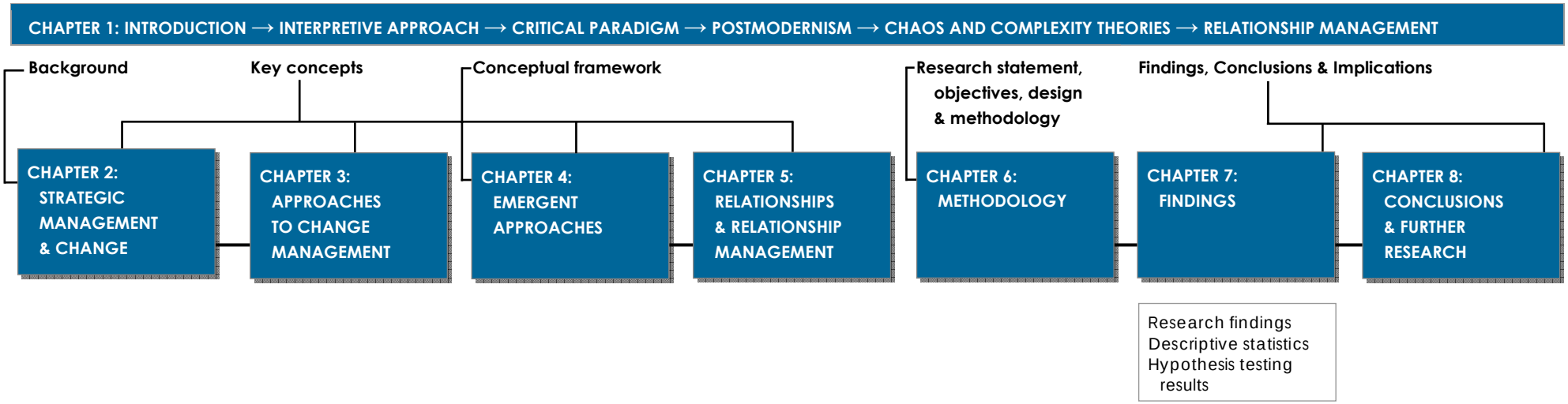
OVERVIEW OF CHAPTER 7: *Findings*



CHAPTER 7:

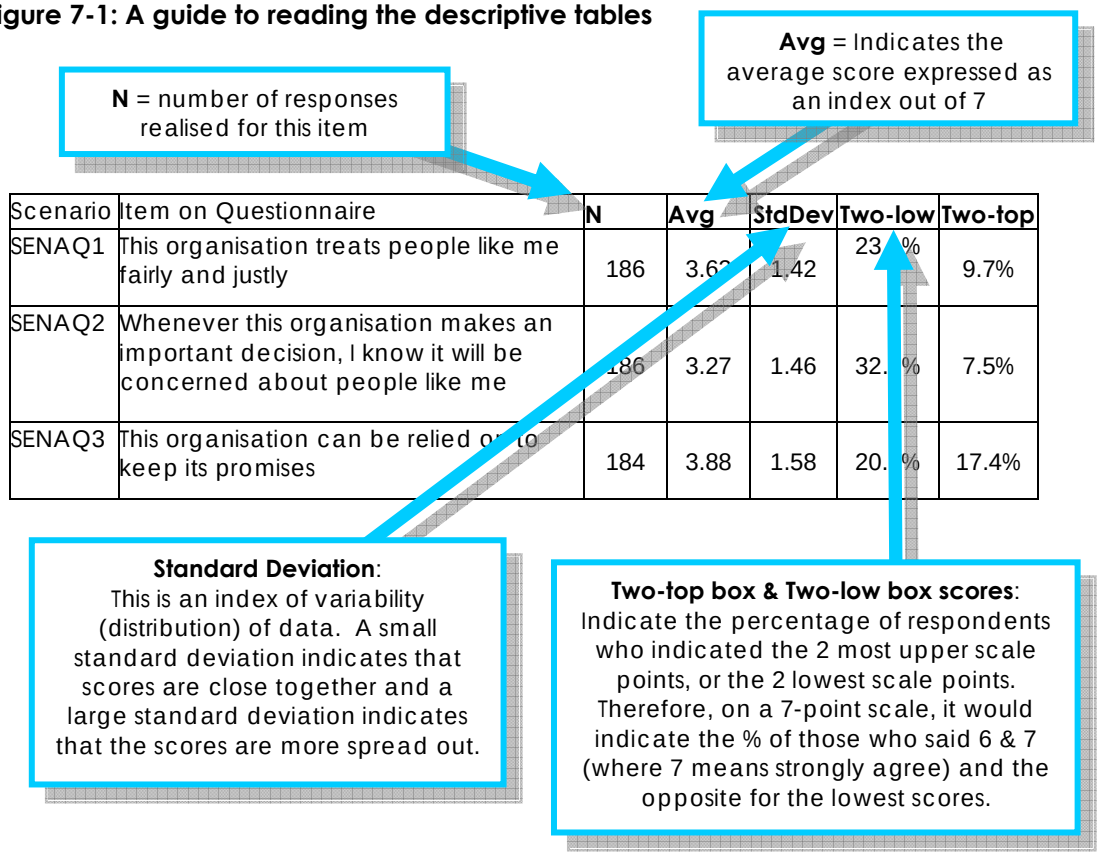
Findings

7.1 Introduction

In the previous chapter the stage was set for the results of this study. Chapter 7 is the culmination of all the theoretical chapters and the methodological foundations set in chapter 6. In this chapter all the findings are used to analyse the hypotheses and decide whether to accept or reject them, thereby contributing to the final discussion of the research question set in Chapter 1.

The results of this study will be discussed by first examining the findings of the pre-experimental phase. Thereafter the findings of the manipulation success will be presented, followed by the general descriptive findings, and finally, the statistical results of the experimental phase. The descriptive findings, which will be presented first, are shown in tables and the following figure provides a short explanation of how to read the results:

Figure 7-1: A guide to reading the descriptive tables



7.2 Findings of the pre-test phase

The following tables present the descriptive statistics for the 14 questionnaires of the pre-test phase. There were 15 elements and each element was measured on a scale from 1 to 7, where one end of the scale reflected a characteristic of the planned approach under that element, and the other end represented a characteristic of the emergent approach under the same element.

Table 7-1: Pre-test Relationship Scale index for Scenario A (planned approach)

Number	Element on Questionnaire	N	Avg	StdDev	Two-low	Two-top
1	Change	14	1.71	1.14	85.7%	0.0%
2	Managed by	14	1.57	0.65	92.9%	0.0%
3	Communication	14	1.57	0.85	92.9%	0.0%
4	Decision-making	14	1.50	0.76	85.7%	0.0%
5	Change type	14	1.71	0.99	78.6%	0.0%
6	Environment	14	2.14	1.56	71.4%	7.1%
7	Top management	14	1.29	0.47	100.0%	0.0%
8	Change managers	14	1.36	0.50	100.0%	0.0%
9	Monitoring	14	1.43	0.51	100.0%	0.0%
10	Problems managed	14	1.50	0.65	92.9%	0.0%
11	Conflicts	14	1.71	1.07	85.7%	0.0%
12	Time and money	14	1.50	0.94	85.7%	0.0%
13	Information	14	1.86	1.23	85.7%	0.0%
14	Driven by	14	1.79	1.12	85.7%	0.0%
15	Evaluation	14	1.50	0.65	92.9%	0.0%

The averages of the pre-test for Scenario A are all towards the planned approach side of the scale where 1 and 2 indicated the elements as being structured and top management driven, and the two-low box scores were the highest.

Table 7-2: Pre-test Relationship Scale index for Scenario B (participative approach)

Number	Element on Questionnaire	N	Avg	StdDev	Two-low	Two-top
1	Change	14	6.36	0.50	0.00%	100.0%
2	Managed by	14	6.36	0.63	0.00%	92.9%
3	Communication	14	6.5	0.65	0.00%	92.9%
4	Decision-making	14	6.21	0.89	0.00%	85.7%
5	Change type	14	6.29	0.61	0.00%	92.9%
6	Environment	14	6.00	0.68	0.00%	78.6%
7	Top management	14	6.29	0.73	0.00%	85.7%
8	Change managers	14	6.21	1.12	0.00%	85.7%
9	Monitoring	14	6.07	1.00	0.00%	71.4%
10	Problems managed	14	5.93	0.83	0.00%	78.6%
11	Conflicts	14	6.14	0.66	0.00%	85.7%
12	Time and money	14	5.93	1.27	0.00%	71.4%
13	Information	14	6.21	1.37	7.1%	85.7%
14	Driven by	14	6.21	1.42	7.1%	78.6%
15	Evaluation	14	6.43	0.51	0.00%	100.0%

The averages of the pre-test for Scenario B are all towards the emergent participative approach side of the scale where 6 and 7 indicated the elements as being employee driven, and the two-top box scores were the highest.

The results show that the respondents understood and perceived the two scenarios in relation to the elements. From these results, and the focus groups, seven elements were extracted for use in the final questionnaire. These were the elements of change, communication, decision-making, change managers, conflicts, information and evaluation.

7.3 Descriptive statistics

In this section, the general descriptive results will be presented and discussed. The statistical significance testing of the results follows in later sections.

7.3.1 The Relationship Scale

Tables 7.3 and 7.4 show the relationship scales for Scenarios A and B respectively. (The items of the questionnaire marked with SENAQX indicate that these were the items marked as Question X for Scenario A).

Table 7-3: Relationship Scale index for Scenario A (planned approach)

Scenario	Item on Questionnaire	N	Avg	StdDev	Two-low	Two-top
SENAQ1	This organisation treats people like me fairly and justly	186	3.62	1.42	23.1%	9.7%
SENAQ2	Whenever this organisation makes an important decision, I know it will be concerned about people like me	186	3.27	1.46	32.8%	7.5%
SENAQ3	This organisation can be relied on to keep its promises	184	3.88	1.58	20.7%	17.4%
SENAQ4	I believe that this organisation takes the opinions of people like me into account when making decisions	186	2.95	1.49	**44.1%**	**5.9%**
SENAQ5	I feel very confident about this organisation's skills	186	3.96	1.62	20.4%	21.5%
SENAQ6	This organisation has the ability to accomplish what it says it will do	185	4.44	1.52	**13.5%**	**28.6%**
SENAQ7	This organisation and people like me are attentive to what each other says	185	3.43	1.52	30.8%	10.3%
SENAQ8	This organisation believes the opinions of people like me are legitimate	186	3.18	1.60	37.6%	8.6%
SENAQ9R	In dealing with people like me, this organisation has a tendency to throw its weight around	186	3.46	1.63	35.5%	11.8%
SENAQ10	This organisation really listens to what people like me have to say	185	2.98	1.37	**40.0%**	**1.6%**
SENAQ11	The management of this organisation gives people like me enough say in the decision-making process	185	2.86	1.48	**49.2%**	**4.9%**
SENAQ12	I feel that this organisation is trying to maintain a long-term commitment to people like me	185	3.21	1.60	37.8%	9.2%
SENAQ13	I can see that this organisation wants to maintain a relationship with people like me	184	3.16	1.47	37.5%	7.6%
SENAQ14	There is a long-lasting bond between this organisation and people like me	185	3.06	1.55	**42.2%**	**8.1%**
SENAQ15	Compared to other organisations, I value my relationship with this organisation more	185	3.41	1.67	34.6%	13.0%
SENAQ16	I would rather work with this organisation than not	183	4.05	1.73	20.8%	23.5%
SENAQ17	I am happy with this organisation	183	3.60	1.65	27.9%	15.8%
SENAQ18	Both the organisation and people like me benefit from the relationship	183	3.59	1.63	31.7%	15.3%
SENAQ19	Most people like me are happy in their interactions with this organisation	184	3.29	1.50	36.4%	8.2%
SENAQ20	Generally speaking, I am pleased with the relationship this organisation has established with people like me	185	3.34	1.62	**38.4%**	10.8%
SENAQ21	Most people enjoy dealing with this organisation	185	3.65	1.56	26.5%	12.4%

As pointed out earlier, in the Institute of Public Relations relationship scale (Hon & Grunig, 1999), item 9 was negatively worded. This item was, however, reverse-scored in this study and the scores are thus correctly indicated.

It would seem that the respondents felt that, with the planned approach (Scenario A), the organisation does not take people's opinions into account when making decisions; nevertheless, they had confidence in the fact that this organisation would be able to accomplish what it set out to do. Furthermore, the respondents felt that this organisation did not listen to the opinions of its stakeholders, and did not let employees participate in decision-making. The fact employees did not have a chance to participate, or felt that they were not being listened to, affected their commitment to the organisation, as indicated by the item pertaining to forming a long lasting bond with the organisation, which was rated quite low—**42.2%** of all respondents rated this item very low. It would seem that overall the respondents were not very pleased with the relationship that this organisation had established with them (38.4% rated this item very low).

Table 7-4: Relationship Scale index for Scenario B (participative approach)

Scenario	Item on Questionnaire	N	Avg	StdDev	Two-low	Two-top
SENBQ1	This organisation treats people like me fairly and justly	186	5.20	1.26	3.2%	44.6%
SENBQ2	Whenever this organisation makes an important decision, I know it will be concerned about people like me	186	5.13	1.39	7.0%	48.4%
SENBQ3	This organisation can be relied on to keep its promises	186	4.93	1.38	5.9%	**37.6%**
SENBQ4	I believe that this organisation takes the opinions of people like me into account when making decisions	186	5.17	1.50	6.5%	**50.5%**
SENBQ5	I feel very confident about this organisation's skills	186	5.15	1.46	6.5%	46.2%
SENBQ6	This organisation has the ability to accomplish what it says it will do	185	5.10	1.31	5.4%	42.2%
SENBQ7	This organisation and people like me are attentive to what each other says	185	5.20	1.29	4.3%	45.4%
SENBQ8	This organisation believes the opinions of people like me are legitimate	185	5.09	1.42	6.5%	43.2%
SENBQ9R	In dealing with people like me, this organisation has a tendency to throw its weight around	185	4.86	1.57	10.8%	42.2%
SENBQ10	This organisation really listens to what people like me have to say	186	5.07	1.41	5.4%	42.5%
SENBQ11	The management of this organisation gives people like me enough say in the decision-making process	186	5.12	1.44	4.8%	45.2%
SENBQ12	I feel that this organisation is trying to maintain a long-term commitment to people like me	186	5.31	1.36	3.8%	53.2%
SENBQ13	I can see that this organisation wants to maintain a relationship with people like me	186	5.28	1.27	1.6%	48.4%
SENBQ14	There is a long lasting bond between this organisation and people like me	185	5.04	1.41	4.3%	41.6%
SENBQ15	Compared to other organisations, I value my relationship with this organisation more	186	5.35	1.28	3.2%	51.1%
SENBQ16	I would rather work with this organisation than not	186	5.54	1.23	2.7%	**59.1%**
SENBQ17	I am happy with this organisation	184	5.35	1.25	3.8%	48.4%
SENBQ18	Both the organisation and people like me benefit from the relationship	186	5.32	1.37	4.3%	50.0%
SENBQ19	Most people like me are happy in their interactions with this organisation	186	5.17	1.31	4.8%	46.8%
SENBQ20	Generally speaking, I am pleased with the relationship this organisation has established with people like me	186	5.22	1.26	2.7%	47.3%
SENBQ21	Most people enjoy dealing with this organisation	184	5.16	1.24	3.8%	46.2%

With the participative approach (Scenario B), a high percentage of respondents seemed to agree with most of the statements because more than 40% of the respondents rated all (except one) items very highly—6 and 7 on a scale of 7.

Less than 40% of the respondents rated the statement about the reliability of the organisation highly; still, a high percentage—37.6%—felt that this organisation was reliable.

The two items rated the highest by most of the respondents, were items 4 and 16, indicating a very high commitment and close working relationship with an organisation that follows a participatory approach.

7.3.2 Descriptive statistics on the respondents' organisations

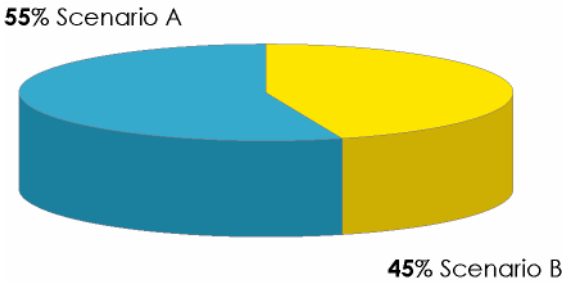
7.3.2.1 Percentage of scenario approach followed in the respondents' organisation

The number of respondents who indicated that they followed a participative approach in the organisation in which they were working was relatively high, but it was still the planned approach that was being followed for managing change.

Table 7-5: Percentage of scenario approach followed in respondents' organisation

	N	Percentage
Scenario A (planned)	95	54.6
Scenario B (participative)	79	45.4
Total	174	100

Figure 7-2: Percentage of scenario approach followed in the respondents' organisation



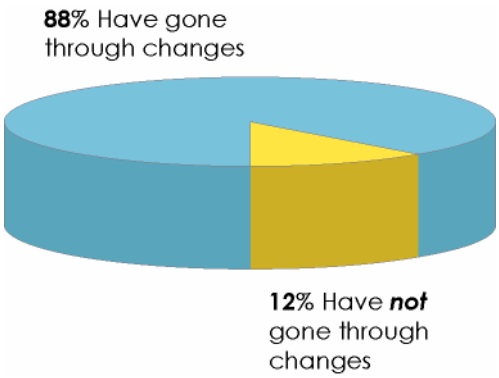
7.3.2.1 Percentage of organisations that have been through major changes according to respondents

The number of respondents who indicated that they were going through major changes was very high, which was normal for the South African organisational arena (most organisations were affected by the equity bill, affirmative action, etc.).

Table 7-6: Percentage of organisation that have been through major changes according to respondents

	N	Percentage
Yes	160	87.9
No	22	12.1
Total	182	100

Figure 7-3: Percentage of organisations that have been through major changes according to respondents



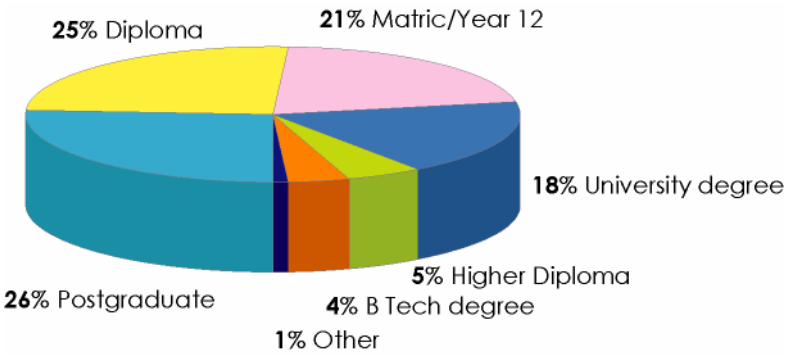
7.3.3 Educational levels of respondents

The respondents were highly educated, with a high percentage of post-graduates as indicated in Table 7.7. This is not reflective of the general population of South Africa, but is typical of middle to higher managerial levels (refer to Table 7.8).

Table 7-7: Educational levels of respondents

	N	Percentage
Matric/Grade 12	38	20.5
Diploma	47	25.4
B Tech degree	7	3.8
University degree	34	18.4
Higher diploma	9	4.9
Post Graduate	48	25.9
Other	2	1.0
Total	185	100

Figure 7-4: Educational levels of respondents



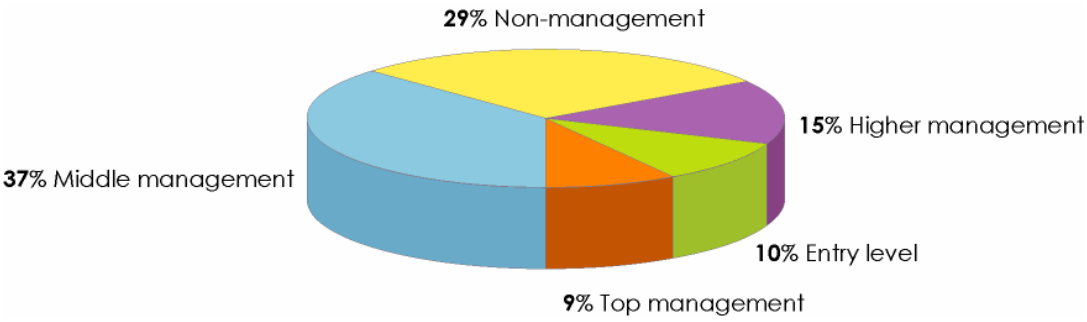
7.3.4 Level or ranking in the organisation

The sample consisted of a rather equal spread through the levels in the organisations. A third were non-managerial, more or less 50% was from entry and middle levels of management, and the last 20% were in higher managerial levels.

Table 7-8: Level of ranking in the organisation

	N	Percentage
Top management	17	9.2
Higher management	28	15.1
Middle management	67	36.2
Entry level management	19	10.3
Non-managerial	54	29.2
Total	185	100.0

Figure 7-5: Level or ranking in the organisation



7.4 Experimental control measures

7.4.1 Test of order differences

An ANOVA test was performed to ascertain whether there was a significant difference between the responses when the questionnaire for Scenario A (planned approach) and Scenario B (participatory approach) was alternated.

Table 7-9: ANOVA Test of influence of scenario order in questionnaire

Testing differences in SCENARIO A for both order options					
Item on Questionnaire	**Order1**	**Order2**	**Difference**	**p**	
This organisation treats people like me fairly and justly	3.62	3.62	0.00	**0.99**	Not significant
Whenever this organisation makes an important decision, I know it will be concerned about people like me	3.19	3.37	-0.06	**0.40**	Not significant
This organisation can be relied on to keep its promises	3.86	3.90	-0.01	**0.87**	Not significant
I believe that this organisation takes the opinions of people like me into account when making decisions	2.85	3.07	-0.08	**0.32**	Not significant
I feel very confident about this organisation's skills	4.01	3.90	0.03	**0.63**	Not significant
This organisation has the ability to accomplish what it says it will do	4.54	4.33	0.05	**0.35**	Not significant
This organisation and people like me are attentive to what each other says	3.45	3.40	0.01	**0.82**	Not significant
This organisation believes the opinions of people like me are legitimate	3.15	3.21	-0.02	**0.80**	Not significant
In dealing with people like me, this organisation has a tendency to throw its weight around	4.41	4.69	-0.06	**0.25**	Not significant
This organisation really listens to what people like me have to say	2.87	3.11	-0.08	**0.24**	Not significant
The management of this organisation gives people like me enough say in the decision-making process	2.70	3.06	-0.13	**0.10**	Not significant
I feel that this organisation is trying to maintain a long-term commitment to people like me	3.17	3.26	-0.03	**0.71**	Not significant
I can see that this organisation wants to maintain a relationship with people like me	3.05	3.28	-0.08	**0.29**	Not significant
There is a long-lasting bond between this organisation and people like me	2.94	3.21	-0.09	**0.24**	Not significant
Compared to other organisations, I value my relationship with this organisation more	3.44	3.36	0.02	**0.76**	Not significant
I would rather work with this organisation than not	4.22	3.86	0.09	**0.15**	Not significant
I am happy with this organisation	3.66	3.53	0.04	**0.60**	Not significant
Both the organisation and people like me benefit from the relationship	3.64	3.53	0.03	**0.65**	Not significant
Most people like me are happy in their interactions with this organisation	3.18	3.42	-0.08	**0.28**	Not significant
Generally speaking, I am pleased with the relationship this organisation has established with people like me	3.33	3.35	-0.01	**0.92**	Not significant
Most people enjoy dealing with this organisation	3.58	3.74	-0.05	**0.49**	Not significant

Table 7-10: ANOVA Test for difference in Scenario B for both order options

Item on Questionnaire	Order 1	Order 2	Difference	p	
This organisation treats people like me fairly and justly	5.30	5.08	0.04	**0.24**	Not significant
Whenever this organisation makes an important decision, I know it will be concerned about people like me	5.28	4.95	0.06	**0.11**	Not significant
This organisation can be relied on to keep its promises	5.00	4.85	0.03	**0.46**	Not significant
I believe that this organisation takes the opinions of people like me into account when making decisions	5.31	5.01	0.06	**0.18**	Not significant
I feel very confident about this organisation's skills	5.33	4.94	0.07	**0.07**	Not significant
This organisation has the ability to accomplish what it says it will do	5.15	5.04	0.02	**0.55**	Not significant
This organisation and people like me are attentive to what each other says	5.33	5.05	0.05	**0.13**	Not significant
This organisation believes the opinions of people like me are legitimate	5.21	4.95	0.05	**0.22**	Not significant
In dealing with people like me, this organisation has a tendency to throw its weight around	4.97	4.73	0.05	**0.31**	Not significant
This organisation really listens to what people like me have to say	5.31	4.79	0.10	**0.01**	**Significant**
The management of this organisation gives people like me enough say in the decision-making process	5.29	4.93	0.07	**0.09**	Not significant
I feel that this organisation is trying to maintain a long-term commitment to people like me	5.51	5.08	0.08	**0.03**	**Significant**
I can see that this organisation wants to maintain a relationship with people like me	5.52	5.01	0.09	**0.01**	**Significant**
There is a long-lasting bond between this organisation and people like me	5.24	4.80	0.08	**0.03**	**Significant**
Compared to other organisations, I value my relationship with this organisation more	5.52	5.15	0.07	**0.05**	**Significant**
I would rather work with this organisation than not	5.75	5.30	0.08	**0.01**	**Significant**
I am happy with this organisation	5.56	5.12	0.08	**0.02**	**Significant**
Both the organisation and people like me benefit from the relationship	5.51	5.09	0.08	**0.04**	**Significant**
Most people like me are happy in their interactions with this organisation	5.38	4.93	0.08	**0.02**	**Significant**
Generally speaking, I am pleased with the relationship this organisation has established with people like me	5.48	4.91	0.10	**0.00**	**Significant**
Most people enjoy dealing with this organisation	5.44	4.85	0.11	**0.00**	**Significant**

The ANOVA showed no significant difference in the group that received Scenario A first (Order 1); however, there was a significant difference in the group that received Scenario B first (Order 2). The reason for this may be that Scenario B was perceived to be more positive than Scenario A. That is, when asked afterwards, the respondents in the first group reported that they had perceived Scenario A to be quite positive, but changed their mind after reading Scenario B. Respondents who received Scenario B first evaluated Scenario A to be significantly more negative. Furthermore, the items that were rated significantly different were the items pertaining to *commitment* and *satisfaction*. It would seem that the respondents felt less committed and less satisfied with the *planned approach* (Scenario A) having rated the *participative approach* (Scenario B) first. So, even though both scenarios were given to the respondents to read before answering the questionnaire, the order the scenarios was given created a significant difference. This is a classical example of the interaction effect of variables discussed in the previous chapter.

7.4.2 Experimental control measures

There were significant differences between the experimental control measures of Scenario A (planned approach) and Scenario B (participative approach), which means that the two approaches were perceived as being radically different. This emphasises the validity of the experimental measures. This test is regarded as a significant proof of the internal validity of the experimental design, indicating that the experimental manipulation had a definite effect on the dependent variable of the measuring instrument.

Table 7-11: Test to show the differences in experimental validity of the experimental stimuli

Analysis of Variance (internalstatistica2.sta)								
Marked effects are significant at p < 0.05000								
	SS	df	MS	SS	df	MS		
	Effect	Effect	Effect	Error	Error	Error	F	p
SENAQ26	714.41105	1	714.411	939.2008	369	2.54526	280.683	0
SENAQ27	744.93243	1	744.9324	1021.395	368	2.775529	268.393	0
SENAQ28	588.07727	1	588.0773	928.3623	362	2.564537	229.3113	0
SENAQ29	642.45545	1	642.4555	993.1456	369	2.691452	238.7022	0
SENAQ30	481.6099	1	481.6099	1018.18	369	2.759295	174.5409	0
SENAQ31	815.11409	1	815.1141	1002.126	369	2.715788	300.1391	0
SENAQ32	774.88043	1	774.8804	908.4239	366	2.482033	312.1959	0

7.5 Reliability analysis

7.5.1 Questionnaire reliability analysis

The Cronbach Alpha-coefficient was used to perform a reliability analysis on the relationship scale distributed by the Institute of Public Relations (Hon & Grunig, 1999). The reliability analysis resulted in a coefficient of **0.97**, which is highly satisfactory compared to statistical benchmarks of **0.70** given in the literature. Gay & Diehl (1992, p. 170) notes that a researcher can be satisfied with reliability levels between the 0.70s to 0.80s, so a coefficient of over **0.90** is highly acceptable for any instrument.

Owing to the high Cronbach Alpha coefficient obtained in the first round of testing, no statement that would lead to an increase in the Cronbach Alpha coefficient was deleted, because deletion of these statements would lead only to a marginal improvement. The *item-to-total* correlations were also checked to delete possible statements with low item-to-total correlations (below 0.3), which would indicate a lack of stability. Only item 9 showed a relatively low item-to-total correlation, which could have been due to its being a reversed statement. The item-to-total correlation of item 9 was still above 0.4 and was thus retained. The overall average item-to-total correlation was 0.66, and the Squared multiple (R) was above 0.6 for all items.

In the Institute of Public Relations relationship scale (Hon & Grunig, 1999), item 9 was negatively worded. This item was, however, reverse-scored in this study, and the scores are therefore correctly indicated. The effect of this on the item-to-total score is clear (0.438) and this would have improved the alpha if deleted (by 0.002), but not to such an extent that it granted the removal of the item from the relationship instrument in this study.

Table 7-12: Item to total correlations and alpha if deleted

Summary for scale: Mean = 94.4614 **Std.Dv** .= 29.6116 **Valid N, p.** 372			
Cronbach alpha = 0.971118 **Standardised alpha** = 0.971224			
Average inter-item corr. = 0.655753			
	Itm-Totl Correl.	**Squared Multp. R**	**Alpha if deleted**
SENAQ1	0.851	0.792	0.969
SENAQ2	0.847	0.806	0.969
SENAQ3	0.721	0.657	0.970
SENAQ4	0.898	0.873	0.968
SENAQ5	0.776	0.733	0.970
SENAQ6	0.645	0.624	0.971
SENAQ7	0.863	0.796	0.969
SENAQ8	0.870	0.811	0.969
SENAQ9R	0.438	1.000	0.973
SENAQ10	0.877	0.870	0.969
SENAQ11	0.856	0.845	0.969
SENAQ12	0.907	0.886	0.968
SENAQ13	0.916	0.902	0.968
SENAQ14	0.905	0.857	0.968
SENAQ15	0.895	0.859	0.969
SENAQ16	0.788	0.736	0.970
SENAQ17	0.899	0.861	0.969
SENAQ18	0.900	0.856	0.969
SENAQ19	0.917	0.881	0.968
SENAQ20	0.923	0.892	0.968
SENAQ21	0.819	0.735	0.969

7.5.2 Relationship scale dimension reliability analysis

The Cronbach Alpha-coefficient was also used to perform a reliability analysis on the four dimensions of the relationship instrument of the Institute of Public Relations, as well as to the behaviour items added. The Cronbach Alpha coefficients obtained for the dimensions are shown in Tables 7.13 to 7.16.

Table 7-13: Cronbach Alpha reliability coefficient for the Trust factor

Cronbach alpha = 0.930906 **Standardised alpha** = 0.931481			
Average inter-item corr. = 0.704202			
	Itm-Totl Correl.	**Squared Multp. R**	**Alpha if deleted**
SENAQ1	0.8478624	0.7591171	0.9121
SENAQ2	0.8437613	0.7876371	0.912008
SENAQ3	0.7848693	0.6325884	0.919858
SENAQ4	0.8121594	0.7298787	0.917482
SENAQ5	0.8132685	0.6996244	0.916105
SENAQ6	0.6962227	0.6010392	0.930439

Table 7-14: Cronbach Alpha reliability coefficient for the Control-mutuality factor

Cronbach alpha = 0.908862 **Standardised alpha** = 0.908825			
Average inter-item corr. = 0.707068			
	Itm-Totl Correl.	**Squared Multp. R**	**Alpha if deleted**
SENAQ7	0.8218138	0.736557	0.878434
SENAQ8	0.8539003	0.783434	0.870217
SENAQ9R	0.481604	0.2346212	0.945085
SENAQ10	0.8679261	0.8286788	0.867685
SENAQ11	0.8519301	0.8027066	0.870368

Table 7-15: Cronbach Alpha reliability coefficient for the Commitment factor

Summary for scale: Mean = 21.7275 **Std.Dv.** = 8.09270 **Valid N, p.** 372						
Cronbach alpha = 0.956532 **Standardised alpha** = 0.956277						
Average inter-item corr. = 0.827135						
	Mean if deleted	**Var. if deleted**	**StDv. if deleted**	**Itm-Totl Correl.**	**Squared Multp. R**	**Alpha if deleted**
SENAQ12	17.46331	41.120975	6.412564	0.898528	0.861219	0.942815
SENAQ13	17.500435	41.770885	6.46304	0.919281	0.88415	0.939351
SENAQ14	17.676109	41.537983	6.444997	0.903563	0.835977	0.941896
SENAQ15	17.347408	41.690323	6.456804	0.89556	0.810488	0.943274
SENAQ16	16.922583	45.161575	6.720236	0.77639	0.659498	0.962504

Table 7-16: Cronbach Alpha reliability coefficient for the Satisfaction factor

Summary for scale: Mean = 21.8649 **Std.Dv .**= 7.87990 **Valid N, p.** 372						
Cronbach alpha = 0.964680 **Standardised alpha** = 0.964550						
Average inter-item corr. = 0.849485						
	Mean if deleted	**Var. if deleted**	**StDv. if deleted**	**Itm-Totl Correl.**	**Squared Multp. R**	**Alpha if deleted**
SENAQ17	17.38537	39.764286	6.305893	0.907364	0.82397	0.954883
SENAQ18	17.40423	39.252094	6.265149	0.91308	0.84106	0.95397
SENAQ19	17.627096	39.685425	6.299637	0.915622	0.849091	0.953541
SENAQ20	17.58461	39.097446	6.252795	0.924694	0.860322	0.952026
SENAQ21	17.458429	42.113659	6.489504	0.836073	0.701994	0.966074

Table 7-17: Cronbach Alpha reliability coefficient for the behaviour factor

Cronbach alpha = 0.892233 **Standardised alpha** = 0.892546			
Average inter-item corr. = 0.677288			
	Itm-Totl Correl.	**Squared Multp. R**	**Alpha if deleted**
SENAQ22	0.7641332	0.5963593	0.860533
SENAQ23	0.7472687	0.5780641	0.867352
SENAQ24	0.7761491	0.6272869	0.856009
SENAQ25	0.7625471	0.6124375	0.861335

Table 7-18: Standardised Alpha reliability coefficients for each dimension

Dimension	Cronbach Alpha-coefficient
Trust (Items 1-6)	0.931
Control Mutuality (Items 7-11)	0.909
Commitment (Items 12—16)	0.957
Satisfaction (Items 17—21)	0.965
Behaviour change (Items 22–25)	0.892

The coefficients obtained are within accepted norms, and all the relationship dimensions received very satisfactory Cronbach's Alpha coefficients. A Cronbach's Alpha coefficient was also determined for the four items relating to the behavioural change dimension of this study, and although it was lower than the items in the relationship scale, it was still within acceptable norms (0.892).

7.6 Validity analysis

As part of the statistical validation of the findings a principal component factor analysis was performed on the relationship statements. A satisfactory factor solution resulted in a cumulative explained variance of **78.34%**, which means that the instrument explains nearly **78.4%** of all variability between different relationships. The Eigenvalue for this analysis was accepted at the normal guideline of '**1.00**'. Two factors were extracted but the difference between the cumulative variance of these 2 factors is only **4.852%**, and only 3 items were extracted for factor 2, all from the *trust* dimension. This implies that the instrument could not sufficiently differentiate between the intended dimensions as extracted from the theoretical construct.

The explained cumulative variance, factor loadings and correlation matrix of the factor analysis is shown in Table 7.19, Table 7.20, Table 7.21 respectively.

Table 7-19: Explained cumulative variance

Eigenvalues—Extraction: Principal components				
Factor	**Eigenvalue**	**% Total Variance**	**Cumulative Eigenvalue**	**Cumulative %**
1	15.416	73.409	15.416	73.409
2	1.036	4.933	16.452	78.342

Table 7-20: Factor loadings

Extraction: Principal components (Marked loadings are > 0.700000)	Factor 1	Factor 2
SENAQ1	0.646	0.583
SENAQ2	0.668	0.548
SENAQ3	0.340	0.782
SENAQ4	0.789	0.464
SENAQ5	0.381	0.813
SENAQ6	0.173	0.880
SENAQ7	0.725	0.496
SENAQ8	0.762	0.459
SENAQ9R	0.658	-0.026
SENAQ10	0.828	0.381
SENAQ11	0.829	0.350
SENAQ12	0.787	0.482
SENAQ13	0.814	0.459
SENAQ14	0.741	0.536
SENAQ15	0.761	0.495
SENAQ16	0.639	0.495
SENAQ17	0.706	0.576
SENAQ18	0.749	0.521
SENAQ19	0.769	0.518
SENAQ20	0.778	0.515
SENAQ21	0.690	0.478

Because the factors were not loading according to the preset four dimensions of the relationship scale, a correlation matrix was calculated to give a clearer indication of the correlations that may have existed between the variables in question (Table 7.21).

Table 7-21: Correlation matrix of factor analysis

Marked correlations are significant at p < 0.05000				
	Trust	**Control Mutuality**	**Commitment**	**Satisfaction**
Trust	1			
	p= ---			
Control Mutuality	0.8467	1		
	p=0.00	p= ---		
Commitment	0.8702	0.8949	1	
	p=0.00	p=0.00	p= ---	
Satisfaction	0.8658	0.8846	0.9391	1
	p=0.00	p=0.00	p=0.00	p= ---

The correlation matrix showed that the dimensions were not independent and that they were highly correlated, indicating an existence of multicollinearity. This might account for why the items loaded on mostly one factor, with the exception of 3 items.

7.7 Hypothesis testing results

In the following sections, the test hypotheses will be re-stated in the alternative form (even though the null hypotheses were tested) in order to simplify the discussion.

7.7.1 Hypotheses regarding experimental validation and control measures

7.7.1.1 Test Hypotheses 1

(Test Hypothesis = **TH**)

TH1 = There is a meaningful difference between the experimental controls of Scenario A (planned approach) and Scenario B (participatory approach) as perceived by the respondents.

Table 7-22: Experimental manipulation test – Test hypothesis 1

Questions	Scenario A	Scenario B	p
Question 26 concerning change	2.784	5.559	0.000
Question 27 concerning communication	2.859	5.697	0.000
Question 28 concerning decision-making	2.392	4.934	0.000
Question 29 concerning change managers	2.470	5.102	0.000
Question 30 concerning conflicts	3.157	5.435	0.000
Question 31 concerning information	2.600	5.565	0.000
Question 32 concerning evaluation	2.592	5.495	0.000

	Wilks' Lambda	Rao's R	df 1	df 2	p-level
1	0.49	52.4	7.00	353.000	0.000

As reported earlier, this test was regarded as a significant proof of the internal validity of the experimental design, indicating that the experimental manipulation had a definite affect on the dependent variable of the measuring instrument. Because $\mathbf{p<0.01}$ the null hypothesis is rejected in favour of the alternative hypothesis, which states that there is a meaningful difference between the experimental controls of Scenario A and Scenario B.

7.7.1.2 Test hypothesis 2

TH2 = There is a meaningful difference between the different organisations in terms of the respondents' responses to the two different scenarios.

Table 7-23: Test Hypothesis 2

Organisations	Relational index Scenario A	Relational index Scenario B
Org 1 = Private sector - large bank	3.89	5.00
Org 2 = Large private industry	3.54	5.07
Org 3 = IT company	3.95	5.23
Org 4 = Professional body	5.10	6.52
Org 5 = Large bank - governmental	3.15	5.39
Org 6 = Large private industry	3.77	5.61
Org 7 = Large corporate (partially privatised; semi-parastatal)	3.34	5.40
Org 8 = Higher education	2.78	4.79
Org 9 = Higher education	2.90	5.57

	Wilks' Lambda	Rao's R	df 1	df 2	p-level
1	0.81	2.49	16.00	352.000	0.001

The nul hypothesis gets rejected in favour of the null hypothesis ($p<0.01$). This means that organisational type, size, or culture, or any other characteristic that makes organisations different from one another, had an affect on the relationship that the respondents would have towards the organisation. This finding had significant implications for this study because it showed that managers should consider the type of organisation when deciding on a change management approach to follow, as these factors seemed to have an influence on the success of an approach followed. This response was unexpected and may be contributed to the types of organisations used in this sample as they were not representative, but may also imply that size and type of organisation had important implications for change strategy choices. This needs to be examined further.

7.7.1.3 Test hypothesis 3

TH3 = There is no meaningful difference between the different educational levels of respondents in terms of their responses to the two different scenarios.

The educational levels were grouped together in order to simplify the analysis. Grade 12 (final year of school) was one group and all post school education formed another group.

Table 7-24: Test Hypothesis 3

Educational levels	Relational index Scenario A	Relational index Scenario B
Grade 12 = final school level	3.78	4.79
Post school education	3.39	5.29

	Wilks' Lambda	Rao's R	df 1	df 2	p-level
1	0.94	2.80	4.00	358.000	0.026

These findings imply that the null hypothesis is rejected ($p<0.05$), and that the educational level of employees may have an influence on how they respond to communication approaches followed during change management. Again the representativeness of the sample may have influenced the results, or may also imply that educational levels of participants have to be considered when deciding on a change strategy.

7.7.1.4 Test hypothesis 4

TH4 = There is a meaningful difference between the different functional levels within organisation in terms of the respondents' responses to the two different scenarios.

Table 7-25: Test Hypothesis 4

Levels in the organisation	Relational index Scenario A	Relational index Scenario B
Top management	3.46	5.07
Higher management	3.52	5.24
Middle management	3.40	5.33
Entry level management	3.71	5.16
Non-managerial	3.38	5.00

	Wilks' Lambda	Rao's R	df 1	df 2	p-level
1	0.98	0.55	8.00	358.000	0.821

In this case, the null hypothesis was not rejected (p = 0.821), and there thus seemed to be no significant difference between the levels in which respondents function in terms of how they responded to the two scenarios.

7.7.1.5 Test hypothesis 5

TH5 = There is no meaningful difference between the real change management styles followed in the respondents' organisations in terms of the experimental test of the relationships with the two scenarios.

Table 7-26: Test Hypothesis 5

Change style followed in organisation of respondent	Relational index Scenario A	Relational index Scenario B
Planned change	3.43	5.24
Participative style	3.48	5.13

	Wilks' Lambda	Rao's R	df 1	df 2	p-level
1	0.10	0.24	2.00	171.000	0.785

In this case, there seemed to be no significant difference between the management styles followed in the respondents' organisations in terms of the relationships with the scenarios and thus the null hypotheses was accepted (p = 0.785)

7.7.1.6 Test hypothesis 6

TH6 = There is no meaningful difference between the change (or not) in the respondents' organisations in terms of the experimental tests of relationships with the two scenarios.

Table 7-27: Test Hypothesis 6

Whether change has occurred in organisation of respondent	Relational index Scenario A	Relational index Scenario B
Change has occurred	3.50	5.16
Change has not occurred	3.09	5.16

	Wilks' Lambda	Rao's R	df 1	df 2	p-level
1	0.99	1.04	2.00	179.000	0.354

The null hypothesis was accepted (p = 0.354), and there was thus no significant difference between the change happening in the respondents' organisations and the relationships within the two scenarios.

These findings implied that there is proof of the internal validity of the experimental design concerning some of the variable, and that the experimental manipulation (the two different change management strategies) had a strong effect on the relationship that employees have with the organisation. However, it also appeared as if the type of organisation and the educational level of respondents had an influence on the results. This needs further research to ascertain how and why these factors influence the change management style followed. The level in the organisation, changes in the respondent organisation, or change management style followed in respondent organisation had no influence.

7.7.2 Research hypotheses

7.7.2.1 Research hypotheses 1 to 5

(Research Hypothesis = **H**)

> **Research Hypothesis 1 - 5** = High participatory communication and change strategy will lead to significantly more trust/control mutuality/commitment/satisfaction/behavioural effects between an organisation and its employees than with a lower degree of participation and a planned approach.

Table 7-28: Dimension average

	Trust	Control Mutuality	Commitment	Satisfaction	Behaviour
Scenario A	3.70	3.24	3.43	3.53	4.56
Scenario B	5.07	5.02	5.23	5.19	4.41

Table 7-29: Analysis of variance

Marked effects are significant at p < 0.05000									
	SS Effect	df Effect	MS Effect	SS Error	df Error	MS Error	F	p	
H1 = TRUST	189.1	1.0	189.1	548.8	370.0	1.48	127.465	0.000	**Significant**
H2 = CONT.MUT	331.6	1.0	331.6	511.0	370.0	1.38	240.138	0.000	**Significant**
H3 = COMMIT	344.7	1.0	344.7	635.7	369.0	1.72	200.083	0.000	**Significant**
H4 = SATIS	282.7	1.0	282.7	644.3	369.0	1.75	161.926	0.000	**Significant**
H5 = BEHAV	2.1	1.0	2.1	758.5	354.0	2.14	0.991	0.320	Not significant

In terms of the research hypotheses 1 to 4 it seems as if all of the null hypotheses could be rejected in favour of the stated alternative hypotheses. Hypothesis 5 seems to show that a participatory approach will not necessarily lead to a significantly more positive goal attainment and change behavioural effects between an organisation and its employees than with a lower degree of participation and a planned approach.

7.7.2.2 Research hypothesis 6

H6 = High degree of participation during high change in organisations will lead to significantly more positive relationship between an organisation and its internal publics than with lower degrees of participation and a planned approach.

Table 7-30: Scheffe's Test

	Trust	Control Mutuality	Commitment	Satisfaction
Trust	0.000			
Control Mutuality	0.000	0.000		
Commitment	0.000	0.000	0.000	
Satisfaction	0.000	0.000	0.000	0.000

This nul hypothesis is rejected and it seems then that participation during change will lead to more positive relationships between organisations and the employees in the organisation.

7.7.2.3 Research hypothesis 7

H7 = There is a meaningful difference between Scenario A (planned approach) and Scenario B (participatory approach) in terms of the relationships with internal stakeholders.

Table 7-31: MANOVA Test for difference in two scenarios and relationships

Summary of all effects					
Scenario	**Wilks' Lambda**	**Rao's R**	**df 1**	**df 2**	**p-level**
A	0.633	106.797	2.000	368.000	0.000
B	0.886	23.684	2.000	368.000	0.000
A & B	0.879	25.216	2.000	368.000	0.000

This final hypothesis merely confirms the findings of hypothesis 6 using a relational hypothesis rather than a causal one. The findings show clearly that the null hypothesis is rejected and that there is a significant difference between the two approaches to change in terms of the relationships towards stakeholders.

7.8 Summary

In terms of the experimental validity of this study and the measuring instrument used, the most important findings showed significant proof of the internal validity of the experimental design used, indicating that:

- the experimental manipulation (the two different change management strategies) had a definite effect on the relationship that internal stakeholders would have with organisations, and that most other variables had no influence (type of organisation and educational level had some influence);

- high participation during high change led to significantly more positive overall relationships between an organisation and its internal stakeholders, as compared to low participation with a planned approach;

- strong correlations between the strategy followed during change and the resulting projected relationships with internal stakeholders of the organisation.

In the next and final chapter, the significance and implications of the above findings will be discussed in the context of practice and theory of change management and relationship management.