than what Weiss, Brunet, Best, Metzler, Liberman, Pole, Fagan and Marmar (2010, 739) found in a study involving 54 police officials. In that study, all alpha coefficients exceeded >.80, with the exception of the coefficient of .75 for the variety index. The comparison group in this case also included police officials, which supports the suspicion that participants in that group were more frequently exposed to a wider variety of incidents, and that they too found it difficult to cope during the immediate aftermath of traumatic events.

The Cronbach's alpha for the IES-R and the different constructs in this study were more or less in agreement with what Beck, Grant, Read, Clapp, Coffey, Miller and Palyo (2008, 189) found in a study with 182 individuals who had experienced a serious motor vehicle accident. High levels of internal consistency were reported (intrusion: Cronbach's alpha = .87−.94, avoidance: Cronbach's alpha = .84−.87, and hyperarousal: Cronbach's alpha = .79−.91). Although the comparison group in this case did not include members of the police service, it can be anticipated that the impact of the event would be more or less the same for participants in the SAPS as for those exposed to similar traumatic incidents in general.

The Cronbach's alpha for the PTCI and the different constructs in this study are all lower than what Foa, Ehlers, Clark, Tolin and Orsillo (1999, 307) found in a study with 601 volunteers who had experienced a traumatic event and had moderate to severe PTSD. The Cronbach's alpha for the three PTCI constructs and total scores were: negative cognitions about self = .97, negative emotions about the world = .88, self-blame = .86, with a total score of .97. Although the comparison group in this case had all experienced traumatic events, they had moderate to severe PTSD. Participants in the present study had all been exposed to a variety of traumatic events, but only experienced mild to moderate signs and symptoms of post-traumatic stress. No participant had been diagnosed with PTSD, which explains the lower average scores.

Differences within groups

Tables 2 and 3 respectively indicate the differences within the experimental and comparison groups, more specifically where dependent groups differed pre- and post-intervention.

Table 2: Descriptive statistics and effect sizes on psychometric constructs within the experimental group on differences between pre- and post-tests

MHC-SF							
Construct	**N**	**Pre-test mean**	**Std**	**Post-test mean**	**Std**	**p-value**	**d-value**
EWB	13	10.32	3.17	12.23	2.24	0.05*	0.63∆
SWB	13	13.38	4.91	14.96	5.35	0.12	0.32
PWB	13	21.69	6.99	24.14	4.85	0.09	0.35
Total	13	45.35	13.67	51.37	11.32	0.03*	0.44
CIHQ							
Incident	11	49.39	22.02	46.46	12.39	0.31	0.11
Cope	11	62.44	35.89	69.92	40.93	0.39	0.12
IES-R							
Avoidance	13	2.03	0.97	1.11	0.75	0.05*	0.96∆∆
Intrusion	13	1.63	0.81	1.00	0.66	0.05*	0.80∆∆
Hyperarousal	13	1.72	1.07	0.69	0.65	0.05*	0.96∆∆
Total	13	5.39	2.68	2.80	1.96	0.05*	0.97∆∆
PTCI							
Self	13	2.42	1.36	1.58	0.59	0.05*	0.62∆
World	13	4.48	1.26	3.59	1.43	0.02*	0.71∆
Self-blame	13	3.12	1.60	2.23	1.10	0.01*	0.56∆
Total	13	10.03	3.62	7.40	2.42	0.05*	0.73∆

Note: N = number of participants; Std = standard of difference; p-value = statistical significance; d-value = effect size

MHC-SF = Mental Health Continuum-Short Form; CIHQ = Critical Incident History Questionnaire; IES-R = Impact of event scale-Revised; PTCI = Posttraumatic Cognitions Inventory

EWB = Emotional well-being; SWB = Social well-being; PWB = Psychological well-being

* = Statistically significant at ≤ 0.05 level according to t-test results within groups

∆ = Medium effect in practice

∆∆ = Practical effect in practice

According to Table 2 there was a practically significant effect (d = 0.80) in the mean differences between the pre- and post-test of the experimental group regarding the total

IES-score and all its subtests. This means that the mean differences between the pre-test for total IES, avoidance (m = 2.03), intrusion (m = 1.63) and hyperarousal (m = 1.72) were significantly higher than the total IES, avoidance (m =1.11), intrusion (m = 1.00) and hyperarousal (m = 0.69) for the post-test. Thus the intervention had a practically significant effect on the decrease of the total IES, avoidance, intrusion and hyperarousal.

There was a medium practical effect (d = 0.50) on the mean difference between the pre-and post-test of the experimental group at the construct EWB. This means that the mean difference for EWB (m = 10.32) of the experimental group was higher than the mean difference of EWB (m = 12.23) of the comparison group, and therefore noticeable with the naked eye. Thus the intervention had a medium practical effect on the improvement of the respondents' EWB.

There was also a medium practical effect (d = 0.50) on the mean differences between the pre- and post-test of the experimental group regarding the total PTCI score and all the subsets. This means that the mean differences between the pre-test for total PTCI, self (m = 2.42), world (m = 4.48) and self-blame (m = 3.12) was higher than the total PTCI, self (m = 1.58), world (m = 3.59) and self-blame (m = 2.23) for the post-test. Thus the intervention had a medium effect on the decrease of self, world and self-blame. These improvements are an indication that the programme could succeed in improving some aspects of the respondents' mental health, the impact of the event and certain negative cognitions of self and the world.

Table 3:   Descriptive statistics and effect sizes on psychometric constructs within the control group on differences between pre- and post-tests

MHC-SF							
Construct	**N**	**Pre-test mean**	**Std**	**Post-test mean**	**Std**	**p-value**	**d-value**
EWB	15	10.33	3.90	12.53	1.85	0.04*	0.56Δ
SWB	15	16.60	5.36	16.93	6.77	0.41	0.06
PWB	15	24.60	3.94	24.26	4.61	0.39	0.08
Total	15	51.47	10.54	53.68	12.29	0.24	0.21
CIHQ							
Incident	14	89.38	55.67	81.49	53.88	0.27	0.07
Cope	15	84.28	29.62	87.54	31.54	0.28	0.11
IES-R							
Avoidance	13	1.84	0.96	1.28	0.85	0.03*	0.59Δ
Intrusion	13	1.40	0.93	1.23	0.95	0.19	0.19
Hyperarousal	13	1.07	0.89	1.02	0.91	0.43	0.05
Total	13	4.31	2.65	3.53	2.62	0.13	0.30
PTCI							
Self	15	1.77	0.89	1.82	0.80	0.36	0.05
World	15	4.24	1.42	4.59	1.34	0.18	0.25
Self-blame	15	2.28	0.91	2.71	1.27	0.09	0.47
Total	15	8.29	2.56	9.11	2.91	0.10	0.32

Note: N = number of participants; Std = standard of difference; p-value = statistical significance; d-value = effect size

MHC-SF = Mental Health Continuum-Short Form; CIHQ = Critical Incident History Questionnaire; IES-R = Impact of event scale-Revised; PTCI = Posttraumatic Cognitions Inventory

EWB = Emotional well-being; SWB = Social well-being; PWB = Psychological well-being

* = Statistically significant at ≤0.05 level according to t-test results within groups

Δ = Medium effect in practice

According to Table 3, EWB in the comparison group showed an improvement from the pre- to the post-test, with a medium practical effect (d = 0.56) compared with a medium practical effect (d = 0.63) in the experimental group. Despite this improvement,

EWB still showed an improvement against the comparison group. Avoidance in the comparison group also improved with a medium practical effect (d = 0.59) compared to a practically significant effect (d = 0.96) in the experimental group. Avoidance therefore also showed an improvement against the comparison group. No other differences occurred between pre- and post-testing.

Differences between groups

Table 4 indicates the difference between the experimental and comparison group, more specifically how the two groups comparatively changed from the pre- to post-test.

Table 4: Descriptive statistics and effect sizes for differences between the experimental and control groups

Mental health continuum-short form (MHC-SF)						
Construct	**Group**	**N**	**Mean difference**	**Std of difference**	**p-value**	**d-value**
EWB	1	13	2.00	1.47	0.44	0.04
	2	15	2.20	4.54		
SWB	1	13	1.58	4.57	0.26	0.22
	2	15	0.33	5.69		
PWB	1	13	2.45	5.83	0.08	0.50Δ
	2	15	-0.33	4.03		
Total	1	13	6.03	10.55	0.19	0.32
	2	15	-2.21	11.91		
Critical incident history questionnaire (CIHQ)						
Incident	1	11	-2.43	15.81	0.42	0.07
	2	14	-4.15	24.21		
Cope	1	11	-2.43	-13.05	0.42	0.07
	2	14	-4.15	-18.13		
Impact of event scale - revised (IES-R)						
Avoidance	1	13	-0.93	1.01	0.18	0.35
	2	15	-0.57	1.04		
Intrusion	1	13	-0.63	0.70	0.05*	0.61Δ
	2	15	-0.18	0.76		
Hyperarousal	1	13	-1.03	0.77	0.05*	1.11ΔΔ
	2	15	-0.04	0.88		
Total	1	13	-2.59	2.29	0.03*	0.70Δ
	2	15	-0.79	2.57		
Post traumatic cognitions inventory (PTCI)						

Self	1	13	-0.85	1.14	0.01*	0.80ΔΔ
	2	15	0.04	0.47		
World	1	13	-0.90	1.32	0.01*	0.85ΔΔ
	2	15	0.35	1.47		
Self-blame	1	13	-0.89	1.16	0.05*	1.11ΔΔ
	2	15	0.43	1.19		
Total	1	13	-2.63	3.10	0.05*	1.12ΔΔ
	2	15	0.82	2.41		

Note: 1 = experimental group; 2 = control group; N = number of participants; M = mean difference; Std = standard of difference; p-value = statistical significance; d-value = effect size

EWB = Emotional well-being; SWB = Social well-being; PWB = Psychological well-being

* = Statistically significant at ≤ 0.05 level according to t-test results for independent groups

Δ = Medium effect in practice

ΔΔ = Practical effect in practice

According to Table 4, there was a practically significant effect (d = 0.80) in the mean differences between the experimental and control groups at the construct hyperarousal. This means that the mean difference for hyperarousal (m = 1.03) of the experimental group was significantly higher than that of the comparison group (m = 0.04).

There was also a practically significant effect (d = 0.80) in the mean differences between the experimental and control groups for the total PTCI and all its subsets. This means that the mean differences for the total PTCI, self (m = 0.85), world (m = 0.90) and self-blame (m = 0.89) were significantly higher than the total PTCI, self (m = 0.04), world (m = 0.35) and self-blame (m = 0.43) of the comparison group.

Thus changes in the experimental group's mean score from pre- to post-test for the abovementioned variables were practically more significant than those in the comparison group.

There was a medium practical effect (d = 0.50) in the mean differences between the experimental and comparison groups at the construct PWB, thus the mean difference for PWB (m = 2.45) was higher than for the PWB (m = 0.33) of the comparison group.

There was also a medium practical effect (d = 0.50) in the mean differences between the experimental and control groups for the total IES-R and one of its subsets. This means that the mean differences for the total IES-R (m = 2.59) and intrusion (m = 0.63)

were higher than the total IES-R (m = 0.79) and intrusion (m = 0.18) of the comparison group.

Changes in the experimental group's mean score from pre- to post-test for the aforementioned variables were more noticeably visible than those in the comparison group. These improvements are an indication that the programme did succeed in improving aspects of the respondents' mental health, the impact of traumatic events and certain negative cognitions of self and the world.

Rating of the different topics pre- and post-programme

In this section the average of respondent's ratings is expressed as a percentage (before and after the programme).

Table 5:   Results of quantitative evaluation (group members' attitude and knowledge)

Subject	Average score (%) before programme	Average score (%) after programme
Trauma	61.5	76.0
Relaxation	72.0	78.2
Remembering and re-telling	46.2	51.7
Emotions, feelings and thoughts	44.4	75.6
Negative emotions	64.2	76.8
Altered thinking	65.6	72.3
Destructive and self-destructive behaviour	61.2	69.4
Problem-solving	68.2	76.7
Trigger events	65.6	78.2
Relationship with others	59.4	74.3
Systems advocacy	38.5	41.2
Relapse prevention	49.6	77.9
Average score (all subjects)	58.0	70.7

The average scores were calculated and indicated in percentages. The average scoring regarding the group members' attitude and knowledge improved with 12.7 per cent from 58.0 to 70.7 per cent. This was a major improvement regarding group members' attitude and knowledge on all the topics included in the PTP. Systems advocacy was the only topic showing a small perceived improvement of 2.7 per cent. The topics of remembering/

re-telling, relaxation, altered thinking, destructive and self-destructive behaviour and problem-solving showed an average perceived improvement ranging between 5.5 and 8.5 per cent. The topics of trauma, emotions, feelings and thoughts, negative emotions, trigger events, relationship with others and relapse prevention showed larger perceived improvements ranging from 12.6 to 31.2 per cent.

Responses from the qualitative data

As part of the pre- and post-programme, respondents had to answer questions about their expectations of the programme and their psycho-social well-being. Examples of respondents' personal views are cited to illustrate the above, first the "before" and then the "after" narratives.

Expectations of the programme

Regarding the expectations of the programme, the following two issues can be highlighted:

• Expected gains/real gains from the programme

The following narratives can be seen as being representative of the responses on the before measure:

> I would like to learn how to deal with trauma when you don't get enough support like we do.

> More knowledge and skills to handle trauma in future, how to cope.

> To take SAPS forward not as individuals but as a team. Members will feel safe and secure, it will give us direction and repositioning, gaining knowledge.

After the programme the following narratives were noted:

> I now have better skills and knowledge on how to process trauma and better deal with stress and depression.

> I realised that everything has a solution through the information acquired from the programme.

> Always do things in a positive manner and think positive.

> I now have more knowledge about trauma, stress and the symptoms after exposure to trauma.

After the programme, participants had more knowledge of trauma and how to deal with it. The narratives also had a much more positive outlook than the "before" narratives.

- Envisaged influence/real influence of the programme

The following narratives reflected on the before and after measurement on the envisaged and the real influence of the programme:

> I hope that the programme will influence my life and health condition positively, and help me stand up for what I believe in.

> I wish that the programme will assist me to become strong in my job, in my family life and my inner self.

> The programme might help to put the past where it belongs, and not to blame myself for any situation good or bad, no matter the outcome, and help me to be equipped for any traumatic situation that I might encounter in future.

After the programme, participants had the following to say regarding its influence on their situation:

> It felt good to identify various feelings and emotions and to learn how to cope with them.

> All the sessions had a positive impact, but the information on trauma and how to handle the symptoms was most valuable.

> Learnt a lot about challenging maladaptive feelings and thoughts.

> The last session was excellent where everything we have learnt came together like the pieces of a puzzle.

From these narratives it is clear that participants were now more positive than before about implementing what they had learned during the sessions – especially on feelings, thoughts and challenging maladaptive behaviour.

Psycho-social well-being

Regarding the questions on psycho-social well-being, the following can be reported.

- Feelings about the work as a police officer

Before the programme participants had the following to say about their work situation:

> I rather love my work and feel obliged to serve my community to the best of my ability.

I am proud to be a police official, to serve my government and my people. It is, however, difficult to be confronted by people who have little respect for SAPS members.

I feel overloaded, because I am facing danger on a daily basis – even my family are not safe.

After the programme participants had the following to say about the work environment:

I will always be faced with traumatic events in my work, but I now cope better in order to cope with my daily tasks.

I feel good, but still maintain that as a low ranking police official I am not taken into consideration and listened to.

I love my job and the organisation, but the one problem remaining is that here is no communication between top management and the workers on the ground.

From the "after" narratives it can be deduced that participants in the programme felt better about their working circumstances. However, the fact that the lower ranks felt they were not recognised by top management, remains an issue.

• Feelings about family

The following feelings about participants' families were noted:

I love my family but when I am stressed out they suffer.

It's bad for my family. I have to leave them for special duties for a very long time because of unpredictable work.

I feel that my family are not protected or safe, anything can happen to them as a result of the work that I am doing.

Upon completion of the programme, participants had the following to say:

I have learned from the programme that I will always be faced with traumatic events in my work situation, but I have to be able to apply what I have learned and cope in order for me to continue.

I learned that I cannot blame my family for anything work related and hopefully it will now be better.

My family is my most valuable asset in life and I should cherish and nurture them.

Participants realised that they have to apply what they learned from the programme on a daily basis, and that traumatic events will always be part and parcel of a police official's job. They also realised that family is important and should be nurtured at all times.

• Feelings about the future

Participants mentioned the following feelings about the future prior to the programme:

> I am blessed because I still have a job, shelter and food on the table.

> Sometimes I feel so negative because of all the corruption and crime in our country – I feel that I am not able to make a difference.

> I try to go on with my life and take it day by day, to roll away the stones in my way and continue to be positive – it is very hard to do.

> There is little support from management and problems of officials are not taken seriously.

After the programme the following remarks were made:

> I feel much more positive after the programme and accept that policing has its unique challenges.

> I will now think twice before reacting and speaking out on a situation.

> I now understand that I have to do my job as best as I can, without attempting to change the world – my small contribution is part of the solution.

> I will seek help in time and not wait till the problem reaches breaking point.

From remarks made after the programme, it is clear that the future seems brighter in respect of participants accepting certain issues and realising that they are only a small part of a bigger picture. It was realised that help should be sought when needed, rather than waiting until a situation reaches breaking point.

DISCUSSION

The PTP programme brought about a significant, positive change with regard to police officials' overall understanding of trauma, and the acquisition of knowledge and skills to improve their mental health, better cope with the impact of traumatic events, and the ability to change trauma-related thoughts and beliefs. This assumption can be made because one construct of the MHC-SF improved with medium practical effect, four constructs of the IES-R scale improved with practically significant effect, while four

constructs of the PTCI improved with medium practical effect in the experimental group. In addition, all these constructs were sustainable three weeks post-intervention.

The reliability of the MHC-SF was calculated and all three constructs were regarded as reliable. After the programme intervention, the experimental group measured a noticeable difference regarding EWB, which visibly improved in the experimental group, but also in the comparison group. This indicated a medium practical effect on the improvement of the respondents' EWB. It is not clear whether the improvement in the experimental group was due to the programme or due to another event that had occurred in the control group. There were no visibly significant differences in any of the other constructs in the comparison group post-testing. In the test between groups, psychological well-being showed a medium practical difference after the experimental group had been exposed to the programme. None of the other constructs measured any significant differences.

The qualitative data also showed a significant improvement. Participants were more positive as they appeared to have gained more knowledge on stress-related issues and strategies for effective problem-solving. Aspects of the programme that most probably enhanced problem-solving were the completion of the pros, cons and positive–negative consequences worksheets. Group members mentioned that, as a result of the programme, they were fully dependent on the support and care of their family, friends and colleagues. This reinforces trust in others, the world and themselves after a traumatic event has occurred. Aspects of the programme that concentrated on systems of care were: psycho-education on how PTSD affects families, friends and colleagues, and exercises about trust and betrayal, intimacy and connectedness and the maintenance of good relationships. During session ten of the PTP group members were informed regarding trust and intimacy in relationships. According to the DSM-5, trauma could cause clinically significant distress or the impairment of emotional, social, psychological or other important areas of functioning (American Psychiatric Association [APA] 2013, 265). In a study by Goetzinger (2008, 134) concerning caregivers' well-being and satisfaction, it was confirmed that emotional well-being in particular appears to be enhanced with the use of active coping strategies, and when recipients access additional social support. The assumption can thus be made that the intervention led to a perceived improvement in respondents' emotional, social and psychological well-being.

Some respondents indicated that they had acquired awareness with regard to intrusion symptoms such as recurrent distressing memories, dreams and flashbacks (APA 2013, 271). They indicated that they understand the importance of remembering and adapting their ability to manage feelings, emotions and impulses as a result of these memories. Aspects of the programme that most probably improved intrusion behaviours were exercises on the importance of remembering, re-telling the story, informal writing and the construction of a trauma inventory as part of session three. Williams and Poijula (2013, 22) confirm that before working on the symptoms bothering individuals who have been exposed to trauma, it is important that the counsellor should be aware of what gave

rise to those symptoms. Wilkinson (2015, 54) emphasises the interconnectedness of the event, primary emotions, negative feelings and the common thoughts that drive them. Pettinelli (2012, 71) indicates that it is important to learn how to turn off a reminder automatically, but stresses that it can also be done to certain feelings, as these are largely triggered by reminders.

Participants reported marked alterations in arousal associated with a traumatic event(s). They specifically referred to irritability, angry outbursts, hypervigilance, substance abuse and the risk for suicide (APA 2013, 271), indicating an improvement in their ability to handle stress related to hyperarousal, assert personal boundaries and find alternative coping mechanisms. Aspects of the programme that most probably improved the possibility of destructive and self-destructive behaviour as a result of arousal were information on the aggression cycle, dealing with anger, the link between trauma, substance abuse and suicide, and the composition of a safety plan in session seven. Escolas, Bartone, Rewers, Rothberg and Carter (2010, 293), Thomas (2010, 123), and Videbeck (2014, 191) emphasise the link between the event, arousal that might lead to anger and violent behaviour, substance abuse and suicidal thoughts, and actual suicide. It is therefore important that group members be provided with self-help information and skills to reduce pain and increase coping resources. These improvements are an indication that the PTP could succeed in improving some of the signs and symptoms arising as a result of the impact of traumatic events on police officials.

The authors are of the opinion that during treatment, patients have to be taught to decentre themselves from negative thoughts and to regard these as cognitive events rather than necessary thoughts. These improvements are an indication that the PTP could succeed in improving aspects related to changing the thoughts and beliefs of police officials following exposure to traumatic events.

The objectives of the group work sessions of the PTP were met in general, but the nature and composition of some activities were adjusted to meet the group members' knowledge, level of understanding and available time, since their work – which is quite flexible and demanding – sometimes took longer than planned. The PTP was developed and tested to become a tool in service delivery to police officials attached to specialised units. Further possibilities, in terms of using the programme at different specialised units in the SAPS, indicate that it is considered a useful and complete empowering instrument.

RECOMMENDATIONS

Based on the discussion of the results, the following recommendations can be made:

- The PTP should be evaluated within other specialised units, not only in the North West but also in the rest of the country, so that the quantitative and qualitative results of this study can be either confirmed or refuted.

- The PTP should also be evaluated with other emergency agencies, such as the Fire Brigade, ER24 and the Metro Police, to determine its external value.

- Respondents found it extremely difficult to answer the CIHQ. The two constructs pertaining to incident and coping were confusing, and many were unable to understand the link. It was thus completed as a group, with an interpreter interpreting every statement. The recommendation here is that the questionnaire be simplified to accommodate all police officials.

- The programme is supposed to be presented over a period of 12 weeks, with one session of one-and-a-half hours per week. As a result of police officials' work demands, often long and irregular working hours (overtime, deployment) and the unpredictability of their work, this seems impossible. It is therefore recommended that the programme be made more flexible.

- As a result of the extent of the sessions and the intensity of certain topics and activities, the time allocation should not be less than two hours per session.

- It is important to extensively market the programme to police management, so as to sensitise them with regard to police officials' unique needs, to have a better understanding so that they can be proactive and to provide timeous support to those exposed to traumatic events.

- The PTP should include a session on financial management, as many respondents complained about opportunities for promotion, overtime remuneration, inadequate salaries and expectations regarding basic needs (as voiced by family members).

- The PTP can be adjusted to include family members such as spouses, at some stage of the intervention process, so that they can better understand trauma and help to strengthen the police officials' support system.

- The implementation of the PTP should be strictly monitored to ensure that it is used as a therapeutic intervention process as part of the SAPS trauma risk management operating procedure.

SUMMARY

The purpose of this article was to evaluate and determine the effect of a compiled PTP for police officials attached to a specialised unit in the North West, who are constantly exposed to traumatic events. A mixed methods research approach was followed. Police officials in the experimental and comparison groups were selected by means of purposive sampling from a single specialised unit, POP in Potchefstroom. Post-sampling, police officials were screened and again purposively divided into two groups based on availability as a result of extreme work demands. This was done with due consideration for gender, age, ethnic background, rank, qualification, marital status and years of service. For this study, concurrent convergent design was utilised and it

included two groups: experimental and comparison. These groups were quantitatively evaluated by means of the MHC-SF, CIHQ, IES-R and PTCI. Qualitative evaluation of the experimental group was done by means of self-developed schedules. It was found that the PTP developed for this study brought about a significant, positive change with regard to police officials' overall knowledge and skills in coping with the signs and symptoms of trauma, their mental health, the impact of traumatic events and trauma-related thoughts and beliefs, to prevent PTSD or any other co-morbid disorder.

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REFERENCES

American Psychiatric Association (APA). 2013. *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5). 5th ed. Washington, DC: APA.

Beck, J. G., D. M. Grant, J. P. Read, J. D. Clapp, S. F. Coffey, L. M. Miller, and S. A. Palyo. 2008. "The Impact of Event Scale – Revised: Psychometric Properties in a Sample of Motor Vehicle Accident Survivors." *Journal for Anxiety Disorders* 22 (2): 187–198.

Creswell, J. W. 2014. Research Design: Qualitative, Quantitative and Mixed Methods Approaches. 4th ed. California: Sage.

Creswell, J. W., and V. L. Plano Clark. 2011. *Designing and Conducting Mixed Methods Research*. 2nd ed. Thousand Oaks, CA: Sage.

Delport, C. S. L., and C. B. Fouché. 2011. "The Qualitative Research Report." In *Research at Grass Roots: For the Social Sciences and Human Service Professions*, edited by A. S. de Vos, H. Strydom, C. B. Fouché, and C. S. L. Delport, 425–430. Pretoria: Van Schaik. Fourth edition.

De Vos, A. S., and H. Strydom. 2011. "Intervention Research." In *Research at Grass Roots: For the Social Sciences and Human Service Professions*, edited by A. S. de Vos, H. Strydom, C. B. Fouché, and C. S. L. Delport, 473–490. Pretoria: Van Schaik. Fourth edition.

Escolas, S. M., P. T. Bartone, M. Rewers, J. M. Rothberg, and J. Carter. 2010. "Why Do Soldiers Kill Themselves? Understanding Suicide in the Military." In *The 71F Advantage: Applying Army Research Psychology for Health and Performance Gains*, edited by P. T. Bartone, R. H. Pastel, and M. Vaitkus, 283–314. Washington: National Defense University Press.

Foa, E. B., A. Ehlers, M. Clark, D. F. Tolin, and S. M. Orsillo. 1999. "The Post-traumatic Cognitions Inventory (PTCI): Development and Validation." *Psychological Assessment* 11 (3): 303–314.

Fraser, M. W., J. M. Richman, M. J. Galinsky, and S. H. Day. 2009. *Intervention Research: Developing Social Programmes*. New York: Oxford University Press.

Goetzinger, A. M. 2008. "Predictors of Caregiver Well-Being and Satisfaction: The Development of a Comprehensive Model". PhD thesis, University of Missouri-Kansas City.

Greeff, M. 2011. "Information Collection: Interviewing." In *Research at Grass Roots: For the Social Sciences and Human Service Professions*, edited by A. S. de Vos, H. Strydom, C. B. Fouché, and C. S. L. Delport, 341–375. Pretoria: Van Schaik.

Grinnell, R. M., Y. A. Unrau, and M. Williams. 2011. "Group-Level Designs." In *Social Work Research and Evaluation: Foundations of Evidence-Based Practice*, edited by R. M. Grinnell and Y. A. Unrau, 258–283. New York: Oxford University Press. Ninth edition.

Keyes, C. L. M., M. Wissing, J. P. Potgieter, M. Temane, A. Kruger, and S. van Rooy. 2008. "Evaluation of the Mental Health Continuum-Short Form (MHC-SF) in Setswana-Speaking South Africans." *Clinical Psychology and Psychotherapy* 15: 181–192.

Marlow, C. R. 2011. *Research Methods for Generalist Social Work*. 5th ed. USA: Brooks/Cole Cengage Learning.

Mthethwa, N. 2013, April 16. Media Statement from Ministry of Police. "Minister Mthethwa Urges Police Officials to Utilize SAPS Wellness Programmes." http://www.saps.gov.za/_dynamicModules/internetSite/newsBuild.asp?myURL=3112 (accessed 20 April 2013).

Patton, M. Q. 2015. *Qualitative Research and Evaluation Methods*. 4th ed. California: Sage.

Pettinelli, M. 2012. "The Psychology of Emotions, Feelings and Thoughts." http://cnx.org/content/col10447/latest (accessed 9 July 2015).

Rodriguez, A. J. 2013. "Epilogue: Moving the Equity Agenda Forward Requires Transformative Action." In *Moving the Equity Agenda Forward: Equity Research, Practice and Policy in Science Education*, edited by J. A. Bianchini, V. L. Akerson, A. C. Barton, O. Lee, and A. J. Rodriguez, 355–364. Dordrecht: Springer Science + Business Media.

Rubin, A., and E. R. Babbie. 2005. *Research Methods for Social Work*. 5th ed. Belmont, CA: Brooks/Cole-Thompson Learning.

Rubin, A., and E. R. Babbie. 2010. *Essential Research Methods for Social Work*. 2nd ed. Belmont, CA: Brooks/Cole Cengage Learning.

Strydom, H. 2011. "Sampling in the Quantitative Paradigm." In *Research at Grass Roots: For the Social Sciences and Human Service Professions*, edited by A. S. de Vos, H. Strydom, C. B. Fouché, and C. S. L. Delport, 222–235. Pretoria: Van Schaik.

Thomas, C. 2010. "Basic Management Skills: Essential Reading for First-time Managers, Supervisors and Existing Leaders Who Want to Upgrade their Skills." http://bit.ly/1rVZ4tV (accessed 24 January 2015).

Videbeck, S. L. 2014. *Psychiatric-Mental Health Nursing*. 6th ed. Philadelphia: Lippincott Williams & Wilkens.

Weiss, D. S., A. Brunet, S. R. Best, T. J. Metzler, A. Liberman, N. Pole, J. A. Fagan, and C. R. Marmar. 2010. "Frequency and Severity Approaches to Indexing Exposure to Trauma: The Critical Incident History Questionnaire for Police Officers." *Journal for Traumatic Stress* 23(6): 734–743.

Wilkinson, L. 2015. *Overcoming Anxiety and Depression on the Autism Spectrum: A Self-help Guide using CBT*. London: Jessica Kingsley.

Williams, M. B., and S. Poijula. 2013. *The PTSD Workbook: Simple, Effective Techniques for Overcoming Traumatic Stress Symptoms*. 2nd ed. Oakland: New Harbinger.