

Chapter 6

Results

In this chapter the results of the analyses pertaining to the Individualism (IS) and Collectivism (CS) scores, and the Semantic Differential Scale (SDS) scores for the perceptions of the five cultural-orientation groups, are provided and illustrated by means of tables of findings. The first section of this chapter refers to the descriptive statistics for the IS/CS scores and the SDS attitude scores. The second section presents the results of the factor analyses and reliability analyses of the (IS/CS) scores and the five SDS scores separately. The third section focuses on the group comparisons of the IS and CS scores in terms of each independent variable. The fourth section focuses on the group comparisons of the SDS attitude scores for the perceptions of each of the five cultural-orientation groups included in the questionnaire. Lastly, the fifth section includes the results of the correlations between the IS/CS scores and the SDS attitude scores for the perceptions of the five cultural-orientation groups separately.

The predetermined decisional level of statistical significance was set at $p = .05$. In the cases where the observed significance values are on a smaller probability level, for example $p = .01$ or $.001$, these values exceed the required levels of statistical significance and are therefore regarded as highly significant. The results pertaining to each hypothesis will be illustrated by means of tables of findings. Only those values which are statistically significant will be indicated in bold and with asterisks where relevant, as well as noted in the text accompanying each table.

6.1 Descriptive statistics

The descriptive statistics for the IS/CS scores and the five SDS Attitude scores are provided in **Table 6.1**.

Table 6.1 Descriptive statistics for the SDS Attitude and IS/CS scores

DEPENDENT VARIABLE	N	MINIMUM SCALE POINT	MAXIMUM SCALE POINT	MEAN SCALE POINT	STD. DEVIATION
IS	541	1.00	5.80	1.7594	.57
CS	541	1.00	5.50	1.7974	.62
WESTERN-AFRIKAANS SDS	541	1.58	7.00	4.6032	.89
WESTER N-ENGLISH SDS	539	2.05	7.00	4.8274	.78
INDIAN/ASIANS SDS	541	1.40	7.00	4.4219	.90
MIDDLE-EASTERN (MUSLIM) SDS	540	1.00	7.00	4.5126	.89
INDIGENOUS AFRICAN SDS	540	1.00	7.00	4.2532	1.03

Table 6.1 provides an indication of the descriptive statistics for the IS/CS scores and each of the five SDS scores respectively. Please note that the tabulated minimum and maximum range of scores refer to the scale point averages for the total scale scores for each dependent measure, for which the mean, median and standard deviation has also been provided. The IS/CS and SDS scores range between a value of one to seven. For the IS/CS scores, a low value indicates a strong endorsement of a particular value-orientation, and a high score indicates a weak endorsement of a particular value-orientation. For each of the five SDS scores, a low value indicates an unfavourable perception of a particular cultural group, and a high value indicates a favourable perception of the cultural group concerned.

As indicated in **Table 6.1**, the mean IS/CS scores were clearly skewed towards a positive extreme, suggesting a strong endorsement of both value-orientations for the total subject sample. The mean IS and the mean CS scores were **1.7594** and **1.7974** respectively. The highest mean SDS score for the total subject sample was indicated for the perceptions of the Western-English cultural group (**4.8274**). This was followed by the mean SDS scores for the perceptions of the Western-Afrikaans (**4.6032**), Middle-Eastern (Muslim) (**4.5126**), Indian/Asian (**4.4219**) and Indigenous African (**4.2532**) cultural groups in order of favourability. This indicates that the Western-English cultural group was perceived most favourably and the Indigenous African cultural group was perceived the least favourably, as indicated by the scores for the total subject sample.

6.2 The psychometric characteristics of the research instruments

6.2.1 Postulates 1.1 and 1.2: Construct validity and associated reliability of the IS and CS

Table 6.2 represent the results of the factor analysis of the **IS scores** for the total sample.

Table 6.2 The total variance explained by the second-order principal factors and the reliability (Cronbach alpha) of the ten IS items

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA OF THE TEN IS ITEMS
1	1.460	72.990	72.990	.75
2	.540	27.010	100.000	

Extraction Method: Principal Axis Factoring

Number of factors: Kaiser's criterion of Eigenvalues = 1

Table 6.2 indicates the **percentages of the total variance** for the **IS scores** explained by the two second-order factors, as well as the **reliability (Cronbach alpha)** coefficients for the ten IS items. The

results indicate that one main factor explains approximately **73%** of the total variance of the IS scores. The reliability (Cronbach alpha) for the ten IS items is **.75**. This indicates adequate construct validity and internal reliability of the measure. Thus **Postulate 1.1** with regard to the IS scores is confirmed.

Table 6.3 present the results of the factor analyses for the **CS scores**.

Table 6.3 The total variance explained by the second-order principal factors and the reliability (Cronbach alpha) of the ten CS items

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA OF THE TEN CS ITEMS
1	1.519	75.966	75.966	.76
2	.481	24.034	100.000	

Extraction Method: Principal Axis Factoring
 Number of factors: Kaiser's criterion of Eigenvalues ≥ 1

Table 6.3 indicates the **percentages of the total variance** for the **CS scores** explained by the two second-order factors, as well as the reliability (Cronbach alpha) coefficients for the ten CS items. The results indicate that one main factor explains approximately **76%** of the total variance of the CS scores. The reliability (Cronbach alpha) for the first (principle) factor is **.76**. This indicates adequate construct validity and internal reliability of the measure. Thus **Postulate 1.2** with regard to the CS scores is confirmed.

6.2.2 Postulate 2: Factor analysis of the Semantic Differential Scale (SDS) for the perceptions of each of the five cultural-orientation groups

Tables 6.4 and 6.5 represent the results of the factor analyses of the **Western-Afrikaans SDS scores** for the total sample.

Table 6.4 Initial and extracted communalities and the rotated factor I factor-loadings for the Western-Afrikaans SDS items

SDS ITEMS	COMMUNALITIES		SDS ITEMS	FACTOR 1
	INITIAL	EXTRACTION		FACTOR-LOADINGS
1 FAIR/UNFAIR	.389	.409	WORTHLESS/VALUABLE	.657
2 UNRELIABLE/RELIABLE	.279	.291	CRUEL/KIND	.593
3 BORING/INTERESTING	.301	.305	DISHONEST/HONEST	.592
4 WISE/FOOLISH	.307	.270	UNGRATEFUL/GRATEFUL	.579
5 WORTHLESS/VALUABLE	.430	.483	COWARDLY/BRAVE	.530
6 CRUEL/KIND	.462	.500	LAZY/HARDWORKING	.514
7 GOOD/BAD	.383	.450	UNRELIABLE/RELIABLE	.505
8 LAZY/HARDWORKING	.290	.288	BORING/INTERESTING	.485
9 CO-OPERATIVE/ ARGUMENTATIVE	.270	.268	AGGRESSIVE/HARMONIOUS	.349
10 COWARDLY/BRAVE	.302	.312	BAD/GOOD	.187
11 CLEAN/DIRTY	.348	.311	RUDE/COURTEOUS	.283
12 UNGRATEFUL/GRATEFUL	.401	.421	DISLOYAL/LOYAL	.147
13 LOYAL/DISLOYAL	.318	.365	UNFAIR/FAIR	.280
14 OPEN-MINDED/ CLOSED-MINDED	.513	.611	UNPLEASANT/PLEASANT	.298
15 FLEXIBLE/RIGID	.489	.595	FOOLISH/WISE	.225
16 ACCEPTING/REJECTING	.526	.557	DIRTY/ CLEAN	.342
17 COURTEOUS/RUDE	.523	.542	RIGID/FLEXIBLE	---
18 AGGRESSIVE/HARMONIOUS	.246	.221	CLOSED-MINDED/ OPEN -MINDED	---
19 DISHONEST/HONEST	.391	.405	REJECTING/ACCEPTING	.107
20 PLEASANT/UNPLEASANT	.404	.418	ARGUMENTATIVE/CO-OPERATIVE	.104

Extraction Method: Principal Axis Factoring.
 Rotation Method: Varimax with Kaiser Normalization
 Rotation converged in 6 iterations

Table 6.5 The total variance explained by the second-order principal factors and the reliability (Cronbach alpha) for the items of the first three factors pertaining to the Western-Afrikaans SDS scores

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA
1	1.965	65.498	65.498	.8081
2	.696	23.187	88.685	.8207
3	.339	11.315	100.000	.7630

Extraction method: Principal Axis Factoring
 Number of factors: Kaiser's criterion of Eigenvalues ≥ 1

Table 6.4 presents the results for the **rotated factor-loadings** for the first factor and the **initial and extracted communalities** for the 20 adjectival/adverbial pairs pertaining to the **Western-Afrikaans SDS**. A principal axis factor analysis by Varimax Rotation (with Kaiser's Normalization) was used to extract the initial factors and to obtain the best communality estimates for each factor.

The items characterising the first factor have been indicated in bold. These are: worthless/valuable (.657), cruel/kind (.593), dishonest/honest (.592), ungrateful/ grateful (.579), cowardly/ brave (.530), lazy/ hardworking (.514), unreliable/reliable (.505), boring/interesting (.485), aggressive/harmonious (.349), dirty/ clean (.342). Each of these items indicate adequate factor-loadings above .30. The item 'worthless/valuable' had the highest loading on the first factor, indicating that this item featured as the most important measure of the first factor of Western-Afrikaans SDS scores.

Table 6.5 indicates the **percentages of the total variance**, for the **Western-Afrikaans SDS** explained by the first three second-order factors, as well as the **reliability (Cronbach alpha)** coefficients for the items of these three factors. The results indicate that one main factor explains **65.5%** of the total variance of the Western-Afrikaans SDS scores. The reliability (Cronbach alpha) for the first factor is **.8081**. Together this indicates adequate construct validity and internal reliability of the measure. Thus **Postulate 2** with regard to the Western-Afrikaans SDS scores is confirmed. However, the factor-loadings on ten items were unsatisfactorily low. This may be explained by the fact that not only one factor, but a total of three factors were extracted. Those items with low factor-loadings had higher factor-loadings on one or both the other two factors.

Tables 6.6 and 6.7 present the results of the factor analyses for the **Western-English SDS scores** for the total sample.

Table 6.6 Initial and extracted communalities and the rotated factor I factor-loadings for the Western-English SDS items

SDS ITEMS	COMMUNALITIES		SDS ITEMS	FACTOR 1
	INITIAL	EXTRACTION		FACTOR-LOADINGS
1 FAIR/UNFAIR	.354	.389	CRUEL/KIND	.622
2 UNRELIABLE/RELIABLE	.303	.316	LAZY/HARDWORKING	.597
3 BORING/INTERESTING	.294	.339	DISHONEST/HONEST	.576
4 WISE/FOOLISH	.328	.363	UNGRATEFUL/GRATEFUL	.532
5 WORTHLESS/VALUABLE	.343	.382	BORING/INTERESTING	.530
6 CRUEL/KIND	.443	.466	UNRELIABLE/RELIABLE	.522
7 GOOD/BAD	.341	.435	COWARDLY/BRAVE	.521
8 LAZY/HARDWORKING	.349	.388	WORTHLESS/VALUABLE	.517
9 CO-OPERATIVE/ ARGUMENTATIVE	.194	.248	AGGRESSIVE/ HARMONIOUS	.432
10 COWARDLY/BRAVE	.283	.310	GOOD/BAD	.185
11 CLEAN/DIRTY	.248	.301	WISE/FOOLISH	.197
12 UNGRATEFUL/GRATEFUL	.386	.437	CLEAN/DIRTY	.136
13 LOYAL/DISLOYAL	.340	.336	FAIR/UNFAIR	.306
14 OPEN-MINDED/ CLOSED-MINDED	.418	.591	PLEASANT/ UNPLEASANT	.244
15 FLEXIBLE/RIGID	.483	.611	LOYAL/DISLOYAL	.280
16 ACCEPTING/ REJECTING	.468	.600	OPEN-MINDED/ CLOSED-MINDED	.113
17 COURTEOUS/RUDE	.415	.486	FLEXIBLE/RIGID	.102
18 AGGRESSIVE/HARMONIOUS	.223	.235	ACCEPTING/REJECTING	.145
19 DISHONEST/HONEST	.410	.465	COURTEOUS/RUDE	.229
20 PLEASANT/ UNPLEASANT	.332	.340	CO-OPERATIVE/ARGUMENTATIVE	---

Extraction Method: Principal Axis Factoring.
 Rotation Method: Varimax with Kaiser Normalization.
 Rotation converged in 6 iterations.

Table 6.7 Total variance explained by the second-order principal factors and the reliability (Cronhach Alpha) for the items of the first four factors pertaining to the Western-English SDS scores

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA
1	2.286	57.148	57.148	.8191
2	.735	18.365	75.513	.7555
3	.557	13.935	89.448	.7496
4	.422	10.552	100.000	.6235

Extraction Method: Principal Axis Factoring
 Number of factors: Kaiser's criterion of Eigenvalues ≥ 1

Table 6.7 presents the results of the **rotated factor-loadings** of the first factor, and the initial and extracted communalities for the 20 adjectival/adverbial pairs pertaining to the **Western-English SDS**. A principal axis factor analysis by Varimax Rotation (with Kaiser's Normalization) was used to extract the initial factors and to obtain the best communality estimates for each factor.

The items characterising the first factor have been indicated in bold. These are: **cruel/ kind (.622)**; **lazy/hardworking (.597)**, **dishonest/honest (.576)**, **ungrateful/grateful (.532)**, **boring/interesting (.530)**, **unreliable/reliable (.522)**, **cowardly/brave (.521)**, **worthless/valuable (.517)**, **aggressive/harmonious (.432)**, **fair/ unfair (.306)**. Each of these items indicate adequate factor-loadings above .30. The highest factor-loading was indicated for the characteristic 'cruel/kind'. This indicates that the characteristic 'cruel/kind' featured as the most important measure of the first factor for the Western-English SDS scores.

Table 6.7 indicates the **percentages of the total variances** for the **Western-English SDS scores** explained by the first four second-order factors, as well as the **reliability (Cronbach alpha)** coefficients for the items of these four factors. The results indicate that one main factor explains **57.1%** of the total variance of the Western-English SDS scores. The reliability (Cronbach alpha) for the first factor is **.8191**. Together this indicates adequate construct validity and internal reliability of the measure. Thus, **Postulate 2**, with regard to the Western-English SDS scores is confirmed. However, the factor-loadings on ten items were unsatisfactorily low. This may be explained by the fact that not only one factor, but a total of four factors were extracted. Those items with low factor-loadings had higher factor-loadings on one or more of the other three factors.

Tables 6.8 and 6.9 present the results of the factor analyses of the **Indian/Asian SDS scores** for the total sample.

Table 6.8 Initial and extracted communalities and the factor I factor-loadings for the Indian/Asian SDS items

SDS ITEMS		COMMUNALITIES		SDS ITEMS	FACTOR 1
		INITIAL	EXTRACTION		FACTOR-LOADINGS
1	FAIR/UNFAIR	.386	.383	WORTHLESS/ VALUABLE	.648
2	UNRELIABLE/RELIABLE	.365	.376	BORING/ INTERESTING	.566
3	BORING/INTERESTING	.300	.343	COWARDLY/ BRAVE	.555
4	WISE/FOOLISH	.309	.486	UNGRATEFUL/ GRATEFUL	.552
5	WORTHLESS/VALUABLE	.374	.449	CRUEL/KIND	.543
6	CRUEL/KIND	.387	.424	UNRELIABLE/ RELIABLE	.529
7	GOOD/BAD	.364	.400	DISHONEST/ HONEST	.509
8	LAZY/HARDWORKING	.320	.369	LAZY/ HARDWORKING	.449
9	CO-OPERATIVE/ ARGUMENTATIVE	.279	.357	AGGRESSIVE/HARMONIOUS	.391
10	COWARDLY/BRAVE	.311	.350	COURTEOUS/RUDE	.195
11	CLEAN/ DIRTY	.233	.208	CO-OPERATIVE/ RGUMENTATIVE	---
12	UNGRATEFUL/GRATEFUL	.390	.403	FAIR/ UNFAIR	.249
13	LOYAL/ DISLOYAL	.328	.384	GOOD/ BAD	.240
14	OPEN-MINDED/ CLOSED-MINDED	.432	.537	PLEASANT/UNPLEASANT	.244
15	FLEXIBLE/RIGID	.488	.691	CLEAN/DIRTY	.187
16	ACCEPTING/REJECTING	.461	.531	FLEXIBLE/ RIGID	---
17	COURTEOUS/RUDE	.431	.476	OPEN-MINDED/CLOSED-MINDED	---
18	AGGRESSIVE/HARMONIOUS	.285	.276	ACCEPTING/ REJECTING	.148
19	DISHONEST/HONEST	.419	.459	WISE/ FOOLISH	.147
20	PLEASANT/UNPLEASANT	.421	.443	LOYAL/ DISLOYAL	.237

Extraction Method: Principal Axis Factoring.
 Rotation Method: Varimax with Kaiser Normalization
 Rotation converged in 6 iterations

Table 6.9 Total variance explained by the second-order principal factors and reliability (Cronbach alpha) for the items of the first four factors pertaining to the Indian/Asian SDS scores

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA
1	2.328	58.192	58.192	.8208
2	.742	18.541	76.733	.7592
3	.560	14.005	90.738	.7753
4	.370	9.262	100.000	.5710

Extraction Method: Principal Axis Factoring
 Number of factors: Kaiser's criterion of Eigenvalues ≥ 1

Tables 6.8 presents the results of the **rotated factor-loadings** of the first factor, and the **initial and extracted communalities** for the 20 adjectival/adverbial pairs pertaining to the **Indian/Asian SDS**. A principal axis factor analysis by Varimax Rotation (with Kaiser's Normalization) was used to extract the initial factors and to obtain the best communality estimates for each factor.

The items characterising the first factor for the Indian/Asian SDS are indicated in bold. These items are: worthless/valuable (.648), boring/interesting (.566), cowardly/brave (.555), ungrateful/ grateful (.552), cruel/kind (.543), unreliable/reliable (.529), dishonest/ honest (.509), lazy/hardworking (.449) aggressive/ harmonious (.391). Each of these items indicate adequate factor-loadings above .30. The highest factor-loading was indicated for the characteristic 'worthless/valuable'. This indicates that the characteristic 'worthless/valuable' featured as the most important measure of the first factor for the Asian/Indian SDS scores.

Table 6.9 indicates the **percentages of the total variances**, for the **Indian/Asian SDS** explained by the first four second-order factors, as well as the reliability (Cronbach alpha) coefficients for the items of these four factors. The results indicate that one main factor explains **58.2%** of the total variance of the **Indian/Asian SDS scores**. The **reliability (Cronbach alpha)** for the first factor is **.8208**. Together this indicates adequate construct validity and internal reliability of the measure. Thus, **Postulate 2** with regard to the Indian/Asian SDS scores is confirmed. However the factor-loadings on eleven items were unsatisfactorily low. This may be explained by the fact that not only one factor, but a total of four factors were extracted. Those items with low factor-loadings had higher factor-loadings on one or more of the other three factors.

Tables 6.10 and 6.11 present the results for the factor analyses of the **Middle-Eastern (Muslim) SDS scores** for the total sample.

Table 6.10 Initial and extracted communalities and the factor I factor-loadings for the Middle-Eastern (Muslim) SDS items

SDS ITEMS	COMMUNALITIES		SDS ITEMS	FACTOR 1
	INITIAL	EXTRACTION		FACTOR-LOADINGS
1 FAIR/UNFAIR	.422	.432	LAZY/HARDWORKING	.626
2 UNRELIABLE/RELIABLE	.402	.429	UNRELIABLE/RELIABLE	.611
3 BORING/INTERESTING	.331	.361	WORTHLESS/VALUABLE	.607
4 WISE/FOOLISH	.315	.321	DISHONEST/HONEST	.598
5 WORTHLESS/VALUABLE	.402	.414	UNGRATEFUL/GRATEFUL	.590
6 CRUEL/KIND	.523	.559	COWARDLY/BRAVE	.564
7 GOOD/BAD	.433	.467	CRUEL/KIND	.553
8 LAZY/HARDWORKING	.395	.446	BORING/INTERESTING	.546
9 CO-OPERATIVE/ ARGUMENTATIVE	.364	.442	AGGRESSIVE/HARMONIOUS	.408
10 COWARDLY/BRAVE	.332	.376	GOOD/BAD	.263
11 CLEAN/DIRTY	.321	.345	COURTEOUS/RUDE	.292
12 UNGRATEFUL/GRATEFUL	.384	.402	CO-OPERATIVE/ ARGUMENTATIVE	---
13 LOYAL/DISLOYAL	.308	.416	PLEASANT/UNPLEASANT	.238
14 OPEN-MINDED/ CLOSED-MINDED	.588	.681	FAIR/UNFAIR	.289
15 FLEXIBLE/RIGID	.600	.739	CLEAN/DIRTY	.187
16 ACCEPTING/REJECTING	.581	.615	WISE/FOOLISH	.236
17 COURTEOUS/RUDE	.510	.534	LOYAL/DISLOYAL	.288
18 AGGRESSIVE/HARMONIOUS	.312	.381	FLEXIBLE/RIGID	---
19 DISHONEST/HONEST	.443	.478	OPEN-MINDED/CLOSED-MINDED	---
20 PLEASANT/UNPLEASANT	.461	.500	ACCEPTING/REJECTING	.176

Extraction Method: Principal Axis Factoring.
 Rotation Method: Varimax with Kaiser Normalization
 Rotation converged in 7 iterations

Table 6.11 Total variance explained by the second-order principal factors and reliability (Cronbach alpha) of the items of the first three factors pertaining to the Middle-Eastern (Muslim)

SDS scores

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA
1	2.007	66.900	66.900	.8393
2	.637	21.221	88.121	.8215
3	.356	11.879	100.000	.8420

Extraction Method: Principal Axis Factoring
 Number of factors: Kaiser's criterion of Eigenvalues ≥ 1

Table 6.10 presents the results of the **rotated factor-loadings** of the first factor, and **the initial and extracted communalities** for the 20 adjectival/adverbial pairs pertaining to the **Middle-Eastern (Muslim) SDS**. A principal axis factor analysis by Varimax Rotation (with Kaiser's Normalization) was used to extract the initial factors and to obtain the best communality estimates for each factor.

The items characterising the first factor for the Middle-Eastern (Muslim) SDS are indicated in bold. These items are: **Lazy/ hardworking** (.626), **unreliable/reliable** (.611), **worthless/valuable** (.607), **dishonest/honest** (.598), **ungrateful/grateful** (.590), **cowardly/brave** (.564), **cruel/kind** (.553), **boring/interesting** (.546), **aggressive/harmonious** (.408). The highest factor-loading was indicated for the characteristic 'Lazy/ hardworking'. Each of these items indicate adequate factor-loadings above .30. This indicates that the characteristic 'Lazy/ hardworking' featured as the most important measure of the first factor for the Middle-Eastern (Muslim) SDS scores.

Table 6.11 indicates the **percentages of the total variances** for the **Middle-Eastern (Muslim) SDS** explained by the first three second-order factors, as well as the **reliability (Cronbach alpha)** coefficients for the items of these three factors. The results indicate that one main factor explains **66.9%** of the total variance of the Middle-Eastern (Muslim) SDS scores. The reliability (Cronbach alpha) for the first factor is **.8393**. Together this indicates adequate construct validity and internal reliability of the measure. Thus, **Postulate 2** with regard to the Middle-Eastern (Muslim) SDS scores is confirmed. The factor-loadings on eleven items were however unsatisfactorily low. This may be explained by the fact that not only one factor, but a total of three factors were extracted. Those items with low factor-loadings had higher factor-loadings on one or both the other factors.

Tables 6.12 and 6.13 represent the results of the factor analysis of the **Indigenous African SDS scores** for the total sample.

Table 6.12 Initial and extracted communalities and the factor I factor-loadings for the Indigenous African SDS items

SDS ITEMS	COMMUNALITIES		SDS ITEMS	FACTOR 1
	INITIAL	EXTRACTION		FACTOR -LOADINGS
1 FAIR/UNFAIR	.487	.550	GOOD/BAD	.631
2 UNRELIABLE/RELIABLE	.459	.489	FAIR/UNFAIR	.599
3 BORING/INTERESTING	.370	.446	WISE/FOOLISH	.553
4 WISE/FOOLISH	.462	.494	CLEAN/DIRTY	.549
5 WORTHLESS/VALUABLE	.325	.386	CO-OPERATIVE/ ARGUMENTATIVE	.456
6 CRUEL/KIND	.453	.474	LOYAL/DISLOYAL	.401
7 GOOD/BAD	.458	.526	FLEXIBLE/RIGID	.218
8 LAZY/HARDWORKING	.442	.456	ACCEPTING/REJECTING	.187
9 CO-OPERATIVE/ ARGUMENTATIVE	.342	.407	OPEN-MINDED/CLOSED-MINDED	.293
10 COWARDLY/BRAVE	.356	.415	COURTEOUS/RUDE	.341
11 CLEAN/DIRTY	.455	.485	PLEASANT/UNPLEASANT	.393
12 UNGRATEFUL/GRATEFUL	.434	.473	AGGRESSIVE/HARMONIOUS	.136
13 LOYAL/DISLOYAL	.343	.341	DISHONEST/HONEST	.246
14 OPEN-MINDED/ CLOSED-MINDED	.472	.513	LAZY/HARDWORKING	.225
15 FLEXIBLE/RIGID	.484	.589	UNGRATEFUL/GRATEFUL	.126
16 ACCEPTING/REJECTING	.458	.554	UNRELIABLE/RELIABLE	.312
17 COURTEOUS/RUDE	.469	.499	BORING/INTERESTING	---
18 AGGRESSIVE/HARMONIOUS	.371	.450	WORTHLESS/VALUABLE	.177
19 DISHONEST/HONEST	.520	.576	COWARDLY/BRAVE	.155
20 PLEASANT/UNPLEASANT	.447	.483	CRUEL/KIND	.297

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization

Rotation converged in 6 iterations

Table 6.13 Total variance explained by the second-order principal factors and the reliability (Cronbach alpha) for the items of the first four factors pertaining to the Indigenous African SDS scores

FACTOR	EIGENVALUES	% OF VARIANCE	CUMULATIVE %	CRONBACH ALPHA
1	2.734	68.360	68.360	.8216
2	.608	15.201	83.561	.8266
3	.376	9.394	92.956	.8087
4	.282	7.044	100.000	.7420

Extraction Method: Principal Axis Factoring

Number of factors: Kaiser's criterion of Eigenvalues ≥ 1

Table 6.12 presents the results for the **rotated factor-loadings** for the first factor and the **initial and extracted communalities** for the 20 adjectival/adverbial pairs pertaining to the **Indigenous African SDS**. A principal axis factor analysis by Varimax Rotation (with Kaiser's Normalization) was used to extract the initial factors and to obtain the best communality estimates for each factor.

The items characterising the first factor have been indicated in bold. These are: bad/good (.631), fair/unfair (.599), wise/foolish (.553), clean/dirty (.549), argumentative/co-operative (.456), loyal/disloyal (.401), courteous/rude (.341), pleasant/unpleasant (.393), unreliable/reliable (.312). Each of these items indicate adequate factor-loadings above .30. The item 'good/bad' had the highest loading on the first factor, indicating that this item featured as the most important measure of the first factor of the Indigenous African SDS scores.

Table 6.13 indicates the **percentages of the total variance**, for the **Indigenous African SDS** explained by the first four second-order factors, as well as the **reliability (Cronbach alpha)** coefficients of the items of these four factors. The results indicate that one main factor explains **68%** of the total variance of the Indigenous African SDS scores. The reliability (Cronbach alpha) for the first factor is **.8216**. Together this indicates adequate construct validity and internal reliability of the measure. Thus, **Postulate 2** with regard to the Indigenous African SDS scores is confirmed. Nevertheless, the factor-loadings on eleven items are unsatisfactorily low. This may be explained by the fact that not only one factor, but a total of four factors were extracted. Those items with low factor-loadings had higher factor-loadings on one or more of the other four factors.

6.3 Between-group comparisons of the IS and CS scores

This section provides detail on the results of the **IS and CS scores** for each independent variable separately. The analysis of the results of the IS and CS scores involved the examination of the differences according to the independent variables for the IS and CS separately. The following independent (between-group) variables were included in the analysis:

1. Gender
2. Student resident vs. day-student
3. Cultural-orientation group
4. Home language

Differences in the IS and CS scores of the male and female respondent, and between resident and day-students, were analysed by means of independent t-tests. Differences in the scores of the five cultural-orientation groups and the three language groups were analysed by means of ANOVA and subsequent post-hoc analyses. Tables of findings are provided for each of the statistics pertaining to the variables. These included tables pertaining to the descriptive statistics, t-test/ ANOVA results, Levene's test, and post-hoc, multivariate test results. The IS and CS scores for each item were calculated in such a way that a high score indicated a strong opposition towards a particular value statement, and a low score indicated a strong orientation towards a particular value statement. The scores ranged between 1, indicating a strong endorsement of, and 7, indicating a strong opposition towards a particular value, with 4 indicative of a neutral position. The scores for each item were added to provide a total score.

6.3.1 Hypothesis 1: Differences between male and female respondents

The results for the IS and CS scores according to the effect of gender, are provided in **Tables 6.14 and 6.15**.

Table 6.14 The mean, SD and N for the total IS and CS scores of male and female respondents

DEPENDENT VARIABLE	GENDER	N	MEAN	SD
IS SCORE	MALE	103	1.8694	.64
	FEMALE	436	1.7233	.52
CS SCORE	MALE	103	1.9735	.61
	FEMALE	436	1.7391	.57

Table 6.15 Independent t-tests, and Levene's test of equality of error variances for the comparison of the IS and CS scores for male and female respondents.

DEPENDENT VARIABLE		LEVENE'S TEST FOR EQUALITY OF VARIANCES				
		F RATIO	SIG.	t VALUE	Df	SIG. (2-TAILED)
IS SCORES	EQUAL VARIANCES ASSUMED	8.991	.003	2.443	537	.015
	EQUAL VARIANCES NOT ASSUMED			2.159	135.959	.033*
CS SCORES	EQUAL VARIANCES ASSUMED	.561	.454	3.709	537	.000***
	EQUAL VARIANCES NOT ASSUMED			3.551	146.687	.001

* significant at the .05 level

*** significant at the .001 level

Table 6.14 indicates the mean scores, the standard deviations (SD) and number of cases (N), for the total IS and CS scores of male and female respondents separately. Note that the IS and CS scores range between a value of one and seven, with a lower score indicating a stronger endorsement of a particular value-orientation. Females indicated a lower mean total IS and CS score ($m=1.7233$ and 1.7391) than males ($m=1.8694$ and 1.9735), suggesting a stronger endorsement of an Individualistic and Collectivistic value-orientation amongst the female respondents.

The results of the t-test for the IS and CS scores of the male and female respondents are provided in Table 6.15. The t-test analysis involved testing the differences between IS and CS scores of the male and female respondents. Levene's test was applied to provide an indication of the equality (homogeneity) of error variances of the IS and CS scores across both groups. A statistically significant difference between the IS scores of the male and female respondents was indicated, viz. $p=.033$. This value is statistically significant at the .05 level, under the condition of not assuming equal variances. An observation of the mean scores in Table 6.14 indicates that females had a lower mean IS score ($m=1.7233$) than males ($m=1.8694$), suggesting a stronger individualistic-orientation amongst the female respondents compared to the male respondents.

A statistically significant difference in the CS scores of male and female respondents was indicated, viz. $p=.000$. This value is significant at the .001 level, for the condition of assuming equal variances. An observation of the mean CS scores in Table 6.14 indicates that female respondents had a lower mean CS score ($m=1.7391$) than males ($m=1.9735$), suggesting a stronger Collectivistic-orientation amongst the female respondents compared to the male respondents. In view of these findings, the null-hypothesis (H_{01}), in reference to hypothesis 1, was rejected for the IS and CS scores of the male and female respondents.

6.3.2 Hypothesis 2: Differences between resident vs. day-students

The results of the **IS and CS scores** for the **resident and day-students** are provided in **Tables 6.16 and 6.17**.

Table 6.16 The mean, SD and N for the total IS and CS scores of resident and day-students.

DEPENDENT VARIABLE	RESIDENT/ DAY-STUDENTS	N	MEAN	SD
IS SCORE	RESIDENT	97	1.7691	.54
	DAY-STUDENT	423	1.7473	.55
CS SCORE	RESIDENT	97	1.9342	.65
	DAY-STUDENT	423	1.7548	.57

Table 6.17 Independent t-tests and Levene's test of equality of error variances for the comparisons of resident and day-students SDS scores.

DEPENDENT VARIABLE		LEVENE'S TEST FOR EQUALITY OF VARIANCES				
		F ratio	Sig.	t value	df	Sig. (2-tailed)
IS SCORE	EQUAL VARIANCES ASSUMED	.126	.723	.354	518	.724
	EQUAL VARIANCES NOT ASSUMED			.358	145.144	.721
CS SCORE	EQUAL VARIANCES ASSUMED	3.093	.079	2.743	518	.006**
	EQUAL VARIANCES NOT ASSUMED			2.532	132.186	.013*

* significant at the .05 level

** significant at the .01 level

Table 6.16 indicates the **mean scores, standard deviations (SD) and number of cases (N)**, pertaining to the **total IS and CS scores** of **resident and day-students** separately. The mean scores for the IS and CS range between the values of one and seven, with a low score indicating a stronger endorsement of a particular value-orientation and a high score indicating a strong opposition towards a particular value-orientation. The results in **Table 6.16** indicate that resident students had a higher mean CS score (**m=1.9342**) than day-students (**m=1.7548**), suggesting a weaker collectivistic value-orientation amongst resident students compared to day-students. The IS scores for both resident and day-students were relatively similar, **viz. m=1.7691 and 1.7473** respectively.

Table 6.17 indicates the results of the t-tests for the **IS and CS scores** of **resident and day-students** separately. The t-test analysis involved testing the differences between the mean IS and CS scores of the resident and day-students. **Levene's test** was applied to provide an indication of the equality (homogeneity) of error variances of the IS and CS scores across both groups. The results indicate no statistically significant differences between the IS scores of resident and day-students. Significant differences between the CS scores of resident and day-students were found, **viz. p=.006**, under the condition of assuming equal variances. This value is statistically significant at the **.01** level. An observation of the observed differences in **Table 6.16** indicates that the resident students provided a significantly higher CS score (**m=1.9342**) than the day-students (**m=1.7548**), suggesting a stronger collectivistic-orientation amongst day-students compared to the students in the residences.

In view of these findings, the **null-hypothesis (Ho₂)** in reference to **hypothesis 2**, with regard to the **IS scores of resident students and day-students**, was not rejected. The **null-hypothesis (Ho₂)** in reference to **hypothesis 2** with regard to the CS scores of resident students and day-students was rejected, and the **alternate hypothesis (Ha₂)** was accepted.

6.3.3 Hypothesis 3: Differences between the five cultural-orientation groups.

The differences in the **IS and the CS scores** of the **five cultural-orientation groups** were analysed by means of ANOVA and multivariate, post-hoc tests. This included multiple pair-wise comparisons between the cultural-orientation groups. The broad cultural-orientation groups were classified in terms of the biographical information pertaining to the cultural-orientation with which the respondents identified, as well as the respondents' home-language. As only a small number of respondents indicated that they were from a Middle-Eastern (Muslim) cultural group, the Middle-Eastern (Muslim) and Asian cultural groups were combined into one group. In order to accommodate a new sub-group of respondents who identified themselves with a Western cultural group, yet spoke an Indigenous African language as a first language, a new variable was created. This was referred to as the Westernised-African group. The final cultural groups included in the analyses were: **Indigenous African, Westernised-African, Indian/Asian, Western-English and Western-Afrikaans cultural groups**

The results of **the IS and CS scores** for the **five cultural-orientation groups** are provided in **Tables 6.18 to 6.22**.

Table 6.18 The mean, SD and N of the total IS and CS scores for the five cultural-orientation groups

DEPENDENT VARIABLE	CULTURAL-ORIENTATION GROUP	N	MEAN	SD
IS SCORE	INDIGENOUS AFRICAN	104	1.7610	.58
	ASIAN/INDIAN	61	1.6721	.52
	WESTERN-ENGLISH	186	1.7133	.52
	WESTERN-AFRIKAANS	137	1.7263	.51
	WESTERNISED-AFRICAN	47	2.0069	.65
	TOTAL	535	1.7470	.55
CS SCORE	INDIGENOUS AFRICAN	104	1.8154	.65
	ASIAN/INDIAN	61	1.4829	.47
	WESTERN-ENGLISH	186	1.7660	.53
	WESTERN-AFRIKAANS	137	1.7921	.55
	WESTERNISED-AFRICAN	47	2.0841	.65
	TOTAL	535	1.7779	.58

Table 6.19 Levene's test of the equality of error variances for the IS and CS scores of the five cultural-orientation groups.

DEPENDENT VARIABLE	LEVENE'S STATISTIC	DF1	DF2	SIG.
IS SCORE	3.125	4	530	.015*
CS SCORE	4.918	4	530	.001***

* significant at the .05 level

*** significant at the .001 level

Table 6.20 The ANOVA results for the differences between the IS and CS scores of the five cultural-orientation groups.

DEPENDENT VARIABLE		SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG.
IS SCORE	BETWEEN GROUPS	3.807	4	.952	3.243	.012*
	WITHIN GROUPS	155.566	530	.294		
	TOTAL	159.373	534			
CS SCORE	BETWEEN GROUPS	9.916	4	2.479	7.726	.000***
	WITHIN GROUPS	170.055	530	.321		
	TOTAL	179.971	534			

* significant at the .05 level

*** significant at the .001 level

Table 6.21 Post-hoc tests for the systematic comparisons of the IS scores for the five cultural-orientation groups.

POST-HOC TEST	CULTURAL-ORIENTATION GROUP	CULTURAL -ORIENTATION GROUP	MEAN DIFFERENCE (I-J)	STD. ERROR	Sig.
DUNNETT T3	INDIGENOUS AFRICAN	ASIAN/INDIAN	.0889	.08716	.973
		WESTERN-ENGLISH	.0477	.06861	.999
		WESTERN-AFRIKAANS	.0347	.07167	1.000
		WESTERNISED -AFRICAN	-.2459	.11042	.247
	ASIAN/INDIAN	INDIGENOUS AFRICAN	-.0889	.08716	.973
		WESTERN-ENGLISH	-.0412	.07624	1.000
		WESTERN-AFRIKAANS	-.0541	.07901	.999
		WESTERNISED -AFRICAN	-.3348	.11531	.045*
	WESTERN-ENGLISH	INDIGENOUS AFRICAN	-.0477	.06861	.999
		ASIAN/INDIAN	.0412	.07624	1.000
		WESTERN-AFRIKAANS	-.0130	.05791	1.000
		WESTERNISED -AFRICAN	-.2936	.10202	.053
	WESTERN-AFRIKAANS	INDIGENOUS AFRICAN	-.0347	.07167	1.000
		ASIAN/INDIAN	.0541	.07901	.999
		WESTERN-ENGLISH	.0130	.05791	1.000
		WESTERNISED -AFRICAN	-.2806	.10411	.084
	WESTERNISED -AFRICAN	INDIGENOUS AFRICAN	.2459	.11042	.247
		ASIAN/INDIAN	.3348	.11531	.045*
		WESTERN-ENGLISH	.2936	.10202	.053
		WESTERN-AFRIKAANS	.2806	.10411	.084

* significant at the .05 level

Table 6.22 Post-hoc tests for the systematic comparisons of the CS scores for the five cultural-orientation groups.

POST-HOC TEST	CULTURAL -ORIENTATION GROUP	CULTURAL -ORIENTATION GROUP	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
DUNNETT T3	INDIGENOUS AFRICAN	ASIAN/INDIAN	.3325	.08757	.002**
		WESTERN-ENGLISH	.0494	.07510	.999
		WESTERN-AFRIKAANS	.0233	.07936	1.000
		WESTERNISED -AFRICAN	-.2687	.11435	.187
	ASIAN/INDIAN	INDIGENOUS AFRICAN	-.3325	.08757	.002**
		WESTERN-ENGLISH	-.2831	.07139	.001***
		WESTERN-AFRIKAANS	-.3092	.07586	.001***
		WESTERNISED -AFRICAN	-.6012	.11195	.000***
	WESTERN-ENGLISH	INDIGENOUS AFRICAN	-.0494	.07510	.999
		ASIAN/INDIAN	.2831	.07139	.001***
		WESTERN-AFRIKAANS	-.0261	.06105	1.000
		WESTERNISED -AFRICAN	-.3181	.10249	.028*
	WESTERN-AFRIKAANS	INDIGENOUS AFRICAN	-.0233	.07936	1.000
		ASIAN/INDIAN	.3092	.07586	.001***
		WESTERN-ENGLISH	.0261	.06105	1.000
		WESTERNISED -AFRICAN	-.2920	.10565	.070
	WESTERNISED -AFRICAN	INDIGENOUS AFRICAN	.2687	.11435	.187
		ASIAN/INDIAN	.6012	.11195	.000***
		WESTERN-ENGLISH	.3181	.10249	.028*
		WESTERN-AFRIKAANS	.2920	.10565	.070

* significant at the .05 level

** significant at the .01 level

*** significant at the .001 level

Table 6.18 indicates the mean scores, standard deviations (SD) and number of cases (N), pertaining to the total IS and CS scores of the five cultural-orientation groups separately. The mean scores for the IS and CS range between a value of one and seven, with a low score indicating a stronger endorsement of a particular value-orientation and a high score indicating a strong opposition towards a particular value-orientation. The results show that the Westernised-African group indicated the highest IS score ($m=2.0069$), and the highest CS score ($m=2.0841$), and the Asian/ Indian group indicated the lowest IS score ($m=1.6721$) and the lowest CS score ($m=1.4829$).

Levene's test in Table 6.19 tests the null hypotheses (Ho) that the standard error of variance of the dependent variables, viz. the IS and CS scores, are equal across the cultural-orientation groups. The observed significance values of $p < .05$ for the IS and the CS scores independently, indicates that the post-hoc test, **Dunnett T3**, should be performed on the IS and CS scores.

Table 6.20 indicates the **ANOVA results** for the **five cultural-orientation groups**. The results indicates that a statistically significant difference exists between the cultural-orientation groups for the IS and the CS scores, **viz. $p=.012$ and $.000$** respectively. These differences are significant at the **.05 and .001 levels** respectively.

Table 6.21 represents the post-hoc test results for the **IS scores** of the **five cultural-orientation groups**. The post-hoc tests represent a multiple comparison of the IS scores of each cultural-orientation group with each of the other groups' scores. The analysis shows that there is a statistically significant difference (**$p=.045$**) between the IS scores of Indian/Asian group and the Westernised-African group. This difference was significant at the **.05 level**. An observation of the mean scores indicates that the Asian/ Indian group had a significantly lower mean **IS score ($m=1.6721$)** than the Westernised-African group (**$m=2.0069$**). This suggests that the Indian/ Asian group endorsed a significantly stronger individualistic value-orientation than the Westernised-African group. No statistically significant difference was found between the IS scores for the comparisons of the other cultural-orientation groups. The **null-hypothesis (H_0)** in reference **hypothesis 3**, with regard to the IS scores, was therefore rejected for the Indian/Asian and the Westernised-African groups, and the **null-hypothesis (H_0)** was not rejected for the comparisons of the other cultural-orientation groups.

Table 6.22 indicates the **post-hoc test** results for the comparison of the **CS scores** for the five cultural-orientation groups. The post-hoc tests represent a multiple comparison of the CS scores of each cultural-orientation group with each of the other groups' scores. The results indicate that there are statistically significant differences in the CS scores of the Indian/ Asian group in comparison with the Indigenous African group (**$p=.002$**), the Western-English group (**$p=.001$**), the Western-Afrikaans group (**$p=.001$**), and the Westernised-African group (**$p=.000$**). The first value was statistically significant at the **.01 level**, and the latter three were statistically significant at the **.001 level**. An observation of the mean scores in **Table 6.18** indicates that the Indian group provided a significantly lower mean CS score (**$m=1.4829$**) in comparison to the Indigenous African group (**$m=1.8154$**), the Western-English group (**$m=1.7660$**), the Western-Afrikaans group (**$m=1.7921$**), and the Westernised-African group (**$m=2.0841$**). This suggests that Indian/Asian group endorsed a significantly stronger collectivistic value-orientation than each of the other cultural-orientation groups.

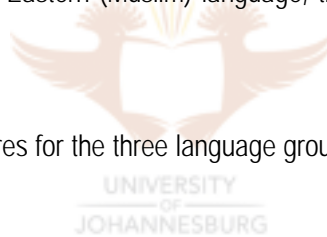
A statistically significant difference between the CS scores of the Western-English and Westernised-African groups was indicated, **viz. $p=.028$** . This value was statistically significant at the **.05 level**. An observation of the mean scores in **Table 6.18** indicates that the Westernised-African group had a higher mean CS score (**$m=2.0841$**) than the Western-English group (**$m=1.7660$**). This suggested that the

Western-English group endorsed a significantly stronger collectivistic value-orientation than the Westernised -African group.

In view of these findings, the **null-hypothesis (Ho₃)** in reference to **hypothesis 3**, with regard to the CS scores, was rejected for the comparisons of the Indian/Asian group, and the four other cultural-orientation groups. **The null-hypothesis (Ho₃)** in reference to **hypothesis 3**, was not rejected for the comparisons between the CS scores of the Indigenous African group, the Western-English and the Western-Afrikaans groups. The Western-English and Westernised-African groups also differed from each other.

6.3.4 Hypothesis 4: Differences between the Afrikaans, English and African language groups

The differences between the **three language groups**, with regards to their **IS and CS scores**, were analysed by means of ANOVA and multivariate tests. This included post-hoc, multiple pair-wise comparisons between the language groups. The language groups included in this analysis were: **African, English and Afrikaans first-language speakers**. As only a small proportion of students spoke an Indian/Asian or Middle-Eastern (Muslim) language, these respondents were omitted from the analysis.



The results of the IS and CS scores for the three language groups are provided in **Tables 6.23 to 6.27**.

Table 6.23 The mean, SD and N for the IS and CS scores of the African, English and Afrikaans language groups

DEPENDENT VARIABLE	FIRST LANGUAGE	N	MEAN	SD
IS SCORES	AFRICAN LANGUAGE	136	1.8682	.59
	ENGLISH	246	1.6995	.53
	AFRIKAANS	146	1.7116	.51
	TOTAL	528	1.7463	.55
CS SCORES	AFRICAN LANGUAGE	136	1.9253	.69
	ENGLISH	246	1.7006	.53
	AFRIKAANS	146	1.7878	.55
	TOTAL	528	1.7826	.59

Table 6.24 Levene's test of the equality of error variances for the IS and CS scores of the three language groups.

DEPENDENT VARIABLE	LEVENE STATISTIC	df1	df2	Sig.
IS SCORES	3.423	2	525	.033*
CS SCORES	11.369	2	525	.000***

* significant at the .05 level

*** significant at the .001 level

Table 6.25 The ANOVA results for the differences between the IS and CS scores for the three language groups.

DEPENDENT VARIABLE		SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG.
IS SCORES	BETWEEN GROUPS	2.734	2	1.367	4.640	.010*
	WITHIN GROUPS	154.660	525	.295		
	TOTAL	157.393	527			
CS SCORES	BETWEEN GROUPS	4.428	2	2.214	6.628	.001***
	WITHIN GROUPS	175.363	525	.334		
	TOTAL	179.791	527			

* significant at the .05 level

*** significant at the .001 level

Table 6.26 Post-hoc tests for the systematic comparisons of the IS scores for the three language groups

POST-HOC TEST	(I) FIRST LANGUAGE	(J) FIRST-LANGUAGE	MEAN DIFFERENCE (I-J)	STD. ERROR	Sig.
DUNNETT T3	AFRICAN LANGUAGE	ENGLISH	.1687	.06086	.018*
		AFRIKAANS	.1565	.06598	.054
	ENGLISH	AFRICAN LANGUAGE	-.1687	.06086	.018*
		AFRIKAANS	-.0121	.05441	.994
	AFRIKAANS	AFRICAN LANGUAGE	-.1565	.06598	.054
		ENGLISH	.0121	.05441	.994

* significant at the .05 level

Table 6.27 Post-hoc tests for the systematic comparisons of the CS scores of the three language groups

POST-HOC TEST	(I) FIRST LANGUAGE	(J) FIRST LANGUAGE	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
DUNNETT T3	AFRICAN LANGUAGE	ENGLISH	.2247	.06747	.003**
		AFRIKAANS	.1375	.07417	.182
	ENGLISH	AFRICAN LANGUAGE	-.2247	.06747	.003**
		AFRIKAANS	-.0872	.05676	.331
	AFRIKAANS	AFRICAN LANGUAGE	-.1375	.07417	.182
		ENGLISH	.0872	.05676	.331

** significant at the .01 level

Table 6.23 indicates the **mean scores, standard deviations (SD) and number of cases (N)** pertaining to the **total IS and CS scores** of the **three language groups** separately. The mean scores for the IS and CS range between a value of one and seven, with a low score indicating a stronger endorsement of a particular value-orientation and a high score indicating a strong opposition towards a particular value-orientation. The results indicate that the highest mean IS and CS scores were obtained by the African language group (**m=1.8682 and 1.9253 respectively**), and the lowest mean IS and CS scores were obtained by the English group (**m=1.6995 and 1.7006 respectively**).

Levene's test in Table 6.24 above tests the null hypotheses that the standard error of variance of the dependent variables, viz. IS and CS respectively, are equal across the language groups. The observed significance values of **p < .05** for the IS and the CS scores indicates that the post-hoc test, **Dunnnett T3**, should be performed on both scales.

Table 6.25 indicates the **ANOVA results** for the **IS and CS scores** of the **three language groups**. The ANOVA indicates that a statistically significant difference exists between the language groups for the IS and the CS scores, viz. **p=.010 and .001** respectively. These differences are significant at the **.05 and .001** levels respectively.

Table 6.26 represents the post-hoc test results for the **IS scores for the three language groups**. The post-hoc tests represent a multiple comparison of the IS scores of each language group with each of the other groups' scores. The results indicate statistically significant differences between the IS scores of the African and the English language groups (**p=.018**). This value is significant beyond the **.05** level. An observation of the mean IS scores in **Table 6.23** indicates that the English language group had a significantly lower mean IS score (**m=1.6995**) than the African language group (**m=1.8682**). This

suggests that the English language group endorsed a significantly stronger individualistic value-orientation than the African language group.

In view of these findings, the **null-hypothesis (Ho₄)** in reference to **hypothesis 4**, with regards to the **IS scores**, was rejected for the comparisons of the African and English language groups. The **null-hypothesis (Ho₄)** was not rejected for the comparisons of the English and the Afrikaans language groups, and the Afrikaans and the African language groups.

Table 6.27 represents the **post-hoc test** results for the **CS scores** of the **three language groups**. The post-hoc tests represent a multiple comparison of the CS scores of each language group with each of the other groups' scores. The results indicate statistically significant differences between the CS scores of the English and African language groups, **viz. p=.003**. This value is significantly beyond the **.01 level**. An observation of the mean CS scores in **Table 6.23** indicates that the English group had a lower mean CS score (**m=1.7006**) than the African language group (**m=1.9253**). This suggests that the English group endorsed a significantly stronger collectivistic value-orientation than the African language group.

In view of these findings, the **null-hypothesis (Ho₄)** in reference to **hypothesis 4**, with regards to the **CS scores**, was rejected for the comparisons of the African and English language groups. The **null-hypothesis** was not rejected for the comparisons of the English and Afrikaans, and the Afrikaans and African language groups.

6.4 Between-group comparisons for the five SDS scores pertaining to the perceptions of the five cultural-orientation groups

This section provides detail on the results of the Semantic Differential Scale total scores pertaining to the perceptions of each of the five cultural-orientation groups included in the questionnaire. The five cultural-orientation groups included in the questionnaire are: Western-Afrikaans, Western-English, Indian/Asian, Middle -Eastern (Muslim) and Indigenous African cultural -orientation groups. The following independent (between-group) variables were included in the analysis:

1. Gender
2. Student resident vs. day-student
3. Cultural-orientation group
4. Home language

Differences in the SDS scores of male and female respondents, and between resident and day-students were analysed in terms of independent t tests. Differences in the scores of the five cultural-orientation groups and the three language groups were analysed in terms of ANOVA tests, with multivariate, post-hoc analyses.

Tables of data are provided for each of the statistics pertaining to the variables. These include tables pertaining to the descriptive statistics, ttest/ ANOVA results, Levene's test, and post-hoc, multivariate test results. The SDS scores for each item were calculated in such a way that a high score indicates a favourable attitude towards the cultural group concerned, and a low score indicates an unfavourable attitude towards the group concerned. The scores ranged between a value of one, indicating an extreme unfavourable attitude, and seven, indicating an extreme favourable attitude, with four indicating a neutral attitude towards the group concerned. The scores for each item were added to provide a total score. For ease of interpreting the attitude scores, calculations were carried out on the scale point average for each respondent towards each cultural group. This score was used to provide a measure of the respondents' attitude towards the group concerned.

6.4.1 Hypothesis 1: Differences between the male and female respondents

The results of the SDS attitude scores according to the effect of gender, are provided in **Tables 6.28** and **6.29**.



Table 6.28 The mean, SD and N for the total SDS attitude scores of the male and female respondents.

DEPENDENT VARIABLE: TARGET GROUP	GENDER	N	MEAN	SD
WESTERN –AFRIKAANS	MALE	103	4.6069	.89
	FEMALE	436	4.6071	.89
WESTERN-ENGLISH	MALE	102	4.7590	.82
	FEMALE	435	4.8461	.77
INDIAN/ASIAN	MALE	103	4.2201	1.07
	FEMALE	436	4.4719	.85
MIDDLE-EASTERN (MUSLIM)	MALE	103	4.3592	1.12
	FEMALE	435	4.5502	.83
INDIGENOUS AFRICAN	MALE	103	4.0792	1.18
	FEMALE	435	4.2884	.98

Table 6.29 Independent t-tests and Levene's test of equality of error variances for the comparison of the SDS scores for the male and female respondents.

DEPENDENT VARIABLE: TARGET GROUP		LEVENE'S STATISTIC		t VALUE	DF	SIG. (2-TAILED)
		FRATIO	SIG.			
WESTERN –AFRIKAANS	EQUAL VARIANCES ASSUMED	.091	.763	-.002	537	.999
	EQUAL VARIANCES NOT ASSUMED			-.002	153.682	.999
WESTERN-ENGLISH	EQUAL VARIANCES ASSUMED	.187	.665	-1.016	535	.310
	EQUAL VARIANCES NOT ASSUMED			-.973	145.100	.332
INDIAN/ASIAN	EQUAL VARIANCES ASSUMED	5.749	.017	-2.577	537	.010
	EQUAL VARIANCES NOT ASSUMED			-2.237	133.933	.027*
MIDDLE-EASTERN (MUSLIM)	EQUAL VARIANCES ASSUMED	4.497	.034	-1.962	536	.050
	EQUAL VARIANCES NOT ASSUMED			-1.634	129.646	.105
INDIGENOUS AFRICAN	EQUAL VARIANCES ASSUMED	2.391	.123	-1.870	536	.062
	EQUAL VARIANCES NOT ASSUMED			-1.667	137.058	.098

* significant at the .05 level

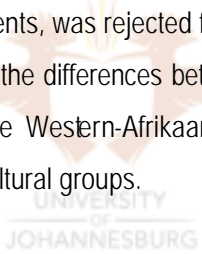
Table 6.28 indicates the mean scores, standard deviations (SD), and the number of cases (N) pertaining to the total SDS attitude scores of the male and female respondents separately. For each SDS, the mean total scores range between one, indicating an extreme unfavourable attitude, to seven, indicating an extreme favourable attitude, with four indicative of a neutral attitude towards the cultural group concerned.

The female respondents indicated the highest mean total scores for the perceptions of each of the five cultural-orientation groups. The highest mean total scores for both male and female respondents were indicated for the perceptions of the Western-English cultural group (**m=4.7590 and 4.8461 respectively**), and the lowest mean total scores for both male and female respondents were indicated for the perceptions of the Indigenous African cultural groups (**m=4.0792 and 4.2884, respectively**).

Levene's test of equality of error variances, and the t-test results for the comparisons of **male and female** respondents, are provided in **Table 6.29**. The ttest analysis involved testing the differences between the mean SDS scores of the male and female respondents. **Levene's test** was applied to provide an indication of the **equality (homogeneity) of error variances** of the SDS scores across both groups.

The results indicate that there are no statistically significant differences between the SDS attitude scores of the male and female respondents for the perceptions of Western-Afrikaans, Western-English, Middle-Eastern (Muslim) and Indigenous African cultural groups. Statistically significant differences between the SDS scores of males and female respondents were indicated for the perceptions of the Indian/Asian cultural group, **viz. p=.027**. This difference is statistically significant at the **.05** level for the assumption of unequal variances. The results show that the female respondents indicated a significantly more favourable perception of the Indian/ Asian cultural group (**m=4.4719**) than the male respondents (**m=4.2201**).

In view of these findings, the **null-hypothesis (Ho₁)**, in reference to **hypothesis 1**, for the differences between the male and female respondents, was rejected for the perceptions of the Indian/Asian cultural group. The **null-hypothesis (Ho₁)**, for the differences between the male and female respondents, was not rejected for the perceptions of the Western-Afrikaans, the Western-English, the Middle-Eastern (Muslim) and the Indigenous African cultural groups.



6.4.2 Hypothesis 2: Differences between resident and day-students

The results of the **SDS attitude scores** in terms of the effect of **resident vs. day-students** are provided in **Tables 6.30 to 6.31**.

Table 6.30 Mean, SD, and N for the total SDS attitude scores of the resident and day-students.

DEPENDENT VARIABLE: TARGET GROUP	RESIDENT / DAY-STUDENTS	N	MEAN	SD
WESTERN –AFRIKAANS	RESIDENT	97	4.8259	.81
	DAY-STUDENT	423	4.5640	.91
WESTERN-ENGLISH	RESIDENT	97	4.7735	.77
	DAY-STUDENT	421	4.8551	.78
INDIAN/ASIAN	RESIDENT	97	4.2828	.97
	DAY-STUDENT	423	4.4471	.88
MIDDLE -EASTERN (MUSLIM)	RESIDENT	97	4.4351	.85
	DAY-STUDENT	422	4.5218	.89
INDIGENOUS AFRICAN	RESIDENT	96	4.0544	1.14
	DAY-STUDENT	423	4.3054	.99

Table 6.31 Independent t-tests and Levene's test of equality of error variances for the comparisons of resident and day-students' SDS attitude scores.

DEPENDENT VARIABLE: TARGET GROUP		LEVENE'S STATISTIC		tVALUE	DF	SIG. (2-TAILED)
		F RATIO	SIG.			
WESTERN –AFRIKAANS	EQUAL VARIANCES ASSUMED	.456	.500	2.618	518	.009**
	EQUAL VARIANCES NOT ASSUMED			2.815	156.599	.006
WESTERN-ENGLISH	EQUAL VARIANCES ASSUMED	.368	.544	-.928	516	.354
	EQUAL VARIANCES NOT ASSUMED			-.942	146.038	.348
INDIAN/ASIAN	EQUAL VARIANCES ASSUMED	.217	.641	-1.627	518	.104
	EQUAL VARIANCES NOT ASSUMED			-1.529	134.421	.129
MIDDLE-EASTERN (MUSLIM)	EQUAL VARIANCES ASSUMED	.078	.780	-.870	517	.385
	EQUAL VARIANCES NOT ASSUMED			-.894	148.079	.373
INDIGENOUS AFRICAN	EQUAL VARIANCES ASSUMED	2.994	.084	-2.180	517	.030*
	EQUAL VARIANCES NOT ASSUMED			-1.990	129.139	.049

* significant at the .05 level

** significant at the .01 level

Table 6.30 indicates the means, standard deviations (SD), and the number of cases (N) pertaining to the total SDS attitude scores of the resident and the day-students separately. For each SDS, the mean total scores range between one, indicating an extreme unfavourable attitude, to seven, indicating an extreme favourable attitude, with four indicative of a neutral attitude towards the cultural group concerned.

The results indicate that resident students had the most favourable perceptions of the Western-Afrikaans cultural group (m=4.8259), and day-students had the most favourable perceptions of the

Western-English cultural group ($m=4.8551$). For both resident and day-students, Indigenous African cultural groups were rated the least favourably ($m=4.0544$ and 4.3054 respectively).

Table 6.31 indicates the results for the **Levene's test of equality of error variances**, and the **t-test** results for the **SDS** attitude scores of the resident and day-students separately. The ttest analysis involved testing the differences between the mean SDS scores of the resident and day-students. **Levene's test** was applied to provide an indication of the **equality (homogeneity) of error variances** of the SDS scores across both groups. No statistically significant differences between resident and day-students were indicated for the perceptions of the Western-English, Indian/ Asian and Middle-Eastern (Muslim) cultural groups. Statistically significant differences between resident and day-students were indicated in terms of the perceptions of the Western-Afrikaans ($p=.009$) and Indigenous African cultural groups ($p=.030$). These values being significant at the **.01 and .05 levels** respectively, for equal variances assumed. The results indicate that the resident students have a statistically more favourable attitude towards the Western-Afrikaans cultural group and a statistically less favourable perception of the Indigenous African cultural groups compared to day-students.

The **null-hypothesis (H_0)**, in reference to **hypothesis 2**, with regard to the SDS attitude scores of resident and day-students, was therefore rejected for the perceptions of the Western-Afrikaans and Indigenous African cultural groups. The **null-hypothesis (H_0)** was not rejected for the differences between resident and day-students for the perceptions of the other cultural-orientation groups.

6.4.3 Hypothesis 3: Differences between the five cultural-orientation groups

The differences in the **SDS attitude scores (perceptions of the broad cultural-orientation groups), for the five cultural-orientation groups**, were analysed by means of ANOVA and multivariate, post-hoc tests. This included multiple pair-wise comparisons between the cultural-orientation groups. The cultural-orientation groups were classified in terms of the biographical information pertaining to the broad cultural-orientation with which the respondents identified, as well as the respondents' home-language. As only a small number of respondents indicated that they were from a Middle-Eastern (Muslim) cultural group, the Middle-Eastern (Muslim) and Indian/Asian cultural groups were combined into one group. In order to accommodate a new sub-group of respondents who identified themselves with a Western cultural group, yet spoke an African language as a first language, a new variable was created. This was referred to as the Westernised-African group. The final cultural-orientation groups included in the analyses were: **Indigenous African, Indian/Asian, Western-English, Western-Afrikaans and Westernised-African cultural groups.**

Tables 6.32 to 6.37 illustrate the results of the SDS attitude scores for five cultural-orientation groups.

Table 6.32 Mean, SD and N for the total SDS attitude scores of the five cultural-orientation groups.

DEPENDENT VARIABLE: TARGET GROUP	CULTURAL -ORIENTATION GROUP	N	MEAN	SD
WESTERN -AFRIKAANS	INDIGENOUS AFRICAN	104	4.0159	.94
	ASIAN/INDIAN	61	4.3610	.70
	WESTERN-ENGLISH	186	4.6073	.79
	WESTERN-AFRIKAANS	137	5.0867	.73
	WESTERNISED -AFRICAN	47	4.8539	.89
	TOTAL	535	4.6087	.89
WESTERN-ENGLISH	INDIGENOUS AFRICAN	103	4.8494	.85
	ASIAN/INDIAN	61	4.6488	.78
	WESTERN-ENGLISH	186	5.0356	.69
	WESTERN-AFRIKAANS	136	4.6275	.81
	WESTERNISED -AFRICAN	47	4.8142	.70
	TOTAL	533	4.8317	.78
INDIAN/ASIAN	INDIGENOUS AFRICAN	104	4.2828	.84
	ASIAN/INDIAN	61	4.6538	.90
	WESTERN-ENGLISH	186	4.4657	.87
	WESTERN-AFRIKAANS	137	4.3856	.95
	WESTERNISED -AFRICAN	47	4.3439	.91
	TOTAL	535	4.4204	.90
MIDDLE-EASTERN (MUSLIM)	INDIGENOUS AFRICAN	103	4.5247	.80
	ASIAN/INDIAN	61	4.6211	.86
	WESTERN-ENGLISH	186	4.4824	.89
	WESTERN-AFRIKAANS	137	4.4836	.94
	WESTERNISED -AFRICAN	47	4.5290	.93
	TOTAL	534	4.5108	.89
INDIGENOUS AFRICAN	INDIGENOUS AFRICAN	104	4.7824	.93
	ASIAN/INDIAN	60	4.2528	.81
	WESTERN-ENGLISH	186	4.1945	.98
	WESTERN-AFRIKAANS	137	3.9296	1.1
	WESTERNISED -AFRICAN	47	4.1597	.95
	TOTAL	534	4.2445	1.0

Table 6.33 Levene's test of the equality of error variances for the SDS scores of the five cultural-orientation groups.

DEPENDENT VARIABLE: TARGET GROUP	LEVENE'S STATISTIC	DF1	DF2	SIG.
WESTERN-AFRIKAANS	2.899	4	530	.022*
WESTERN-ENGLISH	1.734	4	528	.141
INDIAN/ASIAN	.312	4	530	.870
MIDDLE-EASTERN (MUSLIM)	.639	4	529	.635
INDIGENOUS AFRICAN	1.667	4	529	.156

* significant at the .05 level

Table 6.34 ANOVA results for the differences between the SDS scores of the five cultural-orientation groups.

DEPENDENT VARIABLE: TARGET GROUP	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG.	SUM OF SQUARES
WESTERN-AFRIKAANS	BETWEEN GROUPS	74.426	4	18.606	28.343	.000***
	WITHIN GROUPS	347.935	530	.656		
	TOTAL	422.361	534			
WESTERN-ENGLISH	BETWEEN GROUPS	15.491	4	3.873	6.623	.000***
	WITHIN GROUPS	308.738	528	.585		
	TOTAL	324.230	532			
INDIAN/ASIAN	BETWEEN GROUPS	6.115	4	1.529	1.918	.106
	WITHIN GROUPS	422.544	530	.797		
	TOTAL	428.659	534			
MIDDLE-EASTERN (MUSLIM)	BETWEEN GROUPS	1.029	4	.257	.326	.861
	WITHIN GROUPS	417.961	529	.790		
	TOTAL	418.990	533			
INDIGENOUS AFRICAN	BETWEEN GROUPS	44.484	4	11.121	11.481	.000***
	WITHIN GROUPS	512.407	529	.969		
	TOTAL	556.892	533			

*** significant at the .001 level

Table 6.35 Post-hoc test results for the systematic comparisons of the perceptions of the Western-Afrikaans cultural group by the five cultural-orientation groups.

TARGET GROUP: WESTERN- AFRIKAANS CULTURAL GROUP		CULTURAL - ORIENTATION GROUP	CULTURAL -ORIENTATION GROUP	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
DUNNETT TEST						
INDIGENOUS AFRICAN		ASIAN/INDIAN		-.3452	.12918	.080
		WESTERN-ENGLISH		-.5914	.10932	.000***
		WESTERN-AFRIKAANS		-1.0709	.11187	.000***
		WESTERNISED -AFRICAN		-.8381	.15986	.000***
ASIAN/INDIAN		INDIGENOUS AFRICAN		.3452	.12918	.080
		WESTERN-ENGLISH		-.2463	.10720	.208
		WESTERN-AFRIKAANS		-.7257	.10980	.000***
		WESTERNISED -AFRICAN		-.4929	.15842	.025*
WESTERN-ENGLISH		INDIGENOUS AFRICAN		.5914	.10932	.000***
		ASIAN/INDIAN		.2463	.10720	.208
		WESTERN-AFRIKAANS		-.4794	.08556	.000***
		WESTERNISED -AFRICAN		-.2466	.14269	.588
WESTERN-AFRIKAANS		INDIGENOUS AFRICAN		1.0709	.11187	.000***
		ASIAN/INDIAN		.7257	.10980	.000***
		WESTERN-ENGLISH		.4794	.08556	.000***
		WESTERNISED -AFRICAN		.2328	.14465	.680
WESTERNISED - AFRICAN		INDIGENOUS AFRICAN		.8381	.15986	.000***
		ASIAN/INDIAN		.4929	.15842	.025*
		WESTERN-ENGLISH		.2466	.14269	.588
		WESTERN-AFRIKAANS		-.2328	.14465	.680

* significant at the .05 level

*** significant at the .001 level

Table 6.36 Post-hoc test results for the systematic comparisons of the perceptions of the Western-English cultural group by the five cultural-orientation groups.

TARGET GROUP:					
WESTERN-ENGLISH CULTURAL GROUP	CULTURAL -ORIENTATION GROUP	CULTURAL -ORIENTATION GROUP	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
SCHEFFÉ TEST	INDIGENOUS AFRICAN	ASIAN/INDIAN	.2006	.12354	.621
		WESTERN-ENGLISH	-.1862	.09392	.417
		WESTERN-AFRIKAANS	.2219	.09988	.295
		WESTERNISED -AFRICAN	.0352	.13460	.999
	ASIAN/INDIAN	INDIGENOUS AFRICAN	-.2006	.12354	.621
		WESTERN-ENGLISH	-.3868	.11283	.020*
		WESTERN-AFRIKAANS	.0213	.11784	1.000
		WESTERNISED -AFRICAN	-.1654	.14841	.871
	WESTERN-ENGLISH	INDIGENOUS AFRICAN	.1862	.09392	.417
		ASIAN/INDIAN	.3868	.11283	.020*
		WESTERN-AFRIKAANS	.4081	.08627	.000***
		WESTERNISED -AFRICAN	.2214	.12484	.534
WESTERN-AFRIKAANS	INDIGENOUS AFRICAN	-.2219	.09988	.295	
	ASIAN/INDIAN	-.0213	.11784	1.000	
	WESTERN-ENGLISH	-.4081	.08627	.000***	
	WESTERNISED -AFRICAN	-.1867	.12939	.721	
WESTERNISED -AFRICAN	INDIGENOUS AFRICAN	-.0352	.13460	.999	
	ASIAN/INDIAN	.1654	.14841	.871	
	WESTERN-ENGLISH	-.2214	.12484	.534	
	WESTERN-AFRIKAANS	.1867	.12939	.721	

* significant at the .05 level

*** significant at the .001 level

Table 6.37 Post-hoc test results for the systematic comparisons of the perceptions of the Indigenous African cultural group by the five cultural-orientation groups.

TARGET GROUP: INDIGENOUS AFRICAN CULTURAL GROUP	CULTURAL- ORIENTATION GROUP	CULTURAL-ORIENTATION GROUP	MEAN DIFFERENCE (I-J)	STD. ERROR	Sig.
SCHEFFÉ TEST	INDIGENOUS AFRICAN	ASIAN/INDIAN	.5296	.15955	.027*
		WESTERN/ENGLISH	.5879	.12051	.000***
		WESTERN/AFRIKAANS	.8528	.12800	.000***
		WESTERNISED-/AFRICAN	.6227	.17298	.012*
	ASIAN/INDIAN	INDIGENOUS AFRICAN	-.5296	.15955	.027*
		WESTERN/ENGLISH	.0584	.14612	.997
		WESTERN/AFRIKAANS	.3232	.15236	.344
		WESTERNISED-/AFRICAN	.0931	.19171	.994
	WESTERN/ENGLISH	INDIGENOUS AFRICAN	-.5879	.12051	.000***
		ASIAN/INDIAN	-.0584	.14612	.997
		WESTERN/AFRIKAANS	.2649	.11081	.223
		WESTERNISED-/AFRICAN	.0348	.16068	1.000
WESTERN/AFRIKAANS	INDIGENOUS AFRICAN	-.8528	.12800	.000***	
	ASIAN/INDIAN	-.3232	.15236	.344	
	WESTERN/ENGLISH	-.2649	.11081	.223	
	WESTERNISED-/AFRICAN	-.2301	.16637	.752	

* significant at the .05 level

*** significant at the .001 level

Table 6.32 indicates the **means, standard deviations (SD) and the number of cases (N)**, pertaining to the **total SDS attitude scores** of the **five cultural-orientation groups** separately. For each SDS, the mean total scores range between one, indicating an extreme unfavourable attitude, to seven, indicating an extreme favourable attitude, with four indicative of a neutral attitude towards the cultural group concerned. The mean total scores for each of the five SDS indicates that the Western-English cultural group were given the most favourable ratings (**m=4.8317**), and the Indigenous African cultural group was given the least favourable ratings (**m=4.2445**), as perceived by the total subject sample.

The Western-Afrikaans cultural group was rated the most favourably by the Western-Afrikaans group (**m=5.0867**), and the least favourably by the Indigenous African group (**m=4.0159**). The Western-English cultural group was rated the most favourably by the Western-English group (**m=5.0356**), and the least favourably by the Western-Afrikaans group (**m=4.6275**).

The Indian/Asian cultural group was rated the most favourably by the Indian/ Asian group (**m=4.6538**), and the least favourably by the Indigenous African group (**m=4.2828**). The Middle-Eastern (Muslim) cultural group was rated the most favourably by the Indian/Asian group (**m=4.6211**), and the least favourably by the Western-English group (**m=4.4824**). The Indigenous African cultural group was perceived most favourably by the Indigenous African group (**m=4.7824**), and the least favourably by the Western-Afrikaans group (**m=3.9296**).

As expected, each of the five cultural-orientation groups indicated the most favourable attitudes towards their own cultural group. The in-group evaluation score was much higher for Western-Afrikaans and Western-English respondents compared to the other cultural-orientation groups.

Levene's test (Table 6.33), tests the **null hypothesis (Ho)** that the standard error of variance of the dependent variable is equal across the five cultural-orientation groups. The observed significance values in **Table 6.33** indicates that the post-hoc test **Dunnnett T3** should be performed on the Western-Afrikaans SDS group, as the observed significance value for this scale was **p < .05**, and the post-hoc **Scheffé test** should be performed on the SDS scores of the four other cultural-orientation groups where the observed significance values of the Levene test for these groups were **p > .05**.

Table 6.34 indicates the **ANOVA results for the effect of cultural-orientation** on each of the five **SDS scores**. The ANOVA indicates that a significant statistical difference exists between the five cultural-orientation groups for the perceptions of Western-Afrikaans, Western-English and Indigenous African cultural groups, the significance values being equal for each cultural-orientation group, viz. **p=.000**. This value is significant at the **.001 level**, which is indicative of highly significant differences. The differences

between the five cultural-orientation groups in terms of their perceptions of the Indian/ Asian and Middle -Eastern (Muslim) cultural groups were insignificant.

The **null-hypothesis (Ho₃)**, in reference to **Hypothesis 3**, was thus rejected for the perceptions of Western-Afrikaans, Western-English and Indigenous African cultural groups. The **null-hypothesis (Ho₃)**, in reference to **hypothesis 3** was not rejected for the perceptions of the Indian/Asian and Middle -Eastern (Muslim) cultural groups.

Table 6.35 presents the **post-hoc test results** for the systematic comparisons of the **perceptions of the Western-Afrikaans cultural group for the five cultural-orientation groups**. The post-hoc tests represent a multiple comparison of the SDS scores of the cultural-orientation groups with each other.

Significant differences for the perceptions of the Western-Afrikaans cultural group were indicated for the Indigenous African group in comparison with the Western-English, the Western-Afrikaans and the Westernised -African group. The significance values were equal for all three comparisons, viz. **p=.000**. This was indicative of highly significant differences between the groups. Comparisons of the observed mean SDS scores provided in **Table 6.32** indicates that the Indigenous African group had a significantly less favourable perception of the Western-Afrikaans cultural group (**m=4.0159**), in comparison with the Western-English (**m=4.6073**), the Western-Afrikaans (**m=5.0867**), and the Westernised-African (**m=4.8539**) groups' perceptions of the Western-Afrikaans cultural group. The Indigenous African group however did not differ significantly from the Indian/ Asian group in their perceptions of the Western-Afrikaans cultural group.

Significant differences were indicated for the Indian/ Asian group in comparison with the Western-Afrikaans and Westernised -African groups. The significance values are **p=.000** and **p=.025** respectively. These values are significant at the **.001 and .05 levels**. An observation of the mean scores in **Table 6.32** indicates that the Indian/Asian group provided a significantly less favourable perception (**m=4.3610**) of the Western-Afrikaans cultural group than the Western-Afrikaans (**m=5.0867**) and Westernised-African (**m=4.8539**) groups. No statistically significant differences were indicated for the Indian Asian group in comparison with the Western-English group, for the perceptions of the Western-Afrikaans cultural group.

Statistically significant differences were indicated for the Western-English group in comparison with the Western-Afrikaans group, viz. **p=.000**. This difference is significant at the **.001 level**, which is indicative of a highly significant difference. A comparison of the observed means in **Table 6.32** indicates that the Western-Afrikaans group had a significantly more favourable perception of the Western-Afrikaans

cultural group ($m=5.0867$) than the Western-English group ($m=4.6073$). No significant differences were indicated for the Western-English and Westernised-African group.

Statistically significant differences were indicated for the Western-Afrikaans group in comparison with the Indigenous African, the Indian/ Asian and the Western-English groups, the significance values being equal for all three group comparisons, viz. $p=.000$. This value is significant at the **.001 level**, which is indicative of highly significant differences. An observation of the mean scores provided in **Table 6.32** indicates that the Western-Afrikaans group indicated a significantly more favourable perception of the Western-Afrikaans cultural group ($m=5.0867$), in comparison with the Indigenous African ($m=4.0159$), Indian/Asian ($m=4.3610$) and the Western-English ($m=4.6073$) groups.

In view of these findings, the **null-hypothesis (H_{o3})** in reference to **hypothesis 3**, with regard to the perceptions of the Western-Afrikaans cultural group, was rejected for the comparisons between the Western-Afrikaans group with the Indigenous African, Western-English and Indian/Asian groups; the comparisons between the Westernised-African group with the Indigenous African and the Indian/Asian groups; and the comparisons between the Western-English and the Indigenous African groups. The **null-hypothesis (H_{o3})** was not rejected for the other group comparisons.

Table 6.36 presents the **post-hoc test results** for the systematic comparisons of the **perceptions of the Western-English cultural group for the five cultural-orientation groups**. The post-hoc tests represent a multiple comparison of the SDS scores for the cultural-orientation groups with each other.

The results indicate that there are significant differences between the Western-English and the Indian/Asian groups, viz. $p=.02$, and between the Western-English and the Western-Afrikaans groups, viz. $p=.000$, in their perceptions of the Western-English cultural group. These differences are significant at the **.05** and **.001 levels** respectively. An observation of the mean scores in **Table 6.32** indicates that the Western-English group have significantly more favourable perceptions of their own cultural group ($m=5.0356$) in comparison with the Indian/ Asian ($m=4.6488$) and the Western-Afrikaans ($m=4.6275$) groups' views of them.

No statistically significant differences between the other cultural-orientation groups were indicated for the perceptions of the Western-English cultural group. Thus, the **null-hypothesis (H_{o3})** in reference to **hypothesis 3**, with regard to the perceptions of the Western-English cultural group, was rejected for the comparisons of the Western-English group with the Western-Afrikaans and the Indian/Asian group. The **null-hypothesis (H_{o3})** was not rejected for the other group comparisons.

Table 6.37 presents the **post-hoc test results** for the systematic comparisons of the **perceptions of the Indigenous African cultural group for the five cultural-orientation groups**. The post-hoc tests represent a multiple comparison of the SDS scores for the five cultural-orientation groups with each other.

Statistically significant differences for the perception of the Indigenous African cultural group were indicated for the Indigenous African group in comparison with the Indian/Asian ($p=.027$), the Western-English ($p=.000$), the Western-Afrikaans ($p=.000$) and the Westernised-African ($p=.012$) groups. These differences are significant at the **.05 and .001 levels**. An observation of the mean scores in **Table 6.32** indicates that the Indigenous African group had a significantly more favourable perception of their own cultural group ($m=4.7824$) than the Indian/Asian ($m=4.2528$), Western-English ($m=4.1945$), Western-Afrikaans ($m=3.9296$) and Westernised-African ($m=4.1597$) groups. No statistically significant differences in the perceptions of the Indigenous African cultural group were indicated for the comparisons of the four out-groups.

In view of these findings, the **null-hypothesis (H_0_3)** in reference to **hypothesis 3**, with regard to the **perceptions of the Indigenous African cultural group**, was rejected for the comparisons of the Indigenous African group with each of the other cultural-orientation groups. The **null-hypothesis (H_0_3)** was not rejected for other group comparisons.

6.4.4 Hypothesis 4: Differences between the three home-language groups

The differences between the **three language groups**, with regards to their perceptions of the five cultural groups (SDS attitudes scores), were analysed by means of ANOVA and multivariate tests. This included post-hoc, multiple pair-wise comparisons between the language groups. The language groups included in this analysis were: **African, English and Afrikaans first-language speakers**. As only a small proportion of students spoke an Indian/Asian or Middle-Eastern (Muslim) language, these respondents were omitted from the analysis.

Tables 6.38 to 6.43 present the results of the **SDS attitude scores** for the **three language groups**.

Table 6.38 The mean, SD and N for the total SDS attitude scores of the three language groups.

DEPENDENT VARIABLE: TARGET GROUP	LANGUAGE GROUP	N	MEAN	SD
WESTERN -AFRIKAANS	AFRICAN LANGUAGE	136	4.3119	1.0
	ENGLISH	246	4.5097	.80
	AFRIKAANS	146	5.0537	.73
	TOTAL	528	4.6092	.90
WESTERN-ENGLISH	AFRICAN LANGUAGE	135	4.8302	.80
	ENGLISH	246	4.9660	.74
	AFRIKAANS	145	4.6199	.79
	TOTAL	526	4.8357	.78
INDIAN/ASIAN	AFRICAN LANGUAGE	136	4.3449	.84
	ENGLISH	246	4.4747	.87
	AFRIKAANS	146	4.3992	.98
	TOTAL	528	4.4204	.90
MIDDLE- EASTERN (MUSLIM)	AFRICAN LANGUAGE	135	4.5265	.83
	ENGLISH	246	4.5245	.91
	AFRIKAANS	146	4.4763	.92
	TOTAL	527	4.5117	.89
INDIGENOUS AFRICAN	AFRICAN LANGUAGE	136	4.5844	.99
	ENGLISH	246	4.2363	.96
	AFRIKAANS	146	3.9392	1.07
	TOTAL	528	4.2438	1.03

Table 6.39 Levene's test of equality of error variances for the three language groups

DEPENDENT VARIABLE: TARGET GROUP	LEVENE'S STATISTIC	DF 1	DF 2	SIG.
WESTERN-AFRIKAANS	10.154	2	525	.000***
WESTERN-ENGLISH	.457	2	523	.634
INDIAN/ASIAN	.407	2	525	.666
MIDDLE- EASTERN (MUSLIM)	.424	2	524	.655
INDIGENOUS AFRICAN	.558	2	525	.573

*** significant at the .001 level

Table 6.40 ANOVA results for the effect of home language on the perceptions of the five cultural-orientation groups (SDS scores)

DEPENDENT VARIABLE: TARGET GROUP		SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG.
WESTERN-AFRIKAANS	BETWEEN GROUPS	43.309	2	21.655	30.008	.000***
	WITHIN GROUPS	378.860	525	.722		
	TOTAL	422.169	527			
WESTERN-ENGLISH	BETWEEN GROUPS	10.931	2	5.465	9.225	.000***
	WITHIN GROUPS	309.868	523	.592		
	TOTAL	320.798	525			
INDIAN/ASIAN	BETWEEN GROUPS	1.566	2	.783	.975	.378
	WITHIN GROUPS	421.386	525	.803		
	TOTAL	422.952	527			
MIDDLE-EASTERN (MUSLIM)	BETWEEN GROUPS	.252	2	.126	.159	.853
	WITHIN GROUPS	416.711	524	.795		
	TOTAL	416.964	526			
INDIGENOUS AFRICAN	BETWEEN GROUPS	29.334	2	14.667	14.639	.000***
	WITHIN GROUPS	526.008	525	1.002		
	TOTAL	555.341	527			

*** significant at the .001 level

Table 6.41 Post-hoc tests for the systematic comparisons of the perceptions of the Western-Afrikaans cultural group by the three language groups.

TARGET GROUP: WESTERN-AFRIKAANS CULTURAL GROUP	(I) FIRST-LEARNED LANGUAGE	(J) FIRST-LEARNED LANGUAGE	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
DUNNETT T3 TEST	AFRICAN LANGUAGE	ENGLISH	-.1978	.10198	.152
		AFRIKAANS	-.7419	.10705	.000***
	ENGLISH	AFRICAN LANGUAGE	.1978	.10198	.152
		AFRIKAANS	-.5440	.07941	.000***
	AFRIKAANS	AFRICAN LANGUAGE	.7419	.10705	.000***
		ENGLISH	.5440	.07941	.000***

*** significant at the .001 level

Table 6.42 Post-hoc tests for the systematic comparisons of the perceptions of the Western English cultural group by the three language groups.

TARGET GROUP: WESTERN-ENGLISH CULTURAL GROUP	(I) FIRST-LEARNED LANGUAGE	(J) FIRST-LEARNED LANGUAGE	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
SCHEFFÉ TEST	AFRICAN LANGUAGE	ENGLISH	-.1358	.08245	.258
		AFRIKAANS	.2103	.09206	.075
	ENGLISH	AFRICAN LANGUAGE	.1358	.08245	.258
		AFRIKAANS	.3461	.08059	.000***
	AFRIKAANS	AFRICAN LANGUAGE	-.2103	.09206	.075
		ENGLISH	-.3461	.08059	.000***

*** significant at the .001 level

Table 6.43 Post-hoc tests for the systematic comparisons of the perceptions of the Indigenous African cultural group by the three language groups.

TARGET GROUP: INDIGENOUS AFRICAN CULTURAL GROUP	(I) FIRST-LEARNED LANGUAGE	(J) FIRST-LEARNED LANGUAGE	MEAN DIFFERENCE (I-J)	STD. ERROR	SIG.
SCHEFFÉ TEST	AFRICAN LANGUAGE	ENGLISH	.3481	.10696	.005**
		AFRIKAANS	.6452	.11929	.000***
	ENGLISH	AFRICAN LANGUAGE	-.3481	.10696	.005**
		AFRIKAANS	.2970	.10457	.018*
	AFRIKAANS	AFRICAN LANGUAGE	-.6452	.11929	.000***
		ENGLISH	-.2970	.10457	.018*

* significant at the .05 level

** significant at the .01 level

*** significant at the .001 level

Table 6.38 indicates the means, standard deviations (SD) and the number of cases (N) pertaining to the total SDS attitude scores of the three language groups separately. For each SDS, the mean total scores range between a value of one, indicating an extreme unfavourable attitude, to a value of seven, indicating an extreme favourable attitude, with four indicative of a neutral attitude towards the cultural group concerned.

The results indicate that the Afrikaans language group had the most favourable perception of the Western-Afrikaans cultural group ($m=5.0537$), and the African language group had the least favourable perception of the Western-Afrikaans cultural group ($m=4.3119$). The English and African language groups indicated similar, favourable perceptions of the Western-English cultural group ($m=4.9660$ and 4.8302 respectively), followed by the Afrikaans group ($m=4.6199$). The three language groups

indicated similar perceptions of the Indian/ Asian and Middle-Eastern (Muslim) cultural groups. The Indigenous African cultural group was rated the most favourably by the African language group ($m=4.5844$), and the least favourably by the Afrikaans group ($m=3.9392$).

Levene's test (Table 6.39), tests the **null hypothesis (Ho)** that the standard error of variance of the dependent variable is equal across the three language groups. The observed significance values in **Table 6.39** indicates that the post-hoc test **Dunnnett T3** should be performed on the Western-Afrikaans SDS scores, as the observed significance value for this scale was $p < .05$, and the post-hoc test **Scheffé** was performed on the four other SDS where the observed significance values for these scales were $p > .05$.

Table 6.40 indicates the **ANOVA results** for the effect of **home/first language on each of the five sets of SDS scores**. The ANOVA indicates that a significant statistical difference exists between the three language groups for the perceptions of Western-Afrikaans, Western-English and Indigenous African cultural groups, the significance value being equal for each SDS, viz. $p=.000$. This value is significant at the **.001 level**, which is indicative of highly significant differences between the language groups. The differences between the three language groups in terms of their perceptions of Indian/ Asian and Middle-Eastern (Muslim) cultural groups were insignificant.

Table 6.41 presents the **post-hoc test results** for the systematic comparisons of the **perceptions of the Western-Afrikaans cultural group for the three language groups**. The post-hoc tests represent a multiple comparison of the SDS scores of the three language groups with each other.

Significant differences in the perceptions of the Western-Afrikaans cultural group were indicated for the African and Afrikaans language groups, viz. $p=.000$. This value is statistically significant at the **.001 level**, which is indicative of a highly significant difference. An observation of the mean scores provided in **Table 6.38** indicates that the Afrikaans language group has a significantly more favourable perception of the Western-Afrikaans cultural group ($m=5.0537$) than the African language group ($m=4.3119$). No significant differences in the perceptions of Western-Afrikaans cultural group were indicated for the comparisons between the African and the English language groups.

A significant difference was indicated for the comparison of the English and Afrikaans language groups in terms of their perceptions of the Western-Afrikaans cultural group, viz. $p=.000$. This value is significant at the **.001 level**, which is indicative of a highly significant difference. An observation of the mean scores in **Table 6.38** indicates that the Afrikaans language group had a significantly more favourable perception of the Western-Afrikaans cultural group ($m=5.0537$) than the English language group ($m=4.5097$).

The **null-hypothesis (Ho₄)**, in reference to **hypothesis 4**, with regard to the perceptions of the Western-Afrikaans cultural group, was thus rejected for the comparisons between the African and the Afrikaans language groups, and the Afrikaans and the English language groups. The **null-hypothesis (Ho₄)** was not rejected for the comparisons between the African and English language groups.

Table 6.42 presents the **post-hoc test results** for the systematic comparisons of the **perceptions of the Western-English cultural group for the three language groups**. The post-hoc tests represent a multiple comparison of the SDS scores of the three language groups with each other.

Significant differences in the perceptions of the Western-English cultural group were indicated for the English and the Afrikaans language groups, **viz. p=.000**. This value is significant at the **.001 level**, which is indicative of a highly significant difference. A comparison of the mean scores in **Table 6.38** indicates that the English language group had a significantly more favourable perception of the Western-English cultural group (**m=4.9660**) than the Afrikaans language group (**m=4.6199**). No significant differences in the perceptions of the Western-English cultural group were indicated for the comparisons of the English and the African language groups.

The **null-hypothesis (Ho₄)**, in reference to **hypothesis 4** with regard to the perceptions of the **Western-English cultural group**, was thus rejected for the comparisons between the English and Afrikaans language groups. The **null-hypothesis (Ho₄)** was not rejected for the comparisons between the English and the African language groups and between the African and Afrikaans language groups.

Table 6.43 presents the **post-hoc test results** for the systematic comparisons of the **perceptions of the Indigenous African cultural group for the three language groups**. The post-hoc tests represent a multiple comparison of the SDS scores of the three language groups with each other.

Significant differences in the perceptions of the Indigenous African cultural group were indicated for the African and English language groups, **viz. p=.005**. This difference is significant at the **.01 level**. A comparison of the mean scores in **Table 6.38** indicates that the African language group had a significantly more favourable perception of the Indigenous African cultural group (**m=4.5844**) than the English language group (**m=4.2363**). A statistically significant difference in the perceptions of the Indigenous African cultural group was indicated for the comparison of the African and the Afrikaans language groups, **viz. p=.000**. This difference is significant at the **.001 level**, which is indicative of a highly significant difference between the groups. A comparison of the observed means in **Table 6.38**

indicates that the African language group had a significantly more favourable attitude of the Indigenous African cultural group ($m=4.5844$) than the Afrikaans group ($m=3.9392$).

A statistically significant difference in the perceptions of the Indigenous African cultural group for the comparisons of the English and the Afrikaans groups was indicated, viz. $p=.018$. This difference is statistically significant at the .05 level. A comparison of the observed means in Table 6.38 indicates that the English group had a significantly more favourable perception of the Indigenous African cultural group ($m =4.2363$) than the Afrikaans group ($m=3.9392$). The null-hypothesis (H_{04}), in reference to hypothesis 4, with regards to the perceptions of the Indigenous African cultural group, was thus rejected for the comparisons between the African and English language groups, the African and Afrikaans language groups, and the Afrikaans and English language groups.

6.5 Correlations between the IS/CS and the SDS Attitude scores.

Correlations between the IS/CS scores, and the SDS attitude scores for the perceptions of the five cultural-orientation groups were undertaken to identify the relation between the dependent measures, and to determine the feasibility of conducting a regression analysis for the effects of the IS/CS scores on the SDS attitudes for the perceptions of the five cultural-orientation groups independently. The motivation for this was to determine the predictive power of I/C for attitudes towards cultural groups.

The results of the correlations between the IS/CS scores, and the SDS scores are presented in Table 6.44.

Table 6.44 Correlations between the IS/CS scores and the SDS attitude scores for the perceptions of the five cultural-orientation groups.

DEPENDENT VARIABLE		WESTERN-AFRIKAANS	WESTERN-ENGLISH	INDIAN/ASIAN	MIDDLE-EASTERN (MUSLIM)	INDIGENOUS AFRICAN
IS SCORES	PEARSON CORRELATION	.059	-.077	.067	.018	.068
	SIG. (2-TAILED)	.168	.074	.121	.672	.115
	N	539	537	539	538	538
CSSCORES	PEARSON CORRELATION	-.076	-.112**	-.132**	-.168***	-.119**
	SIG. (2-TAILED)	.079	.010	.002	.000	.006
	N	539	537	539	538	538

** significant at the .01 level.

*** significant at the .001 level

Table 6.44 indicates the results of the **correlations of the IS/CS scores and the SDS attitude scores for the perceptions of the five cultural-orientation groups** based on Person's product-moment correlation coefficients. No significant correlations are indicated for the correlations of the IS scores with the SDS scores for the perceptions of each of the five cultural-orientation groups. Significant correlations are indicated for the CS scores and the perceptions of the Western-English (**p=.010**), Indian/Asian (**p=.002**), Middle-Eastern (Muslim) (**p=.000**) and Indigenous African cultural groups (**p=.006**). Each of these values are significant at the **.01 level**. The correlation between the CS scores and the SDS attitude scores for the perception of the Middle-Eastern (Muslim) cultural group was significant at the **.001 level**. Each of these correlations are however extremely low, the highest value being **-.168**. This suggests that the correlations between the CS scores and each of the four SDS attitude scores are very weak.

In view of these findings, the **null-hypothesis (H₀₅)**, in reference to **hypothesis 5**, was not rejected for the correlations between the IS scores and the perceptions of the Western-cultural groups. The **null-hypothesis (H₀₆)**, in reference to **hypothesis 6** was rejected for the correlations between the CS scores and the perceptions of the Western-English, Indian/Asian, Middle-Eastern (Muslim) and Indigenous African cultural groups.

