

CHAPTER SEVEN

RESULTS

Biographical Analysis

The results of the analyses conducted on the biographic characteristics of the sample are presented in Chapter 6. In addition, a Pearson's chi square analysis was conducted in order to determine whether the two groups differed in the relative distribution of observations among the biographic characteristics of age, population group, education level, and language. The chi square analysis showed no significant difference in the range of age ($\chi^2_{(5)} = 3.47$; $p = .628$), gender ($\chi^2_{(1)} = 0$; $p = 1$); population group ($\chi^2_{(3)} = 5.389$; $p = .1115$); education level ($\chi^2_{(4)} = .5019$; $p = .285$) and language ($\chi^2_{(6)} = 6.648$; $p = .335$) across the two companies.

Table 3

Means and standard deviations, comparisons on sense of coherence, organisational climate and readiness for change across the two companies

MEAN (SD)							
Sample	N	SOC Tot	Manage	Meaning	Compre	Org Clim	Read for change
Company 1	57	4.5448 (.9623)	4.2295 (1.0791)	5.0673 (1.1565)	4.3754 (1.1408)	4.1739 (.6679)	5.4898 (.9554)
Company 2	88	4.6454 (.9223)	4.2585 (1.0844)	5.2765 (1.1587)	4.4523 (.9935)	4.4658 (.6619)	5.2194 (.8380)

Table 3 shows means and standard deviations for all variables for the entire sample of this study. This table indicates that the two companies did not significantly differ on the mean average score obtained on each of the variables. In addition, the standard deviation for each construct indicated that there was a similar spread of responses for both companies on the variables except for readiness for change and comprehensibility, where the spread in company one was greater than in company two ($SD = 0.95$ and $SD = 1.14$ for readiness for change and comprehensibility in company one respectively).

Aims 1 and 2

Pearson product moment correlation coefficients were calculated in determining the first two aims of the study, namely: to examine the degree of association between employee disposition (sense of coherence) and employee readiness for change, as well as between employee perception of the context factors (organisational climate) and employee readiness for change. The correlational analysis was run separately for company one and company two and will thus be reported individually.

Correlations in Company One

With respect to the relationship between the independent variables (organisational climate and sense of coherence) and the dependent variable (readiness for change) in company one, Table 4 reflects that organisational climate and readiness for change were found to be moderately correlated with one another ($r = .36, p < .01$) and a strong positive correlation between SOC and readiness for change can also be seen ($r = .47, p < .01$). A strong correlation was also noted when considering the relationship between the two independent variables, organisational climate and SOC, in company one ($r = .52, p < .01$).

An analysis of the subscales of the sense of coherence construct, revealed a significant positive correlation between meaningfulness and readiness for change ($r = .59, p < .01$); comprehensibility and readiness for change ($r = .37, p < .01$); manageability and organisational climate ($r = .42, p < .01$); meaningfulness and organisational climate ($r = .44, p < .01$) and comprehensibility and organisational climate ($r = .46, p < .01$) in company one. The correlation between manageability and readiness for change in company one was not found to be significant ($r = .25; p > .05$).

Table 4: Pearson correlations for company one

Variable	Read for change	Org clim	SOC	Manage	Meaning	Comprehe
Read for change	1.00					
Org clim	.36**	1.00				
Soc	.47**	.52**	1.00			
Manage	.25	.42**	.82**	1.00		
Meaning	.59**	.44**	.81**	.44**	1.00	
Comprehe	.37**	.46**	.92**	.68**	.62**	1.00

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

Correlations in Company Two

With respect to the relationship between the independent variables (organisational climate and sense of coherence) and the dependent variable (readiness for change) in company two, the analysis presented mixed results. The relationship between SOC and readiness for change were found to be significantly correlated with one another ($r = .34$, $p < .01$). The relationship between organisational climate and readiness for change, as seen in table 5 was not significant ($r = .01$, $p > .05$). A similar result was noted when considering the relationship between the two independent variables, organisational climate and SOC, with this association yielding a correlation score of $r = .17$ ($p > .05$).

An analysis of the subscales of the sense of coherence construct, revealed a significant positive correlation between meaningfulness and readiness for change ($r = .47$, $p < .01$), as well as between comprehensibility and readiness for change ($r = .24$, $p < .05$). However, with respect to manageability and readiness for change, no significant correlation was found ($r = .16$, $p > .05$). In company two, no significant correlations were found between the three subscales of sense of coherence and organisational climate. As can be seen in table 5, these associations yielded the following scores: manageability and organisational climate ($r = .20$, $p > .05$); meaningfulness and organisational climate ($r = .12$, $p > .05$) and comprehensibility and organisational climate ($r = .13$, $p > .05$).

Table 5: Pearson correlations for company two

Variable	Read for change	Org clim	SOC	Manage	Meaning	Comprehe
Read for change	1.00					
Org clim	.01	1.00				
Soc	.34**	.17	1.00			
Manage	.16	.20	.85**	1.00		
Meaning	.47**	.12	.82**	.51**	1.00	
Comprehe	.24*	.13	.90**	.71**	.61**	1.00

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

Aim 3

The third aim of the study was to determine which set of independent variables (sense of coherence and organisational climate) are most strongly related to the dependent variable (readiness for change) across two different organisations. In examining this research question a stepwise regression was conducted on both companies using the following variables: organisational climate, SOC (total score), manageability, meaningfulness and comprehensibility. The r^2 , which reflects the amount of variance explained in the dependent variable (readiness for change) by the independent variables (sense of coherence and organisational climate) (SPSS, 1998) differed across the two companies, $r^2 = 0,35$ (in company one) and $r^2 = 0,22$ (in company two). All the variables were entered into the stepwise regression model and then removed until one variable,

which was selected as the best predictor for accounting for the criterion of variance, remained. The variable that consistently remained across both organisations was the component 'meaningfulness'.

Additional Analyses

Independent Sample t-test

In the present research, t-test procedures were undertaken on the data to detect whether any statistically significant difference existed between the variances of companies one and company two on each of the variables. Companies one and two had sample sizes of 57 and 88 respectively. For the t-test situation in which two companies are being compared, a check for homogeneity of variance was conducted. In order to check this assumption, one principal method was used prior to actually conducting the independent samples t-test. The Levine's test for equality of variance indicated that no significant differences existed between the variances of readiness for change ($p = .13$ where $p > .05$); organisational climate ($p = .54$ where $p > .05$); sense of coherence ($p = .45$ where $p > .05$); manageability ($p = .77$ where $p > .05$); meaning ($p = .95$ where $p > .05$) and comprehensibility ($p = .06$ where $p > .05$).

Once it was determined that the variances between the subjects from each company were almost equal, the independent samples t-test was conducted. Group statistics can be seen in Table 6. The independent samples t-test yielded no significant differences between the two companies except for the variable organisational climate ($t = -2.59$).

Table 6: Independent samples t-test for the sample groups of the two companies

	Mean Company 1	Mean Company 2	<u>N</u> Company 1	<u>N</u> Company 2	<u>df</u>	t- value	<u>P</u>
Read for change	5,49	5,22	57	88	143	1,80	.08
Org clim	4,17	4,47	57	88	143	-2,59	.01
Soc	4,54	4,65	57	88	143	-.63	.53
Manage	4,23	4,26	57	88	143	-.16	.88
Meaning	5,07	5,28	57	88	143	-.06	.29
Comprehe	4,38	4,45	57	88	143	-.43	.67

First Order Partial Correlation

As the relationship between variables differed across the two companies, partialing out organisational climate, which was uncorrelated with the two major measures (sense of coherence and readiness for change) in company two, was carried out. The Pearson correlations revealed that in company one there were statistically significant high correlations between all three major variables (organisational climate, SOC and readiness for change). In company two this was not the case. The only significant relationship found in company two was between SOC and readiness for change.

In first order partial correlations, three variables were involved, one of which is held constant (in this case organisational climate). These variables are numbered 1, 2 and 3

formerly. Thus, for the purpose of this analyses the three major variables were numbered as follows:

Variable 1 : SOC

Variable 2 : Readiness for change

Variable 3 : Organisational climate

The Pearson correlations between the three major variables across both companies were tabulated, as can be seen in table 7.

Table 7: Pearson correlations across both companies

	Company 1	Company 2
SOC (1) x Readiness for change (2)	.35	.34
SOC (1) x Organisational climate (3)	.52	.17
Readiness for change (2) x Organisational climate (3)	.36	.91

First order partial correlations were then conducted using the following formula:

$$\frac{r_{12.3} - r_{13} \cdot r_{23}}{\sqrt{(1 - r_{13}^2)(1 - r_{23}^2)}}$$

The analysis revealed that the relationship between SOC and readiness for change when partialising out organisational climate was $r_{12.3} = .35$ in company one and $r_{12.3} = .34$ in company two. Both values are significantly different from zero, thus the relationship between SOC and readiness for change is statistically significant.

Simply, what this analyses revealed is that whatever the relationship was between the three variables in either company, when the variable of organisational climate is removed the relationship between SOC and readiness for change is statistically the same. Therefore, what can be concluded is that organisational climate is not significant to the relationship between SOC and readiness for change as it has no statistical effect on the relationship between SOC and readiness for change across the two companies.

Summary of Main Findings

In sum, the independent samples t-test indicated that the two companies differed on the variable of organisational climate ($t = -2.59$). This was also confirmed by the correlation analysis, yielding a moderately significant correlation between organisational climate and readiness for change in company one ($r = .36, p < .01$) and a non-significant relationship in company two ($r = .01, p > .05$). The results, however, revealed a significant correlation between SOC and readiness for change in company one ($r = .47, p < .01$) as well as in company two ($r = .34, p < .01$). The analysis of the SOC subscores revealed a significant positive correlation between meaningfulness and readiness for change in company one ($r = .59, p < .01$) as well as in company two ($r = .47, p < .01$).

First order partial correlations were also conducted. As the relationship across the companies differed, partialising out organisational climate, which was uncorrelated with the two major variables in company two was carried out. The results of the first order partial correlations revealed that the relationship between SOC and readiness for change when partialising out organisational climate was $r_{12.3} = .35$ in company one and $r_{12.3} = .34$ in company two.

In accordance with the first aim of this study: ‘what is the relationship between employees’ perceptions of the context factors (climate) and employee readiness for change’, the results clearly suggest that climate in this study was not strongly correlated with employees’ readiness for change. The results of the first order partial correlations confirm this finding, as when organisational climate was partialised from the relationship between the other two major measures in the study (readiness for change and sense of coherence), the relationship between readiness for change and SOC were statistically the same across both companies ($r_{12.3} = .359$ in company one; $r_{12.3} = .343$ in company two). Thus organisational climate in the current study was not significant to the relationship between readiness for change and SOC as it had no statistical effect on the relationship between these two measures across both companies.

In view of the second aim of this study: ‘what is the relationship between employee disposition (sense of coherence) and employee readiness for change’, the significant correlations between SOC and readiness for change across both companies as well as the results of the first order partial correlations, reveal that the dispositional measure of SOC was strongly related to employee readiness for change in the current study.

In relation to the third aim of the present study: ‘which set of independent variables (sense of coherence and organisational climate) are most strongly related to the dependent variable (readiness for change), the regression results reflect that the ‘meaningfulness’ component of the SOC was the most influential dimension on employee readiness for change.