

CHAPTER 5 RESULTS

5.1 INTRODUCTION

The results of the statistical analysis are presented under the headings of sections B, C, D, E, F and G. The format of the report was designed to make reading simple and clear, whilst providing the most relevant and important information for answering the research questions.

The information required to draw conclusions with in chapter 6 is as follows:

Section 5.2 provides the information required to answer research question 1.

The results of the hypothesis testing and the findings on the analysis of variance are reported under each section.

Section 5.3 provides the information used to do the structural equations analysis, as well as the structural equation model from which the factors are extracted. It also provides the extracted factors that are required to fit the new change model in chapter 6 as transformational and transactional factors of workforce diversity. Thus, this sub section will be used to answer research questions 2 and 3.

Summaries of the results of the statistical analysis for this report are found in appendix 4

The results on sample statistics in appendix 4 provide information as follows:

A description of the Criterion Group and the reference group based on demographic (DEM) and organisational (ORG) diversity. The descriptions provide information on possible differences and similarities in the means of sections between and within the two groups through the following: (a) the mean, (b) the F-Value and (c) $Pr > F$

5.2 THE DIMENSIONS OF WORKFORCE DIVERSITY

The demographic and organisational diversity is annotated as follows:

DEM (VV7) : Age of the observer. Categories are:

20 - 30 years; 31 - 40 years; 41 years and older

DEM (V8) : Gender of the observer. Categories are:

1 = female; 2 = male

ORG (VV3) : Length of service at present organisation.

Tenure vs. Yuppies (young professionals)

ORG (VV4) : Nature of the industry.

Corporate Commercial vs. Parastatal.

ORG (VV5) : Organisational category of work done by observer

Human resource function (PM) vs. Quantitative function (QF)

ORG (VV6) : Size of the organisation:

Corporate vs. small and medium sized organisations.

ORG (VV10) : Economic sector of the organisation.

Private, public or other.

5.2 THE DIMENSIONS OF WORKFORCE DIVERSITY IN SOUTH AFRICA

5.2.1 The Status quo regarding the management of diversity

Objectives of this section

The main objective of this section is to compare the results to the score-criteria of organization form, so that the organization form of South African organizations as perceived by the managers in the population sample of can be established. The tables of sample statistics appear in appendix 3 (b).

Findings on the sample Statistics

$N = 608$. The actual mean falls in the interval $17.85 \pm .18 = 17.67 - 18.03$.

(i) *The hypothesis*

The hypothesis is that for Section D, the mean is less than 17, i.e. the results would indicate a mono-cultural diversity climate.

As the actual sample mean = 17,85, the hypothesis have to be rejected. However, a monocultural climate is indicated by a sample mean of 11-16, and non-discriminatory by 17-26.

For the purposes of this research, the sample mean can be viewed as reflective of a mono-cultural organization form.

(ii) *Statistical differences in the mean within and between Criterion and Reference Groups based on demographic an rganizational diversity*

There is a significant difference within the reference group between varying age groups on Section D. The reference group was drawn from the University of Pretoria. In the results of the study of diversity at the University of Pretoria it was seen that 48% of higher-level management (HLM), thought that the university was in he non-discriminatory phase. It may be the case that in this study, older members of the

reference group share the same historical background as the higher-level management group in the pilot-study, contributing to the mean of 18.34, which is higher than the criterion group mean of 17.07.

There is no significant difference within the reference group between tenure and yuppies on Section D. One can thus conclude that there is no significant difference between variations in age and tenure.

There is no significant difference within and between groups, between Corporate Commercial and Parastatal.

There is no significant difference within and between groups, between Human Resource and Quantitative functions on Section D.

There is no significant difference within and between groups, between Corporate and SMMES on Section D.

There is no significant difference within and between groups, between private, public and others on Section D.

5.2.2 Extent of organizational change

Objectives of this section

To help an organization assess how open it is to change.

To identify places where an organization or groups are not open.

To determine what, if anything, needs to be done to make the culture of the organization more open.

Sample Statistics

$N = 608$. Sample mean = $41,39 \pm .40 = 40.99 - 41.79$

(i) *The hypothesis*

The hypothesis is that for Section C, the mean is less than 39, i.e. change should be implemented quicker. As the actual sample mean = 41,38, the hypothesis is rejected.

The organisations understand that change is a reality; and are open to change, but has

not fully embraced it, nor is it harnessing changes to make it work for the organisation.

The organisations understand that change is a reality; and are open to change, but has not fully embraced it, nor is it harnessing changes to make it work for the organisation.

It would seem that the variances in age and membership of private and public organizations are the sources of differences. The stereotypes developed by older people tend to be hardest to change. One of the hardest gaps to bridge is not one of culture or race, but one of age (Gardenswartz and Rowe, 1993:387).

Statistical differences in the mean within and between Criterion and Reference groups based on demographic and organizational diversity

There are significant differences between observers varying in age in the reference group on change. As in section D, it is likely that the older observers view current adaptations to change more positively, because of their historical background. If this assumption is true, then they may also represent higher management levels in their organizations. Their organization's culture will then be more permeable to change (Gardenswartz and Rowe: 232).

There are no significant differences between males and females in both groups, as well as between groups on change. There are significant differences within and between the two groups belonging to Corporate Commercial and Parastatal organisations on change. Parastatal organizations are situated mainly in Pretoria, and it is assumed that this population consists mainly of older observers. As with varying age, one can then expect these differences. The differences in the corporate section may be explained by migration of older people from parastatal organizations to corporate organizations as a result of affirmative action and assisted retirements.

There are no significant differences within and between groups in Human Resource or Quantitative functions on change.

There is a significant difference within the criterion group between corporate and SMMES on change. Small and medium-sized companies adapt quicker to change. This fact, together with the presence of more older people in corporate organizations, can explain the differences.

There are significant differences within and between groups, between private, public and other organisations on change. These differences can be explained in the same way as was done for corporate and parastatal organization.

5.2.3 How much is diversity valued in your organization

Objectives of this research

- (i) To assess attitudes about openness toward diversity.
- (ii) To identify possible sources of resistance to diversity.
- (iii) To uncover personal prejudices and feelings about diversity.

Sample Statistics

N = 608. Sample mean = 21,20 (F2); +- .14 = 20.06 – 21.34; 27,89 (F1), +- .17 = 27.72 – 28.06

(i) *Hypothesis*

Managers will perceive organizations to have a more mono-cultural view to workforce diversity.

Multicultural view:	8.2 / 612 (25%)
Mono-cultural view:	<u>-23.7 / 612 (75%)</u>
Aggregate: is diversity not valued	<u>-15.5 (50%)</u>

Thus, the hypothesis cannot be rejected. However, the mono-cultural items have a very high score, nearly three time as much as the score of the multicultural items. Thus, the view that workforce diversity is not being valued is very strong.

(ii) *Statistical differences in the mean between Criterion and Reference groups based on demographic and organizational differences*

There are no significant differences between the criterion and reference group with regard to any demographic or organisational characteristics on Section F1, which is the section that represents monocultural views. This is a very significant finding. It means that all observers perceive organizations in South Africa not to value diversity, and that this perception is quite strong.

There is a significant difference within the criterion group between the means of males and females on Section F2, which represents multicultural views on the valuing of workforce diversity. There is a significant difference within the criterion group between the means of tenure and yuppies on Section F2. The results till thus far have shown that older people may view organizations as being more multicultural than viewed by younger people.

There is a significant difference within the reference group between Corporate and SMME's on Section F2. The results till thus far point to the possibility that corporate organizations, due to its size, may have more older people, who may have a more multicultural view than younger people.

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Scoring:

The even-numbered items are opinions that represent a more mono-cultural view and resistance to diversity. The higher the total for these items, the stronger this view is held.

The odd-numbered items are opinions that represent a more multicultural view and a valuing of diversity. The higher the total of these items, the stronger this view is held.

An overall score for comparison purposes can be obtained by subtracting the odd

score from the even score. The result may be a positive or negative number. The higher the number on a positive scale, the greater the acceptance and receptivity to diversity.

Monocultural items (V62; V64) will have a positive correlation with mono-cultural items on D options “1” and with low scores on Section C and options “1” and “2” on Section B.

Multicultural items (V63; V65) will have a positive correlation with multicultural Items D3, and high scores on Section C and options “4” and “5” on Section B.

5.2.4 How is diversity managed in your organization?

Objectives of this section

Gardenswartz and Rowe (1993:270), state that the objectives of this section are the following:

To assess three levels of an organization’s effectiveness in managing a diverse workforce: individual beliefs and attitudes, organizational values and norms, and management practices and procedures.

To increase awareness and knowledge about aspects of managing workforce diversity.

To target areas of needed development.

Sample statistics

$N = 608$. Sample mean = $32,79 \pm .30 = 32.49 - 33.09$

(i) The hypothesis

The hypothesis is that aggregate will show that organisations emphasise organisation values and norms (OVN) and management practices and policies (MPP) and that they de-emphasise individual attitudes and beliefs (IAB).

The way, in which diversity is actually managed, as perceived by the observers, add up as following:

Individual attitudes and beliefs:	0.00
Organizational values and norms	16.30
Management practices and procedures:	17.44
Total aggregate score:	33.74

The actual results show that the hypothesis is true and cannot be rejected.

(ii) *Statistical differences in the mean between -Criterion and Reference Group based on demographic and organizational diversity*

There is a significant difference within the reference group between the means of different age groups on Section G.

There is a significant difference within the reference group between the means of tenure and yuppies on Section G.

There is a significant difference within the criterion group between Corporate Commercial and Parastatal on Section G.

Out of possible 56 points, the score of 33.74 indicates that organizations are 60.3% effective in managing workforce diversity.

Organizational values and norms contribute to $16.3/22 = 73\%$ of how workforce diversity is managed.

Management practices and procedures contribute to $17.44/22 = 88\%$ of how workforce diversity is managed.

5.2.5 Extent of diversity-related problems

Objectives of this section

Gardenswartz and Rowe (1993:273), state that the objectives of this section is:

- (i) To identify diversity-related problems within the organization.
- (ii) To raise awareness and spark discussion about such issues.
- (iii) To provide a jumping-off point for taking action to deal with diversity-related problems.

Sample statistics

$N = 608$, Mean = 45.10 \pm 0.46 = 44.64 – 45.56

(i) *Hypothesis*

The hypothesis is that for the Section B, the mean is less than 37, i.e., it has in the context of this section, a negative diversity climate.

As the actual sample mean = 45,10, it can be concluded that the diversity climate is neutral, i.e., it is neither negative nor positive.

(ii) *Statistical differences in the mean between Criterion and Reference groups based on demographic and organizational diversity*

There is no statistical difference between any males and females on the extent of diversity related problems.

There are no statistical differences between any observers of any age group.

There are significant differences Corporate Commercial and Parastatal.

There is no significant difference between PM-function and QF. There is a significant difference within the criterion group on Corporate and SMME. There is a significant difference within the reference group on Private, Public, Other.

5.3 RESULTS OF THE DETERMINATION OF THE FACTORS OF WORKFORCE DIVERSITY

5.3.1 Results of the association between sections

5.3.1.1 Introduction

The results on the associations between sections, are associations between latent variables, and will be used in covariance analysis to determine the factors (manifest) of workforce diversity.

Figure 5.3.1 The interdependence between the sections of the diversity opinion questionnaire

	Sorted rotated combined group
D Status quo re management of diversity in your organisation.	0.858
G How is diversity managed in your organisation.	0.828
C Extent of organisational change	0,743
B Extent of diversity-related problems	0,565
F1 (multicultural views) How much is diversity valued in your organisation.	-0,446
F2 (mono-cultural views) How much is diversity valued in your organisation	0,251

It is important not to ignore the factor loading of F2, the monocultural view of valuing diversity or the resistance to diversity. Reasons for this will be discussed in chapter 6.

The interrelationships between sections

There are no significant differences in the validity of the associations between sections or dimensions.

Differences between criterion and reference groups on extent of association of sections

There are significant differences between the criterion and reference group on the association between mono-cultural (F 2) and multicultural (F1) statements on the valuing of workforce diversity.

Extent of association of sections based on demographic and organizational diversity.

Association : based on demographic attributes Gender

(V8):

There are significant differences within the reference group on the association of multicultural statements on the valuing of diversity, with openness to change.

There are also differences within the reference group on the association of multicultural statements on the valuing of diversity with how diversity is managed.

Age (VV7):

There are differences within the reference group on the association of mono-cultural statements with multicultural statements on the valuing of diversity.

Association based on organisational attributes

Tenure (VV3):

There are differences within the reference group on the association of mono-cultural statements with multicultural statements on the valuing of diversity.

Nature of business (VV4):

There are differences within the reference group on the association of mono-cultural statements with multicultural statements on the valuing of diversity.

Career category (H.R. function vs. quantitative function) (VV5):

There are differences within the reference group on the association of mono-cultural statements with multicultural statements on the valuing of diversity.

Size of the organization (VV6):

There are differences within the reference group on the association of mono-cultural statements with multicultural statements on the valuing of diversity.

Economic sector of the organization (VV10):

There are differences within the reference group on the association of mono-cultural statements with multicultural statements on the valuing of diversity.

5.3.2 Results of the structural equations analysis

The results of this section have to be combined with that of the factor and item analysis of 5.2.1; 5.2.2; 5.2.3; 5.2.4; and 5.2.5. Structural equations analysis is confirmatory factor analysis in the context of major patterns of inferred causality based on the associations between sections or dimensions of workforce diversity.

The factors determined in the analysis of covariance are selected from the structural equations model that satisfy the minimum criteria for a good fit for a theoretical model. Figure 5.3.2 is the path diagramme or structural equations model model of workforce diversity in South Africa that needs to be assessed for acceptance as an interim or transitional model.

Figure 5.3.2 Path diagramme of the theoretical model of workforce diversity in South Africa

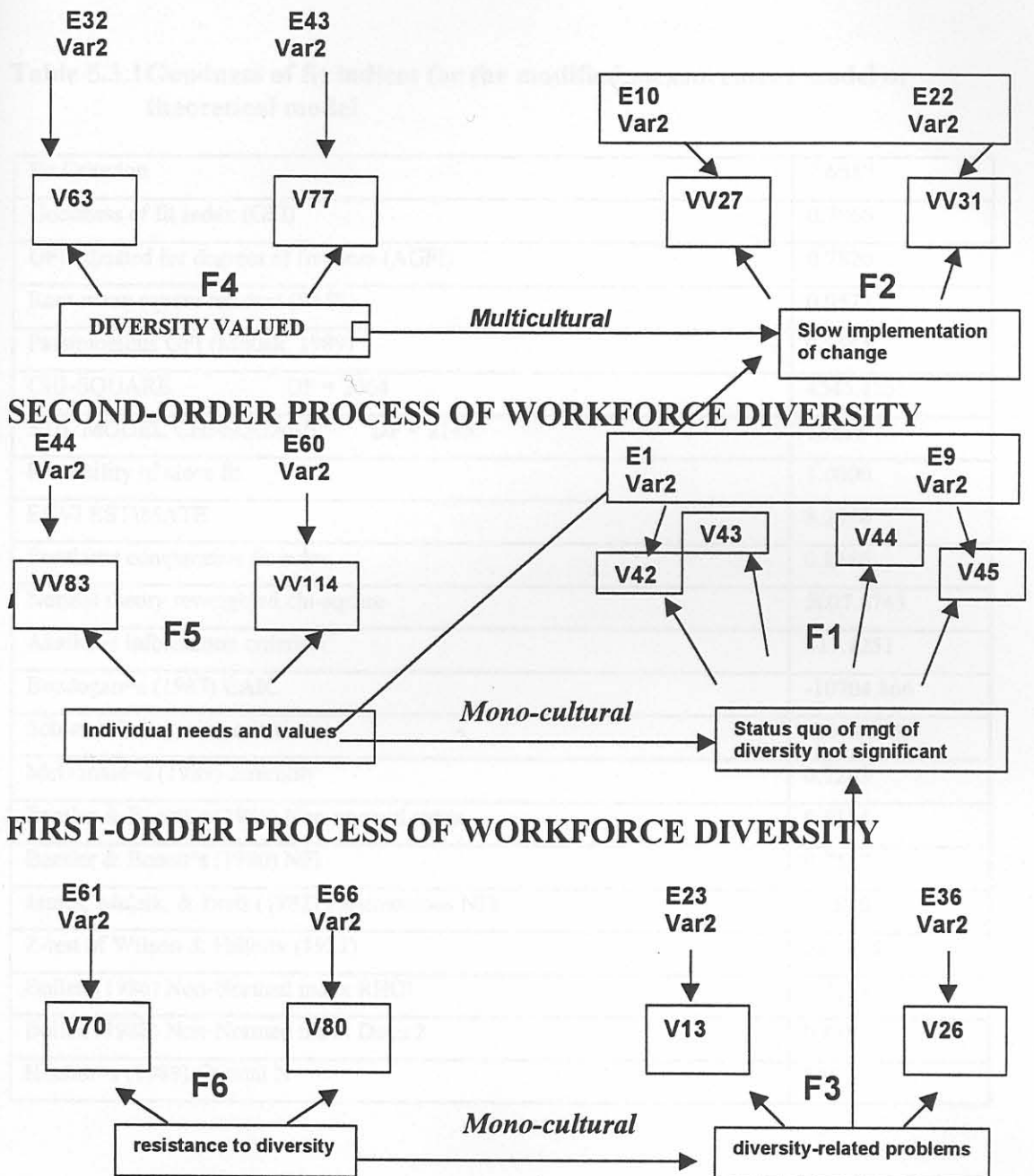


Table 5.3.1 presents the goodness of fit indices of the theoretical model in figure 5.3.2. These indices must be assessed with other characteristics of an ideal fit of the data with the predicted model, as outlined in step1 of the analysis.

Table 5.3.1 Goodness of fit indices for the modified measurement model or theoretical model

Fit Criterion	7.6517
Goodness of fit index (GFI)	0.7965
GFI adjusted for degrees of freedom (AGFI)	0.7820
Root mean square residual (RMR)	0.0572
Parsimonious GFI (Mulaik, 1989)	0.7664
CHI-SQUARE DF = 2064	4545.1251
NUL MODEL CHI-SQUARE: DF = 2145	15819
Probability of close fit	1.0000
ECVI ESTIMATE	8.2096
Bentler=s comparative fit index	0.8186
Normal theory reweighted chi-square	5007.8743
Akaike=s information criterion	417.1251
Bozdogan=s (1987) CAIC	-10704.866
Schwartz's Bayesian criterion	-8640.8656
McDonald=s (1989) centrality	0.1243
Bentler & Bonett's (1980) Non-normed index	0.8114
Bentler & Bonett's (1980) NFI	0.7127
James, Mulaik, & Brett (1982) Parsimonious NFI	0.6858
Z-test of Wilson & Hilferty (1931)	29.0194
Bollen (1986) Non-Normed index RHOI	0.7014
Bollen (1988) Non-Normed index Delta 2	0.8196
Hoelter=s (1983) Critical N	285

Extent to which criteria for determining the factors of workforce

Diversity is met

The tests show that the theoretical model provides a fit that is acceptable. Following are notes on the extent to which the fit-criteria are met.

The p value for the model chi-square test is $> .05$

(ii) *The Chi-square difference test:*

$$M_t - M_m = 4545 - 4541 = 4.$$

The chi-square difference value for this comparison is 4, which is quite close to the value that was predicted by the LaGrange multiplier test. The degrees of freedom for the test are equal to the difference between the degrees of freedom for the two models, i.e., $2064 - 2062 = 2$.

The critical value of chi-square with 2 degrees of freedom ($p < .001$) is 13.82. The observed chi-square difference value of 4 is less than this critical value, meaning that there is no significant difference in the fit provided by the two models.

(iii) The chi-square/df ratio should be less than 2

$$\text{The chi-square/df ratio} = 2.$$

(iv) The CFI and the NNFI should both exceed 0.9; the closer to 1.00, the better. The CFI = 0.82, and the NNFI = 0.82.

The absolute value of the t-statistics for each factor loading and path

coefficient exceed 1.96, and the standard factor loadings are non-trivial in size (i.e., absolute values should exceed 0.05).

(vi) The Root-squared values for the latent endogenous variables should be moderately large, compared to what typically is obtained in research with these variables.

The distribution of normalized residuals is symmetric and centred on zero. 48

[12(4)] normalized residuals exceed 2.0 in absolute value.

(viii) The combined models demonstrate very acceptable levels of

Parsimonious GFI and PNFI = 0.72

The structural portion of the model should demonstrate relatively high levels of parsimony and fit, as evidenced by the RNFI, the RPR, and the RPF1.

The structural portion demonstrate moderate levels of parsimony and fit = 0.70.

The ideal is very often not attained with real world data (Anderson and Gerbing, 1989).

Following now is the third stage of the operationalization of the new paradigm of workforce diversity:

Provision of an intermediary scale for the determination of variables of workforce diversity in South Africa.

5.3.3 The factors of workforce diversity in South Africa

Status quo regarding the management of diversity

- | | |
|-----|---|
| V43 | Newcomers are expected to adapt to existing norms, or
There is some flexibility to accommodate the needs of diverse staff, or
Norms are flexible enough to accommodate everyone. |
| V44 | Diversity is an issue that stirs irritation and resentment, or
Attention is paid to meeting equal employment opportunity guidelines, or
Working towards a diverse staff is seen as a strategic advantage. |
| V45 | Dealing with diversity is not a top priority, or
Dealing with diversity is the responsibility of the personnel department, or
Dealing with diversity is considered part of every manager's job. |
| V46 | People downplay or ignore differences among employees, or
People tolerate differences and the needs they imply, or
People value differences and want to see diversity cultivated. |
| V50 | Managers are held accountable for:
Maintaining a stable staff and maintaining existing norms, or
Meeting affirmative action goals and identifying promotable talent, or
Building productive work-teams with a diverse staff. |
| V51 | In our company it is an advantage:
To be a white male, or
Learning to be the old guard, or
To be unique and find new ways of doing things. |

- | | |
|-----|---|
| V47 | There is diversity in staff at lower levels, or
There is diversity among staff at lower and middle management levels, or
There is diversity among staff at all levels. |
| V42 | Family and parenting problems like day-care and care of aged relatives are treated as women's problems, or
There are flexible systems to accommodate the needs of diverse staff, or
Many options are available to support staff with children and dependants. |

Extent of openness to change

- | | |
|------|---|
| VV27 | Change is viewed as a challenge and opportunity |
| VV28 | Policies are reviewed annually |
| VV29 | Rewards are handed out to suit the preference of the person rewarded |
| VV30 | There is an openness to suggestions from all people in the company |
| VV31 | Our strategic plan is revised as needed |
| VV32 | “We have always done it this way”, is a reflection of how our company responds to new ideas |
| VV33 | When problems emerge, there is a willingness to fix them |
| VV34 | Our training and services reflect awareness of a diverse customer base |
| VV35 | My supervisor values new ideas and implements them quickly |
| VV36 | Performance evaluation here measures staffs adaptation to change |
| VV37 | Our top managers are visionary and approachable |
| VV38 | We can bring about changes very easily |
| VV40 | People at all levels can build or refine structures |

How much is diversity valued in your organization

- | | |
|------|---|
| V63 | Diversity brings creativity and energy to a workgroup |
| V65 | Multicultural teams can be stimulating and productive |
| V68 | Diversity only brings unnecessary conflict and problems in a workgroup |
| V67 | Showing flexibility to people's individual needs increases commitment and motivation of employees. |
| V71 | People are motivated and productive when they feel they are accepted for who they are. |
| V74 | Minority groups tend to stick together. |
| VV73 | Stereotypes exist about minority groups. |
| VV75 | Differences often make people feel uncomfortable |
| V80 | People are reluctant to disagree with minority group employees for fear of being called prejudiced. |
| V72 | Women and minorities are over-sensitive to prejudice and discrimination. |
| VV64 | Minority group members should be expected to forsake their own cultures and adapt to our ways. |
| V77 | There should be no double standards – the rules should be the same for everyone. |

How is diversity managed in your organization

- | | |
|-------|--|
| VV113 | Top management backs up its value of diversity with action.
(Organization values and norms) |
| VV114 | Managers have effective strategies to use when one group refuses to work with another.
(Management practices and procedures) |
| VV104 | Policies are flexible enough to accommodate everyone.
(Organizational values and norms) |
| VV91 | Managers are flexible with structure benefits and rules that work for everyone.
(Management practices and procedures) |
| VV111 | Managers effectively use problem-solving skills to deal with language differences and other cultural clashes.
(Management practices and procedures) |
| VV108 | Multicultural work teams exist and are working harmoniously.
(Management practices and procedures) |
| VV110 | Resources are spent on diversity development
(Organizational values and norms) |
| VV84 | Managers have a track record of firing and promoting diverse staff.
(Management practices and procedures) |

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

VV87	Managers hold all people equally accountable. (Management practices and procedures)
VV105	Managers get active participation from all staff in meetings. (Management practices and procedures)
VV102	Managers give feedback and evaluate performance so staff does not lose face. (Management practices and procedures)
VV97	Members of minority groups feel that they belong. (Organizational values and norms)
VV94	There is a mentoring programme that identifies and prepares people of diverse backgrounds for promotion. (Organizational values and norms)
VV93	There is a mentoring programme that identifies and prepares women for promotion. (Organizational values and norms)
VV83	There is diverse staff at all levels. (Organizational values and norms)
VV95	Appreciation of differences can be seen in the rewards managers give. (Organizational values and norms)
VV98	One criterion of a manager's performance is developing the diversity of his/her staff. (Management processes and procedures)

Extent of diversity-related problems

V19	Lack of social interaction between members of diverse groups
V17	Ethnic, racial or gender slurs or jokes
V13	Complaints about staff speaking other languages at work
V2	Mistakes and productivity problems due to staff not understanding directions
V21	Difficulty in recruiting and retaining members of different groups
V16	Difficulty in communicating due to limited or heavily accented English