CHAPTER 6
ANALYSIS AND INTERPRETATION OF RESULTS

6.1 INTRODUCTION

This chapter will include an analysis and interpretation of the results of the empirical research findings. It will start with the presentation and discussion of the demographic data from the questionnaire, which will be followed by the findings of the reliability test. Lastly the findings of the *t*-test and Fisher's exact test, testing the six hypotheses on the preparation, support and training of expatriates working for South African MNEs, will be presented.

6.2 DEMOGRAPHIC PROFILE OF THE SAMPLE

The first section of the questionnaire, Section A, focused on the demographic information of the respondents. The following information was gained from this section.

6.2.1 Age profile of respondents

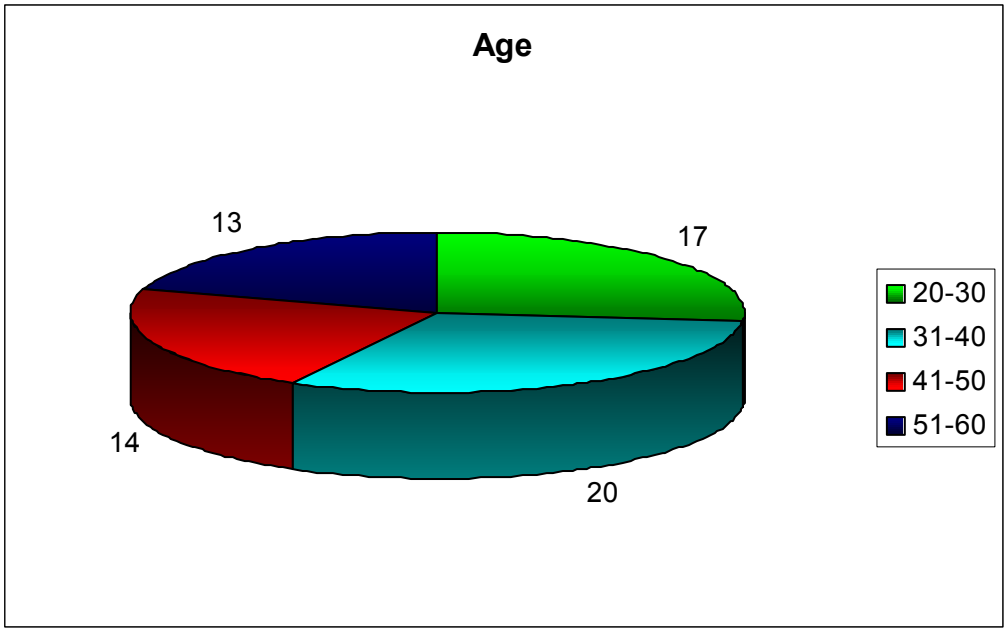
Of the 64 respondents who answered this question the ages of the expatriates varied dramatically from 23 to 60 years of age. Though there is not a great difference in the frequency of responses in each age group, three ages do have four respondents each, which is slightly more than the other age groups. There are four respondents in each of the age groups: 30, 33 and 37.

If the ages are grouped in four groups as in figure 6.1, namely 20-30, 31-40, 41-50 and 51-60, it can be seen that there is again a fairly even spread within these groupings, with seventeen respondents between the ages of 20 and 30, twenty respondents between the ages of 31 and 40 and fourteen respondents between the ages of 41 and 50. Lastly there are thirteen respondents between the ages of 51 and 60.

What we see for South African MNEs is, however, not in line with recent trends. A very recent trend is the tendency for companies to give younger managers international experience much earlier in their careers than previously. This can be linked to the growing problems of mobility (spouse's job, childrens' education and others) for older managers. This also reflects the strategy of some companies to broaden the opportunities for international development, and the growing recognition in some quarters that the payback on the investment of a

developmental assignment may well be greater with a younger manager (Scullion, 1994:88-89).

Figure 6.1: Age profile of the respondents



6.2.2 Gender profile of the respondents

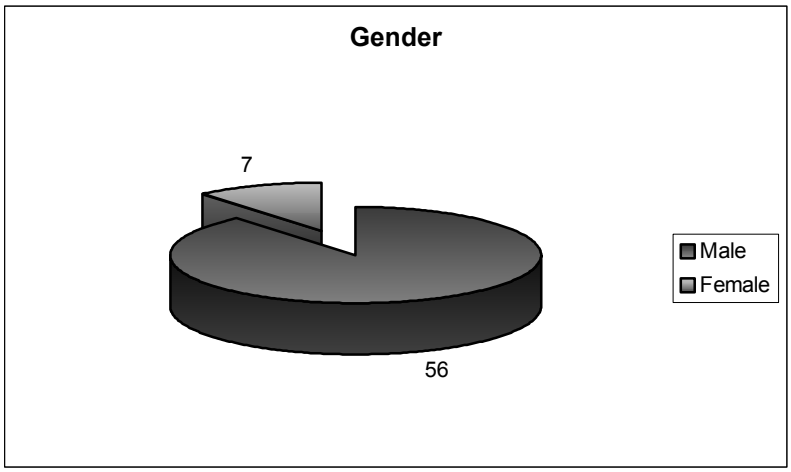
Table 6.1 indicates to us that of the 63 respondents who answered the gender question the great majority, namely 56, were male, while only 7 were female. From these data it can be seen that the great majority of South African expatriates are male.

Table 6.1: Gender profile of the respondents

	Frequency	**Percentage**
Male	56	88.89
Female	7	11.11
Total	**63**	**100.00**

This shows that South Africa is in line with international tendencies, as the literature shows that the majority of trailing spouses are still women, though it is becoming more common to find a trailing husband, who is possibly derailing his career by moving (Sievers, 1998:S9-S10).

Figure 6.2: Gender profile of the respondents



6.2.3 Marital status of respondents

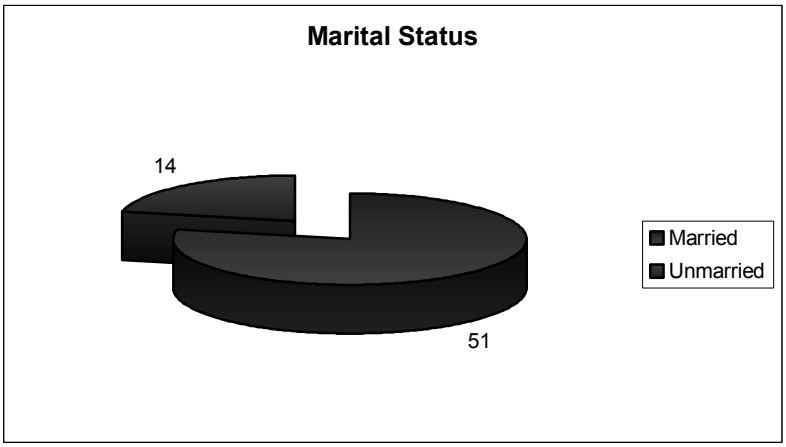
The data in table 6.2 show that of the 65 respondents who answered the question on marital status, 51 respondents were married while only 14 were unmarried.

Table 6.2: Marital status of the respondents

	Frequency	**Percentage**
Married	51	78.46
Unmarried	14	21.54
Total	**65**	**100.00**

The data in table 6.2 are graphically presented in figure 6.3 to provide a visual illustration of the size of the difference in responses.

Figure 6.3: Marital status of the respondents



6.2.4 Hierarchical position of respondents

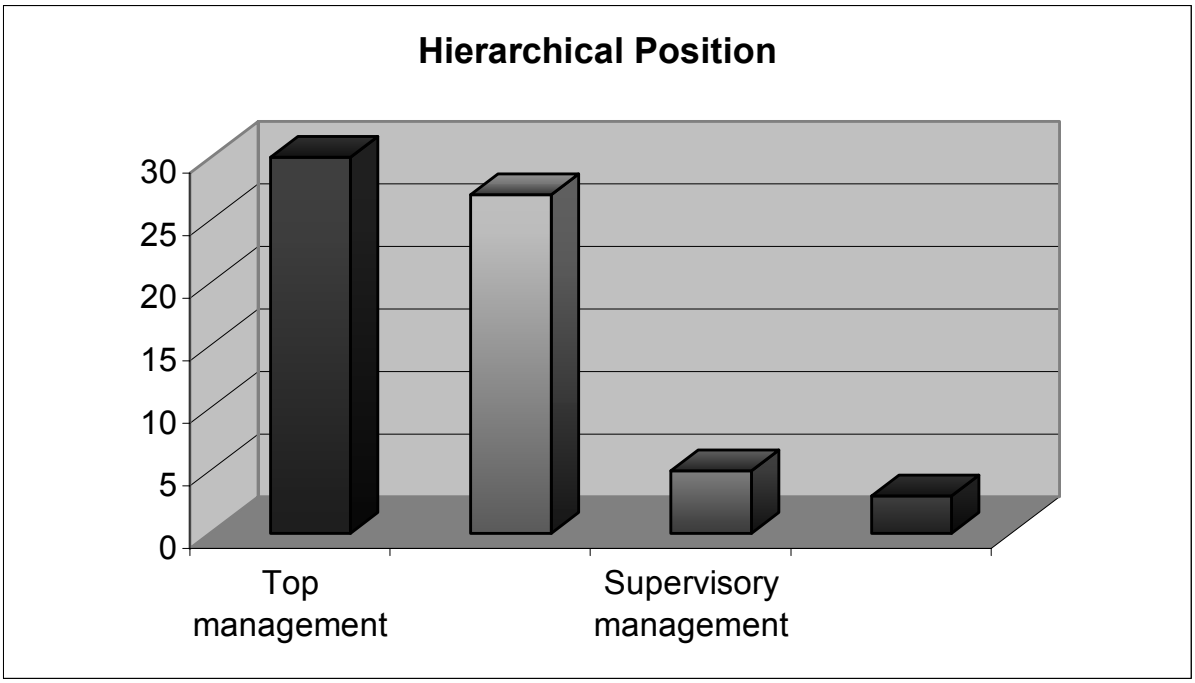
From table 6.3 it can be seen that 30 of the respondents hold top management positions, 27 hold middle management positions, while only 5 are in a supervisory position and 3 in non-managerial positions.

Table 6.3: Hierarchical position of the respondents

Position	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Top management	30	46.15	30	46.15
Middle management	27	41.54	57	87.69
Supervisory management	5	7.69	62	95.38
Non-managerial	3	4.62	65	100.00

Thus by far the largest percentage of the respondents, namely 87.69 percent, are either in a top or middle management position. The use of top and middle mangers as expatriates is in line with international tendencies, as can be seen from the work of Scullion (1994:87). In his study of 45 international personnel management professionals in MNEs based in the UK and Ireland, Scullion found that a majority of the companies continued to rely heavily on PCNs to run their operations. The research findings showed that, while almost 50 percent of companies had formal policies favouring the use of host country managers to run their foreign operations, in practice just over one-third operated with HCNs in senior management positions in their foreign operations. In other words, two-thirds of the companies relied primarily on expatriates to run their foreign operations.

Figure 6.4: Hierarchical position of the respondents



6.2.5 Duration of the international assignment

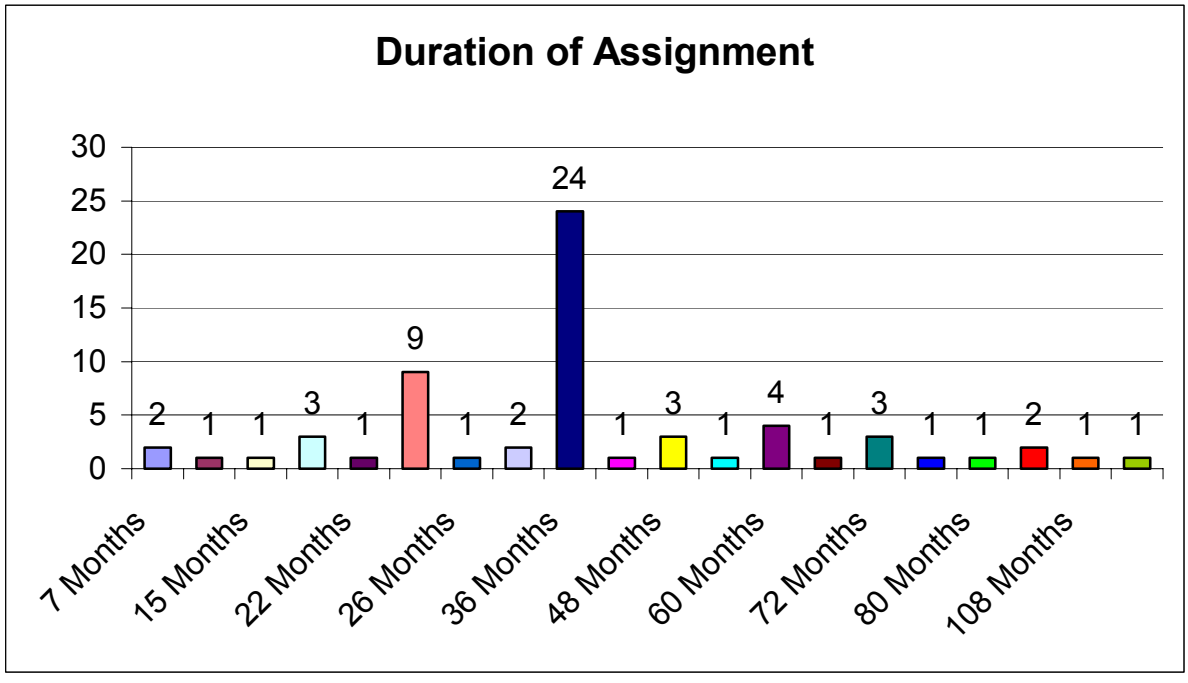
The 63 respondents responding to this question indicated that the duration of their international assignments ranged from as short as 7 months to as long as 120 months. The largest number, namely 24 respondents, indicated that their international assignment would last for 36 months, whilst 9 respondents indicated that their international assignment would last for 24 months.

According to the Measuring Expatriate Success survey (Halcrow, 1999:44-48), a survey of HR professionals to which 337 HR professionals responded, it was found that the average expatriate assignment lasts 2.7 years. When comparing the duration of South African expatriate assignments with this it would seem that we are on a par with the international tendencies. In a more recent study amongst 60 mainly European companies, it was found that 53 percent had more than 50 employees on long-term assignments of a year or more, but only 18 percent had more than 50 abroad for fixed periods of less than a year or so. However, short-term assignments were the ones most companies expected to grow. In a comparative study between 1997 and 2000 it was found that the growth in short-term assignments was quite astounding. One of the reasons for this change is cost. Sending employees abroad long term generally costs three to four times as much as employing local staff. Another reason is the way that companies run international operations. The growth in shorter postings can be

traced to the early 1990s, when executives increasingly acquired global and functional, rather than regional and geographic, responsibilities. A manager with responsibility for, example, information, is expected to work in all the countries in which the company operates. As a result, people with specific skills, often much lower down the company ladder than the typical expatriate of the past, now work abroad for a few weeks or months at a time. Employees' lives have altered too, in ways that make long-term foreign postings less attractive. Professionals marry other professionals: dual-career couples risk losing half their income if one of them has to move (Anon, 2000b:80-82).

This would mean that as the majority of South African expatriate assignments are for two or three years, South African MNEs are behind the most recent trends in the duration of expatriate assignments. As indicated above, when looking at figure 6.5, it can be seen that the two most popular assignment lengths for an international assignment for South African expatriates are either 36 months or 24 months.

Figure 6.5: Duration of an international assignment



6.2.6 Location of an international assignment

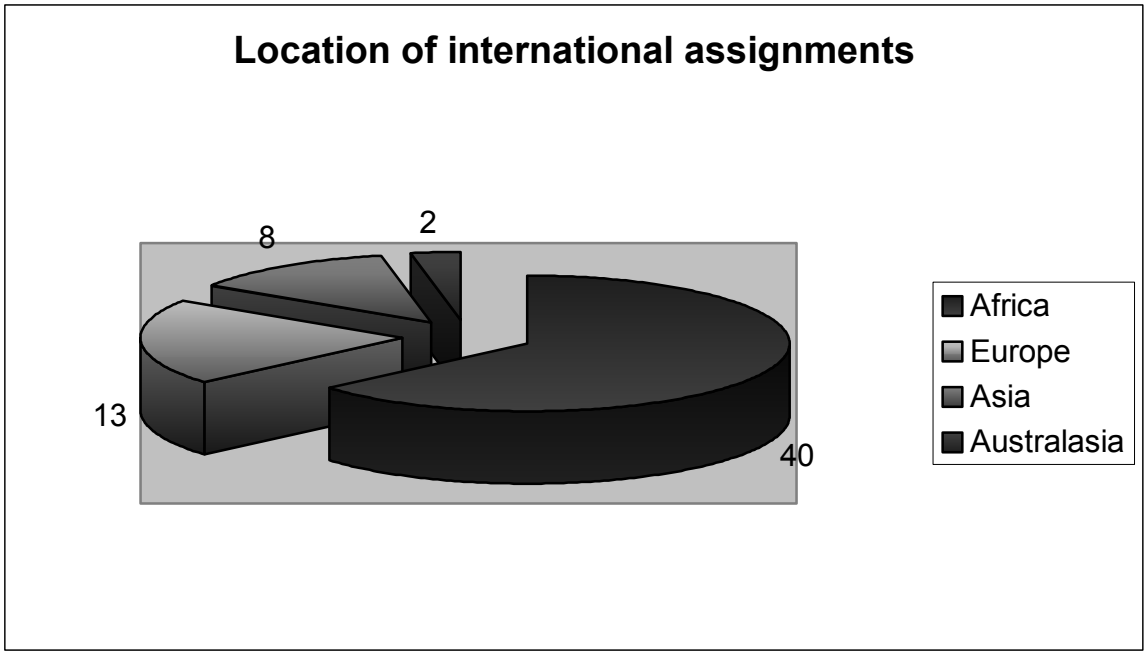
Respondents were asked to indicate the country of their international assignment. The 65 responses were then further grouped into four continents, which resulted in the following:

- 40 respondents were assigned to Africa.

- 13 respondents were assigned to Europe.
- 8 respondents were assigned to Asia.
- 2 respondents were assigned to Australasia.

As can be seen in figure 6.6, the largest number of South African expatriates in this study were assigned to Africa, while the smallest number were assigned to Australasia. It can also be seen that more expatriates are being sent to Africa than are being sent to the rest of the world combined, namely 40 compared with 23.

Figure 6.6: Location of international assignments



6.3 RELIABILITY

Reliability applies to a measure which produces similar results over time and across situations. Broadly defined, reliability is the degree to which measures are free from error and therefore yield consistent results (Zikmund, 2003:300). The reliability of responses in this study was tested using Cronbach's alpha. Because of the sample size and the circumstances discussed in chapter 5, factor analysis and structural equivalence could not be tested.

Factor analysis is a general term for several specific computational techniques. All have the objective of reducing to a manageable number many variables that belong together and have

overlapping measurement characteristics. The predictor-criterion relationship that was found in the dependence situation is replaced by a matrix of intercorrelations among several variables, none of which is viewed as being dependent on another. For example, one may have data on 100 employees with scores on six attitude scale items. Factor analysis begins with the construction of a new set of variables based on the relationship in the correlation matrix. While this can be done in a number of ways, the most frequently used approach is principal components analysis. This method transforms a set of variables into a new set of composite variables or principal components that are not correlated with one another. These linear combinations of variables, called factors, account for the variance in the data as a whole. The best combination makes up the first principal component and is the first factor. The second principal component is defined as the best linear combination of variables for explaining the variance not accounted for by the first factor. In turn, there may be a third, fourth and *k*th component, each being the best linear combination of variables not accounted for by the previous factor. The process continues until all the variances are accounted for, but in practice it is usually stopped after a small number of factors have been extracted (Cooper & Schindler, 2003:635).

According to Sudman & Blair (1998:557), the main applications of factor analytic techniques are firstly to reduce the number of variables and secondly to detect structure in the relationship between variables, that is to classify variables. Therefore, factor analysis is applied as a data reduction or structure detection method.

6.3.1 Cronbach's Alpha

According to Cooper & Schindler (2003:237), Cronbach's alpha measures the degree to which instrument items are homogeneous and reflect the same underlying construct(s). Cooper & Schindler (2001:216-217) add that a Cronbach's alpha value of above 0.5 is regarded as an indication of reliability. Cronbach's alpha is regarded as one of the most important reliability estimates.

6.3.1.1 Preparation of expatriates

As can be seen from table 6.4, a Cronbach coefficient alpha value of 0.839459 was achieved for the 24 variables measuring what was provided to South African expatriates in order to prepare them for an international assignment. A Cronbach coefficient alpha value of 0.819536 was achieved for the same 24 variables measuring what South African expatriates

require in order to be better prepared for an international assignment. As the Cronbach's alpha value for the responses to the preparation construct on both counts were above the required 0.5 value to test for reliability, the responses to this construct can be considered to be reliable.

Table 6.4 Cronbach's alpha results for Preparation

Preparation	Provided	Required
Raw Variables	0.839459	0.819536
Standardised Variables	0.839581	0.823428

6.3.1.2 Support of expatriates

From table 6.5 it can be seen that a Cronbach coefficient alpha value of 0.814811 was achieved for the 16 variables measuring the amount of support provided to South African expatriates on international assignments, while a value of 0.773405 was achieved for the same variables measuring what these expatriates require from the MNEs in terms of support. As the Cronbach's alpha value for the responses to the support construct on both counts were above the required 0.5 value to test for reliability, the responses to this construct can be considered to be reliable.

Table 6.5 Cronbach's alpha results for Support

Support	Provided	Required
Raw Variables	0.814811	0.773405
Standardised Variables	0.816977	0.787953

6.3.1.3 Training of expatriates

Table 6.6 indicates that the 7 variables measuring the training provided to South African expatriates scored a Cronbach coefficient alpha value of 0.880700, while the same 7 variables measuring what training the expatriates require scored a value of 0.849970. As the Cronbach's alpha value for the responses to the training construct on both counts were above the required 0.5 value to test for reliability, the responses to this construct can be considered to be reliable.

Table 6.6 Cronbach's alpha results for Training

Training	Provided	Required
Raw Variables	0.880700	0.849970
Standardised Variables	0.887249	0.862973

6.3.1.4 Expatriate spouses

From table 6.7 it can be seen that the Cronbach coefficient alpha value of the 8 variables measuring what was provided to expatriates' trailing spouses in terms of preparation, support and training is 0.790118. The alpha value of the same 8 variables measuring what expatriates require in terms of support and training for their trailing spouses is 0.802050.

Here also the Cronbach's alpha values for both the responses to the spouse construct were above the required 0.5 value for reliability and as a result the responses to this construct can be considered to be reliable.

Table 6.7 Cronbach's alpha results for Spouses

Spouse	Provided	Required
Raw Variables	0.790118	0.802050
Standardised Variables	0.821845	0.807187

6.3.1.5 Expatriates' children

Table 6.8 shows that the Cronbach coefficient alpha value of the last 5 variables measuring what was provided to expatriates' children is 0.827206, while the value of the same 5 variables measuring what expatriates require for their children is 0.782243.

As the Cronbach's alpha value for both the responses to the last construct, children, were above the required 0.5 value to test for reliability, the responses to this construct can also be considered to be reliable.

Table 6.8 Cronbach's alpha results for Children

Children	Provided	Required
Raw Variables	0.827206	0.782243
Standardised Variables	0.831936	0.762969

6.4 PROVIDED VERSUS REQUIRED

The *t*-test may be used to test a hypothesis stating that the mean scores on some variables will be significantly different for two independent samples or groups. It is used when the number of observations (sample size) is small and the population standard deviation is unknown (Zikmund, 2003:524). However, in this study the samples are not independent but the same respondents responding to the same variables, based on what they received and what they required from the South African MNE they worked for.

When looking at the results of the *t*-test for the individual variables it can be seen that there are statistically significant differences for all the variables between what was provided to expatriates and what the expatriates required from the MNEs. In other words, the mean scores for what expatriates required were higher than the mean scores for what they received for all the variables in the questionnaire.

6.4.1 Preparation of expatriates

On a 99 percent confidence interval when looking at the preparation of expatriates, 16 of the 24 variables scored a p-value of p<.0001, indicating statistical significance for the variables. As indicated in table 6.9, for all the variables the mean scores for what was required was greater than the mean scores for what was provided.

Table 6.9: *t*-Test for preparation required vs. provided

Variable	DF	*t*-Value	Pr > |t|
Orientation visits to the international destination.	52	6.02	<.0001**
Expatriates currently at the international destination.	50	6.26	<.0001**
Accommodation in the host country.	51	2.36	0.0221**
Property rental agents in the host country.	51	4.38	<.0001**
Assistance with a lease agreement.	50	3.09	0.0033**
Buying houses in the host country.	51	6.32	<.0001**
Shipping arrangements for expatriates.	48	3.76	0.0005**
Payment of shipping and insurance expenses.	51	2.13	0.0383**
Payment for storage and insurance.	51	4.22	0.0001**
MNEs should limit shipping and insurance costs.	51	1.93	0.0586*

Table 6.9: (Continues)

Variable	DF	*t*-Value	Pr > |t|
Storage of belongings.	51	2.49	0.0160**
MNEs should ship expatriates' personal automobile.	51	5.43	<.0001**
Loss due to early sale of an automobile.	51	8.06	<.0001**
Rental of a home in the home country.	50	5.79	<.0001**
Assistance in the sale of a home country residence.	51	6.26	<.0001**
Loss due to the sale of a home in the home country.	51	7.17	<.0001**
Shipping expenses of pets.	51	6.45	<.0001**
Assistance with drawing up a will.	51	6.15	<.0001**
Tax consultation for expatriates.	51	10.08	<.0001**
Full medical examination prior to the assignment.	51	6.37	<.0001**
Hotel expenses prior to departure of the expatriate.	50	3.56	0.0008**
Expatriates' long-term career path.	50	8.48	<.0001**
A mentor should be assigned to an expatriate.	51	7.39	<.0001**
Reading material on the host country.	51	5.58	<.0001**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

The following 16 variables have, however, shown the greatest statistically significant differences:

- Prior to the assignment the expatriate and his or her spouse should be allowed to visit the host country for an orientation visit at the MNE's expense (*t*-value = 6.02; p<.0001).
- The MNE should put the expatriate in touch with expatriates who have already made the move (*t*-value = 6.26; p<.0001).
- The MNE should provide a list of property rental agents in the host country that the expatriate can use to find a rental property (*t*-value = 4.38; p<.0001).
- The MNE should allow expatriates to purchase foreign housing (*t*-value = 6.32; p<.0001).
- The MNE should be required to ship a personal automobile to or from the host country (*t*-value = 5.43; p<.0001).
- The MNE should reimburse the expatriate for any losses he or she incurs due to the sale or early lease cancellation of an automobile prior to relocation (*t*-value = 8.06; p<.0001).

- The MNE should administer or assist with the administration of the rental of the primary residence of an expatriate while on an international assignment (*t*-value = 5.79; p<.0001).
- The MNE should provide assistance to expatriates with the sale of a primary residence before an international assignment (*t*-value = 6.26; p<.0001).
- The MNE should reimburse an expatriate for any losses he or she incurs due to the sale of the primary residence prior to an international assignment (*t*-value = 7.17; p<.0001).
- The MNE should be required to pay for the shipping expenses of pets (*t*-value = 6.45; p<.0001).
- The MNE should provide the expatriate with legal assistance in order to make or update a will prior to departure (*t*-value = 6.15; p<.0001).
- The MNE should provide tax consultation to an expatriate prior to departure (*t*-value = 10.08; p<.0001)
- Expatriates and their families should have full physical and dental examinations before leaving their home country (*t*-value = 6.37; p<.0001).
- MNEs should stipulate the long-term career plan with expatriates before an international assignment is undertaken (*t*-value = 8.48; p<.0001).
- The MNE should assign a mentor to an expatriate on an international assignment who can aid in maintaining contact with the home country and repatriation (*t*-value = 7.39; p<.0001).
- The MNE should provide the expatriate with reading material such as newspapers from the host country in order to prepare the expatriate for the new location (*t*-value = 5.58; p<.0001).

6.4.2 Support for expatriates

When looking at section C in the questionnaire – support for expatriates – again all the variables showed statistically significant differences between what was provided and what was required. However, 13 of the16 variables in this section scored a p-value of p<.0001, as can be seen in table 6.10, where the mean score for what was required was greater than the mean score for what was provided.

Table 6.10: *t*-Test for support required vs. provided

Variable	DF	*t*-Value	Pr > |t|
Tour of the new location upon arrival.	51	6.86	<.0001**
Assistance with opening a bank account.	51	5.31	<.0001**
Accommodation prior to long-term accommodation.	51	2.84	0.0064**
One-time relocation allowance upon arriving.	50	4.59	<.0001**
Furniture/appliance allowance to expatriates.	51	6.13	<.0001**
Medical aid cover.	51	5.66	<.0001**
Doctors and dentists in the host country.	51	8.18	<.0001**
Expatriate clubs/organisations in the host country.	51	7.97	<.0001**
Club memberships in the host country.	51	7.67	<.0001**
Plane tickets for home leave.	51	2.28	0.0265**
Sick or dead relatives.	50	5.81	<.0001**
Shipping costs of returning to the home country.	50	2.85	0.0064**
Customs duties upon returning to the home country.	51	5.54	<.0001**
Excess baggage penalties of expatriates.	51	5.83	<.0001**
Temporary accommodation upon repatriation.	50	5.98	<.0001**
Once-off settlement allowance upon repatriation.	50	7.15	<.0001**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

The 13 variables with a p-values of p<.0001 are:

- On arrival the MNE should arrange for the expatriate to be taken on a tour of the area he or she will be working and living in (*t*-value = 6.86; p<.0001).
- The MNE should provide the expatriate with assistance with tasks such as opening a bank account and obtaining a driver's licence (*t*-value = 5.31; p<.0001).
- MNEs should provide expatriates with a one-time relocation allowance to pay for miscellaneous costs associated with the relocation (*t*-value = 4.59; p<.0001).
- The MNE should provide furniture and/or household appliance allowances where shipping or rental of such items is impractical (*t*-value = 6.13; p<.0001).
- The MNE should ensure that expatriates are provided with the same quality of medical aid cover as they received in the home country (*t*-value = 5.66; p<.0001).

- The MNE should provide the expatriate with a list of reputable doctors and dentists in their immediate vicinity (*t*-value = 8.18; p<.0001).
- The MNE should provide support to expatriates and their families by helping to establish expatriate clubs and social organisations in the host country (*t*-value = 7.97; p<.0001).
- The MNE should pay for club memberships (e.g., golf, gym etc.) for the expatriate in the host country (*t*-value = 7.67; p<.0001).
- The MNE should provide round-trip aeroplane tickets to the expatriate and his or her spouse in the case of illness or death in their immediate family (*t*-value = 5.81; p<.0001).
- Upon repatriation the MNE should pay all customs duties on items purchased in the host country on behalf of the expatriate (*t*-value = 5.54; p<.0001).
- Upon repatriation the MNE should pay any excess baggage penalties payable to the airline on behalf of the expatriate (*t*-value = 5.83; p<.0001).
- If the expatriate cannot move into his or her own home immediately upon repatriation the MNE should provide the expatriate with temporary accommodation (*t*-value = 5.98; p<.0001).
- The MNE should provide the expatriate with a once-off settlement allowance to compensate for additional expenses incurred upon repatriation (*t*-value = 7.15; p<.0001).

6.4.3 Training of expatriates

The importance of training expatriates for an international assignment is emphasised by the fact that all seven of the variables measuring the training of expatriates scored a p-value of p<.0001, as can be seen in table 6.11 below, indicating statistically significant differences between the training provided to expatriates and the training they require.

Table 6.11: *t*-Test for training required vs. provided

Variable	DF	*t*-Value	Pr > |t|
Local driving practices in the host country.	51	7.05	<.0001**
Security briefing on the host country.	51	7.86	<.0001**
Overview on doing business in the host country.	51	7.39	<.0001**
Objective cross-cultural training for expatriates.	51	8.72	<.0001**
Subjective cross-cultural training for expatriates.	51	8.86	<.0001**
Language training for expatriates.	51	6.95	<.0001**
Repatriation seminar prior to repatriation.	50	6.98	<.0001**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

The following variables scored a p-value of p<.0001:

- Expatriates should be informed of local driving practices and motor vehicle safety in the host country (*t*-value = 7.05; p<.0001).
- MNEs should provide expatriates and their families with security awareness briefings (*t*-value = 7.86; p<.0001).
- MNEs should provide expatriates with an overview of the basic requirements for doing business in the host country (*t*-value = 7.39; p<.0001).
- Expatriates should receive cross-cultural training focusing on objective characteristics of the host culture such as: currency, language and government system (*t*-value = 8.72; p<.0001).
- Expatriates should receive cross-cultural training focusing on subjective characteristics of the host culture such as: customs, values and beliefs (*t*-value = 8.86; p<.0001).
- Expatriates should receive language training where the host country language is different from the language spoken in the home country (*t*-value = 6.95; p<.0001).
- Prior to repatriation the expatriate and his or her spouse should attend a repatriation seminar to help them prepare mentally for the repatriation (*t*-value = 6.98; p<.0001).

6.4.4 Spouses of expatriates

As was the case with the training of expatriates, all eight of the variables measuring what preparation, support and training was offered and should be offered to the trailing spouses of

expatriates, scored high for statistical significance (p<.0001). Here the mean scores for what was required were higher than the mean scores for what was provided.

Table 6.12: *t*-Test for required vs. provided for trailing spouses

Variable	DF	*t*-Value	Pr > |t|
Spouses should attend information and orientation sessions prior to accepting the assignment.	40	6.73	<.0001**
Work permits for spouses.	39	9.69	<.0001**
Job for spouses in the host country.	40	7.66	<.0001**
MNE should provide spouses with work.	39	6.17	<.0001**
MNEs should pay for spouses to study.	40	7.01	<.0001**
Objective cross-cultural training for spouses.	40	7.59	<.0001**
Subjective cross-cultural training for spouses.	40	7.59	<.0001**
Spouses should receive language training.	40	6.88	<.0001**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

The following eight variables were tested:

- MNEs should involve the spouse of an expatriate in the original information and orientation sessions prior to accepting the assignment (*t*-value = 6.73; p<.0001).
- The MNE should assist spouses of expatriates in acquiring a work permit for the host country (*t*-value = 9.69; p<.0001).
- The MNE should aid expatriates' spouses in finding work in the host country (*t*-value = 7.66; p<.0001).
- If the trailing spouse cannot find work in the host country the MNE should provide the spouse with work (*t*-value = 6.17; p<.0001).
- The MNE should provide the expatriate's spouse with financial support for further study in the host country (*t*-value = 7.01; p<.0001).
- Spouses should receive cross-cultural training focusing on objective characteristics of the host culture such as: currency, language and government system (*t*-value = 7.59; p<.0001).
- Spouses should receive cross-cultural training focusing on subjective characteristics of the host culture such as: customs, values and beliefs (*t*-value = 7.59; p<.0001).

- Spouses should receive language training where the host country language is different from the language spoken in the home country (*t*-value = 6.88; p<.0001).

6.4.5 Children of expatriates

The last section focused on the preparation, support and training of expatriates' children. In this section all the variables showed statistically significant differences between what was provided and what was required.

Table 6.13: *t*-Test for required vs. provided for expatriate children

Variable	DF	*t*-Value	Pr > |t|
Education allowance for children.	25	2.21	0.0362**
Plane tickets for children in tertiary institutions.	25	3.24	0.0034**
Objective cross-cultural training for children.	25	4.03	0.0005**
Subjective cross-cultural training for children.	25	3.63	0.0013**
Language training for children.	25	3.83	0.0008**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

Here also the mean scores for what was required were higher than the mean scores for what was provided. In this section two of the five variables showed a greater statistical significance than the others, namely:

- Expatriate children should receive cross-cultural training focusing on objective characteristics of the host culture such as: currency, language and government system (*t* value = 4.03; p = 0.0005).
- Expatriate children should receive language training where the host country language is different from the language spoken in the host country (*t* value = 3.83; p = 0.0008).

6.4.6 Paired *t*-test section totals

Now that it has been identified that there are statistically significant differences for the individual variables between what has been provided and what is required, the *t*-values and the p-values of the total scores for each section in the questionnaire can be looked at.

- From table 6.14 it can be seen that there is statistical significance in the difference between the mean score for the preparation provided to expatriates (BTOTP) and the mean score for preparation (BTOTR) required by expatriates (*t*-value = 9.61; p<.0001).
- In section C, measuring the support offered to expatriates, there is a statistically significant difference between the mean score for support provided to expatriates and the mean score for support required by expatiates (CTOTP – CTOTR) (*t*-value = 10.23; p<.0001).
- In section D of the questionnaire there is statistical significance in the difference between the mean score for training provided to expatriates and the mean score for the training required by expatriates (DTOTP – DTOTR) (*t*-value = 9.17; p<.0001).
- There is also a statistically significant difference between the mean score for the preparation, support and training provided to the expatriates' trailing spouse and the mean score for the preparation, support and training required by the expatriate for his or her trailing spouse (ETOTP – ETOTR) (*t*-value = 10.13; p<.0001).
- Lastly there is a statistically significant difference between the mean score for the preparation, support and training provided for the expatriate's children and the mean score for the preparation, support and training required by the expatriate for his or her children (FTOTP – FTOTR) (*t*-value = 4.24; p = 0.0003).

In all the above-mentioned cases (Sections B – E) the mean score for what was required was higher than the mean score for what was provided.

Table 6.14: Paired *t*-test section totals

Difference	**DF**	***t*-Value**	**Pr > | *t* |**
BTOTP - BTOTR	44	9.61	< .0001**
CTOTP - CTOTR	47	10.23	< .0001**
DTOTP - DTOTR	50	9.17	< .0001**
ETOTP - ETOTR	38	10.13	< .0001**
FTOTP - FTOTR	25	4.24	0.0003**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

As the *t*–test has shown statistical significance in all five of the sections tested in the questionnaire, the null hypothesis - H_{10}: South African MNEs are providing the preparation,

support and training that expatriates feel they need for international assignments – cannot be accepted.

However, due to the statistical significance in the mean scores of all five sections of the questionnaire, the alternative hypothesis - H_{1A}: South African MNEs are not providing the preparation, support and training that expatriates feel they need for international assignments - is accepted.

6.5 SPOUSE AND FAMILY NEEDS

The *t*-test was also used in determining whether expatriates with trailing spouses and children do have special needs when on an international assignment. Table 6.15 below lists all the variables in the questionnaire testing the requirements of expatriates with trailing spouses with each variable's *t*- and p-value. As can be seen in table 6.15, all the variables showed statistically significant differences between what was provided and what was required, with p-values of p<.0001. For all the variables the mean scores for what was required were higher than the mean scores for what was provided.

Table 6.15: *t*-Test for required vs. provided for trailing spouses

Variable	DF	*t*-Value	Pr > |t|
Spouses should attend information and orientation sessions prior to accepting the assignment.	40	6.73	<.0001**
Work permits for spouses.	39	9.69	<.0001**
Job for spouses in the host country.	40	7.66	<.0001**
MNE should provide spouses with work.	39	6.17	<.0001**
MNEs should pay for spouses to study.	40	7.01	<.0001**
Objective cross-cultural training for spouses.	40	7.59	<.0001**
Subjective cross-cultural training for spouses.	40	7.59	<.0001**
Spouses should receive language training.	40	6.88	<.0001**

Statistical significance, $\alpha = 0.1^{*}$ and $\alpha = 0.05^{**}$

There is also statistical significance between the mean score for the preparation, support and training provided to the expatriates' trailing spouse and the mean score for the preparation,

support and training required by the expatriate for the trailing spouse for all the variables combined in section E (ETOTP – ETOTR) (*t*-value = 10.13;p <.0001).

The last five variables in the questionnaire focused on the preparation, support and training needs of expatriates with children. The following five variables were tested:

- An education allowance (tuition only) should be provided for schooling to expatriate children equal to that offered in the home country (*t*-value = 2.21; p = 0.0362).
- Children attending a tertiary institution in the home country should receive plane tickets to visit their parents in the host country (*t*-value = 3.24; p = 0.0034).
- Expatriate children should receive cross-cultural training focusing on objective characteristics of the host culture such as: currency, language and government system (*t*-value = 4.03; p = 0.0005).
- Expatriate children should receive cross-cultural training focusing on subjective characteristics of the host culture such as: customs, values and beliefs (*t*-value = 3.63; p = 0.0013).
- Expatriate children should receive language training where the host country language is different from the language spoken in the home country (*t*-value = 3.83; p = 0.0008)

As can be seen, at a significance level of $p \leq 0.05$ all the variables in this section show statistically significant differences between what was provided to them and what is required by them, as the mean scores for what was provided were lower than the mean scores for what was required.

When looking at the *t*-value and the p-values for all the variables in section F combined, it can be seen that there is statistical significance in the difference between the mean score for the preparation, support and training provided for the expatriate's children and the mean score for the preparation, support and training required by the expatriate for his or her children (FTOTP – FTOTR) (*t*-value = 4.24; p = 0.0003).

As there are statistically significant differences in all the variables in both sections, it can be said that the expatriates do have special needs for their trailing spouses and children, and as a result the null hypothesis – H_{20}: Expatriates with spouses and families do not have special preparation, support and training needs – is rejected. But the alternative hypothesis –

H_{2A}: Expatriates with spouses and families do have special preparation, support and training needs – is accepted.

6.6 LOCATION NEEDS

Fisher's exact test was used to test for statistical significance between the location of the expatriates and the preparation, support and training they require from the MNEs they work for. Fisher's exact test had to be used as the χ^2 test for 2 x 2 tables assumes that each expected frequency is at least five. If this assumption is not satisfied, other procedures, such as Fisher's exact test should be used (Berenson & Levine, 1996: 622). The Fisher exact test computes the exact probability under the null hypothesis of obtaining the current distribution of frequencies across cells, or one that is more uneven (Statsoft, [n.d.(b)]). As is required by the Fisher exact test, the response categories needed to be combined (collapsed) into two columns and two rows. In order to use the Fisher exact test the locations (independent variable) were divided into two groups (rows) namely, Africa and the rest of the world, and the four-point Likert scale (columns) were combined (collapsed) into Agree and Disagree (dependent variable).

When looking at the results of the Fisher exact test, statistical significance at a significance level of $p \leq 0.05$ was found in only one of the 60 variables, namely V16. When the significance level was, however, reduced to $p \leq 0.10$, statistical significance was found in an additional three of the 60 variables.

At a significance level of $p \leq 0.05$ the only statistically significant difference between expatriates being sent to Africa and expatriates being sent to the rest of the world was:

- The MNE should provide a list of property rental agents in the host country that the expatriates can use to find a rental property ($p<0.0444$). While 75 percent of expatriates on an assignment in Africa agreed with this statement, 95.65 percent of expatriates on assignment to the rest of the world agreed with this statement.

At a significance level of $p \leq 0.10$ the following three variables also showed statistically significant differences:

- The MNE should be required to ship a personal automobile to or from the host country ($p<0.0697$). While 60 percent of expatriates on an assignment in Africa agreed with this

statement, only 34.78 percent of expatriates on assignment in the rest of the word agreed with this statement.

- The MNE should provide the expatriate with legal assistance in order to make or update a will prior to departure ($p<0.0542$). Only 57.50 percent of expatriates on assignment in Africa agreed with this statement, while 82.61 percent of expatriates in the rest of the world agreed with this statement.
- The MNE should assist spouses of expatriates in acquiring a work permit for the host country ($p<0.0754$). While 81 percent of the expatriates in Africa agreed with the statement, 100 percent of the expatriates in the rest of the world agreed with the statement.

When looking at the differences between the requirements of expatriates in Africa and the rest of the word, there were five variables where both the expatriates in Africa and the expatriates in the rest of the world were in one hundred percent agreement with the statements in the questionnaire. These statements were:

- The MNE should pay for the shipment and insurance of household goods to the host country.
- The MNE should cover temporary living expenses of expatriates and their dependants living in a hotel or furnished apartment prior to moving into their new residence in the host country.
- Once a year the MNE should provide the expatriate with plane tickets to the city in the home country where the expatriate is from in order to take home leave.
- The MNE should provide round-trip plane tickets to the expatriate and his or her spouse in the case of illness or death in their immediate family.
- An education allowance (tuition only) should be provided to provide schooling to expatriate children equal to that offered in the home country.

As there are statistically significant differences in only one of the 60 variables at an significance level of $p\leq0.05$, the null hypothesis – H_{30}: There is no difference between the preparation, support and training needs of expatriates on an international assignment in Africa and those expatriates on an international assignment in the rest of the world – is accepted.

6.7 REQUIREMENTS AND AGE

As was the case with the location requirements in section 6.6 above, the Fisher exact test was used in determining whether there is a statistically significant relationship between the age of expatriates (independent variable) and the preparation, support and training needs required (dependent variable) by them. As is required by the Fisher exact test, the response categories needed to be combined (collapsed). The ages of the respondents in this study ranged from 23 to 60, but in order to use the Fisher exact test were divided into two age groups (rows), namely 35 and under; and older than 35, and the four-point Likert scale was combined (collapsed) into Agree and Disagree (columns).

When looking at the results of the Fisher exact test, statistical significance at a significance level of $p \leq 0.05$ was found in three of the 60 variables in the questionnaire. At a significance level of $p \leq 0.10$ an additional two variables could be added to the list of variables with significant differences.

At a significance level of $p \leq 0.05$ the following three variables showed a statistically significant relationship between the age of an expatriate and the preparation, support and training he or she requires from an MNE:

- The MNE should pay for the storage and insurance of those household goods and other belongings remaining in the home country ($p<0.0302$). While 85.71 percent of the expatriates 35 years and under agreed with the statement, 100 percent of the expatriates older than 35 agreed with the statement.
- The MNE should provide the expatriate with legal assistance in order to make or update a will prior to departure ($p<0.0357$). While 82.14 percent of expatriates 35 and under agreed with the statement, only 56.76 percent of expatriates over 35 agreed with the statement.
- The MNE should aid expatriates' spouses in finding work in the host country ($p<0.0011$). While 90 percent of expatriates 35 and under agreed with this statement, only 43.75 percent of expatriates over 35 agreed with this statement.

At a significance level of $p \leq 0.10$ the following variables can be added to the list of variables with a statistically significant difference:

- The MNE should provide the expatriate with reading material such as newspapers from the host country in order to prepare the expatriate for the new location ($p<0.0614$). While 82.14 percent of expatriates 35 years and under agreed with this statement, only 59.46 percent of the expatriates over 35 agreed with this statement.
- Expatriates should receive cross-cultural training focusing on subjective characteristics of the host culture such as: customs, values and beliefs ($p<0.0662$). While 96.43 percent of expatriates 35 and under wished to receive subjective cross-cultural training, only 78.38 percent of expatriates over 35 wished to receive the same training.

As was the case with the location needs in section 6.6, both the expatriates 35 years and under and the expatriates over 35 were one hundred percent in agreement with the following five variables:

- The MNE should pay for the shipment and insurance of household goods to the host country.
- The MNE should cover temporary living expenses of expatriates and their dependants living in a hotel or furnished apartment prior to moving into their new residence in the host country.
- Once a year the MNE should provide the expatriate with plane tickets to the city in the home country where the expatriate is from in order to take home leave.
- The MNE should provide round-trip plane tickets to the expatriate and his or her spouse in the case of illness or death in their immediate family.
- An education allowance (tuition only) should be provided for schooling to expatriate children equal to that offered in the home country.

As there are statistically significant differences in only 3 of the 60 variables at a significance level of $p\leq0.05$, the null hypothesis – H_{40}: There is no relationship between the age group that expatriates fall into and the type of preparation, support and training that they feel they need for international assignments – is accepted.

6.8 REQUIREMENTS AND DURATION

Fisher's exact test was again used in determining whether there is a statistically significant relationship between the duration of an international assignment and the preparation, support and training required by an expatriate. As is required by the Fisher exact test, the response

categories were combined (collapsed) into two duration periods, namely 0-4; years and longer than 4 years (rows) (independent variable), and the four-point Likert scale was combined (collapsed) into Agree and Disagree (columns) (dependent variable).

When looking at the results of the Fisher exact test, statistical significance at a significance level of $p \leq 0.05$ was found in two of the 60 variables in the questionnaire, while at a significance level of $p \leq 0.10$ an additional variable could be added to the list of variables with significant differences.

At a significance level of $p \leq 0.05$ the following two variables showed a statistically significant relationship between the duration of an international assignment and the preparation, support and training required by an expatriate:

- Prior to the assignment the expatriate and his or her spouse should be allowed to visit the host country for an orientation visit at the MNE's expense ($p<0.0356$). While 98 percent of expatriates on an assignment of four years or less agreed with this statement, 80 percent of the expatriates on an assignment of over four years agreed with this statement.
- Spouses should receive cross-cultural training focusing on subjective characteristics of the host culture such as: customs, values and beliefs ($p<0.0352$). Of those expatriates on an assignment of four years or less, 81.58 percent agreed with this statement, while only 50 percent of the expatriates on an assignment of more than four years agreed.

At a significance level of $p \leq 0.10$ the following variable can be added to the list of variables with a statistically significant difference:

- The MNE should provide assistance to the expatriate in negotiating the terms of the property lease agreement ($p<0.0749$). While 83.67 percent of the expatriates on an assignment of four years or less agreed with this statement, only 60 percent of the expatriates on an assignment of longer than four years agreed.

Both the expatriates on an assignment of four years or less and the expatriates on an assignment of longer than four years were one hundred percent in agreement with the following five variables:

- The MNE should pay for the shipment and insurance of household goods to the host country.
- The MNE should cover temporary living expenses of expatriates and their dependants living in a hotel or furnished apartment prior to moving into their new residence in the host country.
- Once a year the MNE should provide the expatriate with plane tickets to the city in the home country where the expatriate is from in order to take home leave.
- The MNE should provide round-trip plane tickets to the expatriate and his or her spouse in the case of illness or death in their immediate family.
- An education allowance (tuition only) should be provided for schooling to expatriate children equal to that offered in the home country.

As there are statistically significant differences in only two of the 60 variables at a significance level of $p \leq 0.05$, the null hypotheses – H_{50}: There is no relationship between the duration of international assignments and the type of preparation, support and training that expatriates feel they need for these assignments – is accepted.

6.9 REQUIREMENTS AND MANAGEMENT LEVEL

The last hypothesis tests whether there is a difference between the preparation, support and training requirements of top and middle managers on an international assignment. In order to test this hypothesis, the Fisher exact test was again used, as was the case with the previous three hypotheses. As is required by the Fisher exact test, the response categories needed to be combined (collapsed) into two rows and two columns, but as the hypothesis only focuses on two management levels there was no need to combine any response categories for the rows, as top and middle managers were used here (independent variable). The four-point Likert scale was, however, combined (collapsed) into Agree and Disagree (columns) (dependent variable).

When looking at the results of the Fisher exact test, statistical significance at a significance level of $p \leq 0.05$ was found in only one of the 60 variables in the questionnaire, while at a significance level of $p \leq 0.10$ an additional three variables could be added to the list of variables with statistically significant differences.

At a significance level of $p \leq 0.05$ the following variable showed a statistically significant difference between the preparation, support and training required by top and middle managers:

- The MNE should assist spouses of expatriates in acquiring a work permit for the host country ($p<0.0099$). One hundred percent of middle managers agreed with this statement, while only 72 percent of top managers agreed.

At a significance level of $p \leq 0.10$, the following three variables can be added to the list of variables with a statistically significant difference:

- The MNE should administer or assist with the administration of the rental of the primary residence of an expatriate while on an international assignment ($p<0.0644$). While 70.37 percent of middle managers agreed with this statement, only 44.83 percent of top managers agreed.
- MNEs should involve the spouses of an expatriate in the original information and orientation sessions prior to accepting the assignment ($p<0.0507$). All the middle managers agreed with this statement, while 80 percent of the top managers agreed.
- The MNE should aid expatriates' spouses in finding work in the host country ($p<0.0832$). While 73.91 percent of middle managers agreed with this statement, only 48 percent of top managers agreed with the statement.

Both the top and the middle managers were in one hundred percent agreement on the following variables:

- The MNE should pay for the shipment and insurance of household goods to the host country.
- The MNE should cover temporary living expenses of expatriates and their dependants living in a hotel or furnished apartment prior to moving into their new residence in the host country.
- Once a year the MNE should provide the expatriate with plane tickets to the city in the home country where the expatriate is from in order to take home leave.
- The MNE should provide round-trip plane tickets to the expatriate and his or her spouse in the case of illness or death in their immediate family.
- An education allowance (tuition only) should be provided for schooling to expatriate children equal to that offered in the home country.

As there are statistically significant differences in only one of the 60 variables at a significance level of $p \leq 0.05$, the null hypotheses – H_{60}: There is no difference between the preparation, support and training needs of top and middle management expatriates on an international assignment – is accepted.

6.10 OPEN-ENDED QUESTIONS

As it is not possible to cover all the possible variables included in the preparation, support and training of expatriates, the expatriates were also given two open-ended questions. In the first question they were asked to indicate what other preparation, support and training they received from the MNE that might not have been covered in the statements in the questionnaire. In the second open-ended question they were asked if there was any other preparation, support and training they might need from the MNE that might not have been covered in the statements in the questionnaire. The following responses were received to the open-ended questions:

6.10.1 Provided

- Travel time is not deducted from annual leave.
- Transport/vehicle/driver is provided in the host country.
- Electricity bill is covered.
- Mobile phone is covered in the host country.
- The cost of cancelling mobile phone subscription in the home country was covered.
- Courses relevant to the new position were offered and completed e.g. finance for non-financial managers and human resource fundamentals. Language was not an issue but the company would have agreed to language courses if required.
- A relocation agency was provided to help with the expatriation.

6.10.2 Required

- A session with a psychiatrist should be arranged for the expatriate and his or her spouse.
- Bonus incentives should be discussed with the expatriate prior to leaving for the assignment.
- First-time expatriates should have a thorough induction from a senior staff member/expatriate on the new job functions two weeks prior to the assignment.

- Help the expatriates with information on travel clinics; rent a vehicle if one is not available immediately, help the expatriates obtain a visa, etc. It is the little things that make a difference to relocating to another country. Do not leave everything in the hands of the person relocating; the MNE should assist 24/7.
- Expatriates need exposure to the international business and legal systems that are applicable in the host countries; equally the financial complexities of cross-currency trading and foreign exchange controls need to be considered and additional training where necessary should be given. Ongoing development and training should be given so that the expatriate when returning is up to date on where the company is at that point in time. Development should be looked at also in the context of the host country and its trading requirements.
- Expatriates and their spouses should be allowed home leave and assistance to achieve this twice a year. Many things crop up and need attention and it is insufficient to attend thereto once a year.
- Better communication of lessons learnt from expatriates that are already operational in the same environment. The more you know before the time the better you can adapt and the sooner you can start to add value.
- If you are going to a politically unstable area, information such as the location of "friendly" embassies, evacuation procedures, contact people in the case of political or military instability and others.
- Information relating to the stability/instability of neighbouring countries and how this may or may not affect the expatriates; if it does affect them, then what steps are being taken to mitigate the risk?
- Guidance on how much local currency will be required to purchase the same type (functional and quality wise) of household goods as is prevalent in the home country.
- The only information that could be obtained prior to arrival had to be obtained by doing own Internet research.
- Expatriates should be provided with assistance with the importation of firearms, pets, vehicles and other personal objects that require additional documentation by customs of that country but which are non-work related.
- As an expatriate you miss out on the training provided to your colleagues back in South Africa, so when you return you are at a disadvantage.

- Training should be provided to expatriates on how to handle situations where despair and extreme loneliness set in. The management of the MNE should also go through training to understand and create an awareness of the host country, its business and social environment and to understand what the expatriate is experiencing and going through.
- Conversion to local drivers licence paid for, including compulsory driving lessons.
- Where the assignment results in a child going to university in the host country, the completion of which goes beyond the assignment term, some provision for the child to return to the home country at the cost of the MNE should be arranged.
- MNEs should make sure that the expatriate, upon arriving, has the necessary tools – getting to work, training, hardware etc. – before the person reports for work.
- Immediate provision of transport rather than leaving the employee to sort this out.
- Employee should be allowed the option of housing or a housing allowance and to be allowed to pocket the difference if they chose to stay in cheaper accommodation.
- The documentation requirements of the country, i.e. work permits/residence visas, what is required, what the country normally provides and a plan for when visas expire, how to go about getting visas renewed. We found ourselves in a difficult situation having to renew visas every 10 days without any knowledge of how to go about doing it.
- Advice on medical issues – doctors/dentists/hospitals, what to do in an emergency in the country. Inoculations required before arrival. Threats of disease in the country and how to avoid them. No guidance or information on malaria were given, all research on if we should take prophylactics was established ourselves.
- We had problems and continue to have problems with water, electricity, the MNE should provide a guide on what the company is responsible for and what the expatriate is personally responsible for.
- Local currency should be provided prior to arrival, sufficient for transport and supplies for the entire family for a period of one week.
- All expatriate candidates and their spouses should be questioned by qualified personnel to ascertain if they can live away from their family.
- When expatriate's children need to go back to the home country for tertiary education, it is very costly to keep the family in contact and together. If one considers the cost element, if the MNE could make a contribution towards the tertiary education locally this would save large costs for the expatriate and is usually lower than the normal high school costs paid by the MNE, plus it allows the family to be kept together.

- Ensure that the expatriate does not receive a worse package than local staff as the salary scales are worked off an African salary scale worked off some nebulous CRG scale. The African is always worse off! Make sure that there are standards set in the expat deals: some pay for animal costs, others get the cost taken care of; some are allowed to get school buses but others not.
- Home leave should be changed to international leave. The expatriate may wish to visit another destination. This should be an entitlement as with most international companies. The costs are always based on the home leave flight costs.

6.11 SUMMARY

There were 65 expatriates who responded to the research on the preparation, support and training of expatriates. Of these expatriates the majority are male, the majority are married and almost 88 percent of the expatriates are either in middle or top management positions.

The research findings have indicated that these expatriates are not getting the preparation, support and training that they require from the MNEs that they work for, and it has also been determined that those expatriates with a trailing spouse and children have special needs in terms of the preparation, support and training they require for their trailing spouses and children. These needs have, however, not been satisfied by the MNEs.

Lastly it was determined that the duration of an international assignment, the age of the expatriate, the location of the international assignment and the management level held by the expatriate do not make a significant difference in the preparation, support and training expatriates require from the MNE they work for.

The next chapter will provide an in-depth discussion of the research findings as well as recommendations to South African MNEs on how better to prepare, support and train their expatriates.