# CHAPTER 5 ANALYSIS, INTERPRETATION AND SYNTHESIS OF QUANTITATIVE AND QUALITATIVE DATA

#### 5.1 INTRODUCTION

In order to investigate the potential contextual effects of, and to evaluate the effectiveness of meditation as a strategy for stress management and the promotion of wellness in teachers, one firstly needs to present the data for analysis to determine the effects and effectiveness. Secondly, one needs to interpret and synthesise the data to determine the contextual effects and evaluate the effectiveness of meditation as a strategy for stress management and the promotion of wellness in teachers.

In this chapter, the quantitative results obtained by the use of various measuring instruments will be presented as data that will be analysed for the effects and effectiveness of Clinically Standardized Meditation. The quantitative data will then be interpreted and synthesised in terms of the effects and effectiveness of Clinically Standardized Meditation as a strategy for stress management and the promotion of wellness in teachers.

Qualitative results obtained by the use of various qualitative methods will be presented as data that will be analysed for the effects and effectivenss of Clinically Standardized Meditation as a stress management strategy and the promotion of wellness, expressed in the form of categories and sub-categories. The qualitative data will then be interpreted and synthesised in terms of the effects and effectiveness of Clinically Standardized Meditation as a stress management strategy and the promotion of wellness in teachers.

The quantitative and qualitative results will then be synthesized and discussed, in terms of the effects of meditation in all the contexts of existence, in order to validate the potential effectiveness of meditation as a strategy for stress management and the promotion of wellness in teachers.

### 5.2 QUANTITATIVE DATA ANALYSIS: THE EFFECTS AND EFFECTIVENESS OF CLINICALLY STANDARDIZED MEDITATION

#### 5.2.1 Reliability indexes of measuring instruments

In Table 5.1 the reliability indexes of all the measuring instruments and their subscales, that were used in this study, are presented.

Table 5.1: Reliability of indexes of all measuring instruments

Measuring instrument	Subscale	Chronbach alpha coefficients
Perceived Stress Scale (PSS)		0,84
Profile of Adaptation to Life - Holistic	**************************************	
(PAL-Holistic)	Negative Emotions	0,83
	Well-Being	0,83
	income Management	0,83
	Physical Symptoms	0,70
	Alcohol/Drug Use	0,43*
	Close Relations	0,95
	Child Relations	0,90
	Social Activity	0,64
	Self Activity	0,62
	Nutrition & Exercise	0,59*
	Personal Growth	0,21*
	Spiritual Awareness	0,60

Measuring instrument	Subscale	Chronbach alpha coefficients
General Health Questionnaire (GHQ)	Somatic Symptoms	0,74
	Anxiety and Insomnia	0,84
	Social Dysfunction	0,76
	Severe Depression	0,77
	Total	0,91
Quality of Life Inventory (QOLI)	Total	0,73
	Health	
	Self-Esteem	
	Goals-and-Values	
	Money	
	Work	
	Play	
	Learning	
	Creativity	***************************************
	Help	
	Love	
	Friends	
	Children	
	Relatives	
	Home	
	Neighbourhood	
	Community	

Measuring instrument	Subscale	Chronbach alpha coefficients
Symptom Checklist-90-Revised	Somatisation	0,86
(SCL-90-R)	Obsessive-Compulsive	0,85
	Interpersonal Sensitivity	0,85
	Depression	0,87
	Anxiety	0,85
	Hostility	0,83
	Phobic Anxiety	0,80
	Paranoid Ideation	0,74
	Psychotisism	0,78
Spiritual Well-being Scale (SWLS)	Total	0,85
	Religious Well-Being	0,92
	Existential Well-Being	0,91
Work Environment Scale (WES)	Involvement	0,79
	Peer Cohesion	0,68
	Supervisor Support	0,76
	Relationship Dimension	0,89
	(comprising the above	
	three)	
	Autonomy	0,70
	Task Orientation	0,72
	Work Pressure	0,74
	Personal Growth Dimen-	0,82
	sions (comprising the	
	above three)	
	Clarity	0,77
	Control	0,54*

	Innovation	0,83
	Physical Comfort	0,79
	System Maintenance and	0,85
	System Change	
	Dimensions (comprising	
	the above four)	
Manufac instrument	Subscale	Chronbach
Measuring instrument	Subscale	alpha coefficients
Profile of Mood States (POMS)	Total Mood Disturbance	0,97
	Depression - Dejection	0,94
	Anger Hostility	0,90
	Vigour - Activity	0,86
	Fatigue – Inertia	0,83
	Confusion Bewilderment	0,87
	Tension – Anxiety	0,88
Generalized Self-Efficacy Scal	e Total	0,81
(GSES)		
	<b>I</b>	

Key: \* = low reliability index

The reliability indexes of the areas of the QOLI were not possible to obtain, because the areas are represented by only two items each in the QOLI, and not three or more which are a prerequisite for the calculation of reliability indexes (Statistical Consultation Service, 2000).

Borg and Gall (1989:245) indicate that a high alpha coefficient is typically .60 or higher. It seems clear from Table 5.1 that the measuring instruments that were used in this study on participating teachers, all have high reliability indexes, except for three subscales of the PAL-Holistic, and one subscale of the WES. This has certain implications for the interpretation of test results of these particular subscales of the PAL-Holistic and WES, due to unacceptable low reliability, and these are therefore omitted from further consideration as far as interpretation is concerned.

## 5.2.2 Comparison of the pre-test scores of the experimental and control groups

To determine if the experimental and control groups are comparable, and if the control group therefore is a valid group for comparison, the pre-test scores on all the measuring instruments were compared. T-tests for independent groups were used for this purpose, namely to determine if the averages differed significantly or not, in order to ascertain if the experimental and control groups were sufficiently similar before the independent variable (CSM) was introduced. The results are reflected in Table 5.2.

Table 5.2: Comparison of the pre-test scores of the experimental and control groups

Scale	Subscale	t	Р	q
PSS	Total	0,86	0,39	
PAL-H	Negative Emotions	0,76	0,44	<u> </u>
	Well-Being	0,25	0,79	
	Income Management	2,16	0,37	
***************************************	Physical Symptoms	1,19	0,24	
	Close Relations	1,80	0,08	
	Child Relations	0,13	0,89	
	Social Activity	0,30	0,75	
	Self Activity	1,15	0,25	
	Spiritual Awareness	0,77	0,44	<b>4</b> von
GHQ	Total	0,59	0,55	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Somatic Symptoms	0,74	0,46	
-	Anxiety and Insomnia	0,89	0,38	
	Social Dysfunction	0,00	1,00	
	Severe Depression	0,19	0,85	
QOLI	Total	0,26	0,79	
	Health	1,41	0,16	
	Self-Esteem	0,62	0,53	
	Goals-and-Values	0,43	0,66	

	Money	1,87	0,07
	Work	0,10	0,92
	Play	1,52	0,13
	Learning	0,75	0,45
	Creativity	0,74	0,46
	Help	1,22	0,22
	Love	1,40	0,16
Table 1	Friends	0,30	0,76
	Children	1,98	0,06
	Relatives	1,17	0,25
	Home	0,94	0,35
	Neighbourhood	0,85	0,40
	Community	0,85	0,40
SCL-90-R	Somatisation	1,11	0,27
	Obsessive-Compulsive	1,07	0,29
	Interpersonal Sensitivity	0,99	0,32
	Depression	0,51	0,61
	Anxiety	0,36	0,71
	Hostility	0,80	0,42
	Phobic Anxiety	0,49	0,62
	Paranoid Ideation	0,27	0,78
	Psychotisism	0,18	0,85
	Global Seventy Index	0,62	0,53
	Positive Symptom Distress Index	0,61	0,54
	Positive Symptom Total	1,04	0,30
SWLS	Total	0,51	0,61
· ·	Religious Well-Being	0,27	0,78
1 miles	Existential Well-Being	0,24	0,80

WES			
	Involvement	0,52	0,60
	Peer Cohesion	1,10	0,27
	Supervisor Support	1,10	0,27
	Relationship Dimension	0,98	0,33
	(comprising the above three)		
	Autonomy	1,03	0,30
	Task Orientation	0,00	1,00
	Work Pressure	0,56	0,57
	Personal Growth Dimensions	0,23	0,81
	(comprising the above three)		
1			
	Clarity	0,20	0,83
	Innovation	1,15	0,25
	Physical Comfort	0,70	0,48
İ	System Maintenance and	0,07	0,93
<u> </u>	System Change Dimensions	With the state of	
	(comprising the above four)	**************************************	-
POMS	Total	1,05	0,30
	Depression - Dejection	0,71	0,47
	Anger – Hostility	0,50	0,61
	Vigour – Activity	0,47	0,63
	Fatigue – Inertia	0,24	0,80
	Confusion - Bewilderment	1,30	0,20
	Tension – Anxiety	1,20	0,23
GSES	Total	1,64	0,10

Notwithstanding the fact that accidental sampling was used in this study (see 4.3), it seems from the data reflected in Table 5.2 that there are no statistical significant differences (on the 5% level) between the scores on the pre-tests of the experimental

and control groups. Taking all the instruments/scales/questionnaires and subparts into account, the research has failed to reject  $HO_1$  ( $\mu E = \mu c$ ). This means that the experimental and control groups were comparable before the commencement of the introduction of the independent variable, namely CMS, on all nine of the chosen quantitative and psychometric parameters.

#### 5.2.3 Comparison of the within group and between group differences

In this section the data are presented and thereafter interpreted per measuring instrument. The experimental and control groups at any time during the pre- or post-tests consisted of a minimum of 12 persons each and a maximum of 18 (See 4.3).

#### 5.2.3.1 The Perceived Stress Scale (PSS)

The PSS, as has been indicated in 4.4.2.11, measures a global level of perceived stress — the degree to which situations in one's life are appraised as stressful — as opposed to so-called objective stress. The items are in the form of questions that concern the feelings and thoughts of the person completing the PSS over the last month. The higher the score on the PSS, the higher the degree to which persons view their lives unpredictable, uncontrollable and overloading.

Table 5.3: Descriptive statistics for the experimental and control groups obtained from the pre- and post-test with the PSS

Pre-tests						Pos	t-tests		
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	Perceived Stress Scale	32,12	8,39	19,00	51,00	21,69	7,16	12,00	36,00
CON	Perceived Stress Scale	29,93	5,66	18,00	39,00	28,61	6,72	14,00	40,00

It seems as if the post-test scores of the experimental group have decreased significantly in comparison with the pre-test score. The post-test score of the control group is, however, only slightly lower than the pre-test score. The post-test mean scores of the experimental group are 21,69 which is close to the mean scores of the national

probability sample of adults of 19,62 reported by Cohen *et al.* (1983:46). Although this was an American sample, the mean scores obtained in this study nevertheless serve as an indication that the practise of CSM has shifted the perceived stress of the experimental group in the direction of a more "normal" sample.

Table 5.4: The significance of the differences between the pre- and post-test scores within the experimental and control groups as measured by the PSS

	Mean difference between pre- and post-testing		Std dev	t	p	d 	
EXP	Perceived Stress Scal	-9,91 e	9,86	-3,48	0,00255**	1,00 <i>##</i>	
CON	Perceived Stress Scal	-2,54 e	5,22	-1,61	0,0685		

Key: \* =  $p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

practically significant)

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the Perceived Stress Scale. This difference can be seen in a statistically highly significant ( $p \le 0.01$ ) decrease in the Perceived Stress Scale score. On account of this the  $HO_2$  ( $|\mu pr - \mu po| = 0$ ) can be rejected for the Perceived Stress Scale. As far as the effect size that has been found, is concerned, it can be noted that a practical significant effect ( $d \ge 0.8$ ) has also been found in the Perceived Stress Scale score between the pre- and post-test scores of the experimental group as measured with the Perceived Stress Scale. This measure of effect size reflects the large effect CSM has had as the independent variable on the experimental group.

No statistically significant difference between the pre- and post-test scores within the control group as measured with the Perceived Stress Scale has been found. On account of this, the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ), which means that no

statistically significant differences have been found between the pre- and post-test scores of the control group with the Perceived Stress Scale.

The significance of the differences between the means of pre- and Table 5.5: post-test difference scores of the experimental and control groups as measured with the PSS

	EXP			CON		· · · · · · · · · · · · · · · · · · ·	
	Mean	Std dev	Mean	Std dev	t	p	d
Perceived Stress Scale	-9,91	9,86	-2,54	5,22	-2,26	0,01845*	0,74#

Key:  $* = p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

practically significant)

A statistically significant difference between the means of the pre- and post-test difference scores of the experimental and control groups as measured by the Perceived Stress Scale was found. On account of this the HO<sub>4</sub> (µE = µc) can be rejected for the Perceived Stress Scale. The experimental group in comparison with the control group had a statistically significant ( $p \le 0.05$ ) decrease on the Perceived Stress Scale score. The effect size indicates that a medium effect (d= 0,74), just below the practical significant cut-off point of d ≥ 0,80, has been found with the Perceived Stress Scale scores. It can therefore be concluded that CSM was effective in bringing about a significant change in the experimental group in comparison to the control group as was measured by the Perceived Stress Scale in respect of a decrease in the average amount of subjectively perceived stress experienced.

#### 5.2.3.2 Profile of Adaptation to Life – Holistic (PAL-H)

The descriptive statistics for the PAL-H are reported in Table 5.3. As has been indicated in Chapter 4 (4.4.2.2), the PAL-H includes seven dimensions of adjustment measured by the shorter clinical form of the PAL scale as well as those life style activities and beliefs that were found to be related to good health and adjustment. Because the PAL-H is not standardised in South Africa, the t-scores have not been used. The range of the averages for raw scores for each area obtained from the Profile Sheet of the PAL-H (Ellsworth, 1981) is however as follows:

Negative Emotions	11,2	-15,00
Well-Being	15,50	- 12,25
Income Management	9,2	- 6,9
Physical Symptoms	<b>9</b> ,8	- 13,6
Close Relations	14,5	- 9,9
Child Relations	15,5	- 12,1
Social Activity	7,25	- 5,1
Self Activity	7,6	- 4,9
Spiritual Awareness	14,6	10,2

It must be remembered that some of these areas are negative, for example, "Negative Emotions" and "Physical Symptoms", and some are positive for example "Well-being". This translates to the fact that a low negative score indicates good adjustment. The inverse is true for positive areas. Scores obtained to the "left" (higher or lower, depending on whether the area is positive or negative) of the averages given above indicate good adjustment. Those scores to the "right" of the averages given indicate poor adjustment.

Table 5.6: Descriptive statistics for the experimental and control groups obtained from the pre- and post-tests with the PAL-H

Pre-te	ests	***************************************				Post-te	sts		
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	Negative Emotions	16,38	2,61	12	20	13,11	3,85	6	20
	Well-Being	13,83	4,14	6	20	16,29	2,59	10	20
	Income Management	7,88	2,60	3	12	8,23	2,84	3	12
	Physical Symptoms	15,00	4,10	В	23	12,29	3,54	7	21
	Close Relations	12,21	5,16	5	20	14,53	5,31	7	20
	Child Relations	15,93	4,26	6	20	16,08	3,70	9	20
	Social Activity	8,22	2,18	6	13	8,64	2,08	5	12
	Self Activity	4,50	1,85	3	9	8,00	2,29	4	12
	Spiritual Awareness	13,83	1,79	11	18	14,47	3,16	5	18
CON	Negative Emotions	15,66	3,02	10	19	15,93	2,96	11	20
	Well-being	14,16	3,60	9	20	13,46	4,13	7	20
	Income Management	5,88	2,92	3	12	6,40	3,75	3	15
	Physical Symptoms	13,50	3,41	В	21	13,86	4,20	8	22
	Close Relations	15,50	4,45	8	20	14,54	5,29	6	20
	Child Relations	15,72	3,60	10	20	13,75	3,69	9	20
	Social Activity	8,44	2,12	5	12	8,06	1,90	5	12
	Self Activity	5,27	2,16	3	10	4,86	1,18	3	7
	Spiritual Awareness	14,38	2,47	11	19	14,73	2,15	12	20

The experimental group showed poor pre-test-adjustments on Negative Emotions, Physical Symptoms and Self Activity, which all changed to average or above average post-test adjustments. The control group showed a poor pre-test adjustment on Negative Emotions also, but which remained a poor post-test adjustment, and Self Activity that changed from average pre-test adjustment to poor post-test adjustment.

Close Relations and Child Relations of the control group both changed from above average pre-test adjustment to average post-test adjustment.

On the whole seven areas of the PAL-H improved with the experimental group, whilst the rest (five) remained roughly the same. Only one of the areas of the PAL-H improved and 3 worsened with the control group, whilst the rest (eight) remained roughly the same.

On the nine PAL-H areas used in this study, the pre- and post-test scores of the experimental group can be summarised as follows:

Negative Emotions: Poor pre-test adjustment changed to average post-test

adjustment.

Well-Being: Average pre-test adjustment changed to above average

adjustment.

Income Management: Average pre-test and post-test adjustments were maintained.

Physical Symptoms: Poor pre-test adjustment changed to average post-test

adjustment.

Close Relations: Average pre-test adjustment changed to above average post-test

adjustment.

Child Relations: Above average pre-test adjustment remained above average

post-test.

Social Activity: Above average pre-test adjustment remained above average

post-test.

Self Activity: Poor pre-test adjustment changed to above average post-test

adjustment.

Spiritual Awareness: Average pre-test adjustment remained average post-test.

In the twelve PAL --H areas, the pre- and post-test scores of the control group can be summarised as follows:

Negative Emotions: Poor pre-test adjustment remained poor post-test.

Well-Being: Average pre-test adjustment remained average post-test.

Income Management: Above average pre-test adjustment remained above average

post-test.

Physical symptoms: Average pre-test adjustment changed to above average post-test

adjustment.

Close Relations: Above average pre-test adjustment changed to average post-test

adjustment.

Child Relations: Above average pre-test adjustment changed to average post-test

adjustment.

Social Activity: Above average pre-test adjustment remained above average

post-test.

Self Activity: Average pre-test adjustment changed to poor post-test

adjustment.

Spiritual Awareness: Above average pre-test adjustment remained above average

post-test.

The differences between the experimental and control groups and those of the pre- and post-tests should, however, only be interpreted in the light of statistical significance, and if possible, practical meaningfulness (as indicated in 4.6.1) in order to ascertain the relative magnitude and meaning of the change in this study.

Table 5.7: The significance of the differences between the pre- and post-test scores within the experimental and control groups as measured with the PAL-H.

		Mean difference between pre- and post-testing	Std dev	t	p	d
EXP	Negative Emotions	-3,23	4,03	-3,30	0,0022**	0,80##
	Well-Being	2,35	4,31	2,24	0,0195*	0,54#
	Income Management	0,29	2,31	0,52	0,3035	
	Physical Symptoms	-2,94	3,66	-3,30	0,0022**	0,80##
<b>1</b>	Close Relations	1,92	3,14	2,20	0,0239*	0,61#
	Child Relations	0,41	3,14	0,45	0,3277	į
	Social Activity	0,29	1,92	0,62	0,2692	
	Self Activity	3,41	2,55	5,51	0,00005**	1,33##
	Spiritual Awareness	0,47	2,91	0,66	0,2578	V
CON	Negative Emotions	-0,06	3,47	-0,07	0,4709	
	Well-Being	-0,93	3,88	-0,93	0,1837	
	Income Management	0,73	3,47	0,81	0,2136	
###	Physical Symptoms	-0,26	4,49	-0,22	0,4108	
	Close Relations	-0,90	2,42	-1,17	0,1353	
	Child Relations	-1,14	3,18	-0,94	0,1895	
	Social Activity	-0,26	1,43	-0,71	0,2421	
	Self Activity	-0,40	1,18	-1,30	0,1057	
TO AND A DESCRIPTION OF THE PROPERTY OF THE PR	Spiritual Awareness	0,40	1,63	0,94	0,1802	

Key:  $* = p \le 0.05$  (statistically significant)

 $\# = d \ge 0,50$  (medium effect)

practically significant)

There is a statistically significant difference (at least p  $\leq$  0,05) between some pre- and post-test scores within the experimental group as measured by the PAL-H. These differences can be seen in a statistically significant (p  $\leq$  0,05): increase in Well-being, and an increase in Close Relations. These differences can also be seen in statistically

<sup>\*\* =</sup>  $\rho \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

highly significant (p  $\leq$  0,01): decreases in Negative Emotions, and Physical Symptoms and, an increase in Self Activity. On account of this, the  $HO_2$  ( $|\mu pr - \mu po| = 0$ ) can be rejected for the PAL-H. It is further important to also reflect on the effect sizes (d) found in order to take stock of how large an effect the independent variable had. In this sense the effect size of d= 0.54 of Well-Being, and d = 0,61 of Close Relations had medium effect sizes, and that of d = 0.80, of both Negative Emotions and Physical Symptoms and that of d = 1,33 of Self Activity practically significant effect sizes.

This practically significant effect size of Self Activity is understandable, because the practise of meditation has a direct bearing on the items in the area of Self Activity. It, however, also serves to indicate that participants have been actively meditating.

On the other hand, no statistically significant difference (at least  $p \le 0.05$ ) between any pre- and post-test scores within the control group as measured by the PAL-H has been found. On account of this the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ), which means no statistically significant differences have been found between the preand post-test scores of the control group with the PAL-H.

Table 5.8: The significance of the differences between means of pre- and post-test difference scores of the experimental and control groups as measured with the PAL-H.

EXP			CON				
	Mean	Std dev	Mean	Std dev	t	P	D
Negative Emotions	-3,23	4.04	-0.07	3.47	-2.38	0.0118*	0,81##
Well-Being	2,35	4,31	-0,93	3,88	2,27	0,0153*	0,33
Income Management	0,29	2,31	0,73	3,47	-0,41	0,3408	
Physical Symptoms	-2,94	3,66	-0,27	4,49	-1,83	0,0392*	0,80##
Close Relations	1,92	3,14	-0,90	2,42	2,42	0,0121*	0,32
Child Relations	0,41	3,14	-1,14	3,18	1,03	0,1603	
Social Activity	0,29	1,92	-0,26	1,43	0,93	0,1777	
Self Activity	3,41	2,55	-0,40	1,20	5,52	0,0005**	1,18##
Spiritual Awareness	0,50	2,91	0,40	1,63	0,08	0,4662	\$0000A

Key: \* =  $p \le 0.05$  (statistically significant)

 $\# = d \ge 0.50$  (medium effect)

practically significant)

<sup>\*\* =</sup>  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

It is clear from Table 5.5 that there is a statistically significant difference between the means of the pre- and post-test difference scores of the experimental and control groups as was measured in four areas by the PAL-H. On account of this can  $HO_4$  ( $\mu E = \mu c$ ) can be rejected for the PAL-H. The experimental group, therefore, in comparison with the control group, had a statistically significant decrease in Negative Emotions and Physical Symptons, increased Well-Being, increased Close Relations and increased Self-Activity. It is, however, important to note that the d-values of these four areas reflect practically significant effect sizes ( $d \ge 0.8$ ) for both the decrease in Negative Emotions and Physical Symptoms and an increase in Self-Activity.

Well-Being and Close Relations, on the other hand, had only small effect sizes. However, on the strengths of the results obtained and reported on, (a decrease in Negative Emotions and Physical Symptoms and an increase in Self-Activity), it can be stated that CSM was effective in bringing about these effects.

#### 5.2.3.3 The General Heath Questionnaire (GHQ)

The GHQ, as has been indicated in 4.4.2.3, consists of four subscales, namely:

Somatic Symptoms
Anxiety and Insomnia
Social Dysfunction
Severe Depression

Total Score.

A low Total Score (0-4) indicates a more positive sense of mental health, and a higher score (5-28) indicates a progressively more negative state of mental health.

Table 5.9: Descriptive statistics for the experimental and control groups obtained from the pre- and post-tests with the GHQ

		Pre-tes	its				Post-tes	ts	
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	Somatic Symptoms	3,19	2,53	0	7	0,61	1,26	0	4
A 100 mm of 100	Anxiety and Insomnia	3,19	2, <del>56</del>	0	7	0,69	1,49	0	4
	Social Dysfunction	2,19	2,22	0	7	0,61	1,04	0	3
	Severe Depression	1,50	1,82	0	6	0,15	0,37	0	1
**************************************	Total Score	10,06	7,76	0	22	2,07	3,52	0	10
CON	Somatic Symptoms	2,62	1,62	0	5	1,92	1,65	0	6
. 9000	Anxiety and Insomnia	2,43	2,18	0	6	2,07	2,01	0	6
www	Social Dysfunction	2,18	1,97	0	6	1,61	2,66	0	7
Anna de la composition de la constanta de la c	Severe Depression	1,37	1,89	0	5	1,23	2,31	0	7
	Total Score	8,62	5,73	0	17	6,84	7,57	0	25

The GHQ, as has been pointed out (in 4.4.2.3), provides information concerning the current mental status of a person, and has as such been used as an indicator of minor psychiatric disturbance in the community and as a measure for teacher distress. The GHQ is aimed at detecting those with a diagnosable psychiatric disorder.

Both the experimental and control groups had very high Total Scores on the GHQ, at the time of the pre-tests, 22 and 17 respectively. Interestingly, however, is that at the post-test the Total Score of the experimental group decreased to 10 (from 25), and that of the control group increased to 25 (from 17). This suggests the lessening of detectable and diagnosable/psychiatric disorder in the experimental group and the inverse for the control group.

Table 5.10: The significance of the differences between the pre- and post-tests scores within the experimental and control groups as measured with the GHQ

Transferon Land		Mean difference between pre-and post-testing	Std dev	t	p	đ
EXP	Somatic Symptoms	-2,41	1,78	-4,69	0,0003**	1,35 <del>##</del>
***	Anxiety and Insomnia	-2,66	2,70	-3,41	0,0029**	D, <b>98##</b>
	Social Dysfunction	-1, <b>6</b> 6	2,42	-2,38	0,0182*	0,6 <b>8#</b>
	. Severe Depression	~1, <b>6</b> 6	2,05	-2,80	0,0086**	0,80##
TT-10000	Total Score	<b>-</b> 8, <b>66</b>	6,99	-4,16	0,0008**	1,20##
CON	Somatic Symptoms	-1,45	2,29	-2,10	0,31	
	Anxiety and Insomnia	-1,00	2,89	-1, <b>1</b> 4	0,135	
	Social Dysfunction	-0,81	2,31	-1,17	0,13	!
	Severe Depression	-0,81	2,48	-1,09	0,15	i
And the second s	Total Score	-4,09	7,5 <b>5</b>	<b>-</b> 1,79	0,05*	0,54#

Key:  $* = p \le 0.05$  (statistically significant)

 $\# = d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect –

practically significant)

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the GHQ. These differences can be seen in a statistically significant ( $p \le 0.05$ ) decrease in Social Dysfunction and a statistically highly significant ( $p \le 0.01$ ) decrease in Somatic Symptoms, Anxiety and Insomnia, Severe Depression and the Total Score. On account of this, the HO<sub>2</sub> ( $|\mu pr - \mu po| = 0$ ) can be rejected for the GHQ. It is further also important to note the effect sizes (d) that have been found. Practical significant effects ( $d \ge 0.8$ ) have been found in Somatic Symptoms, Anxiety and Insomnia, Severe Depression and Total, and a medium effect size in Social Dysfunction. The measures of effect size reflect the large effect CSM had as the independent variable on the experimental group.

A statistically significant difference between the pre- and post-test scores within the control group as measured with the GHQ has been found. A statistically significant decrease ( $p \ge 0.05$ ) in the Total Score has been found. On account of this the HO<sub>3</sub> ( $l \mu pr$ 

- μpo | =0) can be rejected for the GHQ, which means that a statistically significant difference has been found between the pre- and post-test scores of the control group with the GHQ. Although a medium effect size is also noted, it is far smaller than the practical effect size that has been found on the Total Score of the experimental group.

Table 5.11: The significance of the differences between the means of pre- and post-test difference scores of the experimental and control groups as measured with the GHQ

EXP			ÇON				
	Mean	Std dev	Mean	Std dev	t	P	d
Somatic Symptoms	-2,41	1,78	-1,45	-1,11	-1,11	0,135	
Anxiety & Insomnia	-2,66	2,70	-1,00	-1,42	-1,42	0,08	
Social Dysfunction	-1,66	2,42	-0,81	-0,85	-0,85	0,20	
Severe Depression	-1,66	2,05	-0,81	-0,88	-0,88	0,19	
Total Score	-8,41	6,99	-4,09	-1,42	-1,42	0,0852	

No statistically significant difference between the means of the pre- and post-test difference scores of the experimental and control groups were found as was measured by the GHQ. On account of this the research has failed to reject the  $HO_4$  ( $\mu E = \mu c$ ). This is probably ascribable to the fact that although the experimental group showed a significant decrease in negative symptomatology as was indicated by the effect sizes (Table 5.7), between the pre- and post-tests. The control group, on the other hand, firstly had lower pre-test scores on the GHQ and secondly also showed a decrease in symptomatology albeit not statistically significant, but still, as was indicated by the difference (Table 5.7) between the pre- and post-test. This means that if the groups have been more similar in the pre-tests, the post-tests might have been statistically significant different.

#### 5.2.3.4 The Quality of Life Inventory (QOLI)

The QOLI was developed to provide a measure of positive mental health that could supplement measures of negative affect and psychiatric symptoms, and was also

developed to focus the attention on a person's sources of fulfilment, including real-life concerns, and finally also to provide a measure of life satisfaction (see 4.4.2.4). A list of 16 human concerns as areas of life as included in the QOLI included:

Health

Self-Esteem

Goals-and-Values

Money

Work

Play

Learning

Creativity

Helping

Love

Friends

Children

Relatives

Home

Neighbourhood

Community

Total

The ratings on the 16 areas that are covered by the QOLI can be interpreted by the use of the Weighted Satisfaction Profile by identifying the specific areas of satisfaction and dissatisfaction. Ratings of 1 to 6 indicate satisfaction and ratings of -1 to -6 dissatisfaction. Negative weighted satisfaction ratings denote an area of life in which the individual may benefit from treatment, with ratings of -4 to -6 indicating the greatest concern and urgency.

An Overall Quality of Life Classification can also be made and interpreted as follows:

Raw Score Range 3.6 – 60	Overall Quality of Life Classification High
1.6 – 3.5	Average
0.9 15	Low
-6.0 0.8	Very Low

Table 5.12: Descriptive statistics for the experimental and control groups obtained from the pre- and post-tests with the QOLI

	· · · · · · · · · · · · · · · · · · ·	Pre-test	5				Post-te	ests	•••••••••••••••••••••••••••••••••••••••
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	Health	1,22	3,75	-6,00	6,00	2,74	2,38	-2,00	6,00
	Self-Esteem	2,11	3,30	-6,00	6,00	3,41	2,26	-1,00	6,00
	Goals-and-Values	2,22	1,98	-2,00	6,00	3,23	1,52	1,00	6,00
	Money	0,50	2,25	-6,00	3,00	1,11	2,05	-4,00	4,00
	Work	1,77	3,29	-6,00	6,00	2, <del>9</del> 4	2,01	-1,00	6,00
\$	Play	-0,05	3,20	-6,00	6,00	1,88	1,99	-2,00	4,00
	Learning	1,72	2,56	-2,00	6,00	2,29	1,86	-1,00	6,00
•	Creativity	0,77	2,77	-4,00	6,00	2,41	2,31	-2,00	6,00
	Helping	2,50	2,06	-1,00	6,00	2,70	1,99	-1,00	6,00
	Love	0,66	5,13	-6,00	6,00	2,29	3,77	-6,00	6,00
	Friends	2,94	3,03	-4,00	6,00	3,29	2,41	-4,00	6,00
	Children	3,66	1,94	0	6,00	2,58	3,04	-4,00	6,00
	Relatives	3,36	1,64	1,00	6,00	3,94	1,91	1,00	6,00
*	Home	2,55	2,22	-4,00	6,00	3,70	1,40	2,00	6,00
-	Neighbourhood	1,72	2,46	-4,00	6,00	3,05	1,59	1,00	6,00
	Community	1,38	2,09	-2,00	6,00	2,23	1,48	-1,00	6,00
TOTAL AVANCE OF THE STREET, TH	Total	29,11	25,60	-23,00	69,00	43,00	21,24	7,00	88,00

Table 5.12 (continues)

		Pre-test	8				Post	-tests	
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
CON	Health	2,74	2,63	-2,00	6,00	2,69	2,49	-2,00	6,00
	Self-Esteem	2,66	1,81	-2,00	6,00	2,64	2,53	-4,00	6,00
	Goals-and-Values	1,83	3,25	<b>-4</b> ,00	6,00	2,71	2,39	-2,00	6,00
	Money	-1,11	2,86	-6,00	2,00	-0,28	2,39	-3,00	4,00
	Work	1, <b>8</b> 8	3,32	-6,00	6,00	1,14	3,46	-4,00	6,00
	Play	1,61	3,34	-6,00	6,00	2,42	3,45	-6,00	6,00
***************************************	Learning	2,33	2,30	-4,00	6,00	1,35	3,62	-6,00	6,00
To the state of th	Creativity	1,44	2,57	-4,00	4,00	2,71	2,67	-2,00	6,00
***************************************	Helping	1,61	2,27	-2,00	6,00	1,85	2,24	-2,00	4,00
	Love	2,82	3,87	-4,00	6,00	2,92	3,77	-4,00	6,00
***************************************	Friends	2,66	2,37	-2,00	6,00	2,85	2,59	-4,00	6,00
	Children	1,76	3,47	-6,00	6,00	1,14	3,27	-6,00	6,00
1	Relatives	2,22	3,87	-6,00	6,00	2,71	2,01	-3,00	6,00
	Home	1,66	3,30	-6,00	6,00	1,00	3,63	-6,00	6,00
	Neighbourhood	88,0	3,34	-6,00	6,00	0,92	2,23	-4,00	4,00
	Community	0,55	3,56	-6,00	6,00	1,50	2,17	-3,00	4,00
	Total	27,22	15,55	-2,00	64,00	30,14	26,28	-16,00	70,00

On the pre-test the experimental group had an outright negative mean rating in one of the areas, namely Play. It showed an increase at the time of the post-testing.

On the pre-test the control group had an outright negative mean rating on one of the areas, namely that of Money. It was slightly improved at the time of the post-testing. The rest of the areas rated by the experimental and control groups during pre-testing ranged between 0 and satisfactory on the Weighted Satisfaction Profile. Ratings during post-test have generally improved with the experimental group.

Table 5.13: The significance of the differences between the pre- and post-test scores within the experimental and control groups as measured with the QOLI

		Mean difference between pre- and post-testing	Std dev	t	þ	d
EXP	Health	1,70	2,93	2,39	0,02*	0,56#
	Self-Esteem	1,29	2,75	1,93	0,07	
	Goals-and-Values	1,00	2,29	1,79	0,09	
	Мопеу	0.70	2,17	1,33	0,19	
	Work	1,29	3,17	1,67	0,11	
	Play	1,82	2,92	2,57	0,02*	0,62#
	Learning	0,52	2,69	0,80	0,42	
	Creativity	1,64	3,08	2,20	0,04*	0,53#
	Helping	0,05	2,19	0,11	0,91	
	Love	1,23	4,17	1,21	0,24	
	Friends	-0,05	1,74	-0,13	0,89	
	Children	-1,05	2,65	-0,64	0,11	
	Relatives	0,58	2,29	1,05	0,30	
	Home	1,23	2,56	1,98	0,06	
	Neighbourhood	1,47	3,06	1,97	0,06	
	Community	1,11	2,17	2,11	0,05*	0,51#
	Total	14,58	26,00	2,31	0,03*	0,56#

Table 5.13 (continues)

		Mean difference between pre- and post- testing	Std dev	t	P	d
CON	Health	0,75	2,13	1,21	0,24	
	Self-Esteem	0,35	1,49	0,89	0,38	
	Goals-and-Values	1,50	3,91	1,43	0,17	
	Money	0,85	1,79	1,79	0,09	
	Work	-0,85	2,98	-1,07	0,30	
	Piay	1,07	3,07	1,30	0,21	
	Learning	-0,71	4,00	-0,66	0,51	
	Creativity	1,00	3,80	8e,0	0,34	
	Helping	0,28	2,94	0,36	0,72	
	Love	0,69	2,28	1,09	0,29	
	Friends	0,07	3,42	0,07	0,93	
	Children	0,07	2,28	0,12	0,90	
	Relatives	0,14	2,98	0,17	0,86	
	Home	-0,57	1,45	-1,47	0,16	
	Neighbourhood	0,28	2,92	0,36	0,72	
	Community	1,07	3,07	1,30	0,21	
!	Total	5,85	20,56	1,06	0,30	

Key: \* =  $p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect) \*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect – practically significant)

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the QOLI. These differences can be seen in a statistically significant ( $p \le 0.05$ ) increase of areas in Health, Play, Creativity and Community and Total ratings on the Weighted Satisfaction Profile of the QOLI. On account of this, the HO<sub>2</sub> ( $|\mu pr - \mu po| = 0$ ) can be rejected for the QOLI. Effect sizes (p) in these areas ranged between medium and large. These measures of effect size reflect the between medium and large, and medium effect CSM had as the independent variable on the experimental group.

No statistically significant difference between the pre- and post-tests scores within the control group as measured with the QOLI has been found. On account of this the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ) which means that no statistically significant differences have been found between the pre- and post-test scores of the control group within the QOLI.

Table 5.14: The significance of the differences between the means of pre- and post-test difference scores of the experimental and control groups as measured with the QOL!

E	XP		C	ON			
	Mean	Std dev	Mean	Std dev	T	þ	đ
Health	1,70	2,93	0,75	2,13	1,01	0,15	
Self-Esteem	1,29	2,75	0,35	1,49	1,20	0,12	
Goals-and-Values	1,00	2,29	1,50	3,91	-0,42	0,33	
Money	0.70	2,17	0,85	1,79	-0,21	0,41	
Work	1,29	3,17	-0,85	2,98	1,94	0,03*	0,13
Play	1,82	2,92	1,07	3,07	0,69	0,24	
Learning	0,52	2,69	-0,71	4,00	0,99	0,16	
Creativity	1,64	3,08	1,00	3,80	0,51	0,30	
Helping	0,05	2,19	0,28	2,94	-0,23	0,40	
Love	1,23	4,17	0,69	2,28	0,45	0,32	
Friends	-0,05	1,74	0,07	3,42	-0,12	0,44	
Children	-1,05	2,65	0,07	2,28	-1,25	0,10	
Relatives	0,58	2,29	0,14	2,98	0,45	0,32	
Home	1,23	2,56	-0,57	1,45	2,46	0,01**	0,25
Neighbourhood	1,47	3,06	0,28	2,92	1,09	0,14	
Community	1,11	2,17	1,07	3,07	0,04	0,48	
Total	14,58	26,03	5,85	20,56	1,04	0,15	

Key:  $* = p \le 0.05$  (statistically significant)

# =  $d \ge 0.50$  (medium effect)

practically significant)

<sup>\*\* =</sup>  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

There is a statistically significant difference between the means of the pre- and post-test difference scores of the experimental and control groups as were measured in two areas by the QOLI. On account of this  $HO_4$  ( $\mu E = \mu c$ ) can be rejected for the QOLI. The experimental group, therefore, in companion with the control group, had a statistically significant increase in quality of life in terms of the area of Work, and of Home. The d-values, however, of these two areas reflect only small effect sizes.

#### 5.2.3.5 The Symptom Checklist-90-Revised (SCL-90-R)

The SCL-90-R, as has been indicated in 4.4.2.5, consists of nine primary symptom dimensions and three global indices of distress, namely:

Somatisation

Obsessive-Compulsive

Interpersonal Sensitivity

Depression

Anxiety

Hostility

Phobic Anxiety

Paranoid Ideation

**Psychotisism** 

Additional Items

Global Severity Index

Positive Symptom Total

Positive Symptom Distress Index

The SCL-90-R has been designed to be interpreted on three distinct levels of information, namely: the global level, the dimensional level, and the discrete symptom level. Among the three global measures, the GSI provides the most sensitive single numeric indicator of the respondent's psychological status, combining information regarding number of symptoms and intensity of distress. The PSDI represents a pure intensity measure, in a sense "corrected" for number of symptoms; it also indicates the patient's "style" of experiencing distress.

The PST reveals the number of symptoms the respondent endorses to any degree and contributes to interpreting the global distress pattern by communicating the symptomatic breadth of the individual's psychological distress (Derogatis, 1994:57).

Table 5.15: Descriptive statistics for the experimental and control groups obtained from the pre- and post-tests with the SCL-90-R

		Pre-test	S				Post-te	ests	
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	Somatisation	14,44	10,33	1,00	36,00	4,93	6,56	0	23,00
	Obsessive- Compulsive	16,88	8,96	5,00	36,00	6,50	5,75	0	21,00
	Interpersonal Sensitivity	11,94	8,10	0	28,00	5,56	5,47	1,00	23,00
	Depression	21,61	12,30	4,00	41,00	8,37	10,29	0	35,00
	Anxiety	12,83	8,74	0	33,00	3,43	4,36	0	17,00
	Hostility	6,44	5,12	1,00	21,00	3,12	3,89	0	15,00
	Phobic Anxiety	3,00	3,72	0	10,00	0,37	1, <b>5</b> 0	0	6,00
	Paranoid Ideation	8,00	4,97	1,00	21,00	4,00	4,36	0	14,00
	Psychotisism	8,44	7, <b>55</b>	1,00	25,00	3,37	5,32	0	16,00
	Additional Items	10,50	5,40	1,00	21,00	4,43	3,94	0	15,00
	Global Sevenity index	1,26	0,70	0,28	2,43	0,49	0,52	0,12	1,91
	Positive Symptom Total	98,94	0,23	89,00	90,00	89,87	0,34	89,00	90,00
WANTED TO THE PARTY OF THE PART	Positive Symptom Distress Index	1,26	0,70	0,28	2,43	0,49	0,52	0,12	1,91

Table 5.15 (continues)

		Post-tests							
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
CON	Somatisation	11,16	6,94	3,00	32,00	13,53	6,26	5,00	25,00
	Obsessive- Compulsive	14,05	6,75	6,00	33,00	14,46	7,93	5,00	31,00
Market of the second of the se	Interpersonal Sensitivity	9,66	5,42	2,00	19,00	10,00	5,86	0	19,00
THE STATE OF THE S	Depression	19,77	9,00	7,00	40,00	20,20	11,00	7,00	41,00
#   	Anxiety	11,83	7,54	2,00	25,00	11,60	7,89	2,00	32,00
MAY AN	Hostility	7,77	4,82	1,00	19,00	7,26	5,20	2,00	20,00
	Phobic Anxiety	3,72	4,88	0	17,00	4,33	5,44	0	15,00
	Paranoid Ideation	8,44	4,76	3,00	18,00	7,40	2,99	2,00	15,00
	Psychotisism	8,05	4,50	2,00	17,00	08,8	5,96	1,00	19,00
A111	Additional Items	8,16	5,34	2,00	20,00	9,6-	6,19	1,00	24,00
The state of the s	Global Severity Index	1,14	0,50	0,45	2,14	1,19	0,58	0,37	2,38
	Positive Symptom Total	89,83	0,38	89,00	90,00	89,73	0,59	88,00	90,00
Victorian III V	Positive Symptom Distress Index	1,14	0,51	0,45	2,14	1,19	0,58	0,37	2,38

The SCL-90-R is usually used to assess the individual patient's clinical status by converting the person's raw scores to standard T-scores, by using tables that are based on normative groups' scores (Male/Female, Nonpatients, Inpatients et cetera) as is observed in the USA. However, apart from the fact that the SCL-90-R is not standardised in South Africa, the researcher was not interested in individual clinical profiles, but in those of the experimental and control groups respectively. On face value, therefore, it seems as if there has been a substantial decrease in the mean scores of the different sub-scales of the post-test of the experimental group in comparison to that of the pre-test on the other hand, little change has been observed in the equivalent scores of the control group.

Table 5.16: The significance of the differences between the pre- and post-test scores within the experimental and control groups as measured by the SCL-90-R

		Mean difference between pre- and post-testing	Std dev	t	р	d
EXP	Somatisation	-10,43	8,89	-4,69	0,00015**	1,17##
-	Obsessive-Compulsive	-11,62	8,35	-5,56	0,00005**	1,39##
	Interpersonal Sensitivity	-7,12	7,67	-3,71	0,00105**	0,92##
	Depression	-14,37	12,75	-4,50	0,0002**	1,12##
	Anxiety	-9,75	8,53	-4,56	0,0002**	1,1 <b>4##</b>
	Hostility	-3,25	4,64	-2,80	0,0067**	0,70#
	Phobic Anxiety	-2,93	3,41	-3,44	0,0018**	0,8 <b>6##</b>
	Paranoid Ideation	-4,62	4,81	-3,84	0,0008**	0,96##
	Psychotisism	~5, <b>93</b>	5,53	-4,29	0,0003**	1,07##
	Additional Items	-6,75	5,15	-5,23	0,00005**	1,30###
	Global Severity Index	-O,85	0,62	-5,48	0,00005**	1,37##
	Positive Symptom Total	-0,06	0,44	-0,56	0,29025	0,14
	Positive Symptom	-0,85	0,62	-5,48	0,00005**	1,37##
	Distress Index					
CON	Somatisation	0.80	4,19	0,73	0,235	
00.11	Obsessive-Compulsive	-0,73	4,94	-0,57	0,285	
	Interpersonal Sensitivity	0,26	3,47	0,29	0,385	
	Depression	-0,93	7,42	-0,48	0,315	
	Anxiety	-0,93	6,71	-0,53	0,295	
	Hostility	-0,40	4,73	-0,32	0,37	
	Phobic Anxiety	-0,06	2,76	-0,09	0,46	
	Paranoid Ideation	-1,00	4,58	-0,84	0,205	
	Psychotisism	0,73	4,02	0,70	0,245	
	Additional Items	0,40	3,11	0,49	0,31	
	Global Severity Index	-0,02	0,28	-0,27	0,39	
	Positive Symptom Total	-0,06	0,79	-0,32	0,375	
	Positive Symptom	-0,02	0,28	-0,28	0,39	
	Distress Index					

Key:  $*=p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

<sup>\*\* =</sup>  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect practically significant)

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the SCL-90-R. These differences can be seen in a statistically highly significant ( $p \le 0.01$ ) decrease in: Somatisation, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, Psychotisism, Global Severity Index, and Positive Symptom Distress Index. On account of this, the  $HO_2$  ( $\|\mu pr - \mu po\| = 0$ ) can be rejected for the SCL-90-R. It is further also important to note the effect sizes (d) that have been found. Practical significant effects ( $d \ge 0.8$ ) have been found in eight of the nine primary symptom dimensions (referred to above, except for Hostility where a medium effect has been found (d=0.70)), and in two of the three global indices of distress (except Positive Symptom Total). These measures of effect size reflect the large effect CSM has had as the independent variable on the experimental group.

No statistically significant difference between the pre- and post-test scores within the control group as measured with the SCL-90-R has been found. On account of this, the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ), which means that no statistically significant differences have been found between the pre- and post-test scores of the control group with the SCL-90-R.

Table 5.17: The significance of the differences between the means of pre- and post-test difference scores of the experimental and control groups as measured with the SCL-90-R

EXP		C	ON	V.	V		
	Mean	Std dev	Mean	Std dev	t	Þ	d
Somatisation	-10,43	8,89	08,0	4,19	-4,54	0,0001**	8,99##
Obsessive-Compulsive	-11,62	8,35	-0,73	4,94	-4,44	0,0001**	1,30##
Interpersonal Sensitivity	-7,12	7,67	0,266	3,47	-3,48	0,0011**	0,89##
Depression	-14,37	12,75	-0,93	7,42	-3,61	0,0007**	1,05##
Anxiety	-9,75	8,53	-0,93	6,71	-3,20	0,00165**	1,03##
Hostility	-3,25	4,64	-0,40	4,73	-1,69	0,0508	0,60#
Phobic Anxiety	<b>-2,9</b> 3	3,41	-0,05	2,76	-2,58	0,00765**	0,84##
Paranoid Ideation	-4,62	4,81	-1,00	4,58	-2,14	0,02*	0,75#
Psychotisism	-5,93	5,53	0,73	4,02	-3,85	0,0003**	0,94##
Additional Items	-6,75	5,15	0,40	3,11	-4,70	0,00005**	1,16##
Global Severity Index	-0,85	0,62	-0,02	0,28	-4,82	0,00005**	1,33##
Positive Symptom Total	-0 <b>,0</b> 6	0,44	-0,06	0,79	0,01	0,49	
Positive Symptom Distress	-0,85	0,62	0,02	0,28	-4,85	0,00005**	1,33##
Index							

Key:  $\star = p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect practically significant)

Statistically significant differences between the means of the pre- and post-test difference scores on some of the primary symptom dimensions and the global indices of distress of the experimental and control groups as measured by the SCL-90-R were found. On account of this the  $HO_4$  ( $\mu E = \mu c$ ) can be rejected for the SCL-90-R. The experimental group in comparison with the control group had statistically significant highly significant decreases ( $p \le 0.01$ ) in the areas of: Somatisation, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Phobic Anxiety, Psychotisism, Additional Items, General Severity Index, and the Positive Symptom Distress Index. As far as the effect sizes that were found are concerned, it can be reported that practically

significant effects (d  $\geq$  0,80) have been found in all areas except Hostility, Paranoid Ideation and Positive Symptom Total. A medium effect size has, however, been found with Hostility and Paranoid Ideation. It can therefore be concluded that, consistent with the hypothesis, (except for the Positive Symptom Total), that CSM was effective in bringing about a range of significant effects in the experimental group in comparison to the control group as was measured by the SCL-90-R.

These results largely echo the sentiments expressed by Derogatis (*in* Broome, 1995:116), namely that the SCL-90-R has been demonstrated to be highly sensitive to differences between meditation and control groups in the treatment of stress.

#### 5.2.3.6 The Spiritual Well-Being Scale (SWBS)

The SWBS, as has been indicated in 4.4.26, consists of two subscales on one total scale, namely:

Religious Well-Being;

Existential Well-Being, which together form the

Spiritual Well-Being Scale (a summing of the above).

In scoring the SWBS, the 10 RWB and 10 EWB items are summed to yield two subscale scores. Possible values for each subscale range from 10 to 60, with high scores indicating more religious and existential well-being and low scores indicating less. Similarly, the total SWBS score is obtained by summing both the RWB and EWB subscales. One can therefore talk of a spiritual well-being continuum, as proposed by the authors and measured by the SWBS, which ranges from 10 to 60 for the subscale continuums (RWB and EWB) and 20 to 120 for the spiritual well-being continuum.

Table 5.18: Descriptive statistics for the experimental and control groups obtained from the pre- and post-tests with the SWBS

	Pre-tests						Post-tests				
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max		
EXP	Religious Well- being	50,00	9,18	30,00	60,00	55,07	6,22	42,00	60,00		
	Existential Well- being	43,00	9,49	29,00	57,00	47,61	7,12	35,00	60,00		
	Spiritual Well- being Scale	20,87	7,44	5,00	30,00	24,30	6,95	12,00	32,00		
CON	Religious Well- being	51,50	8,99	34,00	60,00	49,07	10,09	28,00	60,00		
	Existential Well- being	42,62	10,83	13,00	56,00	42,76	8,88	29,00	57,00		
	Spiritual Well- being Scale	19,56	7,04	8,00	32,00	19,69	6,14	10,00	29,00		

The Religious Well-being, Existential Well-Being as well as the Spiritual Well-Being Scale had a higher (more positive score) on the post-tests than on the pre-tests of the experimental group. The control group experienced very little change.

Table 5.19: The significance of the differences between the pre- and post-tests scores within the experimental and control groups as measured by the SWBS

		Mean difference between pre- and post-testing	Std dev	t	P	d
EXP	Religious Well-Being	2,66	7,16	1,28	0,11	THE HEALTH STATE OF THE STATE O
LAI	Existential Well-Being	3,25	8,20	1,37	0,095	
	Spiritual Well-Being Scale	2,58	5,14	1,74	0,05*	0,50#
CON	Religious Well-Being	-3,00	6,49	-1,53	0,075	-
	Existential Well-Being	1,00	9,34	0,35	0,365	
	Spiritual Well-Being Scale	0,81	5,75	0,47	0,32	

Key: \* =  $p \le 0.05$  (statistically significant)

 $\# = d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

practically significant)

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured with the SWBS. On account of this, the HO<sub>2</sub> (|µpr upo| = 0) can be rejected, which means that a statistically significant difference has been found between the pre- and post-test scores of the experimental group with the SWBS. This difference can be seen in a statistically significant (p  $\leq$  0,05) increase in the total score of the Spiritual Well-Being Scale. The effect size found indicates a medium effect size  $(d \ge 0.5)$ . This effect size reflects the effect CSM has had as the independent variable on the experimental group.

No statistically significant difference between the pre- and post-tests scores within the control group as measured with the SWBS has been found. On account of this the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ), which means that no statistically significant differences have been found between the pre- and post-test scores of the control group with the SWBS.

Table 5.20: The significance of the differences between the means of the pre- and post-test difference scores of the experimental and control groups as measured with the SWBS

EXP			C	ON		,	**************************************
	Mean	Std dev	Mean	Std dev	t	p	đ
Religious Well-being	2,66	7,16	-3,00	6,49	1,98	0,0299*	0,04
Existential Well-being	3,25	8,20	1,00	9,34	0,61	0,274	
Spiritual Well-Being Scale	2,58	5,14	0,81	<b>5</b> ,75	0,77	0,22435	

Key:  $* = p \le 0.05$  (statistically significant)

 $\# = d \ge 0.50$  (medium effect)

=  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect –

practically significant)

A statistically significant difference between the means of the pre- and post-test difference scores on the Spiritual Well-Being Scale has been found. On account of this the HO<sub>4</sub> (|µ E <> µc|) can be rejected, which means that a statistically significant difference has been found between the experimental and control groups. The effect size was, however, insignificant.

# 5.2.3.7 The Work Environment Scale (WES)

The WES, as has been indicated in 4.4.2.7, consists of 10 subscales which assesses three underlying sets of dimensions, namely:

Involvement

Peer Cohesion

Supervisor Support – which together form the:

Relationship Dimensions

Autonomy

Task Orientation

Work Pressure - which together form the:

Personal Growth Dimensions

Clarity

Innovation

Physical Comfort - which together form the:

Systems Maintenance and Systems Change

Dimensions.

Raw scores can be obtained by making use of a template which is placed over the answer sheet and by counting all the responses observed through the template in each column and entering it in the R/S (raw score) box at the bottom. Because the WES is not standardised in South Africa, the raw scores have been used and have therefore not been converted to standard scores.

Table 5.21: Descriptive statistics for the experimental and control groups obtained from the pre- and post-tests with the WES

	Pre	-tests	***************************************		· · · · · · · · · · · · · · · · · · ·		Post	tests	***************************************
		Mean	Std dev	Min	Max	Mean	Std dev_	Mîn	Max
EXP	Involvement	4,75	2,74	1,00	9,00	6,46	2,29	3,00	9,00
	Peer Cohesion	3,37	2,24	0	8,00	4,23	2,94	0	8,00
	Supervisor Support	3,12	2,68	0	00,8	4,23	2,58	1,00	8,00
	Autonomy	4,50	2,30	1,00	8,00	5,38	2,02	2,00	9,00
	Task Orientation	5,68	2,41	1,00	9,00	7,69	1,10	5,00	9,00
	Work Pressure	7,12	2,30	1,00	9,00	6,61	2,43	2,00	9,00
	Clarity	5,31	2,77	1,00	9,00	6,00	3,21	1,00	9,00
	Innovation	3,25	2,64	0	8,00	4,00	2,73	1,00	9,00
	Physical Comfort	5,12	2,18	2,00	8,00	5,84	2,79	0	9,00
	Relationship	11,25	7,03	3,00	24,00	14,92	7,01	4,00	24,00
	Personal Growth	17,31	5,65	6,00	23,00	19,69	4,23	12,00	25,00
	Systems Maintenance	20,25	6,09	12,00	30,00	22,38	6,88	9,00	34,00
CON	Involvement	5,25	2,59	0	9,00	6,46	2,10	2,00	9,00
	Peer Cohesion	4,25	2,23	1,00	8,00	5,30	2,75	0	9,00
	Supervisor Support	4,12	2,44	1,00	8,00	4,23	2,27	0	7,00
	Autonomy	5,37	2,47	1,00	8,00	6,15	2,15	2,00	9,00
	Task Orientation	5,68	2,15	1,00	9,00	6,30	1,88	3,00	9,00
	Work Pressure	6,68	2,08	3,00	9,00	7,23	1,48	3,00	9,00
	Clarity	5,12	2,36	1,00	8,00	5,61	2,50	2,00	9,00
	Innovation	4,43	3,16	0	9,00	5,53	2,63	0	9,00
	Physical Comfort	4,50	2,78	0	8,00	4,61	2,59	0	9,00
	Relationship	13,62	6,58	4,00	25,00	16,00	6,31	5,00	25,00
	Personal Growth	17,75	4,87	7,00	25,00	19,69	3,42	13,00	26,00
ı	Systems Maintenance	20,43	7,54	6,00	32,00	22,38	7,01	11,00	34,00

Both the post-test scores of the experimental and control groups showed small increases in comparison to the scores of the pre-tests. This can be ascribable to the improvement of the work environment to some extent because of the alleviation of the uncertainty caused by pending rationalisation at the time of the pre-tests, having been concluded at the time of the post-tests. It is nevertheless important to scrutinise the data further.

Table 5.22: The significance of the differences between the pre- and post-tests scores within the experimental and control groups as measured by the **WES** 

		Mean diffe- rence between pre- and post- testing	Std dev	t	p	d
EXP	Involvement	1,16	1,58	2,54	0,01355*	0,73#
	Peer Cohesion	0,83	2,51	1,14	0,13785	
	Supervisor Support	1,00	2,37	1,45	0,08625	
	Autonomy	0,58	1,08	1,86	0,04455*	0,53#
	Task Orientation	1,50	1,88	2,75	0,0093**	0,79#
	Work Pressure	-0,16	1,69	-0,34	0,37005	
i.	Clarity	0,41	2,15	0,67	0,25805	
	Innovation	0,58	2,10	0,95	0,17925	
	Physical Comfort	0,50	1,67	1,03	0,16215	
	Relationship Dimensions	3,00	5,54	1,87	0,0438*	0,54#
	Personal Growth	1,91	3,47	1,91	0,04125*	0,55#
	Systems Maintenance	1,75	5,78	1,04	0,1586	
CON	Involvement	0,54	0,82	2,20	0,02595*	0,66#
	Peer Cohesion	0,63	1,36	1,54	0,0761	
	Supervisor Support	-0,36	2,37	-0,50	0,345	
	Autonomy	0,09	2,42	0,12	0,4518	
	Task Orientation	0,09	1,22	0,24	0,405	
	Work Pressure	-0,18	0,75	-0,80	0,22025	
Adding	Clarity	0,27	2,05	0,44	0,3345	
400	Innovation	0,36	1,28	0,93	0,18525	
	Physical Comfort	-0,36	1,56	-0,76	0,2296	
	Relationship Dimensions	0,81	3,06	3,06	0,198	
	Personal Growth	0	2,48	2,48	0,05*	0,00
	Systems Maintenance	0,36	2,41	2,41	0,3145	

Key:  $\star = p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

practically significant)

<sup>\*\* =</sup>  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the WES. These differences can be seen in statistically significant ( $p \le 0.05$ ) increases in: Involvement, Autonomy, Task Orientation, Relationship Dimensions and Personal Growth Dimentions. On account of this, the HO<sub>2</sub> ( $|\mu pr - \mu po| = 0$ ) can be rejected for the WES. It can also be noted that medium effect sizes have been found in all these areas with Involvement (0,73) and Task Orientation (0,79) just below the cut-off for practical significance. These measures of effect size reflect the large effect CSM has had as the independent variable on the experimental group.

A statistically significant difference between the pre- and post-test scores within the control group as measured with the WES has been found. This difference can be seen in a statistically significant ( $p \le 0.5$ ) increase in Involvement. On account of this the HO<sub>3</sub> ( $|\mu pr - \mu po| = 0$ ) can be rejected, which means that a statistically significant difference has also been found between the pre- and post-test scores of the control group with the WES.

Table 5.23: The significance of the differences between the means of pre- and post-test difference scores of the experimental and control groups as measured with the WES

EXP			C	ON			
	Mean	Std dev	Mean	Std dev	t	p	ď
Involvement	1,16	1,58	0,54	0,82	1,19	0,12455	
Peer Cohesion	0,83	2,51	0,63	1,36	0,23	0,4081	
Supervisor Support	1,00	2,37	-0,36	2,37	1,37	0,0919	
Autonomy	0,58	1,08	0,09	2,42	0,61	0,27315	
Task Orientation	1,50	1,88	0,09	1,22	2,14	0,0225*	0,75#
Work Pressure	-0,16	1,69	-0,18	0,75	0,02	0,489	
Clarity	0,41	2,15	0,27	2,05	0,16.	0,4356	
Innovation	0,58	2,10	0,36	1,28	0,30	0,38215	
Physical Comfort	0,50	1,67	-0,36	1,56	1,27	0,1079	
Relationship Dimensions	3,00	5,54	0,81	3,06	1,18	0,1267	
Personal Growth	1,91	3,47	0,00	2,48	1,52	0,07045	
Systems Maintenance	1,75	5,78	0,36	2,41	0,76	0,22935	

Key: \* =  $p \le 0.05$  (statistically significant)

 $\# = d \ge 0,50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

practically significant)

A statistically significant difference between the means of the pre- and post-test difference score on Task Orientation of the experimental and control groups as measured by the WES was found. On account of this the HO<sub>4</sub> ([µE - µc) can be rejected for the WES. The experimental group in comparison with the control group had a statistically significant increase in Task Orientation. A medium large effect size has been found with Task Orientation (d=0,75). It can therefore be noted that this effect size reflects the nearly practically significant effect CSM has had as the independent variable on the experimental group in comparison to the control group.

# 5.2.3.8 The Profile of Mood States (POMS)

The POMS, as has been indicated in 4.4.2.8, consists of six clearly defined factors and a total score. They are:

Tension-Anxiety (T)

Depression-Dejection (D)

Anger-Hostility (A)

Vigour-Activity (V)

Fatigue-Inertia (F)

Confusion-Bewilderment (C)

Total Mood Disturbance Score (TOT)

Except the mood factor Vigour-Activity, which should ideally be high, the rest of the scores across all the mood factors should be as low as possible in order to indicate low negative feelings affect mood and therefore well-being. A Total Mood Disturbance score can be used as a single global estimate of affective state. This score may be obtained by summing the scores (with Vigour-Activity weighted negatively) on the six primary mood factors.

Table 5.24: Descriptive statistics for the experimental and control groups obtained form the pre- and post-tests with the POMS

	Pre-	tests	,				Post	-tests	
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	Tension-Anxiety	11,58	6,44	2,00	23,00	4,94	4,22	0	14,00
	Depression-Dejection	19,58	8,20	8,00	32,00	8,52	4,96	1,00	19,00
	Anger-Hostility	24,41	16,05	2,00	49,00	6,64	9,43	0	32,00
	Vigour-Activity	19,82	11,45	2,00	36,00	7,35	7,05	1,00	27,00
	Fatigue-Inertia	13,23	6,20	1,00	23,00	19,00	6,11	1,00	31,00
	Confusion-Bewilderment	17,41	8,17	2,00	31,00	6,23	5,85	D	21,00
	Total Mood Disturbance	98,41	24,64	53,00	135,00	70,00	12,84	53,00	90,00
	Score								
CON	Tension-Anxiety	9,2	5,08	3,00	18,00	11,33	6,01	3,00	21,00
	Depression-Dejection	17,77	6,6 <b>3</b>	6,00	30,00	17,80	7,66	5,00	31,00
	Anger-Hostility	21,94	12,74	4,00	45,00	21,60	15,11	4,00	45,00
	Vigour-Activity	18,11	9,57	3,00	39,00	19,46	10,32	6,00	39,00
	Fatigue-Inertia	13,72	5,58	5,00	25,00	14,93	7,35	2,00	32,00
	Confusion-Bewilderment	14,27	5,73	4,00	24,00	15,20	6,14	4,00	24,00
	Total Mood Disturbance	90,83	16,97	63,00	122,00	93,40	20,89	55,00	131,00
	Score								

With the exception of Vigour-Activity, which had an increased score, all the other factors Tension-Anxiety, Depression-Dejection, Anger-Hostility, Fatigue-Inertia, namely, Confusion-Bewilderment and the Total Mood Disturbance Score had decreased scores on the post-tests in comparison with the pre-test scores of the experimental group. This increase and the decreases signify a positive state of affairs, in comparison to the control group which showed relatively little change.

Table 5.25: The significance of the difference between the pre- and post-test scores within the experimental and control groups as measured by the POMS

		Mean difference between pre- and post- testing	Std dev	t	p	d
EXP	Tension-Anxiety	-6,93	7,82	-03,54	0,00145**	0,88##
	Depression-Dejection	-11,25	9,70	-4,63	0,00015**	1,15##
	Anger-Hostility	-18,50	16,79	<b>-4</b> ,40	0,00025**	1,10##
	Vigour-Activity	12,43	11,66	4,26	0,00035**	1,06##
	Fatigue-Inertia	5,50	8,76	2,51	0,012*	0,62#
	Confusion-Bewilderment	-11,43	8,10	-5,64	0,00005	1,41##
	Total Mood Disturbance Score	-30,18	25,51	<b>-4</b> ,73	0,00015**	1,18##
CON	Tension-Anxiety	2,20	4,88	1,74	0,0516	
CON	Depression-Dejection	-0,40	6,00	-0,25	0,40015	
	Anger-Hostility	-0,20	12,10	-0,06	0,47495	
	Vigour-Activity	-1,93	6,86	-1,09	0,14675	
	Fatigue-Inertia	1,20	8,63	0,53	0,2995	
	Confusion-Bewilderment	0,53	8,12	0,25	0,4015	
	Total Mood Disturbance Score	1,40	19,00	0,28	0,3898	

Key: \* =  $p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

practically significant)

<sup>\*\* =</sup>  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the POMS. These differences can be seen in a statistically significant difference (p  $\leq 0.05$ ) in Vigour-Activity and a statistically highly significant difference ( $p \le 0.01$ ) in Depression-Dejection, Anger-Hostility, Fatigue-Inertia, Confusion-Bewilderment, Tension-Anxiety, and the Total Mood Disturbance score. On account of this, the  $HO_2$  ( $|\mu pr - \mu po| = 0$ ) can be rejected for the POMS. As far as effect sizes that have been found are concerned, it can be said that practical significant effects  $(d \ge 0.80)$  have been found in all the factors except Fatigue-Inertia – although a medium effect size (0,62) has been found with the latter. A practical significant effect has also been found in the Total Mood Disturbance score. These measures of effect size reflect the large effect CSM has had as the independent variable on the experimental group. All factors, including the Total Mood score, decreased except Vigour-Activity and Fatigue-Inertia which has increased. The increase in Vigour-Activity is understandable because the factor is weighted negatively and an increase is a positive, or a desirable tendency. The increase in Fatigue-Inertia, however, is unexpected. This phenomenon can possibly be ascribable to the hectic time of the year teachers generally find themselves in: end of term exams after a hectic wintersports season which demarked time and dedication on weekdays after school for practise and weekends for match fixtures, as well as a greater awareness or consciousness of this particular factor experienced by members of the experimental group.

No statistically significant difference between the pre- and post-test scores within the control group as measured with the POMS has been found. On account of this the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ), which means that no statistically significant differences have been found between the pre- and post-test scores of the control group with the POMS.

Table 5.26: The significance of the differences between the means of pre- and post-test difference scores of the experimental and control groups as measured with the POMS

EXP			C	ON			
	Mean	Std dev	Mean	Std dev	t	p	đ
Tension-Anxiety	-6,93	7,82	2,20	4,88	-3,92	0,0003**	0,60#
Depression-Dejection	-11,25	9,70	-0,40	6,00	-3,76	0,00045**	1,11##
Anger-Hostility	-18,50	16,79	-0,20	12,10	-3,49	0,0008**	1,08##
Vigour-Activity	12,42	11,66	-1,93	6,86	4,21	0,00015**	0,90##
Fatigue-Inertia	5, <b>5</b> 0	8,76	1,20	8,63	1,37	0,085	
Confusion-Bewilderment	-11,43	8,10	0,53	8,12	-4,10	0,00015**	1,34##
Total Mood Disturbance	-30,18	25,51	1,40	19,00	-3,92	0,00025**	1,12##
Score							
					The state of the s		

Key: \* =  $p \le 0.05$  (statistically significant)

 $\# = d \ge 0,50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

practically significant)

Statistically significant differences between the means of the pre- and post-test difference scores on all but one of the factor scores and Total score between the experimental and control groups as was measured by the POMS were found. On account of this the  $HO_4$  ( $\mu E = \mu c$ ) can be rejected for the POMS. The experimental group, in comparison with the control group, had statistically highly significant ( $p \le 0.01$ ) decreases in Tension-Anxiety, Depression-Dejection, Anger-Hostility, Confusion-Bewilderment and Total Mood Disturbance. The experimental group, in comparison with the control group, had a statistically highly significant ( $p \le 0.01$ ) increase in Vigour-Activity. As far as the effect sizes that were found are concerned, it can be reported that practically significant effects ( $d \ge 0.80$ ) have been found on all factors except Tension-Anxiety and Fatigue-Inertia. A medium effect was, however, found on the Tension-Anxiety factor. It can therefore be concluded that except for the factor of Fatigue-Inertia, CSM was effective in bringing about a range of significant effects in the experimental group in comparison to the control group as was measured by the POMS.

# 5.2.3.9 The Generalized Self-Efficacy Scale (GSES)

The GSES, as has been indicated in 4.4.2.9, consists of 10 items which are summed to give a total score (GSESTOT). The higher the score, the greater is the individual's generalized sense of self-efficacy.

Table 5.27: Descriptive statistics for the experimental and control groups obtained from the pre- and post-test with the GSES

			Post-tests						
		Mean	Std dev	Min	Max	Mean	Std dev	Min	Max
EXP	GSESTOT	29,22	3,67	23,00	37,00	32,05	4,32	24,00	40,00
CON	GSESTOT	31,11	3,19	27,00	38,00	31,33	3,77	27,00	39,00

The experimental group had an increase in generalized self-efficacy, whilst the control group stayed relatively the same.

Table 5.28: The significance of the differences between the pre- and post-test scores within the experimental and control groups as measured by the **GSES** 

		Mean difference between pre- and post-testing	Std dev	t	p	d
EXP	GSESTOT	2,82	4,29	2,71	0,00765**	0,65#
CON	GSESTO <b>T</b>	0,53	3,22	0,64	0,265	

Key: \* =  $p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect -

practically significant)

There is a statistically significant difference between the pre- and post-test scores within the experimental group as measured by the GSES. These differences can be seen in a statistically highly significant (p ≤ 0,05) increase in the Total score of the Generalized Self-Efficacy Scale (GSES). On account of this, the HO<sub>2</sub> (|µpr - µpo|=0) can be rejected

and the HA<sub>2</sub> ([µpr - µpo] < > 0) be supported for the GSES. A medium effect size (d=0,65) has been found. This measure of effect size reflects the medium effect CSM has had as the independent variable on the experimental group.

No statistically significant difference between the pre- and post-test scores within the control group as measured with the GSES has been found. On account of this, the research has failed to reject the  $HO_3$  ( $|\mu pr - \mu po| = 0$ ), which means that no statistically significant differences have been found between the pre- and post-test scores of the control group with the GSES.

Table 5.29: The significance of the differences between the means of pre- and post-test difference scores of the experimental and control groups as measured with the GSES

	EXP		C	ON	• • • • • • • • • • • • • • • • • • •		
	Mean	Std dev	Mean	Std dev	t	Þ	d
GSESTOT	2,82	4,29	0,53	3,22	1,71	0,04815*	0,5 <b>3#</b>

Key: \* =  $p \le 0.05$  (statistically significant) # =  $d \ge 0.50$  (medium effect)

\*\* =  $p \le 0.01$  (statistically highly significant) ## =  $d \ge 0.80$  (large effect –

practically significant)

A statistically significant difference between the means of the pre- and post-test difference scores of the experimental and control groups as was measured by the GSES was found. On account of this, the HO<sub>4</sub> (μE <> μc) can be rejected for the GSES. A medium effect size (d=0,53) has been found. This measure of effect size reflects the medium effect CSM has had as the independent variable on the experimental group.

#### 5.3 QUANTITATIVE DATA INTERPRETATION AND SYNTHESIS: THE EFFECTS AND EFFECTIVENESS OF CLINICALLY STANDARDIZED MEDITATION AS A STRATEGY FOR STRESS MANAGEMENT AND THE PROMOTION OF WELLNESS

Statistically significant differences between the means of the pre- and post-test difference scores of the experimental and control groups as were measured by the different measuring instruments used in this study will also be presented briefly in 5.3 to reflect the rejection of the  $HO_4$  ( $\mu E = \mu c$ ) or failing to reject the  $HA_4$  ( $\mu E < > \mu c$ )

respectively. The quantitative data interpretation and synthesis, however, will be focussed principally upon the data that reflected medium or practically significant effect sizes or that, inter alia, indicated an improvement in the status of the experimental group as compared to the control group. That is when the effect size,  $d \ge 0.50$  or  $d \ge 0.80$  to indicate the significance of the differences between means of the pre- and post-test difference scores within the experimental and control groups as measured with the various measuring instruments that were used.

# 5.3.1 Descriptive meaning of data obtained from scales of the measuring instruments as defined by the manuals

# 5.3.1.1 The Perceived Stress Scale (PSS)

(See Table 5.5)

A statistically significant difference between the means of the pre- and post-test difference scores were found as were measured by the PPS. On account of this the HO<sub>4</sub> has been rejected for the PSS.

With regard to scores with medium and practically significant effect sizes, the following interpretations can be made:

# Perceived Stress

The experimental group experienced a medium effect size decrease in perceived stress. This represents the degree to which situations in a person's life are appraised as stressful – that is how unpredictable, uncontrollable, and overloaded respondents find their lives. These three issues repeatedly have been found to be central components of the experience of stress. The effect size found (0,74) on the Perceived Stress Scale was unfortunately just below the cut-off point for practical significance (0,80).

#### 5.3.1.2 Profile of Adaptation of Life - Holistic PAL-H

(See Table 5.8)

There are statistically significant differences between the means of the pre- and post-test difference scores of the experimental and control groups as was measured on four areas of the PAL-H. On account of this the HO<sub>4</sub> has been rejected for the PAL-H.

With regard to scores with medium or practically significant effect sizes the following interpretations can be made:

#### Negative Emotions

The experimental group experienced a practically significant decrease in one of the four areas considered to be important to good adjustment, namely Negative Emotions. This means that they have had fewer negative emotions associated with worry, feeling gloomy or "blue", "tense" or "on the edge", uneasy or troubled, or unhappy.

# Physical Symptoms

The experimental group experienced a practically significant decrease in another one of the four areas considered to be important to good adjustment, namely Physical Symptoms. This means that they have had fewer headaches, spells of dizziness, nausea, taken medication for headaches or stomach and felt less hot and feverish and woke less from sleep feeling tired.

#### Self Activity

The experimental group experienced an increase in one of the four life style activities that was found to be characteristic of well-adjusted people, namely, Self Activity which includes spending time alone, time outdoors and practising meditation. This seems to indicate that the experimental group did indeed practise their meditation, and as a consequence have spent more time alone.

#### 5.3.1.3 The General Health Questionnaire (GHQ)

(See Table 5.11)

No statistically significant differences between the means of the pre- and post-test difference scores of the experimental and control groups were found as was measured by the GHQ. The HO<sub>4</sub> has therefore not been rejected.

# 5.3.1.4 The Quality of Live Inventory (QOLI)

(See Table 5.14)

No statistically significant differences between the means of the pre- and post-test difference scores of the experimental and control groups were found as were measured by the QOLI. The HO<sub>4</sub> has therefore not been rejected.

# 5.3.1.5 The Symptom Checklist-90-Revised (SCL-90-R)

(See Table 5.17)

Statistically significant differences between the means of the pre- and post-test difference scores on most of the primary symptom dimensions and the global indices of distress of the experimental and control groups as measured by the SCL-90-R were found. On account of this the HO<sub>4</sub> has been rejected for the SCL-90-R.

With regard to scores with medium and practically significant effect sizes, the following interpretations can be made:

#### Somatisation

The experimental group experienced a practically significant decrease in distress arising from perceptions of bodily dysfunction, such as complaints that focus on cardiovascular, gastrointestinal, respiratory, and other systems with strong autonomic mediation, as well as pain and discomfort of the gross musculature and additional somatic equivalents of anxiety.

#### Obsessive-Compulsive

The experimental group experienced a practically significant decrease in thoughts, impulses, and actions that were experienced as unremitting and irresistible and that were of an ego-alien nature as well as behaviour and experiences indicative of a more general cognitive performance deficit. This dimension includes symptoms that are often identified with the standard clinical syndrome of the same name.

#### Interpersonal Sensitivity

The experimental group experienced a practically significant decrease in feelings of inadequacy and inferiority, particularly in comparison with other people. Self-depreciation, self-doubt, and marked discomfort during interpersonal interactions are characteristic manifestations of this syndrome.

# Depression

The experimental group experienced a practically significant decrease in symptoms of a representative range of the manifestations of clinical depression. This refers to symptoms of dysphonic mood and affect, signs of withdrawal of life interest, lack of motivation, loss of vital energy, feelings of hopelessness, thoughts of suicide, and other somatic and cognitive correlates of depression.

#### Anxiety

The experimental group experienced a practically significant decrease in general signs of anxiety such as nervousness, tension, trembling, panic attacks, feelings of terror, apprehension and dread and some somatic correlates of anxiety.

#### Hostility

The experimental group experienced a medium effect size decrease in the Hostility dimension that reflects thoughts, feelings, or actions that are characteristic of the negative effect state of anger. The selection of items includes all three modes of expression and reflects qualities such as aggression, irritability, rage, and resentment.

# Phobic Anxiety

The experimental group experienced a practically significant decreased persistent fear response to a specific person, place, object, or situation that is irrational and disproportionate to the stimulus and that leads to avoidance or escape behaviour, especially the more pathognomonic and disruptive manifestations of phobic behaviour.

#### Paranoid Ideation

The experimental group experienced a medium effect size decrease in the Paranoid Ideation dimension that represents paranoid behaviour fundamentally as a disordered mode of thinking. This includes projective thought, hostility, suspiciousness, grandiosity, centrality, fear of loss of autonomy, and delusions as primary reflections representative of this conceptualisation.

# Psychotisism

The experimental group experienced decrease in indications of a withdrawn, isolated, schizoid lifestyle and first-rank symptoms of schizophrenia as hallucinations and thought control. The Psychoticism dimension provides for a graduated continuum from mild interpersonal alienation to dramatic psychosis.

#### Additional Items

The experimental group experienced a practically significant decrease on the items of Additional Items which load on several of the dimensions of the SCL-90-R but are not univocal to any of them. They are, however, included because they possess clinical significance as far as the interpretations of the other dimensions of the SCL-90-R are concerned. Additional items are for example concerned with changes in appetite, sleep, thoughts of death and dying and feelings of guilt.

#### Global Severity Index

The experimental group experienced a practically significant decrease on the Global Severity Index which provides the most sensitive single numeric indicator of the respondent's psychological status/current level, or depth of disorder. The Global

Severity Index combines information regarding the number of symptoms reported and the intensity of perceived distress.

# Positive Symptom Distress Index

The experimental group experienced a practically significant decrease in average level of distress reported for the symptoms that were endorsed. As such, it can be interpreted as a measure of symptom intensity, because the PSDI functions as a measure of response style by indicating whether the respondent was augmenting or attenuating symptomatic distress.

These results largely echo the sentiments expressed by Derogatis (*in* Broome, 1995:116), namely that the SCL-90-R has been demonstrated to be highly sensitive to differences between meditation and control groups in the treatment of stress.

# 5.3.1.6 The Spiritual Well-being Scale (SWBS)

(See Table 5.20)

No statistically significant differences between the means of the pre- and post-test difference scores of the experimental and control groups were found as were measured by the SWBS. The HO<sub>4</sub> has therefore not been rejected.

It is, however, interesting to note that a statistically significant difference score between the experimental and control groups on Religious Well-being was nearly found on the 5% level.

#### 5.3.1.7 The Work Environment Scale (WES)

(See Table 5.23)

A statistically significant difference between the means of the pre- and post-test difference scores on Task Orientation of the experimental and control groups as measured by the WES were found. On account of this the HO<sub>4</sub> has been rejected for the WES.

#### Task Orientation

The experimental group experienced a medium effect size increase in the Task Orientation that represents the degree of emphasis on good planning, efficiency, and getting the job done. The effect size found (0,75) on Task Orientation was unfortunately just below the cut-off point for practical significance (0,80).

# 5.3.1.8 The Profile of Mood States (POMS)

(See Table 5.26)

Statistically significant differences between the means of the pre- and post-test difference scores on all but one of the factor scores and total score between the experimental and control groups as was measured by the POMS were found. On account of this the HO<sub>4</sub> has been rejected for the POMS.

With regard to factor scores with medium and practically significant effect sizes, the following interpretations can be made:

# Tension-Anxiety

The experimental group experienced a medium effect size decrease on factor T (Tension-Anxiety), that represents adjective scales descriptive of heightened musculoskelatal tension. This includes reports of somatic tension which may not be overtly observable (Tense, On Edge), as well as observable psychomotor manifestations (Shaky, Restless).

# Depression-Dejection

The experimental group experienced a practically significant decrease on factor D (Depression-Dejection), that represents a mood of depression accompanied by a sense of personal inadequacy. This factor is best defined according to McNair *et al.* (1992:4), by scales indicating feelings of personal worthlessness (Unworthy), futility regarding the struggle to adjust (Hopeless, Desperate), a sense of emotional isolation from others (Blue, Lonely, Helpless, Miserable), sadness (Sad, Unhappy), and guilt (Guilty, Sorry for things done).

The experimental group, in comparison to the control group, it seems, experienced a significant decrease in this mood. A decrease in this mood state might enhance, rather than impede, functioning and wellness in the contexts of human existence.

#### Anger-Hostility

The experimental group experienced a practically significant decrease in factor A (Anger-Hostility) that represents a mood of anger and antipathy towards others. The principal defining scales (Angry, Furious, Ready to fight), according to McNair et al. (1992:4), describe feelings of intense, overt anger. 'Grouchy' and 'Annoyed' describe milder feelings of hostility, whereas 'Resentful', 'Spiteful', 'Deceived' and 'Bitter' items refer to more sullen and suspicious components of hostility. 'Peeved', 'Bad-tempered', and 'Rebellious' were items added to broaden Anger.

The experimental group, in comparison to the control group, it seems, experienced a significant decrease in this mood. A decrease in this mood state might enhance, rather than impede, functioning and wellness in the contexts of human existence.

#### Vigour-Activity

The experimental group experienced a practically significant increase on factor V (Vigour-Activity), which represents a mood of vigorousness, ebullience and high energy. According to McNair et al. (1992:5) in several studies, all the items included in an attempt to define Friendliness have high loadings on the Vigour factor.

The experimental group, in comparison so the control group, it seems, experienced a significant increase of this mood. An increase of this mood state might enhance, rather than impede, functioning and wellness in the contexts of human existence.

#### Confusion-Bewilderment

The experimental group experienced a practically significant decrease on factor C (Confusion-Bewilderment) which represents bewilderment and muddleheadness. Factor C may represent a self-report of the level of cognitive efficiency, as a possible by-product of anxiety or related states.

The experimental group, in comparison to the control group, it seems, experienced a significant decrease in this mood. A decrease in this mood statistically might enhance, rather than impede, functioning and wellness in the contexts of human existence.

#### Total Mood Disturbance Score

The experimental group experienced a practically significant decrease on their Total Mood Disturbance Score which is an indication of a single global estimate of affective state.

The experimental group, in comparison to the control group, it seems, experienced a significant decrease in their total mood disturbance. A decrease in the total mood disturbance might serve to enhance, rather than impede, general functioning and wellness in the contexts of human existence.

### 5.3.1.9 The Generalized Self-Efficacy Scale (GSES)

(See Table 5.29)

Statistically significant differences between the means of the pre- and post-test difference scores of the experimental and control groups were found as were measured by the GSES. On account of this the HO<sub>4</sub> has been rejected for the GSES.

With regard to scores with medium and practically significant effect sizes, the following interpretations can be made:

#### General Self-efficacy

The experimental group experienced a medium effect size increase in general self-efficacy that represents the strength of their generalised self-efficacy beliefs. These are general beliefs in one's ability to respond to and control environmental demands and challenges.

#### 5.3.2 Stress management

CSM had the effect of a decrease in perceived stress as was measured on the Perceived Stress Scale (see Table 5.5). This represents the degree to which situations in a person's life are appraised as stressful. As can be seen from the discussion of the

qualitative data obtained from the SCL-90-R below, there was also relative little change in psychological symptom breadth, but the instensity of the symptoms experienced by the experimental group was much lower. This serves as a powerful indicator of the effectiveness of CSM as a strategy for stress management.

# 5.3.3 Contextualisasion of quantitative data in terms of the promotion of well-being

A person is regarded as a psycho-biological entity who functions in a particular environment and is therefore a participant in the person-environment interaction as has been pointed out in Chapter 2. Therefore, some of the changes experienced by the members of the experimental group and thus noted quantitatively in this study, may have intra and intercontextual effects. The inseparability of contexts can mean that an effect noted in the intrapsychic context may have its effect felt in the biological or any other context. This translates into the realisation that, although an effect might seem to be mainly intrapsychic, it may have a ripple-effect or spill over effect and therefore a secondary, but true effect in other contexts of existence as well. This makes it often difficult to pin a noted effect down to a specific context only. Related contexts are therefore also indicated in the contextualisation process. Keeping this in mind, the quantitative data presented in the data analysis in 5.2, can be further interpreted and synthesised by a process of approximation into contexts of human existence as follows:

of bodily dysfunction and a decrease in Somatisation-distress arising from perceptions of bodily dysfunction and a decrease in physical symptoms and Tension-Anxiety as was measured by the SCL-90-R, the PAL-H and POMS respectedly (see Tables 5.8; 5.17; 5.26). These items, such as cardiovascular, gastrointestinal, aches, dizziness, feverishness or other complaints, might equally well serve as a potential source of stress or a potential effect of stress. It therefore seems as if CSM had a positive effect on the biological context of human existence in members of the experimental group. The same can be said for improvements on Additional Items on the SCL-90-R (see Table 5.17), such as changes in appetite and sleep. These items on Somatisation and Additional Items can, however, be associated with the intra-psychic context as well — the promotion of physical and psychological well-being.

- CSM had the effect of an increase in Vigour-Activity, Generalised Self-efficacy and Task Orientation as was measured by the POMS, the Generalized Self-Efficacy Scale and WES respectively (see Tables 5.23; 5.26; 5.29). Items related to high energy are also relevant for the biological context, because it can be argued that such a construct is both an intra-psychic as well as a biological one, but neither the one nor the other. The effects of an increase in Vigour-Activity and Task Orientation will most probably also impact on the ecological context, for instance in terms of work, productivity, et cetera or a general engagement of the environment. It therefore seems as if CSM had a positive effect on the biological, intra-psychic and ecological contexts of human existence in members of the experimental group—the promotion of physical, psychological and social well-being.
- CSM had the effect of a decrease in Negative Emotions, and an increase in Self-Activity, as was measured by the PAL-H (see Table 5.8), as well as a decrease in symptoms of Obsessive-Compulsiveness, Depression, Anxiety, Phobic Anxiety, Paranoid Ideation, and Psychotisism as was measured on the SCL-90-R (see Table 5.17). It therefore seems as if CSM had a positive effect on the intra-psychic context of human existence in members of the experimental group. These effects will most probably also impact secondarily on the other contexts of existence due to the intra and interactive effect of improved intra-psychic functioning the promotion of psychological well-being.
- CSM had the effect of a decrease in Depression-Dejection, Anger-Hostility and Confusion-Bewilderment and Hostility as was measured by the POMS and SCL-90-R respectedly (see Table 5.17; 5.26). It, therefore seems as if CSM had a positive effect on the intra-psychic, and secondarily on the ecological contexts of human existence in members of the experimental group the promotion of psychological and social well-being.

The factors indicated can, apart from reflecting potential effects of stress, also serve to reflect potential sources of stress due to the intra and interaction with other contexts of human existence. A decreased score on these factors, although contextualised here as primarily intra-psychic, may therefore have equal, but

secondary and tangible effects on the other contexts of human existence in terms of the lessening of potential sources or potential effects of stress. Scales on the Depression-Dejection factor of the POMS (see Table 5.26), such as feelings of worthlessness, futility regarding the struggle to adjust, emotional isolation from others, sadness and guilt may have definite implications for all the other contexts of existence. A decrease in the score on this factor will therefore signify a positive effectual trend, not only in the intra-psychic context, but also in the other contexts of human existence — in this instance also the metaphysical due to the existential issues reflected — the promotion of physical, psychological, social and spiritual well-being.

The same can be said of the decrease in the score of the Anger-Hostility factor on the POMS (see Table 5.26) and Hostility on the SCL-90-R (see Table 5.17), although the contextual interaction might especially be associated with changes in the biological and ecological contexts – the promotion of physical and social well-being.

The decrease in the score of the Confusion-Bewilderment factor on the POMS (see Table 5.26) might be associated with effects on the ecological contexts due to the possible relatedness with and interaction with the social, work and other environments – the promotion of social well-being.

- CSM had the effect of a decrease in Interpersonal Sensitivity as was measured on the SCL-90-R (see Table 5.17). It therefore seems as if CSM had a positive effect on the intra-psychic context of human existence in members of the experimental group. Due to the nature of the items on the Interpersonal Sensitivity-area of the SCL-90-R, the effects noted will most probably also impact secondarily on the ecological context in the sense that social interaction might be enhanced — the promotion of psychological and social well-being.
- CSM had the effect of a decrease in the scores of the Global Severity Index of the SCL-90-R (see Table 5.17). This score serves as an indicator of the experimental group's psychological status or current level or depth of disorder. The Global Severity Index provides a sort of 'summary' of the experimental and control groups'

point-in-time psychological symptom status as it pertains to their psychopathologic status. The experimental group's score was markedly lower.

This state of affairs indicates the range of changes that have taken place in the intra-psychic context of the members of the experimental group. These positive effects may very well have positive spin-offs for the other contexts of human existence because of a spill over effect due to the interaction between different contexts.

- The Positive Symptom Distress Index on the SCL-90-R-90-R (see Table 5.17) interpreted as a measure of symptom intensity also showed a decrease, although interestingly, the Positive Symptom Total interpreted as measure of symptom breadth showed no change. This means that there was relatively little change in symptom breadth, but that the intensity of the symptoms experienced changed to a lower intensity.
- CSM had the effect of a decrease in the scores of the Total Mood Disturbance
  Score on the POMS (see Table 5.26) which is an indication of a single global
  estimate of affective state. This score indicates the very positive effect CSM has
  had on the emotional well-being of the experimental group.

This state of affairs also signifies the range of changes that have taken place in the intra-psychic context of the members of the experimental group, and will, as is the case with the Global Severity Index, have a positive spill-over effect on the other contexts of existence as indicated.

# 5.3.4 Conclusions derived from quantitative data

In concluding the quantitative data interpretation and synthesis, the point can be made that CSM is an effective strategy for stress management and has an effect on all the contexts of existence indicative of the promotion of well-being. Most effects were, however, primarily observed in the intra-psychic context. Secondary effects in other contexts can mostly be extrapolated from the effects noted in the intra-psychic context. It can be speculated that effects in contexts other than the intra-psychic contexts might have been more directly or primarily noted if the instruments used were more sensitive, valid or better chosen to measure effects and/or if the practise of CSM had been longer.

Meditation, on the other hand, is more of an intra-psychic activity, as opposed to physical exercise or social support which is more biological and ecological contextual activities. It is therefore understandable that the effects of CSM are primarily observed in the intra-psychic context.

CSM, however, had powerful effects on a range of aspects that forms part of the intrapsychic context which might be construed as aspects that can function as potential sources of, or reflect potential effects of stress for example anxiety, anger-hostility, depression-dejection. Due to the positive changes in the intra-psychic context, (such as the examples given), primary and secondary appraisals (also intra-psychic contextual processes) may have been changed with regard to these aspects being potential sources of stress as well as potential effects of stress, and hence, better coping might have been the resultant outcome. This intra-contextual change may well lead to a spill-over effect, or intercontextual changes, which might bring about subtle, or even highly visible secondary changes with regard to improved physical, social, vocational, spiritual and other forms of well-being as are represented in the other contexts of human existence. Lastly, it seems as if all the effects measured indicate that the wellness of members of the experimental group had been promoted. This is congruent to the finding that symptom intensity experienced showed a decrease, although symptom breadth showed no change. CSM, therefore, seems to be effective as a strategy for stress management and in the promotion of wellness (as a holistic construct) in teachers.

# 5.4 QUALITATIVE DATA ANALYSIS: THE EFFECTS AND EFFECTIVENESS OF CLINICALLY STANDARDIZED MEDITATION

The method of data analysis has been presented in 4.6.3. For the purpose of triangulation the qualitative data analysis will focus and reflect on:

- The effects noted in the interviews of CSM experienced by the members of the experimental group;
- the strong points and weak points of difficulty of CSM noted in the interviews as perceived by the members of the experimental group;

- the subjective conceptualisation of CSM noted in the interviews by members of the experimental group;
- the worthwhileness and future personal use, and the effectiveness of CSM as a strategy for stress management and the promotion of wellness as perceived by the experimental group and others related to them;
- the effects and effectiveness of CSM as a strategy for stress management and the promotion of wellness as noted in the telephone interviews by the spouses or colleagues or members of the experimental group;
- the effects noted in the diaries of the members of the experimental group;
- effects noted from the physical examination of the members of the experimental group;
- effects noted from participant observations contained in the field notes during the research.

After the qualitative data have been reported and analysed as indicated above, the interpretation and synthesis of the qualitative data will follow, where categories and subcategories found will be discussed further and placed into different contexts of existence.

# 5.4.1 The effects of and effectiveness of CSM for the promotion of wellness as experienced by the participants and noted in the interviews

Interviews formed the main thrust of the qualitative part of this study. Thirteen of the possible fourteen members of the experimental group participated in the interviews. One, however, missed the interview and went on holiday and could subsequently not be reached for the interview.

The data obtained from the interviews are organised into categories and subcategories. Direct quotations are presented verbatim, without corrections, as part of the explanation of the categories and their subcategories. The quotations will be presented in the

speakers' first language, or, in the case of Black teachers in English as their professional language of choice. Quotations in Afrikaans will be translated freely into English directly after the original translation, but will be put in brackets ([]). The quotations are addressed to the subjects in terms of a symbol assigned in accordance to the speakers' name/and surname (for example T, TS, B et cetera). Occasionally explanatory remarks placed between brackets ((\_)) are included in the verbatim quotations by the researcher.

Although themes are divided into main and subcategories in order to distinguish between them, these themes cannot really be regarded as separate, as has been indicated earlier (4.6.3). A category should not be seen in isolation, but as part of the greater "Gestalt" – even more so in this study because of its ecosystemic and holistic focus.

Keeping the method and process of qualitative data analysis in mind, the following categories and subcategories have been found:

# 5.4.1.1 Category 1: Effect of decreased tension

'Tension' can be described in a physiological and pathological sense as: "The condition in any part of the body, of being stretched or strained; a sensation indicating or suggesting this; a feeling of tightness" (The Shorter Oxford English Dictionary on Historical Principles, 1980:2262-2263). Tension can however also be related to "mental and emotional strain" (The New Oxford Dictionary of English, 1999:1911).

Tension seems to be a common potential effect of the experience of high levels of stress. Tension can also function as a significant source of further stress. Members of the experimental group in this study who practised CSM, however, reported effects that signified the experience of less or decreased tension as a consequence of the practise of CSM.

Table 5.30: Effect of decreased tension

Category 1	Effect of decreased tension	n = 13
Subcategory	Improved management physical effects of stress	6
	Improved sleep quality	6
	Increased energy	5
	Improved pain management	4
	Decreased use of medication	4
	Decreased fidgeting	2
	Improved weight management	2
	Increased activity (exercise)	2
		V V V V V V V V V V V V V V V V V V V

The category 'Effect of decreased tension' and its subcategories are formulated from the following direct verbatim quotations:

# Improved management of physical effects of stress

Participants reported that they experienced that they could manage the physical effects of stress better.

R: "So voel ek regtig fisies – dat ek die situasie (laaste week van die skoolkwartaal) beter kon hanteer."

[So I feel really physically - that I can handle the situation (last week of school term) better.]

AS: "As ek stil word en ek sê my mantra, maar ek focus op daai seer plek in my liggaam (spanningshoofpyne en bruikpyne), dan is dit seker (dat ek) begin ontspan en dan gaan die pyn weg."

[If I get still and I say my mantra, but I focus upon that aching spot in my body (tension headaches and abdomen pains), then is it maybe (that I) start to relax and then the pain disappears.]

- D: "Give youself time (by practising CSM) to take a ... breath and time for your own body to heal itself."
- J: "Ek (het) goed deur die operasie gegaan (deur gebruik te maak van CSM)."
  [I (have gone) well through the surgery (by using CSM).]
- T: "I've experienced calmness in body and mind (since practising CSM). The fatigue that I normally had before I started (CSM) is not there."
- A: "Omdat my brein kan focus en ontspan, is my lyf in 'n baie beter toestand. Ek het minder behoefte gehad aan rugmaserings en skouer."

  [Because my brain can focus and relax, my body is in a better state. I had less need of back and shoulder massages.]

#### Improved sleep quality

Participants reported that their quality of sleep improved due to more restful and deep sleep as well as the alleviation of sleep problems and less need of sleep.

- T: "I am not so stressed ... so that is due to the restful sleep I get."
- J: "Ek het slaapprobleme as ek in die aand gaan slaap beoefen ek dit (CSM) partykeer (om te help om aan die slaap te raak)."

  [I've got insomnia when I go te sleep at night I practise it (CSM) sometimes (to help me falling asleep).]
- AS: "Ek het (op) 'n baie gereelde basies 'stilmiddels' gebruik om te slaap en ten spyte daarvan dat my omstandighede baie verander het (weens man wat die huis verlaat het en 'n egskeiding wou hê), gebruik ek glad nie meer ('stilmiddels') en my gehalte van slaap is baie beter."
  - [I have often used medication to sleep and apart from the fact that my circumstances have changed a lot (due to husband leaving home and wanting a divorce), I don't use medication any more and my quality of sleep is much better.]
- TC: "Ek het 'n geweldige probleem met slaap gehad, dit het baie verbeter goeie en beter slaap. Ek het (voorheen) ure gevat om aan die slaap te raak."

[I had a huge problem with sleep, it has improved a lot – good and better sleep. I (previously) took hours to fall asleep.]

A: "Ek het baie beter geslaap – ek is heeltemal uitgerus die volgende dag."

[i have slept much better – I am totally rested the next day.]

TS: "Ek het gevoel ... ek het minder slaap nodig."
[I felt ... I needed less sleep.]

# Increased energy

Participants reported that they had experienced more energy and felt less fatigued and were able to do more.

TS: "Ek het gevind dat ek ... meer energiek voel."
[I found out that I... felt more energetic.]

- RC: "Ek was op 'n stadium passief en ek het nou baie meer energie."
  - "My werk en alles wat ek doen pak ek met meer energie aan en dis lekker."
  - [• I was at one stage passive and now I have lots more energy.
  - My work and everything that I do, I tackle with more energy, and it's nice.]
- B: "Jy het 'go' om aan te gaan verseker."

  [You've got 'go' to go on for sure.]
- T: "That mental strength, the absence of fatigue ... (enabled me) to work through four quite thick books. It exceeded my expectations."
- R: "Jy voel altyd daai laaste week (laaste week van skoolkwartaal) is 'n week te lank.

  Nou voel ek of ek nog drie weke kan aangehou het. Dis die eerste einde van die kwartaal in jare waar ek nie 'op' is nie."

[You feel always that that last week (last week of school term) is a week too long. Now it feels if I could have kept on going for another three weeks. This is the first end of term in years where I don't feel 'depleted'.]

### Improved pain management

Participants reported that they experienced that they could manage pain better and consequently experienced less pain.

- B: "As ek pyn het konsentreer ek op die pyn tydens meditasie, dan vind ek die pyn gaan weg. Dit werk regtig."
  - [If I have pain I concentrate on the pain during meditation, then I experience that the pain goes away. It really works.]
- AS: "Toe het ek dit (as hoofpyne begin: gemediteer en op die pyn gefokus) ook gedoen en dit help regtig. Dis asof dit net weggaan. Dis asof 'n mens self daardie pyn 'uit dink'."
  - [Then I have done it (if headaches begin: meditate and focus on pain) and it really helps. It is as if it just goes away. It is as if one 'thinks' the pain 'out'.]
- T: "It happened really heavy, so twice a week I would know that I've got a headache, but since I've started to meditate, I ... only twice I like had a slight headache, but I was able to stay the whole day without tablets."
- J: "Ek het na ek uitgekom het (uit die hospital post operatief) nie een pynpil gebruik nie."
  - [After I came out (of the hospital post operative) I didn't use one pain tablet. ]

# Decreased use of medication

Participants reported that they experienced that they needed less or no medication for depression, tension and pain.

AS: "Ek dink baie mense in my omstandighede (pending divorce) juis dokter toe sal gaan (en) op Prozac (sal wil gaan). Ek het 2 Zolox (tablette) per dag (vir depressie) gedrink. Ek het net op 'n stadium besluit, maar van nou af gaan ek dit een keer per dag gebruik en ek het nog geen newe-effekte gevoel nie. Ek sal nou dokter toe gaan en vir hom sê... ek het nou so afgekom, dink hy ek kan nou maar elke tweede dag myself daarop sit."

If think a lot of people in my circumstances (pending divorce) will go to the doctor

(and would want to) go on Prozac. I took 2 Zolox (tablets) per day (for depression). At a stage I decided as from now on I am going to use it once a day and I haven't felt any side-effects. I will now go to the doctor and tell him... I have now decreased (my dosage) so much, if he thinks if I can put myself on it only every second day.]

- L: "I stopped using the medication (for depression) to focus on my meditation."
- TC: "En selfs die medikasie (na 'n tydperk van uiterste spanning) ... het nie so nodig gewees nie."

[And even the medication (after a time of great stress) ... wasn't so needed.]

J: "Ek het na ek uitgekom het (uit die hospitaal – post operatief) nie een pynpil gebruik nie."

[After I came out (of the hospital – post operative) I didn't use one pain tablet.]

# Decreased fidgeting

Participants reported that they have either stopped fidgeting or are fidgeting less.

TC: "Ek (kan) nooit stil gesit het nie, nie met my bene of my hande of niks nie (motoriese tic). Dit het my man en kinders grensloos geïrriteer. Ek kan nou stilsit – ontspanne. Dis nogal 'n verskil."

[I (could) never ever sit still, not with my legs or my hands or anything else (motor tic). It irritated my husband and children very much. Now I can sit still – relaxed. It is quite a difference.]

D: "I don't figet as much.

I don't figet as much as I need to any more."

# Improved weight management

Participants reported that they experienced that they had an increased ability to manage their weight by losing weight. Both these persons were to some extent obese.

E: "Ek is meer gesteld daarop om na my liggaam meer te kyk en ek het al 16 kilo's verloor – dis die maklikste wat ek nog ooit gedoen het in my lewe."

[I am more minded to look after my body and I have already lost 16 kilo's - it is the easiest that I have ever done in my life.]

RC: "Ek het ook gewig verloor."
[I have also lost weight.]

#### increased activity (exercise)

Participants reported that they experienced that they started to be more active by starting to exercise or exercising more.

AS: "Na 'n kort rukkie (van die beoefening van CSM) het ek weer begin oefen by 'n gimnasium."

[After a short while (of practicing CSM) I have started again to exercise in a gym.]

TS: "Ek het gevind dat ek ... meer oefen as wat altyd ..."

[I have found that I ... exercise more than usual...]

# 5.4.1.2 Category 2: Effect of personal mastery

'Mastery' can be described as: "One who has the control, use or disposition of something at will" (The Shorter Oxford English Dictionary on Historical Principles, 1980:1286). Members of the experimental group in this study who practised CSM reported effects that signified the experience of greater personal mastery as a consequence of the practise of CSM.

Table 5.31: Effect of increased Personal mastery

Category 2	Effect of personal mastery	n = 13
Subcategory	Increased personal control	10
	Increased focus and attention	8
	Decreased negative emotions	6
The second secon	Increased organisation	2

The category "Effect of increased personal mastery" and its subcategories are formulated from the following direct verbatim quotations:

#### Increased personal control

Participants reported that they experienced increased personal control over their impulses, had less acting-out behaviour and were more in control of their lives.

- L: "At school, I remember times when I shouted that I felt dizzy. I've just stopped that. I just calmly organise the situation, ... you don't have to lose your temper, you don't have to lose control. (I) work in a much more controlled way."
- T: "You don't feel all the time that things are collapsing, (that) there is a danger or lacking somewhere, you are just about."
- J: "Hoe meer geoefen ek daarin (inkeer na die self / sentrering) is, hoe vinniger kom ek by die 'inner chamber'".

[The more practiced I am in it (inward focus / centering) the quicker do I get to the 'inner chamber' (inner self).]

- TS: "...ek het meer beheer."
  [... I've got more control.]
- A: "Ek ... het, nie dat ek vreeslike uitbarstings gehad het voorheen nie, maar het (nou) baie minder (uitbarstings)."

[I ... have, not that I've had terrible outbursts previously, but have (now) a lot fewer (outbursts). ]

E: "Voorheen het ek geen beheer daaroor gehad nie, ... maar dis vir my makliker die keer om te dieet."

[Previously I had no control over it, ... but it is easier for me this time to diet.]

R: "Dit het amper soos 'n kruk geword (CSM), daars iets om op terug te val as jy, en dis werklik of ek 'n stresvolle situasie makliker kan hanteer as daar 'n krisis skielik opduik, voor jy in 'n "flat spin" ingaan, dink jy "kalmeer", dink wat jy doen en dan kan jy die situasie makliker hanteer."

[It has nearly become like a crutch (CSM), there is something to fall back on if you, and its really if I can handle a stressful situation easier if a crisis suddenly pops up. Before you go into a 'flat spin', you think 'calm down', think what you do, and then you can handle the situation easier.]

AS: "As ek so aan die einde van 'n (klas-) periode kom, bly ek maar net stil en wag tot hulle (die leerders) stil bly. En hulle het so oulik geword dat hulle vir mekaar sê: 'Komaan, sjuut, sjuut, sjuut'. Hulle weet ek gaan nie toegee nie, ek gaan nie skree nie, ek gaan nie sê: 'julle moet stilbly nie' en ek moet sê ek dink nie ek sou dit vroeër gedoen het nie."

[If I get to the end of a lesson, I just keep quiet and wait until they (the learners) keep quitet. And they've become so cute that they tell each other: 'Come on shoosh, shoosh,' They know that I am not going to give in, I am not going to scream, I am not going to say: 'You have to keep quiet" and I must say that I don't think I would have done it earlier.

RC: "Ek dink wat my eetgewoontes betref ...Ek gaan regtig daarop uit om gesond te eet."

[I think as far as my eating habits are concerned ... I am really minded to eat healthy.]

TC: "Die meditasie ... het mens geleer om 'n spesifike probleem op te los – dis nie alles hopeloos nie. Jy kan konsentreer op die ding wat 'n probleem is."

The meditation ... has taught one to solve a specific problem – all is not hopeless. You can concentrate on the thing that is the problem.]

#### Increased focus and attention

Participants reported that they experienced that their attention was more focused on issues at hand that had to be dealt with.

B: "Jy sluit darem makliker af van dinge, dinge in die agtergrond en jy gaan makliker aan met jou dinge."

[You disengage easier from things, things in the background and you go on easier with your things. ]

RC: "(Dit is) vir my makliker om rustig te word. Voor die (beoefening van) meditasie.

was dit vir (my) moeilik om af te skakel en rustig te word."

[(It is) easier for me to become relaxed. Before the (practising of) meditation it was difficult to switch off and to become relaxed.]

J: "In die begin was dit (inkeer na die self / sentrering) 'n baie langer proses as nou.

Nou kan ek baie makliker afskakel en fokus op waarmee ek besig is."

[In the beginning it (inward focus / centering) was a much longer process that it is now. Now I can switch off much easier and focus on that which I am busy with.]

TC: "(Probleme is opgelos) deur positief te bly en te aanvaar wat die situasie is, en net te konsentreer op dit wat ek werklik kan verander."
[(Problems have been solved) by staying positive and to accept what the situation is, and to concentrate only on that which I can really change.]

E: "As jy mediteer, want jy is meer gefokus en, baie keer die probleme wat jy ondervind in jou daaglikse lewe – terwyl jy mediteer kom dit voor in jou meditasie."

[If you meditate, because you are more focused and, very often do the problems that you experience in your everyday life – whilst you meditate it surfaces in your meditation.]

- A: "Omdat jou brein en gedagtes gefokus is, is dit nie ... soos linte in die wind nie."

  [Because your brain and thoughts are focused, it is not ... like ribbons in the wind.]
- AS: "My konsentrasie het beslis verbeter as gevolg van meditasie."

  [My concentration has definitely improved because of meditation.]
- T: "Before I started as I say, every afternoon I used to be really exhausted..., I wasn't concentrating because I was very tired."

#### Decreased negative emotions

Participants reported that they experienced fewer feelings of depression, anger and irritation.

- T: "You don't feel gloomy (as I used to be)."
- RC: "Ek is ook 'n depressielyer en ek het ook regtigwaar beter geraak."
  [I am also a depression sufferer and I have really become better.]
- AS: "Terwyl ek dit sê, besef ek dat dit (CSM) my ... gehelp het om minder depressie (te ervaar) ... ek het my antidepressante self verminder."

  [Whilst I say this, I realise that it (CSM) has helped me (to experience) less depression ... I have decreased my antidepressants myself.]
- E: "Maar ek moet darem sê my depressie is baie beter ... ek het 'n groot verandering in myself gesien."

  [But I have to say my depression is a lot better ... I have seen a great change in myself.]
- D: "I'am not so aggressive when I get angry."
  - "Even when you are driving and get aggro then you can say your mantra, get calm and carry on (laugh)."
  - "! noticed less anxiety."

R: "Daar was nie daardie voortdurende 'agitated' gevoel, dat jy voel iets 'tril' in jou nie (sedert die beoefening van CSM)."

[There wasn't that continuous 'agitated' feeling, that you feel something.]

#### Increased organisation

Participants reported that they experienced that they were more organised.

E: "Hierdie keer was ek georden – ek was ook die dag voor die skool sluit (voor die vakansie) toe staan my banke ook al netjies daaragter en ek – die kinders het als gedoen."

[This time round, I was ordered -1 was also the day before the school closed (for the holidays) then my desks stood neatly at the back (of the classroom) and I - the children did every thing.]

RC: "(Ek is nou) Meer georganiseerd."
[(I am now) More organised.]

#### 5.4.1.3 Category 3: Effect of increased sense of identity

'Sense' can be described as: "a feeling that something is the case; an awareness or feeling that one is in a specified state" (The New Oxford Dictionary of English, 1999:1693). 'Identity' can be described as: "the fact of being who or what a person ... is" (The New Oxford Dictionary of English, 1999:908). Members of the experimental group in this study who practised CSM reported effects that signified the experience of a greater sense of identity as a consequence of the practise of CSM.

Table 5.32: Effect of increased sense of identity

Category 3	Effect of increased sense of identity	n = 13
Subcategory	Increased willingness to venture	8
	Increased realistic self-expectations	7
	Increased personal integration	7
	Increased self-acceptance	6
	Increased assertiveness	5
	Increased tendancy to take up a standpoint	3
	Increased self confidence and improved self-image	3

The category 'Effect of increased sense of identity' and its subcategories are formulated from the following direct verbatim quotations:

#### Increased willingness to venture

Participants reported that they experienced an increased willingness to venture in order to face challenges, to find these challenges less threatening and to set new aims for themselves.

AS: "Ek het ... ook meer moed om uh, "to face challenges". "
[I have ... also more courage to uh, 'to face challenges',]

R: "Jy sien 'n saak nie as 'n probleem of 'n las of 'n ding nie, dis vir jou lekker om iets te doen wat andersins 'n oorlas sou gewees het."

[You don't see a concern as a problem or a burden or a thing, it is nice do something that might have other wise been an inconvenience.]

E: "Dinge was vir my altyd soos 'n berg voor my wat ek moes uitkom en nou, ek weet nie, ek klim makliker. Ek kom maklik bo uit."

[Things were always like a mountain that I had to climb and now, I don't know, I climb more easily. I get easier to the top.]

- T: "I know I'm quite an adventurous person ... things like where appear to be zero possibility, these are the things that I like. But, I felt lately that I must please back out of these things, but after starting this thing (CSM), I found that I go where I know myself to be."
- H: "Ja, mens leer nou nie net om met mense saamleef nie jy reël jou eie lewe."

  [Yes, one learns not only to live with other people you manage your own life.]
- RC: "Ek dink ook positiewer ... ek het nuwe doelwitte, nuwe goed wat ek wil aanpak."
  [I also think more positively ... I have new aims, new things that I want to tackle.]
- D: "With studying I can't wait to do it I used to be very scared I used to be very scared I had put off studying for two years and because everyone said you musn't ... I can't actually wait to get started."
- TS: "Ek het net meer geleentheid gehad vir veral ander dinge."
  [I've had more opportunity for especially other things.]

#### • Increased realistic self-expectations

Participants reported that they experienced more realistic self-expectations in the sense that they felt they had to make time for themselves, felt less driven by own and other's expectations and felt comfotable with these changes.

- AS: "Ek het ook definitief deur hierdie hele ding (besef), ek as mens mag tyd vir myself hê. Ek hoef nie skuldig te voel oor 'n uur wat ek self gebruik nie, en nie aan my kinders spandeer nie."

  [I've also (realised) definitely throughout this whole thing (impending divorce), as
  - a person I am allowed to have time for myself. I don't have to feel guilty about an hour that I use for myself, and not spend on my children.
- L: "I still know I can do wonderfull things, but right now I don't have to do anything. I just feel comfortable in this sense. To me that was a move. I can't describe to you how much it means to me."

E: "Ek kon myself baie dryf. Nou vat ek die goue middeweg en ek doen nog steeds dieselfde werk. Ek dryf my net nie meer soos 'n slaaf nie. Dinge kom meer gemaklik."

[I could drive myself a lot. Now I take the golden mean and I still do the same work. I do not drive myself any more like a slave. Things come more easily.]

D: "I still work hard, too hard sometimes, but I know where hard and too much — where the line is drawn."

"I still expect a certain standard, but I don't push myself past that any more."

H: "Ek hou al 40 jaar skool en elke jaar as my skool gesluit het (vir die vakansie), het ek nog drie dae gaan werk by die skool ... tot 6-uur die aand – ek besef dit nou eers toe die klok lui toe sluit ek die deur toe en vergeet die skool ... en toe dink ek wat gaan nou met my aan – word ek nou sleg of wat? Maar dis eintlik 'n goeie ding."

[I have been teaching for 40 years and every year when the school breaks up (for the holiday), I had another three days work at school ... until 6 o'clock in the evening – I only realise it now that when the bell rang, I locked my door and forgot about the school... And then I thought what is happening to me now – am I getting bad or what? But it is actually a good thing.]

RC: "Ek wou altyd 'n ding reg doen, perfek doen, en as ek dit nou nie perfek doen nie dan pla dit my nie meer so nie."

[I always wanted to do something right, do it perfectly, and now if I don't do it perfectly, then it doesn't bother me so much.]

TC: "'n Mens is nie meer so emosioneel afhanklik nie."

[One is not so emotionally dependent any more.]

#### Increased personal integration

Participants reported that they experienced more personal integration in the sense that they felt a oneness and contact with themselves and to be themselves.

D: "I think it (CSM) ... gave me a sort of oneness with myself and a wholeness."

- T: "It (CSM) makes one, as I said, to be, oneself."
- L: "I don't feel bad for not applying for any posts, because I don't have to. Right now I just want to be my self."
- R: "Ek sal sê dit (CSM) bring jouself in kontak met jouself."
  [I shall say it (CSM) brings you in contact with yourself.]
- A: "Vir my gaan dit (CSM) daaroor om jouself te wees en om jouself te vind, eindelik."

  [For me it (CSM) is about being yourself and to find yourself at the end.]
- AS: "Ek hoef my ook nie te laat afbreek nie ek kan die mens wees wat ek wil wees."

  [I needn't have myself broken down I can be the human being that I want to be.]

#### increased self-acceptance

Participants reported that they experienced greater self-acceptance in the sense that they were more comfortable with themselves and their abilities and less reliant on the expectations and acknowledgement of other.

AS: "Ek voel eerlik dit (CSM) het gehelp, dis iets wat ek geweldig baie mee gesukkel het – skuldgevoelens, dat ek nie kon voldoen aan sekere standaarde en dinge nie. Ek het eintlik net besef ek hoef net aan die standaarde te voldoen wat God van my verwag."

[I honestly feel it (CSM) helped, it is something that I struggled with a lot – feelings of guilt, that I could not measure up to certain standards and things. I realised actually I have only to comply to the standards that God expects of me.]

- TC: "Jy kan nie heeltyd op medikasie wees om krisisse te hanteer nie."
  [You cannot always be on medication to handle crises.]
- R: "Wat ek regtig kan sê is, ek het myself weer leer ken. Ek het tyd gevat om my weer toe te wy, op 'n ander manier as ... voorheen."

  [What I can truly say is, I have learned to know myself again. I took time to dedicate myself, in a different way as ... previously.]

- L: "The school, it gives me so much joy, I have so much time in the afternoon to enjoy my own children, not only did I, haven't committed myself to any meetings at all."
- D: "I realise I can only do what I can. I have stopped trying to push myself 'over the limit'."
- EC: "Ek kan nou eintlik sê ek hou nou van myself. Ek het myself altyd gekritiseer, fout gevind en nou kan ek nie, dit het heeltemal verander.

Nou kan ek nie glo ek het myself so negatief beoordeel het nie."

[I can actually say I like myself now. I have always criticised myself, found fault and now I can't, it has totally changed. Now I cannot believe I have judged myself so negatively.]

#### Increased assertiveness

Participants reported that they experienced that they were more assertive in the sense that they were more able to express their opinions where their personal situation was at stake and they were able to say no.

- B: "Die grootste ding is ... ek sal iemand gekonfronteer het en so, maar ek sal nie sommer konfrontasie soek nie ..., maar ek sal (nou) baie vinniger as ek voel ek is geregtig, op my standpunt staan en vir myself en andere dink."
  - The biggest thing is ... I would have confronted somebody and so, but I wouldn't have looked for confrontation..., but (now) I shall much quicker, if I feel I am entitled to, stand on my point of view and think for myself and others.]
- E: "Daar's nie 'n geskouerskuurdery (met kollegas) nie ek vat ook nie die goue weg, net so die maklike uitweg nie, ek sê my sê as ek hom moet sê."

  [There isn't a rubbing of the shoulders with colleagues I also don't take the
  - golden way, the easy way, I say my say if I have to say it.]
- L: "They (at school) asked me to be on some committee, and I said: 'I'm very sorry, but on Tuesday evenings I go for a walk, 'klaar' (finish). I can't be there.' It's so wonderful I'm able to say no, and it doesn't make me feel inferior at all."

H: "Nou sny ek die mense net uit (... wat dit geniet dat jy van hulle afhanklik moet wees...) en ek voel nie sleg daaroor nie – waar ek in die verlede ten gronde sou gaan. Ek het nou nie 'n saak daarmee nie, dis nou klaar en ek gaan my eie gang."

[Now I just cut the people out (... who enjoy it that you have to be dependent on them ...) and I don't feel bad about it — where in the past I would have gone to rack and ruin. Now I have no issue with it, it is finished and I go my own way.]

AS: "Ek's nooit alleen in die toilet ... in die bad nie, maar nou sal ek die ... deur toesluit en sê: 'Scram'. As hulle (kinders) kom klop sal ek sê: 'Gee pad'. Ek voel geregtig op privaatheid."

[I am never alone in the toilet ... in the bath, but now I lock the ... door and say: 'Scram'. If they (the children) knock I shall say: 'Go away'. I feel entitled to my privacy.]

#### Increased tendency to take up a standpoint

Participants reported that they experienced a greater tendency to take up a standpoint in the sense that they were more able to take up and state their standpoint in a persistent manner.

- RC: "Ek kan ook nogal sê wat standpunt aanbetref kan ek nogal (standpunt inneem)."
  [I can also say as far as standpoint is concerned, I can (take a standpoint).]
- B: "Waar ek vroeër teruggestaan het en gesê het man ons bereik maar 'n kompromie, ons kan nie almal altyd tevrede stel nie waar ek nou baie vinniger standpunt inneem."

[Where I earlier would have stood back and have said, man let's reach a compromise, we cannot make everybody happy – where I now take a standpoint a lot quicker.]

L: "My husband was the mother as well (because of being an absent mother due to depression). I just threw my arms into the air, go and lay on the bed, sulk, phone my mother, now I am able to persist and let them (the children) complete the task if I give them something to do."

#### Increased self-confidence and improved self-image

Participants reported that they experienced greater self confidence and a better selfimage in the sense that they were more independent and developed better selfconfidence and self-images.

- H: "Ek was 'n vreeslike afhanklike mens afhanklik van ander persone, familie en so aan en het skielik op 'n punt besef ek is glad nie meer so nie."
  [I was a very dependent person dependent on other persons, family and so on and have suddenly at one point realised I am not at all like that any more.]
- B: "Ek dink tog ek het nooit 'n probleem met my selfbeeld of selfvertroue gehad nie, maar ek dink tog dit het sterker geword."

  [Although I think that I have never had a problem with my self-image or self-confidence, but I do think it has got stronger.]
- J: "Omdat my Christenskap baie nou verwant is aan my hele lewe, dink ek die verdieping wat daar plaasgevind het, het 'deurgespoel' op my selfbeeld."

  [Because my Christianness is very closely associated to my whole life, I think the deepening that occurred in it, had a flow-through on my self-image.]

#### 5.4.1.4 Category 4: Effect of increased tranquility

Tranquility can be described as: 'Free from agitation as disturbance; calm, serene, placid, quiet, peaceful' (The Shorter Oxford English Dictionary on Historical Principles, 1980:2344). Members of the experimental group in this study who practised CSM reported effects that signified the experience of a greater sense of tranquillity as a consequence of the practise of CSM.

Table 5.33: Effect of increased tranquility

Category 4	Effect of increased tranquillity	n = 13
Subcategory	increased relaxedness and calm	8
	increased serenity and contentment	4

The category 'Effect of increased tranquillity' and its subcategories are formulated from the following direct verbatim quotations:

#### Increased relaxedness and calm

Participants reported that they experienced greater relaxedness and calm in the sense that they were more relaxed and calm.

- T: "I'm calmer they (the class) seem to be (calmer), they, and my own children."
- TC: "Baie ... kalmer. Baie rustiger."

  [A lot ... calmer. A lot more tranquil.]
- R: "By my was die grootste gevoel van rustigheid, 'n regtig baie rustigheid wat by my pas."

  [With me was the greatest feeling of tranquillity, a really great sense of tranquillity
- A: "Ek is net meer ontspanne."

that befits me. ]

- E: "Ek is baie meer ontspanne ... Ek is baie meer rustig."
  [I am much more relaxed... I am much more tranquil.]
- D: "During the day I find it (the practise of CSM) calms me down."
- TS: "Dit (CSM) het my baie rustig gemaak. Laat mens baie ontspanne voel."
  [It (CSM) made me very tranquil. Let one feels very relaxed.]
- RC: "(Dit is) vir my makliker om rustig te word."

  [(It is) easier for me to become tranquil.]

#### Increased serenity and contentment

Participants reported that they experienced greater serenity and contentment in their lives in the sense that they felt peace and enjoyment in life with their circumstances.

- J: "As 'n mens werklik so verdiep, inbeweeg ... na die 'inner chamber' toe, kry jy werklik die vrede wat alle verstand te bowe gaan ook (Bybelse begrip)."

  [If one really deepens, moving in ... to the 'inner chamber', you really find the peace that transcends all reason (Biblical concept also).]
- E: "Die meditasie het my definitief gehelp om oor my mammie se dood te kom ... dis asof ek vrede daaroor het."

  [The meditation really helped me to overcome my mommy's death ... it is as if I have got peace about it.]
- T: "You are able to find ... enjoyment in life."
- L: "I wanted to be in the forefront, ... start things, ... be there when something's up, ... I've also early in my life became head of department of a school, ... I was headmistress of a private school when I was in my twenties. When we moved (to Potchefstroom), I still had these aspirations. It was so strange when the Gazette (advertising teaching posts) eventually came out that I just had a very strong feeling that I don't have to prove anything. I don't even feel like applying to anything, because right now I am so happy with the way things have worked out, I'm so happy teaching these little grade I's."

#### 5.4.1.5 Category 5: Effect of improved coping behaviour

'Coping behaviour' can be described as: "(to) deal effectively with something difficult" (The New Oxford Dictionary of English, 1999:405); and "Any behaviour, whether deliberate or not, that reduces stress or enables a person to deal with a situation without excessive stress" (Sutherland, 1995:102). Members of the experimental group in this study who practised CSM reported effects that signified the experience of better coping as a consequence of the practise of CSM.

Table 5.34: Effect of improved coping behaviour

Category 5	Effect of improved coping behaviour	n = 13
Subcategory	Improved emotional-founded coping	8
	Improved problem-focused coping	7
THE PROPERTY OF THE PROPERTY O	Improved resilience	7
	improved crisis management	4

The category 'Effect of improved coping' and its subcategories are formulated from the following direct verbatim quotations:

#### Improved emotional-focused coping

Participants reported that they experienced a greater ability for emotional-focused coping in the sense that they were more relaxed in dealing with problem situations, they felt they had a coping mechanism or 'crutch' to lean on, and were able to become less subjectively involved or more detached in facing problems.

- E: "Ek is baie rustiger, ek kan probleemsituasies baie beter hanteer."
  [I am much more tranquil, I can handle problem situations much better.]
- AS: "Toe my stresvlak, toe dit nou 'genuine' erg is, toe het ek daai kruk om op te leuen."

[When my stress level, when it got 'genuine' severe, then I had that crutch to lean on. ]

- R: "Ek kan ook sê dat dit (CSM) vir my werklik 'n kruk geword het op in stadium en het gehelp om 'n situasie makliker te hanteer."
  - [I can also say that it (CSM) really became a crutch for me at a stage and helped met to handle a situation better.]
- D: "I'am just more calm, I don't panic (CSM) calmed me down."

- L: "I stopped my medication (for depression) a few months ago and uh, when I was sure I could cope and handle, because this (CSM) has given me a coping mechanism."
- TS: "Ek het gevind dat ek ... meer oefen as wat altyd, miskien omdat ek meer ontspanne was. Dit was net makliker."

  [I have found that I ... exercise more as has always been the case, maybe

because I was more relaxed. It was just easier. ]

- TC: "Dis vir my asof ek ampter 'buite' krisisse kan staan en amper daarop en, en dit so benader, so asof jy nie meer so intens persoonlik betrokke raak nie." [For me it is as if I can almost stand 'outside' crises and almost on top and, approach it as such, in such a way as if you don't get so intensely personally involved.]
- T: "One takes them (work-related problems) in one's stride ... at the end it doensn't look so overwhelming."

#### Improved problem-focused coping

Participants reported that they experienced a greater ability for problem-focused coping in the sense that they were in a better position to face their problems and deal with them.

- TC: "As daar nou 'n krisis met 'n personeellid is, dan hanteer jy daai ding. Dis nie (asof) die hele skool is in chaos nie. Jy kon identifiseer en 'pinpoint' net daai probleem oplos, en die ander goed nog positief ervaar."

  [If there is a crisis with a staff member now, then you handle it. It is not (as if) the whole school is in chaos. You could identify and 'pinpoint' just solve that problem, and still experience the other things positively.]
- K: "Voorheen het ek gryp maar mos altyd ook 'n lappie en dan 'titevate' ek en vee af. Nou wag ek tot die klas goed vuil is en dan sê ek luister, julle maak daai hoek skoon, julle daai. Bring môre politoer en alles. Ek neem nie meer alles op myself nie."

[Before I had – always pick up a cloth and then I 'titevate' and wipe. Now I wait until the class is dirty and then I say listen, you clean that corner, you that. Tomorrow bring polish and every thing. I don't take everything upon myself any more. I

AS: "In my persoonlike lewe ook, het ek 'n probleem in my huwelik wat ek baie lank mee gesit het en dit nooit werklik kan hanteer – 'n oplossing daarvoor – dit half tot 'n punt kan dryf nie, terwyl ek lankal geweet het ek moet, ek het dit tog reggekry..."

[In my personal life also, I have a problem in my marriage which I sat with for a long time and never really could handle — a solution for it — it drove to a point, whilst I knew for a long time I had to, I have nevertheless achieved it...]

TS: "Voorheen sou ek gedink het ugh, krisis, stres, stres, hanteer. Nou ... take it with the rest, ek stres bitter min deesdae."

[Before I would have thought ugh, crisis, stress, stress, handle. Now ... take it with the rest, I stress very seldom nowadays.]

- T: "Before one started the idea was always when will this year pass so that I could take a package (and go on pension) or leave this collapsing ship (educational system) here. But now I find that even if there are problems it seems I'm actually lucky to be there."
- D: "I now had time to go out and actually consult him (mininster of religion) instead of going through that (spiritual crises) by myself and I spoke to him and he said 'you know I understand' it made me feel better."
- L: "At school I remember times when I shouted that I felt dizzy. I've just stopped that. I just calmly organize the situation."

#### Improved resilience

Participants reported that they experienced greater resilience in the sense that they felt more resilient to cope with problems and crises in their lives.

- T: "I would say by taking part in meditation like this, "strengthens one's mind", and so it makes you, encourage you."
- TC: "Soos amper of dit ('n krisis) 'n mens nie meer raak nie. Dis nogal baie handig gewees."

  [Almost as if it (a crisis) doesn't concern one any more. It was rather handy.]
- TS: "Ek dink voorheen was ek baie meer, as iets verkeerd gaan ... met 'n beplanning ... dan het ek vreeslik 'opgestres'. En nou is dit vir my ... totaal ... dit is ... on with it."
  - [I think previously I was a lot more, if something goes wrong ... with planning ... then I stressed terribly. And now it is for me ... totally ... it is ... on with it.]
- J: "Maak nie saak watter aanslae kom van die kante af nie jy's geestelike sterk genoeg om dit te hanteer en dit bly vir my 'n geweldige pluspunt."

  [It doesn't matter which onslaughts come from the sides you are spiritually strong enough to handle it for me and it remains an enormous plus point.]
- L: "I stopped using the medication (for depression) to focus on my meditation and to focus on my quality times and it (CSM) helped me to just get out of a stage in my life I did not enjoy at all."
- R: "Ek het ook 'n slegte situasie gehad van my dogter wat Engeland toe is wat ek nie gedink het ek gaan oorleef nie, en ek cope baie goed daarmee."

  [I have also had a bad situation with my daughter who went to England that I didn't think I was going to survive, and I cope well with it.]
- AS: "Ek dink dat ek definitief nie (sonder CSM) die mate van stress sou kon hanteer wat ek die afgelope maand tot ses weke in my lewe gehad het nie."

  [I definitely don't think that (without CSM) I would have been able to handle the measure of stress that I had the past month to six weeks in my life.]

#### Improved crisis management

Participants reported that they experienced a greater ability to manage crises in the sense that they felt they could deal better with crises in their lives.

- AS: "Ek dink ek het meer ... waagmoed om te besef, maar enige krisis, hanteer dit en kry dit agter die rug."
  - [I think I have more ... intrepidity to realise, but any crisis, handle it and get it over and done.]
- T: "Before there was always this feeling when this year passed, so that I can resign.

  But now I think I sort of find that I enjoy it even if so many crises coming but I seem to be enjoying it."
- TC: "Die meeste mense het nie eens geweet van die krisis wat daar was nie ... en dis nogal baie goed."
  - [Most of the people didn't even know of the crisis that has been there ... and it is rather very good.]
- TC: "Dis (CSM) beskikbaar in 'n krisis, selfs om agterna ook te kan herstel. Dit was vir my die moeite werd gewees."
  - [It is (CSM) available in a crisis, even to recuperate also afterwards. It was worth my while.]

#### 5.4.1.6 Category 6: Effect of improved social interaction

"Social interaction" can be described as: "... the behaviour of one's acts as a stimulus for the behaviour of another, and vice versa" (Reber, 1995:381). Members of the experimental group in this study who practised CSM reported effects that signified the experience of better social interaction as a consequence of the practise of CSM.

Table 5.35: Effect of improved social interaction

Category 6	Effect of improved social interaction	n = 13
Subcategory	Improved general and collegial relations	7
	Improved teaching-learning relations	7
	Increased reaching out to others	5
	Increased acceptance of others	5
	Improved approachability by others	4
	Improved family relations	3

The category 'Effect of improved social interaction' and its subcategories are formulated from the following direct verbatim quotations:

#### Improved general and collegial relations

Participants reported that they experienced better general and collegial relations in the sense that they were more relaxed, accommodating and friendly towards others, which had a positive reciprocal effect.

- T: "You are able to relate better (to other persons)."
- R: "Ek dink die feit dat ek in myself rustiger is maak my optrede teenoor ander, 'n ander ou rustiger en hy's meer spontaan terug na my kant toe daar kan ék 'n verskil agterkom."

[I think the fact that I am more tranquil in myself, makes my conduct toward others, another person more tranquil and he's more spontaneous towards my side – there can I see is a difference.]

L: "Dit het seker op ander mense se lewe ook 'n effek as jy opgeruimd voel en groet ... wel ek is vriendeliker."

[It must also have an effect on other people's lives if you are in good spirits and greet them ... well I am friendlier.]

B: "'n Ou volg makliker die goue middeweg (in interaksie met kollegas)."
[One follows the middle way more easily.]

E: "Wat my menseverhouding betref het ek baie gegroei – ek kom makliker met my kollegas by die skool klaar."

[As far as my human relations are concerned I have grown a lot – I get on easier with my colleagues at school.]

AS: "Ek het dit net besef (na voortdurende konflik met 'n kollega), ... maar ag sies tog, maar sy's eintlik 'n baie sagte mens, sy's nie eintlik kwaad vir my nie, sy's kwaad vir die wêreld."

[I have just realised it (after continuous conflict with a colleague) ... oh shame, but she is really a very soft person, she's not angry with me, she's angry with the world.]

TC: "Ek (het) geweet dat om net dit – die probleem (met die voorsitter van die skool se bestuursliggaam) as sulks op te los, die krisis, die punt waaroor ons nie saamstem nie, om daardie punt op te los en nie die hele verhouding as troebel te ervaar nie."

[I knew that to (do) just that – solve the problem as such (with the chairperson of the management committee of the school), the crisis, the point that we could not agree upon, to solve that point and not to experience the whole relationship as turbid.]

#### Improved teaching-learning relations

Participants reported that they experienced better teaching-learning relations in the sense that they were calmer, made better contact with learners, listened more and acted-out less in their relationships with learners.

T: "I had a calming effect on the class."

R: "Dit (rustigheid) het uitgekring na baie ander goeters soos ... jou kinders in jou klas en al daardies."

[It (tranquillity) has rippled outwards toward many other things such as ... your children in your class and all these.]

- J: "Mens het nog beter kontak gemaak (met leerders) omdat jy soos hulle kan dink, en op hulle vlak kan inbeweeg. Dis ... basies wat ek ervaar het."

  [One made even better contact (with learners) because you can think like them and are able to move onto their level. That is basically what I experienced.]
- L: "At school, I rember times when I shouted that I felt dizzy. I'v just stopped that. I just calmly organize the situation."
- D: "I listen to the girls a lot more (in the residence)."
  "I listen more I used to listen, but you know, not listen."
- A: "Ek het eenkeer in die eksamen ... op hulle (die leerders) geskree ...'I was harsh'.

  I immediately just said: 'Look I'm sorry, I was wrong'. In the past ... I wouldn't have said it."

  [Once in the exam I had ... screamed at them (the learners) ... 'I was harsh.' I immediately just said: 'Look I'm sorry, I was wrong'. In the past ... I wouldn't have said it.]
- AS: "Wat my klasse betref (het ek) vir hulle gesê ... 'Kyk hier, ek gaan nie weer op julle skree en skel nie ek wil dit nie doen nie ... julle is mense en julle weet ek het julle baie lief en dis vir my vernederend as ek op julle skel en skree'. Party kinders het my regtig aangekyk asof .. Haai, dis eintlik 'n mens wat ... (praat)."

  [As far as my classes are concerned (I) said to them ... 'Look here I am not going to scream and shout I don't want to do it ... you are human beings and you know I love you very much and it is degrading if I shout and scream at you'. Some children really looked at me as if ... 'Hey this is actually a human being that .. (talks)'.]

#### Increased reaching out to others

Participants reported that they experienced a greater ability to reach out to others in

the sense that they reached out more to other persons, became more involved and supportive of other persons and interacted easier with other persons.

- T: "After the meditation one is able to reach (out to people in sermons). Personally, I also tend to enjoy it (giving the sermons) more."
- J: "Omdat my Christenskap baie nou verwant is aan my hele lewe, dink ek die verdieping wat daar plaasgevind het (weens die beoefening van CSM) het deurgespoel ... op my uitreiking na ander mense."

  [Because my Christianness is closely related to my whole life, I think the deepening that occurred there (due to the practise of CSM) have flown through ... to my outreach to other people.]
- L: "I felt that I am so able to become much more involved (with problems experienced by friends)."
- L: "My husband ... I needed to become a crutch for him."
- E: "Ek kom makliker (uit) dat ek nou uitbeweeg en ek gesels makliker met mense."
  [I come (out) easier (in the sense) that I now move out and converse with other people.]

#### • Increased acceptance of others

Participants reported that they experienced a greater ability to accept other persons in the sense that they accept other persons for whom they are, they felt more compassionate and less self-centred.

- D: "I' am more accepting of people. I expect a lot of quality of work, if people don't do that, then I'm 'aggro'. Now I'm sort accepting that they've got their own standards."
- E: "Ek aanvaar ander mense ook vir wat hulle is nou."
  [I accept other people for what they are now.]

- R: "(Dis) asof 'n mens meer sort van deernis het teenoor 'n ander se foute. Ek het definitief meer verdraagsaamheid daarteenoor (ander se foute) ontwikkel."
  [(It is) as if one has a sort of compassion towards anothers' mistakes. I have definitely developed more tolerance towards it (others' mistakes).]
- T: "I could see that they were enjoying it, themselves (watching sport on television).

  One ... can see it is because there is no 'disasters' from my side (conflict), and it is this thing of work all the time (work induced stress and the effects thereof)."
- A: "Ek dink ek is baie minder 'ek-gesentreer'."
  [I think I am a lot less 'I-centered', ]

#### Improved approachability by others

Participants reported that they experienced that they were more easily approached by other persons in the sense that they were more open and had more time for interaction with other persons.

- TC: "Ek begin meer en meer toeganklik wees."
  [I begin to be more approachable.]
- A: "Ek dink ek het hulle (vriende en ander mense) meer toegelaat om nader te kom, en ek het myself nog baie meer oopgemaak, wat ek voorheen ek was baie in my vel getrek ... nou is ek kalmer en rustig."

  [I think I have allowed them (friends and other people) to come nearer, and I have opened myself up a lot more even, which I previously I was very drawn into myself ... now I am more calm and tranquil.]
- R: "Dit (CSM) ... maak jou oop vir andere, en maak die deure baie meer oop."

  [It (CSM) ... makes you open to others, and opens the doors much more.]
- D: "I work so much with the girls I think I'm making more time for them."

#### Improved family relations

Participants reported that they experienced better familial relations in the sense that

they obtained insights about their role and their stress in relation to family life, which impacted on their attitude and behaviour.

- T: "In the entire process (practising CSM) we find that it also perhaps affects my family life at home (positively)."
- AS: "(Ek) besef net, ek werk nie vir myself nie, ek werk vir die gesin."
  [(I) just realise, I don't work for myself, I work for the family.]
- L: "I've been a real burden to my husband ... really making his life more complicated with my emotional outbursts, crying all the time and wanting to sleep all the time, to becoming the wife I used to be."

#### 5.4.1.7 Category 7: Effect of transcending experiences

'Transcending experiences' can be described as: "experiences that go beyond the present state of awareness in the direction of more refined states of consciousness, commonly referred to as 'peak', 'religious' or 'mystical' experiences" (Gelderloos et al., 1990:178). Members of the experimental group in this study who practised CSM reported effects that signified the experience of transcendent experiences as a consequence of the practise of CSM.

Table 5.36: Effect of transcending experiences

Category 7	Effect of transcending experiences	n = 13
Subcategory	Deepening of relationship with God	6
	Deepening of personal spiritual experience	5

The category 'Effect of transcending experiences' and its subcategories are formulated from the following direct verbatim quotations:

#### Deepening of relationship with God

Participants reported that they experienced a deepening of their personal relationship

with God in the sense that they experienced a deeper and closer spiritual relationship and "open" channel to God.

- J: "Ek sal sê ek mediteer op die Woord van God in die eerste plek (dit) kan tot geweldige geestelike verdieping lei."

  [I shall say I meditate upon the Word of God in the first place (it can lead to immense spiritual deepening.]
- H: "Ek het ook 'n dramatiese (religieuse) verdieping ervaar ... dis baie baie diep."
  [I have also experienced a dramatic (religious) deepening ... it is very very deep.]
- L: "I started to use words from the Word (Bible) to meditate. My relationship with the Lord became more really."
- B: "Ek dink vir my het dit (verdieping in geloof ervaar) tog belangriker geword."
  [I think for me it (deepened religious experience) had become yet more important.]
- R: "Dis vir my of daar soort van, soos 'n mis weggegaan het so 'n opening dink ek (in die verhouding tot God). Dis soos 'n 'oop kanaal' ... en daai "mistigheid" en, blokkasies wat daar was, soort van oopgegaan het."

  [It is for me as if there sort of, like a mist vanishing thus a passage I think (in the relationship to God). As such an 'open channel' ... and that.]
- AS: "Dis of ek nou meer, dat ek werklik weet hier's 'n oop, 'n absolute oop kanaal ek is met God versoen en hy luister vir my ... 'I've crossed the bridge there'."

  [It is as if I now more, that I really know here is an open, an absolute open channel I am reconciled with God and He listens to me ... I've crossed the bridge there.]

#### Deepening of personal spiritual experience

Participants reported that they experienced deeper personal spiritual experiences in the sense that they had individual and intimate personal spiritual experiences.

- J: "Ek het dit (CSM) gebruik om stil te word voor die Here ... ek kan amper sê, 'n geloofservaring te hê'. Dit het nogal vir my goed gewerk."

  [I have used it (CSM) to become still before the Lord ... I can almost say , to have a religious experience. It worked rather well for me.]
- AS: "Ek glo dis God in meditasie, dat ek beslis ... beter kan konsentreer, maar wanneer ek my Bybel lees baie meer dinge ervaar."
  [I believe it is God in meditation, that I definitely ... can concentrate better, but when I read my Bible experience many more things.]
- J: "Dit is stil word voor God en stil in jouself om te kan hoor wat Hy sê."
  [It is becoming still before God and still in yourself to be able to hear what He says.]
- L: "To me it (using words from the Bible to meditate): 'You shall go out with joy and go forth with peace' made such a difference ... I really experience God's joy and His peace."
- E: "Ek het wonderlike ervaringe gehad tydens my meditasie ... dis altyd 'n opbeweeg en dat ek voel ek is by God. Ek is daar by Hom in daai mistigheid."
  [I had wonderful experiences during my meditation ... it is always a moving up and that I feel I am with God. I am there with Him in that mistiness.]

# 5.4.2 Points of strength and difficulty concerning the process of learning and practising CSM as perceived by participants and noted in the interviews

#### 5.4.2.1 Points of strength of the prosess

#### Support

Six of the participants were of the opinion that they found the Monitoring and Motivation sessions valuable due to the support and guidance they received as part of the checking and to hear what others had to say about their experiences and ways of dealing with problems in the practise of CSM.

#### Teaching and Materials

Three of the participants commented on the thoroughness of the teaching of CSM to them and the materials provided (see 4.5.1).

#### Permissiveness of mantra choice

Two of the participants were very positive about the fact that they could choose their own mantra with their own religious significance.

#### 5.4.2.2 Points of difficulty of the process

#### Struggle with compliance

Six participants experienced problems with compliance in practising CSM, sometimes especially in times of crises. Continuous motivation was therefore necessary, especially in the beginning of the practise of CSM.

#### Need to meditate together

Six participants expressed the need to have practised CSM together in group format, because this would have helped them with compliance. Although this might have led to an enhanced experience of, and better compliance to the practise of CSM, this might have served also as an external variable impacting on the personal or individual experience of the practise of CSM due to a raised expectancy of the effects of CSM. Outside of the research setting, group practise of CSM will be encouraged in the future.

Group and individual versus only individual practise of CSM might yield interesting results, which have to be investigated in future.

#### Problems with 'Eastern' connotations of meditation

Five participants reported that they had problems with 'Eastern' connotations with meditation, which they denounced totally. Only after the 'cult-freeness' of CSM had been pointed out thoroughly, were they more at ease. The cult-freeness of CSM and the fact that a participant can assign his/her own value system to CSM by the choice of a mantra, is a very strong argument in favour of CSM.

#### Distractions

Three of the participants reported that they struggled with distractions during the practise of CSM, because their home environments were often not quiet enough (like living in a residence of a school).

#### Struggle to start CSM

Three of the participants reported that they struggled to get started on CSM in the beginning. One was a bit sceptical. They were, however, motivated to get started – one of them in an individual session. Thereafter they proceeded well.

#### The use of CSM for religious purposes

One of the participants noted explicitly that (with the advantage of hindsight) she would have liked to be made aware that CSM could be used for a religious deepening. Although this was not part of the aim of the study, one can address this need in future, especially when dealing with persons who are very spiritually conscious.

#### 5.4.3 Subjective conceptualisation of CSM

Participants conceptualised and described CSM as:

- a relaxation technique;
- the cheapest way to relax, that can be used any time, place and for any period of time;

- an alternative to the tablet (medication);
- a totally natural thing;
- a focus on yourself;
- a process of discovering yourself;
- a mechanism to let you manage problem situations better;
- an aid to overcome all the little or great crises of the day;
- a life skill.

# 5.4.4 The effects and the effectiveness of CSM as a strategy for stress management and the promotion of wellness as perceived by participants and by others and noted in the interviews

### 5.4.4.1 Views about the effectiveness of CSM as a stress management strategy as perceived by participants themselves

- All participants interviewed were of the opinion that the learning and practise of CSM for stress management were worth their while as an effective stress management strategy.
- All participants interviewed were of the opinion that they would personally use CSM
  as a life skill for stress management in the future.

## 5.4.4.2 Views about the effects and effectiveness of CSM as a stress management strategy and the promotion of wellness as perceived by others and reported by participants themselves

Seven of the participants reported that a colleague or friend had made a spontaneous comment on some or other effect they have noted in their interaction with the participant since starting the practise of CSM. Because these comments were spontaneously made they reflected both effects of CSM, and the effectiveness of CSM as a stress management strategy and the promotion of wellness. These comments were, however, on the whole very positive as is evident from the following direct verbatim quotations:

#### A: (Remark by a friend)

I was simmering below the surface' en nou het die groot 'bubble' gebars. Nou lyk dit ... of ek myself is.'

[I was simmering below the surface and now the great bubble has bursted. Now it looks ... as if I am myself.]

#### B: (Colleagues that started to define the relationship differently reflected in their remarks and behaviour.)

"Daardeur het ek 'n klomp moeilikheid gekry. Nie moeilikheid nie, die ander mense moes my anders hanteer, so ek skryf dit daaraan (assertiewe gedrag) toe."

[Thereby I encountered a lot of trouble. Not trouble really, the other people had to treat me differently, so I ascribe it to that (assertive behaviour).]

#### • H: (An old friend's remark)

"Toe sê die persoon vir my sommer so tussenin (in die gesprek), ek het vir hom vreeslik meer opvallend geword, met ander woorde ek was altyd terug in die bondel – nou staan ek 'n bietjie uit."

[Then the person said to me (someway through the conversation), I had become terribly more striking to him, in other words I was always back in the bunch, now I stand out some what.]

#### RC: (Remark by cell group in church context.)

"Toe sê hulle vir my 'ek is vir hulle rustiger', ek was altyd ... 'geworried', wou nêrens heen gaan nie."

[Then they said to me 'I am more relaxed', I was always ... 'worried', wouldn't have gone nowhere.]

#### L: (Remark by colleague.)

"Wel, ek is vriendeliker. Een ('n kollega) het vir my gesê ek is altyd so 'n briesie – en, en dit het vir my baie betekenis hoor!"

[Well, I am friendlier. One (a colleague) said to me I am always such a little breeze – and, and listen that has got a lot of meaning for me. ]

#### A: (Remark by a member of the experimental group whom had known A before the study very well.)

"Ek kan self 'n baie groot verskil sien. Sy was baie nors. Sy is (nou) baie rustiger."

[I can see a huge difference myself. She was very grumpy. She is (now) much more relaxed.]

#### TC: (Remark by colleague.)

"Die een vrou het vir my gesê dat as sy in my posisie was, sou sy so groot soos 'n olifant gewees het, want al manier wat sy die dinge kan verwerk, is om ekstra te eet."

[The one lady said to me that if she were in my position, she would have been as large as an elephant, because the only way she can cope with things, is to eat more.]

# 5.4.5 The effects and effectiveness of CSM as a strategy for stress management and the promotion of wellness noted in the telephone interview by the spouses or colleagues of members of the experimental group

Unfortunately, due to the fact that the post-testing was conducted on the first two days after the school holiday had started, all contact persons for all participants were not available, since some of them had left on holiday. Only eight persons could therefore be contacted for telephone interviews. The following effects and effectiveness of CSM were perceived and noted, and are substantiated from direct verbatim quotations:

### 5.4.5.1 No effects or effectiveness of CSM noted by interviewees during the telephone interview

Two telephone interviewees reported that they did not perceive any changes:

#### D: (Remark of husband)

"No, I didn't notice anything ... we're too busy to .. at the moment."

#### TS: (Remark by colleague.)

"Ek kan nie regtig sê dat ek 'n verskil gesien het nie." [I cannot really say that I saw a difference.]

This leaves six telephone interviewees who noted and reported changes perceived.

## 5.4.5.2 The effects of CSM as a strategy to promote wellness perceived and noted by interviewees during the telephone interview

The following effects of CSM were perceived and noted by telephone interviewees (spouse or colleague) in individual participants in the experimental group:

#### T (Remarks by wife: Second Language Speaker)

"Hy het nie lank geslaap nie. Nou slaap hy reg." [He didn't sleep long. Now he sleeps right.]

"Altyd hy was moeg, na dit (CSM) hy was nie moeg nie, hy was 'fluks' (energiek)." [Always he was tired, after it (CSM) he wasn't tired, he was energetic.]

"Hy het eers met (oor sy) kop gekla – hoofpyn. Nou, hy's reg."
[He first complained with (about) his head – headache. Now he's alright.]

"Hy het "lankmoed" (terneergedruk) gewees voor, nou hy is goed."
[He was despondent before, now he is well.]

"Hy konsentreer baie goed."
[He concentrates very well.]

#### TC (Remarks by colleague)

"Daar (in die skoolopset) was sy regtig baie rustig in 'n baie spanningsvolle tyd."
[There (in the school context) she was really very tranquil during a very stressful time.]

"Sy was rustiger want ons het nou al ons personeel moes benoem, en dit was onderhoude en al sulke goed, maar TC het aan die gang gebly, jy weet."

[She was more tranquil because we had to appoint all our staff, and it was interviews and such, but she stayed on the go, you know.]

#### A (Remarks by colleague)

"Basically, she used to be a very abrubt person, and she wasn't as abrubt."

"Apart from being calm, more eve-tempered."

"It helped her to make up her mind ... she now knows what she wants to do. So she's become direction orientated."

#### SvH (Remarks by colleague)

"Sy het baie rustigheid in haarself gekry en dinge meer op 'n kalm manier beleef." [She found much of tranquillity in herself and experienced things more in a calm way.]

"Sy het deur 'n krisis gegaan en sy moes groot besluite neem en dit was asof sy baie meer 'oopheid' gehad het."

[She went through a crisis and she had to take huge decisions and it was as if she had more 'openness'.]

"Sy was vir my nie meer so negatief nie. Sy het nie net die negatiewe sy van die saak gesien nie. Sy was meer positief gewees oor baie dinge,"

[She was not so negative any more for me. She didn't only see the negative side of the issue. She was more positive about a lot of things.]

"Sy was bereid om te wag en die ding tyd te gee om sy loop te neem, sy wou nie net inspring en die ding self verander nie."

[She was willing to wait and to give the thing time to take its course, she wouldn't just jump in and change the thing herself.]

"Sy het meer oopgemaak teenoor ander mense as wat sy bereid was voor die tyd." [She opened up more to other people than she was willing to before the time.]

#### B (Remarks by wife)

"Ek dink dis (CSM) 'n manier van ontspanning ook gewees -- definitief."
[I think it (CSM) was a way of relaxation also -- definitely.]

"Daar (is) sekere dinge wat hy miskien meer beredeneerd oor was as wat hy aanvanklik oor sou gewees het."

[There (are) certain things that he was more reasoned about, as what he might have been initially.]

"Die beste was dat hy na andere kon luister ... ander se redenasies." [The best was that he could listen to others ... other's arguments.]

"Hy is ... oop vir andere se oortuiginge ... definitief."
[He is ... open for others' convictions ... definitely.]

"(Hy kan nou) self iemand konfronteer ... sonder dat hy dit voorheen rêrig gedoen het."

[(Now he can) confront somebody himself ... without having had done it previously really.]

#### AS (Remarks by colleague)

"Selfs in baie negatiewe omstandighede – weet ek het sy nie 'gecrack' nie." [Even in very negative circumstances – I know she did not 'crack'.]

"Sy het 'n positiewe houding ingeneem."

[She assumed a positive attitude.]

"Al wat ek kan sê is dat ek die laaste tyd agtergekom het dat sy meer ... die wil het om, om op te staan. Die krag het om op te staan vir haarself, en nie bang is om dit te doen nie."

[All that I can say is that I have noticed lately that she is more ... has the will to, stand up. Has the power to stand up for herself, and is not afraid to do it.]

#### RC (Remarks by colleague)

"Sy was altyd baie bang om te waag – sy begin baie meer waagmoed aan die dag lê."

[She was always very afraid to venture – she begins to become much more daring.]

"Sy het baie meer vriende begin maak in die laaste tyd."

[She has started to make a lot more friends lately, ]

"Sy het baie meer fisies begin raak. Sy het baie meer dinge begin doen soos stap." [She has become a lot more physical. She has started to do a lot more things like walking.]

"Haar selfvertroue (het toegeneem)."

[Her self-confidence (has increased).]

"Sy het definitief baie meer 'seker' (assertief) geraak."

[She has definitely become more confident (assertive).]

"Ek het definitief 'n baie groot verandering gesien in haar houding teenoor die lewe."

If have definitely observed a great change in her attitude towards life.]

It seems from the direct verbatim quotations on the effects of CSM given by the interviewees during the telephone interview as if general themes can be found as far as effects of CSM are concerned. Participants in the experimental group projected general themes such as improved ways of coping, were less negative and had an improved orientation or attitude towards life. Participants also seemed more calm and relaxed, had improved relationships with others and were more assertive. Individual idiosyncratic effects were also noted. The general effects noted above are significant in terms of triangulation because great similarities between categories and subcategories found in the individual interviews (see 5.3.1) and themes found in the perceived and noted effects of CSM in the telephone interviews can be identified as they relate to wellness.

## 5.4.5.3 The effectiveness of CSM as a strategy for stress management perceived and noted by interviewees during the telephone interview

The following perceptions concerning the effectiveness of CSM as a stress management technique strategy were noted by interviewees in individual participants in the experimental group:

#### T (Remark by wife)

"Dit (CSM) het goed gewerk ( om stres te bestuur)."
[It (CSM) has worked very well (to manage stress.]

#### • TC (Remark by colleague)

"Sy is deur moeilike tye nou, en sy het dit wonderlik gehanteer ... dit was 'n hoë stresperiode en sy het dit goed hanteer."

[She has gone through a difficult time now, and she has handled it wonderfully ... it was a period of high stress and she coped well.]

#### B (Remark by wife)

"Ek dink dit (CSM) was vir hom 'n goeie stresontlading. Om daarvan (stress) 'n bietjie kalm te raak."

[I think it (CSM) was a very good stress discharge. To become a little bit calm from it (stress).]

#### AS (Remark by colleague)

"Sy het definitief – ek het nogal my hart vasgehou vir die omstandighede die laaste tyd en dit was eintlik vir my baie mooi om te sien hoe – dit was vir my 'n aanmoediging – om te sien hoe sy die situasie hanteer."

[She has definitely – I have rather held my heart for the circumstances recently and it was actually beautiful to see how – it was an encouragement for me – to see how she handled the situation.]

#### A (Remark by colleague)

"It (CSM) made her a lot calmer after what she had to go through (divorce)."

#### SvH (Remark by colleague)

"Wat ek van haar kon opmerk was dat sy baie rustigheid in haarself gekry en dinge meer op 'n kalm manier beleef... Ek weet net sy het baie baat daarby (CSM) gevind."

[What I could notice from her was that she had found a lot of tranquillity in herself and experienced things in a more calm manner... I know she has derived a lot of benefit from it (CSM).]

It is evident from the above direct verbatim quotations that CSM was perceived as an effective stress management strategy by the spouse or colleague interviewed of each individual participant of the experimental group – except those that were not available for interviews or those two that had nothing to report (see 5.3.5.1). The perceived effectiveness of CSM as a stress management strategy is significant in terms of triangulation because of the similar perceptions reflected in the individual interviews (see 5.3.4).

# 5.4.6 The effects and effectiveness of CSM as a strategy for stress management and the promotion of wellness as perceived and noted in the diaries received back from the members of the experimental group

Participants, the members of the experimental group, each received a diary at the start of the study. They were asked to keep note on the frequency of their meditation sessions per day and the time per session in minutes and to write down their noteworthy experiences, insights and realisations when, and if, they had them. Participants were asked to fill in the forms whenever possible but without feeling guilty if they did not manage to find the time. The whole request was put to them in a respectful manner so as to make sure that it wasn't experienced as some form of coercion, which might impact negatively on the experience of CSM itself. The downside to this approach, however, was that only eight of the possible thirteen diaries had been received back. Valuable contributions were however received.

Certain conclusions can be made after the analysis of the diaries received, such as the general frequency per day and time of practise per session, effects of CSM and points of strength and difficulty in the everyday practise of CSM.

## 5.4.6.1 General frequency per day and time of practise per session noted by participants in their diaries

In terms of diaries received back from participants it is difficult to form a general conclusion as to the general frequency of meditation sessions done per day. Although nearly all participants started with two sessions per day, some kept to two sessions per day, whilst others opted for one session per day. Most participants, however, ceased to practise CSM somewhere during the course of the study, usually after they experienced some form of personal difficulty or crises in their lives, when they actually could really benefit from CSM. All resumed the practise, however, within a short span of time, often to use it when difficulties or crises were experienced later on.

As far as the time of practise per session is concerned, everybody started with a 10-minute session as indicated by the CSM materials. Most participants increased their time of practise per session according to schedule until they reached 20 minutes per session. Thereafter participants generally self-regulated their time of practise per session. Some opted for example for a fixed 20, 15 or 10 — minute practise per session, whilst others changed their time of practise per session according to their needs and/or time available. Despite the caution one participant started to over meditate with frightening hallucinatory consequences for the participant. The situation was quickly resolved with a word of caution, an explanation of the problem and a reduction of meditation time. This particular participant resumed her meditation without problems.

## 5.4.6.2 The effects and effectiveness of CSM as a strategy for stress management and the promotion of wellness as perceived and noted by participants in their diaries

Participants report that they:

- are more calm and relaxed;
- have less physical tension;

- sleep better and CSM often helps them to overcome insomnia;
- concentrate better;
- feel less tired;
- use CSM when they are tired and report that afterwards it feel as if they have slept or feel better than having slept;
- feel resilient and that they can take more pressure;
- feel more energetic;
- use CSM for pain management (headaches and muscle aches);
- feel less anxious;
- have more self-confidence and a better self-image;
- are generally more assertive;
- use mini-meditations with great calming effect;
- feel more in contact with self;
- feel more in control of life;
- think that they cope better;
- experience feelings of well-being;
- experience much of fantasy one person distinctly described experiences of regression and revivification analogous to hypnotic trance;
- using less medication;
- experience transcending experiences.

Although all the participants didn't experience all the above effects, there was a fair amount of overlap in effects described. These effects noted above are significant in terms of triangulation, because great similarities between categories and subcategories found in the individual interviews (see 5.3.1) and themes found in the perceived and noted effects of CSM in the diaries can be identified. Participants were unfortunately not

asked to provide a summative evaluation of the effectiveness of CSM as a stress management strategy in their diaries. The effects noted, however, suggest that participants attained a higher level of functioning and wellness and an ability to manage stress actively and being better resourced in doing so. It can therefore be argued that CSM was construed as an effective stress management and wellness promoting strategy.

### 5.4.6.3 Points of strength and difficulty of the process of learning and practising CSM as perceived by participants and noted in the diaries

As far as the strengths are concerned, participants noted that:

- they generally experienced their first session of CSM as extremely positive, and found it to be a wonderful experience;
- they experimented with different mantras and the use of it;
- some participants used more than one mantra one for meditational purposes
  purely, and one to help to overcome insomnia instead of using medication;
- sometimes they spontaneously changed the mantra during the practise of CSM and felt very comfortable about it;
- the holiday seemed to be an excellent time to learn and start the practise of CSM;
- they used CSM and mini-meditations strategically in different contexts (such as before an appointment with the bank manager) during the day with great calming effect.

As far as difficulties are concerned, participants reported that they:

- found it difficult to start;
- found it often difficult to continue with CSM when experiencing problems or crises in life;
- often felt restless during the practise of CSM;
- often experienced intrusive thoughts during the practise of CSM;
- experienced side-effects of tension release (see 3.6.1);

- found it difficult to establish a meditation routine:
- found interruptions guite disturbing:
- found it difficult to practise when they were ill, or when family came to visit during weekends or holiday;
- found environmental influences difficult to handle during the practise of CSM;
- found the earlier person-environment fit becoming dysfunctional because new found assertiveness and resilience led to opposition from others in order to try to maintain the status quo of earlier patterns of interaction.

The last point of difficulty is actually a very strong point due to the combination of the effects of assertiveness and resilience leading to an outcome of more egalitarian patterns of interaction. It might thus be construed as a difficulty initially, but in the longer term an excellent effect. The rest of the difficulties are mostly "normal" difficulties in die course of the practise of CSM according to the CSM materials (Carrington, 1978; 1979), and mostly only need better planning of the practise of CSM to address the difficulties.

## 5.4.7 The effects and effectiveness of CSM as a strategy for stress management and the promotion of wellness noted in the physical examination

Nine of the initial twenty participants in the experimental group were on anti-depressant, anti-anxiety, sleep, or a combination of the medications. Three had hypertension of which one was on medication for hypertension. Some participants did report a decrease of use of medication. The reduction in medication was, however, not quantified to provide a statistical indication of decrease in the use of medication. Moreover, the intake of medication was often reduced strategically by participants themselves within the parameters of their prescription which made it difficult to report on decreases other than those reported subjectively in the interview by the participants themselves (see 5.3.1.1). Only the prescribed dose was noted down in the physical examination.

Because the physical examination was conducted by an independent medical professional, it did not yield as much information about the effects of CSM as the

researcher had hoped for. This was probably due to the fact that the examiner did not elicit, noticed, or noted possible relevant information down concerning the effects of CSM. This examination was primarily concerned about the effects of CSM and not the effectiveness of CSM as a stress management strategy, and the limitations of, cautions in, and contra-indications of the use of meditation in mind (see 3.6). The only indication of an effect of CSM therefore, of relevance for triangulation as far as the physical examination is concerned, is that of the decrease in the use of medication.

What did emerge from the physical examination, is that a significant number of the members of the experimental and control groups did not have an optimum physical health status — a condition most probably exacerbated by stress. This also suggests a more holistic, multi-pronged approach to stress management, such as for example, exercise, dietary changes, et cetera.

## 5.4.8 Participant observation related to the process of teaching, practising and monitoring of CSM as a strategy for stress management and the promotion of wellness

In spite of the fact that the city of Potchefstroom is quite conservative, most participants in the study carried through with the research. Some participants were initially concerned about the practise of meditation and viewed it as an "Eastern" practice only. After explaining to them that CSM was a cult free modern form of meditation they were generally satisfied. One participant did, however, discontinue the practise of CSM on religious grounds, but without discussing her concerns with the researcher. The researcher, however, did get the impression that she was not very committed to her role in the experimental group from the outset of the study. She had some psychological problems and was on medication for a long time before the study started. The researcher did get the impression that she was looking for a quick solution to her problems without the willingness to invest the time and energy needed in the practise of CSM.

A few participants, in spite of their misgivings being addressed, chose to make use of the words 'relaxation exercise' instead of 'meditation', and/or 'focus word' instead of 'mantra'

due to some negative religious connotations with the said words. This was not seen as a problem because of the permissive style of CSM and the fact that they still did practise CSM as a form of meditation. What did, however, become evident, is that a number of participants in the experimental group used CSM in a personalised spiritual manner in the sense that they used a mantra with a personal spiritual significance, and used it enhancingly before or after their own religious worship. After experiencing the transcendent effects of CSM in their own religious worship some participants actually noted that they would have liked to know beforehand of these positively perceived effects, or to put it differently, the potential use of CSM for religious purposes.

Some participants found it difficult to start and keep up their practise of CSM. The monitoring and motivation during the checking sessions held (see 4.5.1) were therefore of great significance. Two of the participants were helped on an individual basis through individual appointments with their adherence to the practise of CSM and a number via the telephone with problems or concerns. Guidance and assistance in individual and group format was very important and noted as such by participants. Throughout the aim was to facilitate the use of an internal locus of control and not an external locus of control, so as to promote personal ownership of the technique and practise of CSM. As part of the monitoring and motivation during the first checking sessions, the researcher used a metaphor to illustrate the implanting of the skill/art of CSM and the responsibility for the practise of CSM as that of the participants. The metaphor used was that of a piece of land that has been given to each participant in the experimental group. The extent to which they farmed and worked the land would be equal to the fruits they reaped or the harvest they made. Leaving the land as received, would conversely and understandably yield little or nothing. The researcher was there as the supervisor to help with problems and provide information, but not to work the land. Every one had to take responsibility for him/herself.

Extra interesting literature was also provided to participants in the experimental group on meditation, obtained from the internet, books and popular literature such as "Why meditate", and "When is doesn't come easy – getting unstuck" (Davis et al., 1998:273-276) (see Annexure G). These participants did, however, comment on the materials of

CSM, which they thought as very thorough and excellent for learning the programme (see 3.3.3,2).

The participants in the experimental group did, however indicate that they would have liked to have had more structure in their continued practise of CSM in the sense that they would have liked to have had fixed times where they could practise CSM together in groups since it would have helped them with compliance in their own practise of CSM. Although this was initially planned, participants' schedules made such an arrangement difficult. In future however, such an attempt will definitely be pursued more vigorously. Interestingly, most of the Black teachers (three out of four) in the experimental group dropped out of the study. They cite transport problems and the fact that the checking sessions were held in the evenings as the main reasons, despite the fact that the researcher was willing to accommodate them in the afternoons.

Various stressors and effects of stress were clinically observable in the lives of the teachers during the three months the researcher had contact with the participants in the experimental group due to personal, professional, occupational, social, political, economic and other sources of stress. Importantly, however, as far as triangulation is concerned, was the fact that most of the effects and effectiveness of CSM as a strategy for stress management and the promotion of wellness that were noted in the rest of the qualitative part of this study, were also noted in the participant observation. All the qualitative data found in this study will be interpreted and synthesised in the next section in order to relate the effects found to different contexts of human existence and to provide a concluding evalution of the effectiveness of CSM as a strategy for stress management and the promotion of wellness in teachers.

# 5.5 QUALITATIVE DATA INTERPRETATION AND SYNTHESIS: THE EFFECTS AND EFFECTIVENESS OF CLINICALLY STANDARDIZED MEDITATION AS A STRATEGY FOR STRESS MANAGEMENT AND THE PROMOTION OF WELLNESS

### 5.5.1 Stress management

That CSM had the effect of more effective stress management (see 5.4.3; 5.4.4.1; 5.4.4.2; 5.4.5.2; 5.4.5.3; 5.4.6.2; 5.4.8; 5.4.11) in members of the experimental group which is supported by the effects of increased tranquillity and improved coping, referred to earlier.

### 5.5.2 Contextualisation of qualitative data in terms of the promotion of wellbeing

The point made in 4.6.3 that themes found are divided into main and subcategories in order to distinguish between them, but that these categories cannot really be regarded as separate should be reiterated. 'Tension' for example has both physical and psychological connotations, but in the categories of this study 'decreased tension' refers more to physical tension, although sight should never be lost of the psychological connotations, because a person is regarded as a psycho-biological entity, as has been pointed out in Chapter 2 as far as the contexts of human existence are concerned. The same principle of inseparability of categories (and contexts) should also be kept in mind when reflecting on other categories in this study. Keeping this in mind, the qualitative data presented in the qualitative data analysis in 5.4 can be interpreted and synthesised by a process of approximation into contexts of human existence as follows:

• That CSM had the effect of decreased tension (see 5.4.1.1; 5.4.3; 5.4.5.2; 5.4.6.2; 5.4.7) which was indicated by the improved management of physical effects of stress, improved sleep quality, increased energy, improved pain management, decreased use of medication, decreased fidgeting, improved weight management and increased activity. It therefore seems as if CSM had a positive effect on the biological context of human existence in members of the experimental group – the promotion of physical well-being.

- That CSM had the effect of increased personal mastery (see 5.4.1.2; 5.4.5.2; 5.4.6.2), which was indicated by increased personal control, increased focus and attention, decreased negative emotions and increased organisation. It therefore seems as if CSM had a positive effect on the intra-psychic context of human existence in members of the experimental group the promotion of psychological well-being.
- That CSM had the effect of an increased sense of identity (see 5.4.1.3; 5.4.3; 5.4.4.2; 5.4.5.2; 5.4.6.2), which was indicated by an increased willingness to venture, increased realistic self-expectations, increased personal integration, increased self-acceptence, increased assertiveness, increased tendency to take up a standpoint, increased self-confidence and improved self-image. It therefore seems as if CSM had a positive effect on the intra-psychic context of human existence in members of the experimental group the promotion of psychological well-being.
- That CSM had the effect of increased tranquillity (see 5.4.1.4; 5.4.5.2; 5.4.6.2) which was indicated by increased relaxedness and calm and increased serenity and contentment. It therefore seems as if CSM had a positive effect on stress management and the intra-psychic context of human existence in members of the experimental group the promotion of psychological well-being.
- That CSM had the effect of improved coping (see 6.5.1.5; 5.4.5.2; 5.4.6.2), which
  was indicated by improved emotional-focused coping, improved problem-focused
  coping, increased resilience and improved crisis management. It therefore seems
  as if CSM had positive effects on stress management and the intra-psychic context
  of human existence in members of the experimental group the promotion of
  psychological well-being.
- That CSM had the effect of improved social interaction (see 5.4.1.6; 5.4.4.2; 5.4.5.2) which was indicated by improved general and collegial relations, improved teaching-learning relations, increased reaching out to others, increased acceptance of others, improved approachability by others and improved family relations. It therefore seems as if CSM had a positive effect on the ecological context of human

existence in members of the experimental group - the improvement of social wellbeing.

- That CSM had the effect of facilitating transcending experiences (see 5.4.1.7; 5.4.6.2; 5.4.8), which was indicated by a deepening of the relationship with God and a deepening of the personal spiritual experience. It therefore seems as if CSM had a positive effect on the meta-physical context of human existence in members of the experimental group the promotion of spiritual well-being.
- That CSM had the effect of the promotion of well-being in all the contexts of human excistence of members of the experimental group if the points above as well as information collected from other sources such as significant others, telephone interviews, et cetra, are taken into consideration (see 5.4.3; 5.4.4.2; 5.4.5.2; 5.4.5.3; 5.4.6.2; 5.4.6.).

### 5.5.3 Conclusions derived from qualitative data

In concluding the qualitative data interpretation and synthesis, the point can be made that CSM had an effect on all the contexts of existence. Most effects were, however, primarily observed in the intra-psychic context. Secondary effects in other contexts can possibly be extrapolated from the effects noted in the intra-psychic context. It can be speculated that effects in contexts other than the intra-psychic contexts might have been more directly or primarily noticible, accentuated and varied if the practise of CSM had been longer. Meditation on the other hand is more of an intra-psychic activity - as opposed to physical exercise or social support which are more biological and ecological contextual activities. It is therefore understandable that the effects of CSM are primarily observed in the intra-psychic context. Apart form the magnitude of effects, CSM did have effects on all the contexts of human existence.

CSM, more specifically, had powerful effects on a range of aspects that forms part of the intra-psychic context which might be construed as aspects that can function as potential sources of, or reflect potential effects of stress, for example, the degree of personal mastery, sense of identity or experience of tranquillity. Due to the positive changes in the intra-psychic context, (such as the examples given), primary and secondary appraisals

(also intra-psychic contextual processes) may have been changed with regard to these aspects being potential sources of stress as well as potential effects of stress, and hence, better coping might have been the resultant outcome. The changes, as has been said, might have been more noticible, accentuated and varied if practise of CSM had been longer than three months as was the case in this study.

In the final analysis, the point can be made that CSM does indeed have an effect on the promotion of well-being in all the contexts of human existence and therefore seems to be effective as a strategy for the promotion of wellness as a holistic construct and for stress management in teachers.

# 5.6 QUANTITATIVE AND QUALITATIVE DATA: SYNTHESIS AND DISCUSSION OF THE EFFECTS AND EFFECTIVENESS OF CLINICALLY STANDARDIZED MEDITATION AS A STRATEGY FOR STRESS MANAGEMENT AND THE PROMOTION OF WELLNESS

In order to comprehensively understand the effects brought about by CSM and the effectiveness of CSM as a strategy for stress management and the promotion of wellness, it is essential to integrate or synthesize the quantitative and qualitative data that have been presented in this study. This also serves as a further exercise in triangulation in order to validate the effects of CSM in the contexts of human existence as well as the effectiveness of CSM as a strategy for stress management and the promotion of wellness in teachers. It should be constantly kept in mind, however, that the effects noted in the different contexts of existence are noted mainly for functional reasons, because this study is based on an eco-systemic paradigm as was indicated in Chapters 1 and 2. This means that although effects might be "categorised" under a particular context of human existence, sight should never be lost of the intra and interactive nature of the contexts of the eco-systems paradigm conceptualised in the meta-approach of this study. Therefore, if a particular effect is noted in a particular context of human existence, it might also have a bearing, directly or indirectly, on (an-)other context(s) of human existence.

The effects of CSM can be synthesized into the contexts of human existence as follows:

### 5.6.1 Synthesis and contextualisation of quantitative and qualitative data related to the effects of CSM as a strategy for stress management and the promotion of wellness

### 5.6.1.1 Stress management

CSM had a notable effect in the experimental group as far as stress management is concerned (see 5.3.2; 5.5.1). This group experienced a decrease in perceived stress which represents the degree to which situations in a person's life is appraised as stressful. This means that the experimental group found their lives less unpredictable, uncontrollable and overloaded. Also important was the fact that there was relative little change in psychological symptom breadth, but that the intensity of the symptoms experienced by the experimental group was much lower. The learning and practise of CSM was also viewed by the experimental group as worthwhile as an effective stress management strategy and that it would be used as a personal life skill for stress management in the future.

### 5.6.1.2 The Biological context

CSM had certain notable effects in the biological context of the experimental group (see 5.3.3; 5.5.2). The most notable were the effects of decreased tension which were related to decreases in physical symptoms and in symptoms of somatisation-distress arising from perceptions of bodily dysfunctions, physical symptoms and tension-anxiety. Also notable were the effects related to increases in the improved management of the physical effects of stress, improved sleep quality, increased energy, improved pain management, decreased use of medication, decreased fidgeting, improved weight management and increased activity.

It therefore seems as if CSM had certain real and tangible effects as far as the promotion of biological, and more specific physical well-being is concerned.

#### 5.6.1.3 The Intra-psychic context

CSM had certain notable effects in the intra-psychic context of the experimental group (see 5.3.3; 5.5.2). Notable were the effects related to decreases in negative emotions,

obsessive-compulsiveness, depression, anxiety, phobic anxiety, paranoid ideation, psychotisism, depression-dejection, anger-hostility, confusion-bewilderment and interpersonal sensitivity.

Also notable were effects related to increases in vigour-activity, self activity, personal mastery, sense of identity, tranquillity, coping, generalised self-efficacy and task orientation. Increased personal mastery was indicated by increased personal control, focus and attention, organisation and decreased negative emotions. Increased sense of identity was indicated by increased willingness to venture, realistic self-expectations, personal integration, self-acceptance, assertiveness, tendency to take up a standpoint, self-confidence and improved self-image. Increased tranquillity was indicated by increased relaxedness, calm, serenity and contentment. Improved coping was indicated by improved emotional-focused coping, problem-focused coping and increased resilience and improved crisis management.

It therefore seems as if CSM had certain real and tangible effects as far as the promotion of psychological well-being is concerned.

### 5.6.1.4 The Ecological context

CSM had certain notable effects in the ecological context of the experimental group (see 5.3.3; 5.5.2). Although effects such as decreases in negative emotions, anger-hostility, confusion-bewilderment, and increases in generalised self-efficacy, inner sense of identity, coping and task orientation and especially interpersonal sensitivity were included under the intra-psychic context above, the point made under 5.3.3 must be reiterated. That is namely that these changes must have had an influence on the ecological context, in terms of enhancing the quality of social interaction. This has, however, been reflected by the effect related to increases in improved social relations such as general and collegial relations, teaching-learning relations, approachability by others, family relations and increased reaching out to others and acceptance of others.

It therefore seems as if CSM had certain real and tangible effects as far as the promotion of ecological, and more specific social well-being is concerned.

#### 5.6.1.5 The Metaphysical context

CSM had certain notable effects in the metaphysical context of the experimental group (see 5.3.3; 5.5.2). The most notable were the effects of increased transcendent experiences specifically related to the deepening of relationships with God and the deepening of spiritual experiences.

It therefore seems as if CSM had certain real and tangible effects as far as the promotion of metaphysical, and more specific, spiritual well-being is concerned.

From the evaluation of the synthesised contexualisation of the data from this study, it does indeed seem as if CSM had a range of effects across all the contexts of human existence in members of the experimental group. These effects noted also signify the promotion of well-being across all the contexts of human existence and therefore the promotion of wellness as holistic construct.

### 5.6.2 Synthesis of data related to the effectiveness of CSM as strategy for stress management and the promotion of wellness

The practise of CSM had indeed an impact on the effectiveness of stress management by members of the experimental group. This was indicated by the decrease in perceived stress and a decrease in symptom intensity although symptom breadth showed no change. This means that the amount of potential stressors probably did not diminish, but the degree to which situations in the lives of members of the experimental groups lives were appraised as stressful, decreased. This decrease was related to how unpredictable, uncontrollable and overloaded respondents found their lives. In other words, the members of the experimental group found their lives far less unpredictable, uncontrollable and overloaded in comparison to the control group. Potential effects of stress in the form of symptoms were still experienced, but at a decreased intensity.

CSM as a strategy was also subjectively viewed as an effective stress management strategy by participants themselves in interviews and diaries, and also by significant others (spouse/intimate friend/colleague). This external evaluation by a significant other person of the effectiveness of CSM as a strategy for stress management is very

important in the sense that it served to validate the perceptions of participants themselves and is therefore also a good fixture for triangulation.

As far as the relationship between the effects and effectiveness of CSM as a strategy for the promotion of wellness is concerned, the following can be argued in conclusion, namely that:

- The different effects of CSM found, could largely be triangulated with the literature study, as well as with the quantitative and qualitative research findings of the study (see 5.3.2; 5.3.3; 5.5.1; 5.5.2).
- One of the effects of CSM can be construed as the management of stress (see 5.3.2; 5.5.1)
- The different effects of CSM can be construed as the promotion of biological, intrapsychic, ecological and meta-physical well-being (see 5.3.3.; 5.5.2).
- These different domains of well-being promoted reflected in all the contexts of human existence in teachers as members of the experimental group, is indicative of the effectiveness of CSM as a strategy for the promotion of wellness as a holistic construct (see 5.3.4; 5.5.3).
- This effective promotion of wellness is probably linked to effective stress management in teachers. It can be argued that it is erroneous to assume a linear cause-effect relationship between CSM and effective stress management or the promotion of wellness alone. It is probably more accurate from an eco-systemic point of view to assume a reciprocal and/or circular dynamic relationship between effective stress management on one hand, and multiple changes in the contexts of human existence signifying promoted wellness on the other hand, simultaneously influenced by CSM and influencing one another.

It can therefore be hypothesised that CSM as an effective strategy for stress management resulted in the promotion of wellness in teachers, and conversely, that CSM as an effective strategy for the promotion of wellness resulted in better stress management in teachers. The exact nature of this dynamic relationship should be clarified, and elaborated on in future research.

• In the last instance, it can be argued that CSM as an effective strategy for stress management and the promotion of wellness in teachers had a positive effect on some of the potential sources of stress and potential effects of stress in the lives of teachers as persons, as was delineated in Chapter 2 and consequently by the parameters of the research methods that have been used.

#### 5.7 SUMMARY

Both quantitative and qualitative research findings from this study indicate that CSM is an effective strategy for stress management in teachers and that CSM created certain effects indicative of the effective promotion of biological, intra-psychic, ecological and metaphysical well-being, and as a consequence the promotion of wellness in teachers. It has been argued firstly that effective stress management and the promotion of wellness in teachers probably influence one another reciprocally, and/or that there exists a dynamic circular relationship between the two constructs. Secondly, that effective stress management and the promotion of wellness in teachers might impact positively on the potential sources of stress and the potential effects of stress in the lives of teachers as persons.