

Table 7.33 lists the product and service categories non-Internet shoppers seriously consider purchasing from via the Internet in the future.

**TABLE 7.33: PRODUCT AND SERVICE CATEGORIES NON-INTERNET SHOPPERS SERIOUSLY CONSIDER PURCHASING FROM VIA THE INTERNET**

Product and service categories	V	Frequency	Percentage
Adult entertainment	V48	46	9.96%
Airline tickets	V49	244	52.81%
Baby products	V50	25	5.41%
Beauty products	V51	44	9.52%
Books and magazines	V52	241	52.16%
Cars and related	V53	76	16.45%
CDs (music)	V54	257	55.63%
Cellular phones and accessories	V55	102	22.08%
Clothing and accessories	V56	63	13.64%
Computer games	V57	127	27.49%
Computer hardware	V58	135	29.22%
Computer software	V59	209	45.24%
Cosmetics	V60	37	8.01%
DVDs / videos	V61	137	29.65%
Flowers	V62	96	20.78%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V63	124	26.84%
Household appliances (Washing machine, Fridge, etc)	V64	74	16.02%
Outdoors equipment and accessories (e.g. tents and camping gear)	V65	87	18.83%
Food (groceries)	V66	116	25.11%
Food (take away)	V67	102	22.08%
Furniture	V68	40	8.66%
Gifts	V69	137	29.65%
Gift vouchers	V70	130	28.14%
Garden related	V71	59	12.77%
Health products	V72	63	13.64%
Hotel reservations	V73	235	50.87%
Insurance: Car	V74	99	21.43%
Insurance: Household	V75	81	17.53%
Insurance: Life	V76	56	12.12%
Interior decorating / renovations	V77	37	8.01%
Jewellery	V78	33	7.14%
Movie or event tickets	V79	229	49.57%
Property	V80	48	10.39%
Sporting goods	V81	69	14.94%
Toys	V82	82	17.75%
Unit trust / Shares	V83	111	24.03%
Wine	V84	87	18.83%
Other Liquor	V85	45	9.74%

n = 462

Table 7.33 indicates that the four product and service categories from which the majority (at least 50%) of non-Internet shoppers seriously consider purchasing via the Internet in the future are:

<b>Category</b>	<b>Percentage</b>
• CDs (Music) (V54)	55.63%
• Airline tickets (V49)	52.81%
• Books and magazines (V52)	52.16%
• Hotel reservations (V73)	50.87%

In addition to the four categories from which the majority of non-Internet shoppers consider purchasing from in the future, between 25% and 49% of respondents indicated that they would consider the following categories:

<b>Category</b>	<b>Percentage</b>
• Movie or event tickets (V79)	49.57%
• Computer software (V59)	45.24%
• DVDs/Videos (V61)	29.65%
• Gifts (V69)	29.65%
• Computer hardware (V58)	29.22%
• Gift vouchers (V70)	28.14%
• Computer games (V57)	27.49%
• Electronic equipment (V63) (TV, Hi-Fi, Video machine, etc)	26.84%
• Food (groceries) (V66)	25.11%

The product and service categories non-Internet shoppers least consider purchasing from via the Internet in the future are:

Category	Percentage
• Other liquor (V85)	9.74%
• Beauty products (V51)	9.52%
• Furniture (V68)	8.66%
• Cosmetics (V60)	8.01%
• Interior decorating/ renovations (V77)	8.01%
• Jewellery (V78)	7.14%
• Baby products (V50)	5.41%

The following two main findings can be derived from the categories selected by non-Internet shoppers:

**(BC10) There are five product and service categories most non-Internet shoppers seriously consider purchasing from via the Internet, namely: CD's (music)(55.63%)(V54), airline tickets (52.81%)(V49), books and magazines (52.16%)(V52), hotel reservations (50.87%)(V73) and movie or event tickets (49.57%)(V79).**

**(BC11) There are five product and service categories non-Internet shoppers least consider purchasing from via the Internet, namely: baby products (5.41%)(V50), jewellery (7.14%)(V78), cosmetics (8.01%)(V60), interior decorating/renovations (8.01%)(V77) and furniture (8.66%)(V68).**

Internet shoppers also had to indicate from which product and service categories they would consider purchasing from in the future.

The product and service categories from which current Internet shoppers have purchased before together with the product and service categories they consider purchasing from in the future are shown in Table 7.34.

**TABLE 7.34: PRODUCT AND SERVICE CATEGORIES INTERNET SHOPPERS HAVE PURCHASED FROM BEFORE AND CATEGORIES SERIOUSLY BEING CONSIDERED TO PURCHASE FROM IN THE FUTURE**

Product and service categories	Have purchased from before			Consider to purchase from in the future		
	V	Freq.	Percentage	V	Freq.	Percentage
Adult entertainment	V149	83	15.28%	V149.5	54	9.94%
Airline tickets	V150	147	27.07%	V150.5	295	54.33%
Baby products	V151	16	2.95%	V151.5	39	7.18%
Beauty products	V152	29	5.34%	V152.5	71	13.08%
Books and magazines	V153	345	63.54%	V153.5	430	79.19%
Cars and related	V154	27	4.97%	V154.5	73	13.44%
CDs (music)	V155	222	40.88%	V155.5	348	64.09%
Cellular phones and accessories	V156	37	6.81%	V156.5	134	24.68%
Clothing and accessories	V157	43	7.92%	V157.5	98	18.05%
Computer games	V158	123	22.65%	V158.5	210	38.67%
Computer hardware	V159	105	19.34%	V159.5	204	37.57%
Computer software	V160	212	39.04%	V160.5	323	59.48%
Cosmetics	V161	20	3.68%	V161.5	63	11.60%
DVDs / videos	V162	113	20.81%	V162.5	255	46.96%
Flowers	V163	79	14.55%	V163.5	173	31.86%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V164	44	8.10%	V164.5	141	25.97%
Household appliances (Washing machine, Fridge, etc)	V165	13	2.39%	V165.5	90	16.57%
Outdoors equipment and accessories (e.g. tents and camping gear )	V166	17	3.13%	V166.5	111	20.44%
Food (groceries)	V167	51	9.39%	V167.5	159	29.28%
Food (take away)	V168	26	4.79%	V168.5	119	21.92%
Furniture	V169	15	2.76%	V169.5	57	10.50%
Gifts	V170	132	24.31%	V170.5	280	51.57%
Gift vouchers	V171	38	7.00%	V171.5	180	33.15%
Garden related	V172	14	2.58%	V172.5	88	16.21%
Health products	V173	55	10.13%	V173.5	153	28.18%
Hotel reservations	V174	137	25.23%	V174.5	301	55.43%
Insurance: Car	V175	22	4.05%	V175.5	106	19.52%
Insurance: Household	V176	22	4.05%	V176.3	107	19.71%
Insurance: Life	V177	11	2.03%	V177.5	68	12.52%
Interior decorating / renovations	V178	8	1.47%	V178.5	52	9.58%
Jewellery	V179	14	2.58%	V178.5	51	9.39%
Movie or event tickets	V180	190	34.99%	V180.5	324	59.67%
Property	V181	7	1.29%	V181.5	50	9.21%
Sporting goods	V182	36	6.63%	V182.5	117	21.55%
Toys	V183	41	7.55%	V183.5	144	26.52%
Unit trust / Shares	V184	49	9.02%	V184.5	148	27.26%
Wine	V185	11	2.03%	V185.5	78	14.36%
Other Liquor	V186	49	9.02%	V186.5	162	29.83%

n = 543

A first observation that can be made from Table 7.34 is that respondents have purchased from all 38 listed product and service categories. A second observation is that Internet shoppers seriously consider purchasing, to a greater or lesser extent, from all 38 categories in the future.

As can be seen from Table 7.34, the product category from which most respondents (63.54%) have purchased before is books and magazines (V153). Other product and service categories from which at least 25% of respondents have purchased are:

<b>Category</b>	<b>Percentage</b>
• CDs (music) (V155)	40.88%
• Computer software (V160)	39.04%
• Movie or event tickets (V180)	34.99%
• Airline tickets (V150)	27.07%
• Hotel reservations (V174)	25.23%

From Table 7.34 it can be seen that less than 10% of respondents have purchased from 25 of the 38 listed product and service categories.

Only the product and service categories from which less than five percent of respondents have purchased (11 categories) will be highlighted.

<b>Category</b>	<b>Percentage</b>
• Cars and related (V154)	4.97%
• Food (take away) (V168)	4.79%
• Cosmetics (V161)	3.68%

<b>Category</b>	<b>Percentage</b>
• Outdoors equipment and accessories (e.g. tents and camping gear) (V166)	3.13%
• Baby products (V151)	2.95%
• Furniture (V169)	2.76%
• Garden related (V172)	2.58%
• Household appliances (washing machine, fridge, etc.) (V165)	2.39%
• Wine (V185)	2.03%
• Interior decorating/renovations (V178)	1.47%
• Property (V181)	1.29%

Table 7.34 also indicates the product and service categories from which Internet shoppers consider purchasing in the future.

Seven product and service categories were identified from which more than 50% of current Internet shoppers consider purchasing in the future. These categories are:

<b>Category</b>	<b>Percentage</b>
• Books and magazines (V153)	79.19%
• CDs (music) (V155)	64.09%
• Movie or event tickets (V180)	59.67%
• Computer software (V160)	59.48%
• Hotel reservations (V174)	55.43%
• Airline tickets (V150)	54.33%
• Gifts (V170)	51.57%

Product and service categories from which less than 10% of current Internet shoppers consider purchasing via the Internet in the future are:

Category	Percentage
• Adult entertainment (V149)	9.94%
• Interior decorating/ renovations (V178)	9.58%
• Jewellery (V179)	9.39%
• Property (V181)	9.21%
• Baby products (V151)	7.18%

Four main findings can be drawn at this point of the discussion, namely that:

**(BC12) The five product and service categories most Internet shoppers have purchased from before via the Internet, are: books and magazines (63.54%)(V153), CDs (music)(40.88%)(V155), computer software (39.04%)(V160), movie or event tickets (34.99%)(V180) and airline tickets (27.07%)(V150);**

**(BC13) The five product and service categories Internet shoppers least purchased from via the Internet, are: property (1.29%)(V181), interior decorating/renovations (1.47%)(V178), wine (2.03%)(V185), household appliances (2.39%)(V165), and garden related (2.58%)(V172);**

**(BC14) The five product and service categories most current Internet shoppers consider purchasing from via the Internet in the future, are: books and magazines (79.19%)(V153), CDs (music) (64.09%)(V160), movie or event tickets (59.67%)(V180), computer**

**software (59.48%)(V160) and hotel reservations (55.43%)(V174);  
and**

**(BC15) The five product and service categories current Internet shoppers least consider purchasing from via the Internet in the future, are: baby products (7.18%)(V151), property (9.21%)(V181), jewellery (9.39%)(V179), interior decorating/renovations (9.58%)(V178) and adult entertainment (9.94%)(V149).**

It was regarded important to determine, from the product and service categories Internet shoppers have purchased before, if they consider purchasing from the same categories via the Internet in the future.

Table 7.35 provides a detailed break-down of the product and service categories from which current shoppers have purchased before and indicate their intention of purchasing from the same categories in the future.

The percentage figures for each of the three columns in Table 7.35 portray the percentage of respondents who have purchased from the specified category before (i.e.  $n$  = the number of Internet shoppers who have purchased from each of the categories before – as depicted in Table 7.34). As an example, for adult entertainment,  $n$  = 83, whereas  $n$  = 147 for airline tickets and so forth.



**TABLE 7.35: PRODUCT AND SERVICE CATEGORIES INTERNET SHOPPERS HAVE PURCHASED FROM BEFORE**

Product and service categories	Have purchased from before, consider to purchase again								
	Will purchase from again			Will not purchase from again			Uncertain whether or not to purchase from again		
	V	Freq.	%	V	Freq.	%	V	Freq.	%
Adult entertainment	V149.2	37	44.58%	V149.3	32	38.55%	V149.4	14	16.87%
Airline tickets	V150.2	135	91.84%	V150.3	6	4.08%	V150.4	6	4.08%
Baby products	V151.2	10	62.50%	V151.3	4	25.00%	V151.4	2	12.50%
Beauty products	V152.2	23	79.31%	V152.3	5	17.24%	V152.4	1	3.45%
Books and magazines	V153.2	337	97.68%	V153.3	2	0.58%	V153.4	6	1.74%
Cars and related	V154.2	24	88.89%	V154.3	2	7.41%	V154.4	1	3.70%
CDs (music)	V155.2	211	95.05%	V155.3	1	0.45%	V155.4	10	4.50%
Cellular phones and accessories	V156.2	31	83.78%	V156.3	3	8.11%	V156.4	3	8.11%
Clothing and accessories	V157.2	36	83.72%	V157.3	3	6.98%	V157.4	4	9.30%
Computer games	V158.2	114	92.68%	V158.3	1	0.81%	V158.4	8	6.50%
Computer hardware	V159.2	95	90.48%	V159.3	7	6.67%	V159.4	3	2.86%
Computer software	V160.2	198	93.40%	V160.3	6	2.83%	V160.4	8	3.77%
Cosmetics	V161.2	17	85.00%	V161.3	3	15.00%	V161.4	0	0.00%
DVDs / videos	V162.2	109	96.46%	V162.3	2	1.77%	V162.4	2	1.77%
Flowers	V163.2	71	89.87%	V163.3	5	6.33%	V163.4	3	3.80%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V164.2	36	81.82%	V164.3	5	11.36%	V164.4	3	6.82%
Household appliances (Washing machine, Fridge, etc)	V165.2	9	69.23%	V165.3	3	23.08%	V165.4	1	7.69%
Outdoors equipment and accessories (e.g. tents and camping gear)	V166.2	14	82.35%	V166.3	2	11.76%	V166.4	1	5.88%
Food (groceries)	V167.2	44	86.27%	V167.3	5	9.80%	V167.4	2	3.92%
Food (take away)	V168.2	23	88.46%	V168.3	2	7.69%	V168.4	1	3.85%
Furniture	V169.2	13	86.67%	V169.3	1	6.67%	V169.4	1	6.67%
Gifts	V170.2	123	93.18%	V170.3	5	3.79%	V170.4	4	3.03%
Gift vouchers	V171.2	36	94.74%	V171.3	1	2.63%	V171.4	1	2.63%
Garden related	V172.2	12	85.71%	V172.3	1	7.14%	V172.4	1	7.14%
Health products	V173.2	49	89.09%	V173.3	5	9.09%	V173.4	1	1.82%
Hotel reservations	V174.2	132	96.35%	V174.3	2	1.46%	V174.4	3	2.19%
Insurance: Car	V175.2	18	81.82%	V175.3	2	9.09%	V175.4	2	9.09%
Insurance: Household	V176.2	20	90.91%	V176.3	1	4.55%	V176.4	1	4.55%
Insurance: Life	V177.2	7	63.64%	V177.3	3	27.27%	V177.4	1	9.09%
Interior decorating / renovations	V178.2	6	75.00%	V178.3	2	25.00%	V178.4	0	0.00%
Jewellery	V179.2	9	64.29%	V179.3	4	28.57%	V179.4	1	7.14%
Movie or event tickets	V180.2	183	96.32%	V180.3	6	3.16%	V180.4	1	0.53%
Property	V181.2	4	57.14%	V181.3	3	42.86%	V181.4	0	0.00%
Sporting goods	V182.2	29	87.88%	V182.3	4	12.12%	V182.4	3	9.09%
Toys	V183.2	36	87.80%	V183.3	5	12.20%	V183.4	0	0.00%
Unit trust / Shares	V184.2	46	93.88%	V184.3	3	6.12%	V184.4	0	0.00%
Wine	V185.2	9	81.82%	V185.3	2	18.18%	V185.4	0	0.00%
Other Liquor	V186.2	48	97.96%	V186.3	1	2.04%	V186.4	0	0.00%

Four main findings can be concluded from analysing the findings in Table 7.35, namely that:

- (BC16) With the exception of one category (adult entertainment)(V149.2), more than 50% of respondents who have purchased from the 38 listed product and service categories before, will purchase from these categories again in the future;**
- (BC17) The two product and service categories from which most respondents had purchased from before and would purchase from it again, are: other liquor (97.96%)(V186.2) and books and magazines (97.68%)(V153.2);**
- (BC18) The two categories from which most respondents, who had already purchased from them before, would not purchase in the future, are: property (42.86%)(V181.2) and adult entertainment (38.55%)(V149.2);**
- (BC19) Almost 17% of respondents who have previously purchased adult entertainment (V149.4) were uncertain as to whether or not they would purchase from this category again.**

In addition to the analyses above, it was decided to also consider, by viewing the different time periods, the product and service categories from which Internet shoppers have purchased and the categories shoppers and non-shoppers consider to purchase from in the future. This analysis and findings are attached in Appendix 10. Two main findings can be concluded from Appendix 10, namely:

- (AP1) At least 20% of all non-Internet shoppers (with the exception of those who have been using the Net for four years or more), across all time periods, consider to purchase from more product and**

**service categories via the Internet in the future than Internet shoppers falling within the same periods.**

**(AP2) At least 45% of Internet shoppers and non-shoppers, who have been using the Internet for less than one year, consider purchasing from product and service categories that current Internet shoppers (who have been using the Net for between one and less than two years) have purchased from before.**

Section 7.3.1 (c) of this chapter showed that there is a definite relationship between the length of time being an Internet user and whether or not respondents have purchased via the Internet before. Although that finding was significant, it had to be established (considering the hypotheses formulated for the study) whether or not the period of Internet usage influences the product and service categories respondents have purchased from or consider purchasing from in the future.

Since 38 product and service categories were listed in the questionnaire, it had to be reduced to a more manageable number. A first consideration was to group the listed categories according to some standard classification, for example convenience goods and services. After considering the list of 38 categories, it was decided that such a grouping of categories was not possible.

For statistical testing purposes, it was decided to select 10 product and service categories. The categories were randomly chosen by considering the percentage of respondents who have purchased from the categories before (to ensure a non-biased distribution of categories). The following observations were made from the categories purchased before: less than 10% of respondents purchased from 25 categories; between 10% and 19.99% of respondents purchased from four categories and between 20% and 29.99% purchased from

five categories; between 30% and 49.99% of shoppers purchased from three categories and more than 50% purchased from one category.

Considering these observations, 10 categories distributed across the 38 categories were selected. The product categories chosen for further analyses, percentage of respondents who purchased from each category and the re-coded variable are shown in Table 7.36.

**TABLE 7.36: RE-CODING OF PRODUCT AND SERVICE CATEGORIES SELECTED FOR FURTHER ANALYSES**

Product or service category	V	Percentage of respondents	Re-coded variable (ProductHP; ProductAP)
CDs (music)	V155	41%	1
Hotel reservations	V174	25%	2
Computer hardware	V159	19%	3
Food (groceries)	V167	9%	4
Electronic equipment (TV, hi-fi, etc)	V164	8%	5
Gift vouchers	V171	7%	6
Food (take away)	V168	5%	7
Outdoors equipment and accessories	V166	3%	8
Household appliances	V165	2%	9
Interior decorating/renovations	V178	1%	10

It can be noticed from the categories listed in Table 7.36 that the re-coded variable ascribed to each identified product or service category comprises one of two descriptions (ProductHP and ProductAP). The reason for using two different variables (all with the same value, e.g. 1; 2; 3; and so forth) is based on the analyses and comparisons that will be made later in this section and the chapter.

The data contained in variable ProductHP comprises all responses from respondents who have purchased from the product or service categories selected for further analyses. The second variable, ProductAP, combines data from all respondents who participated in the study (irrespective whether or not

they have purchased via the Net before) who indicated that they would consider purchasing from the identified categories in the future.

It should be noted that after inferences were drawn from cross-tabulation information received (with specific reference to product categories used for further analyses), it was found that the SAS computer software programme repeatedly issued warnings regarding the validity of the results (since many of the cells contained expected counts of less than five). As a result, the first two time periods were combined, where applicable to the analysis, in an attempt to address the concern. For the purposes of cross-tabulation analyses considering period of Internet usage and the selected product and service categories, the periods of Internet usage were re-coded as depicted in Table 7.37.

**TABLE 7.37 RE-CODED PERIOD OF INTERNET USAGE FOR FURTHER ANALYSES**

<b>Current description</b>	<b>V</b>	<b>New description</b>	<b>Re-coded variable</b>
Less than 1 year	V8.2	Less than two years	VV8.1
1 year to less than 2 years	V8.3		
2 years to less than 3 years	V8.4	2 years to less than 3 years	VV8.2
3 years to less than 4 years	V8.5	3 years to less than 4 years	VV8.3
4 years or more	V8.6	4 years or more	VV8.4

The results from the first cross-tabulation analysis, considering the specific product and service categories that Internet shoppers have purchased from, are shown in Table 7.38.

**TABLE 7.38: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND CATEGORIES PURCHASED FROM**

Period	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Less than two years	VV8.1	7	10	10	5	1	3	1	1	0	1	39
2 years to less than 3 years	VV8.2	14	12	7	4	5	5	7	4	3	4	65
3 years to less than 4 years	VV8.3	17	13	14	6	5	8	4	1	3	2	73
4 years or more	VV8.4	47	36	39	11	16	13	13	6	4	1	186
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

Table 7.38 supports the findings from Table 7.5 earlier in the chapter, by showing that most of the respondents, who have purchased from the ten listed categories before, have been using the Internet for four years and more.

The chi-square test for significance, calculated for Table 7.38, yielded a value of 25.20 and an exceedence probability of 0.5633 calculated. Although the SAS program showed a warning that 42% of the cells had expected frequencies of less than five, it can be concluded that the two variables in the cross-tabulation table are not related.

**(BC20) A main finding that can be derived from the statistical test is that the period of Internet usage does not influence the product and service categories respondents have purchased from via the Internet.**

The cross-tabulation analysis was repeated to determine whether or not the period of Internet usage influences the product and service categories that respondents (both current shoppers and non-shoppers) consider to purchase from in the future. The results from this cross-tabulation are depicted in Table 7.39.

**TABLE 7.39: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Period	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Less than two years	VV8.1	15	17	15	10	9	30	19	21	31	26	193
2 years to less than 3 years	VV8.2	10	17	5	6	12	21	24	27	22	18	162
3 years to less than 4 years	VV8.3	11	23	15	8	11	18	23	14	19	14	156
4 years or more	VV8.4	22	38	32	20	20	28	49	26	35	31	301
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance, applicable to the cross-tabulation findings depicted in Table 7.39, produced a value of 32.35 and an exceedence probability of 0.2193. It can therefore be concluded that the period of Internet usage and ProductAP are not related.

**(BC21) A main finding is that the period of Internet usage does not significantly influence the product and service categories respondents consider purchasing from via the Internet in the future.**

**(c) Questions 16 and 20**

Q16 and Q20: Have you ever searched for or do you consider searching for product or service information on the Internet prior to purchasing from a non-Internet based seller? (e.g. A physical store or telephone shopping)

Respondents who have not purchased via the Internet before were requested to indicate whether or not they search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet-based sellers (question 16). Similarly, respondents who have purchased Online before had to complete question 20.

Table 7.40 shows which respondents search for or consider to search for product and service information on the Internet prior to purchasing from a non-Internet based seller.

**TABLE 7.40: ONLINE INFORMATION SEARCH PRIOR TO PURCHASING OFFLINE**

Description	Non-Internet Shoppers (N = 462)			Current Internet shoppers (N = 543)		
	V	Freq.	Perc.	V	Freq.	Perc.
Search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers	V86	322	69.70%	V187	469	86.37%
Don't search for or don't consider searching for information on the Internet prior to purchasing from non-Internet based sellers	V86	140	30.30%	V187	74	13.63%

Two main findings can be derived from Table 7.40, namely that:

- (BC22)** Eighty-six percent of respondents who have purchased via the Internet, search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers.
- (BC23)** Almost 70% of respondents who have not purchased via the Internet before, search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers.

Based on the findings above and taking into account the hypotheses formulated for the study, chi-square tests were conducted to determine if the period of Internet usage (and whether or not respondents have purchased Online before) is related to whether or not they search for (or consider searching for) Online information prior to Offline purchases.

The first cross-tabulation analysis is depicted in Table 7.41 and considers the period of Internet usage and whether or not non-shoppers search for product and



service information on the Net prior to purchasing from non-Internet based sellers.

**TABLE 7.41: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND PRODUCT AND SERVICE INFORMATION SEARCHED FOR ONLINE PRIOR TO OFFLINE PURCHASES (NON-INTERNET SHOPPERS)**

Period of Internet usage	V	Search or consider searching for product and service information Online		Total
		Yes V86.1	No V86.2	
Less than 1 year	V8.2	46	44	90
1 year to less than 2 years	V8.3	55	28	83
2 years to less than 3 years	V8.4	77	29	106
3 years to less than 4 years	V8.5	63	23	86
4 years or more	V8.6	81	16	97
Total	Frequency	322	140	462
	Percentage	69.70%	30.30%	100%

Two main findings can be derived from Table 7.41, namely that:

**(BC24) A larger number of non-shoppers, across all time periods, either search for or consider searching for information on the Net prior to purchasing from non-Internet based sellers than non-shoppers who don't search for information Online.**

**(BC25) Eighty-three percent (81/97) of non-shoppers who have been using the Internet for four years and more (V8.6) search for information Online prior to Offline purchases.**

The chi-square test, performed for the cross-tabulation depicted in Table 7.41, yielded a value of 23.85 and an exceedence probability of <0.0001. Considering the probability value, it can be derived that the period of Internet usage and whether or not non-shoppers search for product and service information on the Internet prior to Offline purchases are related.

**(BC26) A main finding derived is that the period of Internet usage significantly influences whether or not non-Internet shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services.**

The same cross-tabulation procedure was repeated for respondents who have shopped via the Internet before to determine whether or not the period of Internet usage influences Internet shoppers' search for product and service information Online prior to Offline purchases. The results from the applicable cross-tabulation analysis are shown in Table 7.42.

**TABLE 7.42: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND PRODUCT AND SERVICE INFORMATION SEARCHED FOR ONLINE PRIOR TO OFFLINE PURCHASES (INTERNET SHOPPERS)**

Period of Internet usage	V	Search or consider searching for product and service information Online		Total
		Yes V187.1	No V187.2	
Less than 1 year	V8.2	16	7	23
1 year to less than 2 years	V8.3	42	8	50
2 years to less than 3 years	V8.4	83	17	100
3 years to less than 4 years	V8.5	94	18	112
4 years or more	V8.6	234	24	258
Total	Frequency	469	74	543
	Percentage	86.37%	13.63%	100%

It can be seen from Table 7.42 that larger numbers of current Internet shoppers, across all time periods, either search for or consider searching for information on the Net prior to purchasing from non-Internet based sellers than current shoppers who don't search for Online information.

**(BC27) A main finding that can be derived from Table 7.42 is that 90.70% (234/258) of respondents who have purchased via the Internet and have been using the Internet for four years and more (V8.6), search for information Online prior to purchasing Offline.**

The chi-square test for significance performed for the cross-tabulation analysis depicted in Table 7.42 produced a value equal to 11.39 and a resulting exceedence probability of  $<0.0225$ .

Based on the decision-rule that probability values  $<0.05$  will be used as an indication for significance, it can be derived that the period of Internet usage and whether or not Internet shoppers search for or consider searching for information Online prior to Offline purchases are related.

**(BC28) A main finding is that the period of Internet usage significantly influences whether or not current Internet shoppers have searched for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services.**

Based on the hypotheses formulated for the study, the possible influence of the decision to purchase via the Internet and whether respondents have searched for or consider searching for product and service information on the Internet (prior to purchasing Offline) had to be considered.

The cross-tabulation analysis depicted in Table 7.43 is based on whether respondents have purchased via the Internet before and whether they use the Net to search for product and service information prior to purchasing from non-Internet based sellers.

**TABLE 7.43: RELATIONSHIP BETWEEN SHOPPING ONLINE AND ONLINE INFORMATION SEARCH**

Have purchased via the Internet before	V	Search for or consider Online information search		Total
		Yes Search1	No Search2	
Yes	V21.1	469	74	543
No	V21.2	322	140	462
Total	Frequency	791	214	1 005
	Percentage	78.71%	21.29%	100%

It is important to note that, for comparison purposes, responses V86.1 (question 16 – non-shoppers indicating that they have searched for or consider to search for Online information) and V187.1 (question 20 – current Online shoppers indicating that they have searched for or consider to search for Online information) had to be combined to form a new variable, namely Search 1 (combining all respondents who have searched for or consider to search for information on the Net prior to purchasing Offline).

Following the same logic, variable Search 2 was created, combining all respondents who have not searched for or do not consider searching for Online information prior to Offline purchases.

**(BC29) A main finding that can be derived from Table 7.43 is that 78.71% of respondents either search for or consider searching for product or service information on the Internet prior to purchasing from non-Internet based sellers.**

The chi-square statistical test for significance performed for the results depicted in Table 7.43 realised a value of 42.35 and an exceedence probability of <0.0001.

It can therefore be concluded that the two variables (representing whether or not respondents have purchased before and whether or not they have searched for or consider searching for Online information on products and services) are related.

**(BC30) A main finding is that the decision to search for (or consider searching for) product and service information Online (prior to purchasing Offline) is significantly influenced by whether or not respondents have purchased via the Internet before.**

It was also decided to determine whether or not the decision to purchase via the Net in the future (current non-shoppers) significantly influences whether or not respondents search for or consider searching for product and service information Online prior to purchasing Offline.

The results from the cross-tabulation analysis, considering non-shopper intentions to purchase Online in the future and whether or not product and service information is sought Online prior to Offline purchases, are portrayed in Table 7.44.

**TABLE 7.44: RELATIONSHIP BETWEEN CONSIDERING TO SHOP ONLINE IN THE FUTURE AND ONLINE INFORMATION SEARCH**

Consider to purchase via the Internet in the future	V	Search for or consider Online information search		Total
		Yes V86.1	No V86.2	
Yes	V46.1	233	64	297
No	V46.2	89	76	165
Total	Frequency	322	140	462
	Percentage	69.70%	30.30%	100%

The chi-square test for significance applicable to Table 7.44 resulted in a value of 29.48 and an exceedence probability of <0.0001, indicating that the two variables (V46 and V86) are related.

**(BC31) A main finding is that, for current non-Internet shoppers, the decision to purchase via the Internet in the future significantly influences whether or not respondents search for or consider searching for product and service related information on the Internet prior to purchasing from non-Internet based sellers.**

**(b) Questions 17 and 21**

Q17 and Q21: From which of the following product and services categories have you searched for or do you consider searching for information on the Internet prior to purchasing from a non-Internet based seller? (e.g. physical store or telephone shopping) [Respondents had to choose from a list of 38 categories]

Respondents who had not purchased via the Internet before were requested to complete question 17 if they indicated (question 16 – V86.1) that they searched for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers.

Following the same logic, current Internet shoppers who indicated that they search for or consider searching for product and service information via the Internet (question 20 – V187.1), were requested to complete question 21.

The results from questions 17 and 21 are depicted in Table 7.45, indicating from which product or service categories respondents search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers.

**TABLE 7.45: INFORMATION ON PRODUCT AND SERVICE CATEGORIES SEARCHED FOR ON THE INTERNET PRIOR TO PURCHASING FROM NON-INTERNET BASED SELLERS**

Product or service categories	Current Internet shoppers (n = 469)			Non-Internet shoppers (n = 322)		
	V	Freq.	Percentage	V	Freq.	Percentage
Adult entertainment	V188	58	10.68%	V87	37	8.01%
Airline tickets	V189	270	49.72%	V88	156	33.77%
Baby products	V190	29	5.34%	V89	12	2.60%
Beauty products	V191	44	8.10%	V90	20	4.33%
Books and magazines	V192	301	55.43%	V91	135	29.22%
Cars and related	V193	194	35.73%	V92	116	25.11%
CD's (music)	V194	285	52.49%	V93	152	32.90%
Cellular phones and accessories	V195	172	31.68%	V94	92	19.91%
Clothing and accessories	V196	53	9.76%	V95	43	9.31%
Computer games	V197	201	37.02%	V96	87	18.83%
Computer hardware	V198	261	48.07%	V97	138	29.87%
Computer software	V199	301	55.43%	V98	175	37.88%
Cosmetics	V200	40	7.73%	V99	18	3.90%
DVD's / videos	V201	207	38.12%	V100	80	17.32%
Flowers	V202	58	10.68%	V101	30	6.49%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V203	249	45.86%	V102	131	28.35%
Household appliances (Washing machine, Fridge, etc)	V204	133	24.49%	V103	63	13.64%
Outdoors equipment and accessories (e.g. tents and camping gear )	V205	98	18.05%	V104	61	13.20%
Food (groceries)	V206	63	11.60%	V105	42	9.09%
Food (take away)	V207	42	7.73%	V106	35	7.58%
Furniture	V208	66	12.15%	V107	43	9.31%
Gifts	V209	122	22.47%	V108	59	12.77%
Gift vouchers	V210	63	11.60%	V109	37	8.01%
Garden related	V211	57	10.50%	V110	31	6.71%
Health products	V212	86	15.84%	V111	42	9.09%
Hotel reservations	V213	214	39.41%	V112	137	29.65%
Insurance: Car	V214	86	15.84%	V113	77	16.67%
Insurance: Household	V215	66	12.15%	V114	60	12.99%
Insurance: Life	V216	40	7.37%	V115	44	9.52%
Interior decorating / renovations	V217	51	9.39%	V116	35	7.58%
Jewellery	V218	33	6.08%	V117	21	4.55%
Movie or event tickets	V219	227	41.80%	V118	107	23.16%
Property	V220	112	20.63%	V119	76	16.45%
Sporting goods	V221	90	16.57%	V120	53	11.47%
Toys	V222	73	13.44%	V121	40	8.66%
Unit trust / Shares	V223	110	20.26%	V122	73	15.80%
Wine	V224	100	18.42%	V123	43	9.31%
Other Liquor	V225	34	6.26%	V124	21	4.55%

As can be seen from Table 7.45, the 10 product and service categories from which most **current shoppers** search for or consider searching for Online information prior to Offline purchases are:

Category	Percentage
• Books and magazines (V192)	55.43%
• Computer software (V199)	55.43%
• CDs (music) (V194)	52.49%
• Airline tickets (V189)	49.72%
• Electronic equipment (e.g. TV, Hi-Fi, Video machine, etc.) (V203)	45.86%
• Movie or event tickets (V219)	41.80%
• Hotel reservations (V213)	39.41%
• DVDs/Videos (V201)	38.12%
• Computer games (V197)	37.02%
• Cars and related (V193)	35.73%

In contrast to the 10 categories that more than 35% of current shoppers search from (or consider searching information from), only one category is searched for or considered by more than 35% of *non-shoppers*, namely computer software (V98) (37.88%).

The other nine categories most *non-shoppers* searched from for Online information are:

Category	Percentage
• Airline tickets (V88)	33.77%
• CDs (music) (V93)	32.90%
• Computer hardware (V97)	29.87%
• Hotel reservations (V112)	29.65%
• Books and magazines (V91)	29.22%
• Electronic equipment (TV, Hi-Fi, Video machines, etc) (V102)	28.35%



Category	Percentage
• Cars and related (V92)	25.11%
• Movie or event tickets (V118)	23.16%
• Cellular phones and accessories (V94)	19.91%

Three main findings can be drawn at this point of the discussion, namely that:

**(BC32) a greater number of current Internet shoppers search for more product and service categories Online than non-shoppers (more than 25% of shoppers search from 12 product and service categories as opposed to 8 categories by non-shoppers);**

**(BC33) the five categories on which most searches are conducted for product and service information by Internet shoppers are: books and magazines (55.43%)(V192), computer software (55.43%)(V199), CDs (music)(52.49%)(V194), airline tickets (49.72%)(V189) and electronic equipment (45.86%)(V203); and**

**(BC34) the five categories most searched from for product and service information by non-Internet shoppers are: computer software (37.88%)(V98), airline tickets (33.77%)(V88), CDs (music)(32.90%)(V93), computer hardware (29.87%)(V97) and hotel reservations (29.65%)(V112).**

It can also be derived from Table 7.45 that Internet shoppers search from more or consider searching from more categories than non-shoppers. This becomes clear when considering that there are only nine categories from which less than 10% of shoppers search for information as opposed to the 17 categories from which less than 10% of non-shoppers search.

There are also no categories from which less than five percent of **shoppers** search in comparison with the five categories from which less than five percent of **non-shoppers** search.

The five categories from which **current shoppers** least search for (or consider searching for) information prior to purchasing Offline are:

Category	Percentage
• Insurance: Life (V216)	7.37%
• Cosmetics (V200)	7.37%
• Other liquor (V225)	6.26%
• Jewellery (V219)	6.08%
• Baby products (V190)	5.34%

The five categories from which **non-shoppers** least search from (or consider searching from) information prior to purchasing Offline are:

Category	Percentage
• Other liquor (V124)	4.5%
• Jewellery (V117)	4.5%
• Beauty products (V90)	4.3%
• Cosmetics (V99)	3.9%
• Baby products (V89)	2.6%

### 7.3.3 Results from Section D of the questionnaire

The focus of Section D of the questionnaire was to categorise respondents who participated in the study according to demographic variables. In the following discussion attention will be given on descriptive statistics (either graphically or in tabular form) applicable to different demographic variables and show whether or

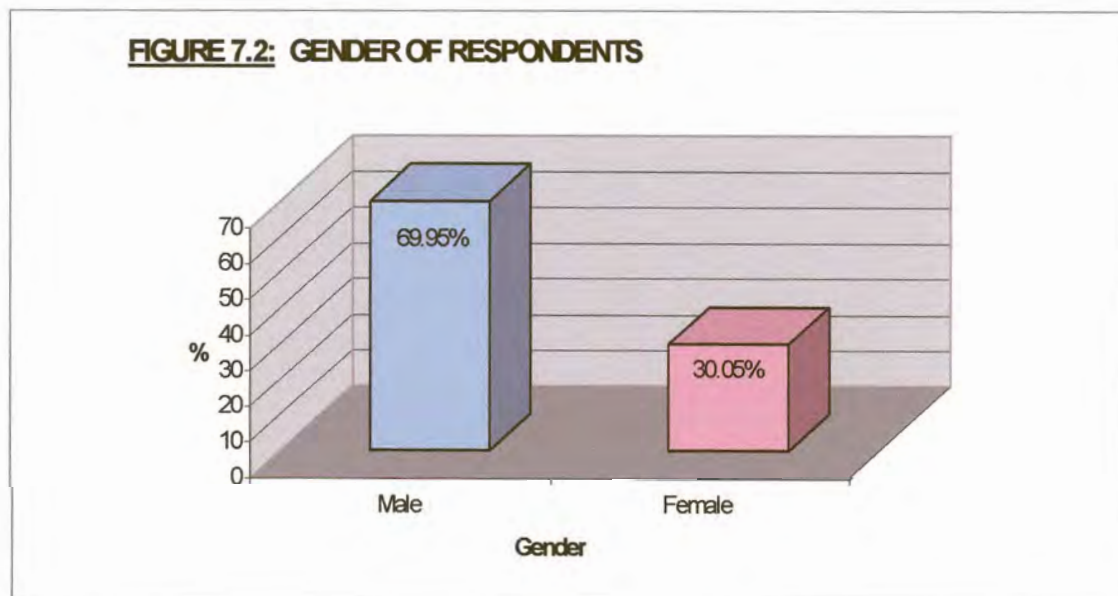
not the demographic variables can be associated with respondents' decisions to purchase Online.

Following the discussion on each demographic variable, inferences will be drawn between the demographic variable being discussed and other variables applicable to the study, for example the period of Internet usage.

It is important to note that the influence of demographic variables on the product and service categories (based on the categories selected earlier in the chapter) respondents purchased from or consider purchasing from via the Internet will only be considered if a significant influence (as determined by statistical tests) has been noted between the demographic variable and whether or not respondents have purchased Online before.

**(a) Gender (Q22)**

Figure 7.2 graphically differentiates between male (V226.1) and female (V226.2) respondents who participated in the study.



**(D1) A main finding derived from Figure 7.2 is that 69.95% of the respondents who participated in the study were male (V226.2), while the remaining 30.05% were female (V226.3).**

Table 7.46 shows the results when gender was compared with whether or not respondents have purchased via the Net before. Gender has, for the cross-tabulation purposes, been re-coded as VV226.1 (male) and VV226.2 (female).

**TABLE 7.46: RELATIONSHIP BETWEEN GENDER AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchased via the Internet	V	Gender		Total
		Male VV226.1	Female VV226.2	
Yes	V21.1	415	128	543
No	V21.2	288	174	462
Total	Frequency	703	302	1 005
	Percentage	69.95%	30.05%	100%

**(D2) A main finding that can be derived from analysing the results from Table 7.46, is that a greater percentage of male respondents (VV226.1)[59.03% (415/703)] indicated that they have purchased products and services via the Internet as opposed to women (VV226.2)[42.38% (128/302)].**

**(D3) It should be explicitly stated that, although related to finding D2, 57.62% (174/302) of female respondents have never purchased products or services via the Internet before.**

The chi-square statistic calculated for Table 7.46 was equal to 23.58 and resulted in an exceedence probability of <0.0001, indicating that gender (VV226) and whether or not respondents have purchased Online before (V21) are related.

**(D4) Gender significantly influenced whether or not respondents have purchased products or services via the Internet.**

Considering the ten product and service categories, selected earlier in the study for further analyses, a cross-tabulation analysis was conducted to determine whether or not gender influenced the product and service categories respondents have purchased from.

The findings from the cross-tabulation analysis are portrayed in Table 7.47, considering gender and ProductHP (categories respondents have already purchased from).

**TABLE 7.47: RELATIONSHIP BETWEEN GENDER AND CATEGORIES PURCHASED FROM VIA THE INTERNET**

Gender	v	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Male	VV226.1	72	51	61	19	24	21	19	12	9	3	291
Female	VV226.2	13	20	9	7	3	8	6	0	1	5	72
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

The chi-square test performed to determine if gender influenced whether or not respondents purchased from the selected product and service categories produced a value of 22.57 and an exceedence probability of 0.0072. It can therefore be derived that the two variables are related.

**(D5) Respondents' gender significantly influenced the product and service categories they have purchased from via the Internet.**

The cross-tabulation analysis was repeated to determine if gender influences the product and service categories respondents consider purchasing from in the future. Table 7.48 portrays the analysis, depicting gender and ProductAP (all

respondents indicating that they consider purchasing from the selected categories in the future).

**TABLE 7.48: RELATIONSHIP BETWEEN GENDER AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Gender	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Male	VV226.1	40	65	59	30	47	59	83	73	84	47	587
Female	VV226.2	18	30	8	14	5	38	32	15	23	42	225
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance was repeated for the variables portrayed in Table 7.48, yielding a value of 48.51 and an exceedence probability of <0.0001 resulted.

Considering the decision-rule that an exceedence probability of <0.05 would be considered as an indication of significance, it may be concluded that the two variables (VV226 and ProductAP) are related.

**(D6) The main finding is that gender significantly influences the product and service categories respondents consider purchasing from via the Internet in the future.**

**(b) Age group (Q23)**

Table 7.49 depicts the age groups of respondents who participated in the study.

**TABLE 7.49: AGE GROUPS OF RESPONDENTS**

Age groups	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Under 18 years	V227.2	12	1.19%	12	1.19%
19-24 years	V227.3	70	6.97%	82	8.16%
25-35 years	V227.4	273	27.16%	355	35.32%
36-50 years	V227.5	404	40.20%	759	75.52%
51-65 years	V227.6	211	21.00%	970	96.52%
Older than 65 years	V227.7	33	3.28%	1 003	99.80%
Not specified	V227.8	2	0.20%	1 005	100%

Table 7.49 indicates that 8.16% of respondents are younger than 25 years (V227.2 and V227.3), 67.36% (677/1005) are between 25 and 50 years old (V227.4 and V227.5) and 24.28% (244/1005) are older than 50 years. Two respondents did not divulge their age group.

It should be mentioned that it was decided to group some of the age groups together to form new groups in an effort to derive a more manageable number to be used for further analyses. The new age groups are shown in Table 7.50.

**TABLE 7.50: RE-CODING OF AGE GROUPS FOR FURTHER ANALYSES**

Current age groups	V	New age groups	Ascribed variable
Under 18 years	V227.2	< 35 years	VV227.1
19-24 years	V227.3		
25-35 years	V227.4		
36-50 years	V227.5	36-50 years	VV227.2
51-65 years	V227.6	Older than 51 years and not specified	VV227.3
Older than 65 years	V227.7		
Not specified	V227.8		

The cross-tabulation comparing the various age groups to whether or not respondents have purchased via the Net before is shown in Table 7.51.

**TABLE 7.51: RELATIONSHIP BETWEEN AGE GROUPS AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Age groups			Total
		< 35 years VV227.1	36-50 years VV227.2	Older than 51 years and not specified VV227.3	
Yes	V21.1	196	218	129	543
No	V21.2	159	186	117	462
Total	Frequency	355	404	246	1 005
	Percentage	35.32%	40.20%	24.48%	100%

The results portrayed in Table 7.51 indicate that a greater percentage of respondents, when considering all specified age groups, have purchased Online than those who have not.

Although this may lead one to assume that the two variables are related, the chi-square statistic for significance will show if there is, statistically, a relationship between the two variables.

The chi-square test, applicable to the cross-tabulation depicted in Table 7.51, yielded a value of 0.45. The exceedence probability associated with the chi-square statistic is 0.798.

Considering the probability value, it can be derived that there is not a relationship between respondents' age groups and the decision to have purchased via the Internet.

**(D7) A main finding is that age group does not influence whether or not respondents have purchased products or services via the Internet.**

Based on this finding, further analyses will not be performed to determine if respondents' age groups influence the product and service categories they have purchased from or consider purchasing from via the Internet in the future.



**(c) Household language (Q24)**

Respondents had to indicate their household language by choosing from eighteen different languages and an “other”-option. Results from question 24 are shown in Table 7.52.

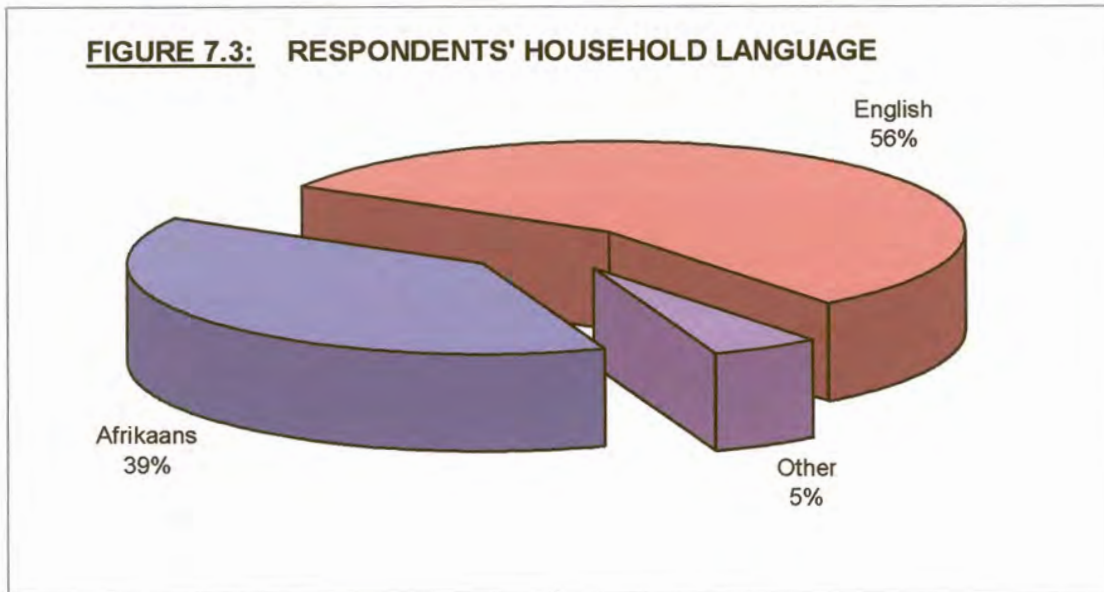
**TABLE 7.52: RESPONDENTS’ HOUSEHOLD LANGUAGE**

Household language	V	Frequency	Percent
Afrikaans	V228.2	391	38.91%
English	V228.3	565	56.22%
French	V228.4	3	0.30%
German	V228.5	9	0.90%
Greek	V228.6	5	0.50%
IsiNdebele	V228.7	0	0.00%
IsiXhosa	V228.8	3	0.30%
IsiZulu	V228.9	5	0.50%
Italian	V228.10	2	0.20%
Portuguese	V228.11	0	0.00%
SePedi	V228.12	3	0.30%
SeSotho	V228.13	3	0.30%
SeTswana	V228.14	7	0.70%
SiSwati	V228.15	1	0.10%
TshiVenda	V228.16	0	0.00%
XiTsonga	V228.17	0	0.00%
An Eastern language	V228.18	0	0.00%
An Asian language	V228.19	0	0.00%
Other	V228.20	8	0.80%

n = 1 005

**(D8) A main finding derived from Table 7.52 is that the majority of respondents indicated that English (V228.3)(56.22%) or Afrikaans (V228.2)(38.91%) was their household language. Only 4.87% of respondents who participated in the study spoke languages other than English or Afrikaans.**

Considering the above, Figure 7.3 depicts the three main household language categories that will be considered for further analyses.



The three categories indicated in Figure 7.3 have been re-coded for further analyses as follows: Afrikaans is ascribed variable VV228.1; English VV228.2 and Other (including all other language options and the “other” than specified option) is re-coded as VV228.3.

Table 7.53 provides the findings from a cross-tabulation analysis, initiated to determine whether or not there is a relationship between household language and whether or not respondents have purchased on the Net before.

**TABLE 7.53: RELATIONSHIP BETWEEN HOUSEHOLD LANGUAGE AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Household language			Total
		Afrikaans VV228.1	English VV228.2	Other VV228.3	
Yes	V21.1	201	327	15	543
No	V21.2	190	238	34	462
Total	Frequency	391	565	49	1 005
	Percentage	38.90%	56.22%	4.88%	100%

**(D9) A main finding derived from Table 7.53 is that 51.41% (201/391) Afrikaans speaking and 57.88% (327/238) English speaking respondents have purchased via the Internet before.**

It can also be derived from Table 7.53 that 69.39% (34/49) of respondents with other household languages (including all other official South African languages) have never purchased via the Internet.

The chi-square statistical test, when applied to Table 7.53, yielded a value of 15.27 and an exceedence probability of 0.0005. It can therefore be derived that household language and whether or not respondents purchase products or services via the Internet are related.

**(D10) A main finding from the analysis is that household language significantly influences whether or not respondents have purchased via the Internet before.**

A further analysis was repeated to determine if there is a relationship between household language and product and service categories respondents have purchased from via the Internet. The results from the cross-tabulation analysis is portrayed in Table 7.54 (showing differences between different household language groups and product and service categories respondents have purchased from).

**TABLE 7.54: RELATIONSHIP BETWEEN HOUSEHOLD LANGUAGE AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM**

Language Groups	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Afrikaans	VV228.1	35	31	30	7	8	10	5	5	1	2	134
English	VV228.2	46	37	39	19	19	18	19	7	8	6	218
Other	VV228.3	4	3	1	0	0	1	1	0	1	0	11
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

From Table 7.54 it can be inferred that more respondents from English-speaking households have purchased from all ten product and service categories than any other language group.

The chi-square test for significance was executed and yielded a value of 17.73 and an exceedence probability of 0.4738. It can therefore be concluded that the two variables (VV228 and ProductHP) are not related.

**(D11) A main finding is that respondents' household language did not significantly influence the product and service categories they have purchased from via the Internet.**

The cross-tabulation analysis was repeated to determine if household language can be regarded as an influence on the decision to purchase from the selected product and service categories in the future. The results from the analysis, depicted in Table 7.55, portray data from VV228 (household language groups) and ProductAP (all respondents indicating that they consider purchasing from the selected product and service categories in the future).

**TABLE 7.55: RELATIONSHIP BETWEEN HOUSEHOLD LANGUAGE AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Language Groups	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Afrikaans	VV228.1	24	35	27	16	21	39	36	47	51	37	333
English	VV228.2	30	54	39	28	27	52	75	37	49	52	443
Other	VV228.3	4	6	1	0	4	6	4	4	7	0	36
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance, performed for Table 7.55, realised a value of 27.51 with an exceedence probability of 0.0699. It is important to note that, based on the decision-rule that an exceedence probability of <0.05 would be

regarded as an acceptable indicator for significance, it has to be concluded that the two variables are not related.

**(D12) A main finding is that respondents' household language does not significantly influence the product and service categories they consider purchasing from via the Internet in the future.**

**(d) Gross monthly household income (Q25)**

The gross monthly household income of respondents participating in the study is portrayed in Table 7.56.

**TABLE 7.56: RESPONDENTS' GROSS MONTHLY HOUSEHOLD INCOME**

Gross monthly income	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Less than R 5 000	V229.2	85	8.46%	85	8.46%
R 5 001 – R 9 999	V229.3	217	21.59%	302	30.05%
R 10 000 – R 14 999	V229.4	168	16.72%	470	46.77%
R 15 000 – R 19 999	V229.5	146	14.53%	616	61.29%
R 20 000 – R 24 999	V229.6	106	10.55%	722	71.84%
R 25 000 – R 29 999	V229.7	63	6.27%	785	78.11%
More than R 30 000	V229.8	133	13.23%	918	91.34%
Not specified	V229.9	87	8.66%	1 005	100%

It can be seen from Table 7.52 that the income group R5 000 – R9 999 (VV229.3) represents the income group with the most respondents (21.59%) who participated in the study. The lowest specified income group, representing less than R 5 000 per month (V229.2), contains the least number of respondents (5.46%), followed by respondents who would not divulge their income (8.66%)(V229.9).

Similar to the previous analyses of demographic variables, it was decided to combine some of the income groups to form more meaningful categories. The new ascribed variables are shown in Table 7.57.

Considering the probability value from the significance test, it can be derived that gross monthly household income and whether or not respondents have purchased Online before are related.

**(D13) A main finding is that household income significantly influence whether or not respondents have purchased products or services via the Internet before.**

A cross-tabulation analysis was performed to determine whether or not respondents' income group exerted an influence on the product and service categories they have purchased from via the Internet. The analysis is shown in Table 7.59, indicating variables VV229 (gross monthly household income groups) and ProductHP (consisting of responses from Internet shoppers who have purchased from the selected product and service categories before).

**TABLE 7.59: RELATIONSHIP BETWEEN GROSS MONTHLY HOUSEHOLD INCOME AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM VIA THE INTERNET**

Income Groups	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
< R 9 999	VV229.1	19	8	19	3	6	7	4	2	3	3	74
R 10 000 – R19 999	VV229.2	25	22	23	3	7	11	7	6	3	3	110
R 20 000 and more	VV229.3	34	35	22	16	10	11	11	4	3	1	147
Not specified	VV229.4	7	6	6	4	4	0	3	0	1	1	32
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

The chi-square test for significance applicable to Table 7.59 yielded a value of 27.70 and an exceedence probability of 0.4263 resulted, enabling one to conclude that the two variables (VV229 and ProductHP) are not related.

**(D14) A main finding is that respondents' household income did not significantly influence the product and service categories they have purchased from via the Internet.**

The analysis was repeated to determine if respondents' gross monthly household income group influence product and service categories they consider purchasing from via the Internet in future. Results from the cross-tabulation analysis are shown in Table 7.60.

**TABLE 7.60: RELATIONSHIP BETWEEN GROSS MONTHLY HOUSEHOLD INCOME AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Income Groups	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
< R 9 999	VV229.1	22	19	15	10	14	34	35	22	39	23	233
R 10 000 – R 19 999	VV229.2	14	29	29	14	15	28	30	35	24	35	253
> R 20 000	VV229.3	17	37	15	14	16	28	41	29	40	26	263
Not specified	VV229.4	5	10	8	6	7	7	9	2	4	5	63
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

A value of 27.70 resulted from the chi-square test performed for Table 7.60, together with an exceedence probability of 0.0477. It can therefore be concluded that, if the decision-rule is applied that an exceedence probability of <0.05 is regarded as significant, the two variables (VV229 and ProductAP) used in the analysis are related.

**(D15) A main finding is that respondents' gross monthly household income significantly influences the product and service categories they consider purchasing from via the Internet in the future.**

**(e) Highest qualification (Q26)**

Table 7.61 provides a demarcation of respondents' highest qualifications.

**TABLE 7.61: RESPONDENTS' HIGHEST QUALIFICATIONS**

Highest Qualification	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Standard 8/Grade 10	V230.2	71	7.06%	71	7.06%
Matric/Grade 12	V230.3	239	23.78%	310	30.85%
Diploma from technical college	V230.4	126	12.54%	436	43.38%
Diploma from technikon	V230.5	127	12.64%	563	56.02%
Degree	V230.6	208	20.70%	771	76.72%
Post-graduate	V230.7	234	23.28%	1 005	100%

It can be seen from Table 7.61 that 23.28% of respondents indicated that they are post-graduates, 20.70% possesses a degree, 23.78% has finished Grade 12, 12.64% acquired a diploma from a technikon, 12.54% obtained a diploma from a technical college and 7.06% completed Grade 10.

The different groups associated with respondents' highest qualification were combined to form a more manageable set. The newly formed groups are labelled in Table 7.62.

**TABLE 7.62: RE-CODING OF HIGHEST QUALIFICATION GROUPS FOR FURTHER ANALYSES**

Qualification groups	V	Newly formed qualification groups	Ascribed variable
Standard 8/Grade 10	V230.2	School Only	VV230.1
Matric/Grade 12	V230.3		
Diploma from technical college	V230.4	Diploma	VV230.2
Diploma from technikon	V230.5		
Degree	V230.6	Degree	VV230.3
Post Degree	V230.7		

Table 7.63 indicates the cross-tabulation results when the newly defined qualification groups were compared with whether or not respondents have purchased via the Net before.



**TABLE 7.63: RELATIONSHIP BETWEEN QUALIFICATIONS AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Highest qualification			Total
		School only VV230.1	Diploma VV230.2	Degree VV230.3	
Yes	V21.1	142	135	266	543
No	V21.2	168	118	176	462
Total	Frequency	310	253	442	1 005
	Percentage	30.85%	25.17%	43.98%	100%

It can be seen from the results portrayed in Table 7.63 that a greater percentage of respondents with post-school qualifications shop on the Net than respondents who have no further qualifications [53.36% (135/253) of respondents with diplomas (VV230.2) and 60.18% (266/442) of respondents with degrees (VV230.3) purchase Online as opposed to 45.81% (142/310) of respondents with no tertiary education].

The chi-square value calculated for the cross-tabulation shown in Table 7.63 was equal to 15.22, resulting in an exceedence probability of 0.0005. If the decision-rule is applied that a probability value of <0.05 is regarded as being indicative of significance, it can be derived that respondent's qualifications (VV230) significantly influenced their decision to purchase Online (V21).

**(D16) A main finding is that whether or not respondents have purchased Online before, is significantly influenced by their qualifications.**

As with many other demographic variables, it was necessary to establish whether or not respondents' qualifications influenced the selected product and service categories they purchased from via the Internet.

A cross-tabulation analysis was performed (shown in Table 7.64) to determine whether or not a relationship exists between respondents' qualifications (VV230)

and product and service categories they have purchased from via the Internet (ProductHP).

**TABLE 7.64: RELATIONSHIP BETWEEN QUALIFICATIONS AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM**

Qualification Groups	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
School only	VV230.1	19	12	25	3	9	6	5	3	2	2	86
Diploma	VV230.2	24	9	16	8	7	4	10	2	5	2	87
Degree	VV230.3	42	50	29	15	11	19	10	7	3	4	190
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

Following the chi-square analysis performed to test for significance, it can be reported that a value of 30.50 was realised from the test with an exceedence probability of 0.0329.

Keeping to the decision rule that an exceedence probability  $<0.05$  is regarded as significant, it can be derived that the two variables (VV230 and ProductHP) are related.

**(D17) A main finding is that respondents' qualifications significantly influenced the product and service categories they have purchased from via the Internet before.**

The analysis was repeated to determine if qualifications exert an influence on product and service categories respondents consider purchasing from via the Internet in the future. The cross-tabulation analysis is shown in Table 7.65.

**TABLE 7.65: RELATIONSHIP BETWEEN QUALIFICATIONS AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Qualification group	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
School only	VV230.1	17	17	22	7	20	32	32	30	26	31	234
Diploma	VV230.2	13	16	19	12	14	15	35	21	35	19	199
Degree	VV230.3	28	62	26	25	18	50	48	37	46	39	379
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance performed, for the cross-tabulation depicted in Table 7.65, realised a value of 35.64 and an exceedence probability of 0.0078. It can therefore be concluded that the two variables (VV230 and ProductAP) portrayed in the cross-tabulation analysis are related.

**(D18) A main finding is that respondents' qualifications significantly influence the product and service categories they consider purchasing from via the Internet in the future.**

**(f) Geographic location (Q27)**

The cities or towns that respondents, who participated in the study, live in or are closest to them are shown in Table 7.66.

**TABLE 7.66 RESPONDENTS' GEOGRAPHIC LOCATION**

City/Town	V	Frequency	Percentage
Beaufort West	V231.2	5	0.50%
Belville	V231.3	30	2.99%
Bloemfontein	V231.4	50	4.98%
Cape Town	V231.5	220	21.89%
Colesberg	V231.6	2	0.20%
Durban	V231.7	85	8.46%
East London	V231.8	20	1.99%
Graaff Reinet	V231.9	4	0.40%
Johannesburg	V231.10	220	21.89%
Kimberley	V231.11	14	1.39%

City/Town	V	Frequency	Percentage
Mossel Bay	V231.12	20	1.99%
Nelspruit	V231.13	13	1.29%
Pietermaritzburg	V231.14	38	3.78%
Pietersburg	V231.15	10	1.00%
Port Elizabeth	V231.16	94	9.35%
Pretoria	V231.17	111	11.04%
Richards Bay	V231.18	23	2.29%
Rustenburg	V231.19	15	1.49%
Springbok	V231.20	3	0.30%
Tzaneen	V231.21	5	0.50%
Umtata	V231.22	6	0.60%
Upington	V231.23	3	0.30%
Witbank	V231.24	14	1.39%
Total		1 005	100%

From Table 7.66 it can be seen that at least some respondents live in or live close to all 23 cities or towns listed in the questionnaire. The majority of respondents indicated that they live in or closest to Cape Town (V231.5) or Johannesburg (V231.10) (21.89% for each of the cities), Pretoria (V231.17)(11.04%), Port Elizabeth (V231.16)(9.35%) and Durban (V231.7)(8.46%). Other cities or towns represented by at least 30 respondents are Belville (V231.3)(2.99%), Bloemfontein (V231.4)(4.98%) and Pietermaritzburg (V231.14)(3.78%).

To do further analyses, the 23 geographical locations had to be reduced to a manageable number. The following variable numbers were ascribed to variables previously used for different geographical locations:

Variables V231.2; V231.3; V231.6; V231.9; V231.11 – V231.15; and V231.18 – V231.24 were combined to form variable VV231.1, representing smaller towns and cities, whereas V231.4; V231.5; V231.7; V231.8; V231.10; V231.16 and V231.17 were combined to form VV231.2, representing metropolitan cities.

Table 7.67 depicts the cross-tabulation findings when V21 (considering whether or not respondents have purchased Online before) and VV231 (geographic location) were further analysed to determine whether or not geographic location significantly influence the decision to purchase on the Net.

**TABLE 7.67 RELATIONSHIP BETWEEN GEOGRAPHIC LOCATION AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED ON THE INTERNET**

Purchase via the Net	V	Geographic location		Total
		Smaller towns and cities VV231.1	Metropolitan cities VV231.2	
Yes	V21.1	115	428	543
No	V21.2	90	372	462
Total	Frequency	205	800	1 005
	Percentage	20.40%	79.60%	100%

**(D19) A main finding that can be derived from the cross-tabulation analysis, is that the majority of respondents (79.60%) who participated in the study reside in or close to a metropolitan city (VV231.2). The remaining 20.40% of respondents either live in or close to a smaller city, large town or smaller town (VV231.1).**

The chi-square measure for significance applicable to the cross-tabulation table portrayed in Table 7.67 yielded a value of 0.44. The realised exceedence probability applicable to the analysis is 0.5055. Based on the statistical results, it can be derived that the two variables (V21 and VV231) are not related.

**(D20) A main finding is that geographic location does not significantly influence whether or not respondents have purchased Online before.**

**(g) Population group (Q28)**

The population groups of respondents participating in the study are shown in Table 7.68.

**TABLE 7.68: RESPONDENTS' POPULATION GROUPS**

Population group	V	Frequency	Percentage
Asian	V232.1	16	1.59%
Black	V232.2	29	2.89%
Coloured	V232.3	24	2.39%
Indian	V232.4	21	2.09%
White	V232.5	902	89.75%
Other	V232.6	13	1.29%
Total		1 005	100%

**(D21) A main finding from Table 7.68 is that 89.75% of respondents who participated in the study were White (V232.5), followed by 2.89% of respondents who indicated that they were Black (V232.2) and 2.39% Coloured (V232.3).**

The population groups were combined to form a manageable set. Two groups were formed, namely "Whites" and "Other population groups". The "Whites" group was re-coded as VV232.1 and the "Other population groups" were labelled VV232.2.

Table 7.69 provides the findings from a cross-tabulation analysis, considering the newly formed population groups and whether or not respondents have purchased via the Internet before.

**TABLE 7.69: RELATIONSHIP BETWEEN POPULATION GROUP AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Population group		Total
		Whites VV232.1	Other population groups VV232.2	
Yes	V21.1	507	36	543
No	V21.2	395	67	462
Total	Frequency	902	103	1 005
	Percentage	89.75%	10.25%	100%

Two main findings can be derived from scrutinising the results shown in Table 7.69, namely that:

**(D22) Fifty-six percent (507/902) of white respondents (VV232.1) have purchased products and services via the Internet before, as opposed to 34.95% (36/103) of respondents from other population groups (VV232.2).**

**(D23) Although related to the previously stated finding, 65.05% (67/103) of respondents from other population groups have never shopped Online before.**

The chi-square test for significance, calculated for Table 7.69, realised a value of 16.82 and yielded an exceedence probability of <0.0001. Based on the decision rule regarding acceptance of significant values, it can be concluded that there is a relationship between population groups and the decision to purchase via the Net.

**(D24) A main finding derived from the discussion is that respondents' population group significantly influences the decision to purchase products and services via the Internet.**

A cross-tabulation analysis was conducted to determine if respondents' population group could be regarded as an influence on the product and service categories they have purchased from via the Internet. The analysis, depicting respondents' population groups and the product categories they have purchased from before, is shown in Table 7.70.

**TABLE 7.70: RELATIONSHIP BETWEEN POPULATION GROUP AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM**

Population group	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Whites	VV232.1	76	69	64	26	24	24	22	12	10	7	334
Other	VV232.2	9	2	6	0	3	5	3	0	0	1	29
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

Based on the results from the chi-square test for significance (yielding a value of 12.07 and an exceedence probability of 0.2094), it can be concluded that the two variables (population group - VV232 - and product and service categories purchased from before – ProductHP) are not related.

**(D25) A main finding is that respondents' population group did not significantly influence the product and service categories they have purchased from via the Internet before.**

The cross-analysis was repeated (shown in Table 7.71) to determine if the respondents' population group exerted an influence on product and service categories they consider purchasing via the Internet in the future (ProductAP).

**TABLE 7.71: RELATIONSHIP BETWEEN POPULATION GROUP AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Population group	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Whites	VV232.1	49	85	61	42	46	88	105	79	97	74	726
Other	VV232.2	9	10	6	2	6	9	10	9	10	15	86
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%



The chi-square test for significance conducted for Table 7.71 yielded a value of 7.91 and an exceedence probability of 0.5432. It can, therefore, be concluded that population group and product and service categories respondents consider to purchase from are not related.

**(D26) A main finding is that respondents' population group do not significantly influence product and service categories they consider purchasing via the Internet in the future.**

**(h) Marital status (Q29)**

The marital status of respondents who participated in the study is captured in Table 7.72.

**TABLE 7.72: RESPONDENTS' MARITAL STATUS**

Population group	V	Frequency	Percentage
Single	V233.2	197	19.60%
Living together	V233.3	42	4.18%
Married	V233.4	688	68.46%
Separated	V233.5	10	1.00%
Divorced	V233.6	53	5.27%
Widowed	V233.7	8	0.80%
Other	V233.8	7	0.70%
Total		1 005	100%

It can be seen from Table 7.72 that the majority of respondents (88.06%) are either married (V233.4)(68.46%) or single (V233.2)(19.60%).

The remainder of respondents are divorced (V233.6)(5.27%), living together (V233.3)(4.18%), separated (V233.5)(1.00%) or widowed (V233.7)(0.80%). Seven respondents (0.70%) indicated that they could not be classified according to the categories provided and selected the "other" option (V233.8).

Since the number of categories for the cross-tabulation analysis had to be limited to be more manageable, the seven categories were reduced to four. The new categories together with the re-coded variables are shown in Table 7.73.

**TABLE 7.73: RE-CODING OF MARITAL STATUS GROUPS FOR FURTHER ANALYSES**

Current marital status group	V	New marital status groups	Ascribed variable
Single	V233.2	Single	VV233.1
Living together	V233.3	Living together	VV233.2
Married	V233.4	Married	VV233.3
Separated	V233.5	Other marital status	VV233.4
Divorced	V233.6		
Widowed	V233.7		
Other	V233.8		

The final cross-tabulation analysis for the study was performed to determine whether demographic variables (specifically marital status at this point of the discussion) influences the decision to purchase Online, is shown in Table 7.74.

**TABLE 7.74: RELATIONSHIP BETWEEN MARITAL STATUS AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Marital status group				Total
		Single VV233.1	Living together VV233.2	Married VV233.3	Other marital status VV233.4	
Yes	V21.1	106	28	371	38	543
No	V21.2	91	14	317	40	462
Total	Frequency	197	42	688	78	1 005
	Percentage	19.60%	4.18%	68.46%	7.76%	100%

It can be deduced from Table 7.74 that, with the exception of the “other” marital status group, all marital status groups comprise of more respondents who have purchased Online before than those who have not. Although comprising the least number of respondents, respondents who are living together (VV233.2)

showed the largest percentage of respondents who have purchased [66.67% (28/42)] when considering the ratio between Online shoppers and non-shoppers for each marital status group.

The chi-square statistic for significance applied to Table 7.74 yielded a value equal to 3.59 and an exceedence probability of 0.3088. It can, therefore, be derived that there is not a relationship between marital status group and the decision to purchase Online.

**(D27) A main finding that can be derived is that marital status does not significantly influence the decision to purchase products and services via the Internet.**

**(i) Number of people actively using the Internet (Q30)**

Table 7.75 indicates the number of people, per respondent's household, who use the Internet more than once a week.

**TABLE 7.75: NUMBER OF ACTIVE INTERNET USERS PER HOUSEHOLD**

Number of people	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
1	V234.2	343	34.13%	343	34.13%
2	V234.3	432	42.99%	775	77.11%
3	V234.4	146	14.53%	921	91.64%
4	V234.5	61	6.07%	982	97.71%
5	V234.6	18	1.79%	1,000	99.50%
6	V234.7	2	0.20%	1,002	99.70%
7	V234.8	1	0.10%	1,003	99.80%
More than 7	V234.9	2	0.20%	1 005	100%

Two main findings can be derived from Table 7.75, namely that:

**(D28) Two members of the household (V234.3) use the Internet more than once a week in 42.99% of households;**

**(D29) Almost 98% of respondents indicated that four or less members of their households use the Internet more than once a week.**

**(j) Number of people per household (Q31)**

The results to the final question of the questionnaire are shown in Table 7.76.

**TABLE 7.76: NUMBER OF PEOPLE PER HOUSEHOLD**

Number of people	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
1	V235.2	88	8.76%	88	8.76%
2	V235.3	278	27.66%	366	36.42%
3	V235.4	204	20.30%	570	56.72%
4	V235.5	265	26.37%	835	83.08%
5	V235.6	120	11.94%	955	95.02%
6	V235.7	39	3.88%	994	98.91%
7	V235.8	6	0.60%	1,000	99.50%
More than 7	V235.9	5	0.50%	1 005	100%

**(D30) A main finding from Table 7.76 is that 83.08% of respondents indicated that there are four or less people living in their households.**

Three main findings can be derived from considering the discussion regarding demographic variables, namely that:

**(D31) Gender (VV226), household language (VV228), gross monthly household income group (VV229), highest qualification (VV230) and population group (VV232) significantly influence whether or not respondents have purchased via the Internet before;**

- (D32) Gender (VV226) and qualification (VV230) significantly influence the product and service categories respondents have purchased from via the Internet; and**
- (D33) Gender (VV226), gross monthly household income group (VV229) and highest qualification (VV230) significantly influence the product and service categories respondents consider purchasing from via the Internet in the future.**

### **7.3.4 Logit Analysis**

Based on the research results obtained from the study, it is possible to perform a logit analysis.

In short, the logit model for categorical data, models the relationship between a binary response (dependent) variable and categorical explanatory (independent) variables. Hair, Anderson, Tatham & Black (1995: 130) explain that to understand the effects of the independent variables more fully, logit analysis does not predict just whether or not an event occurred, but instead predicts the probability of an event. Logit analysis, therefore, compares the probability of an event occurring with the probability of it not occurring (also expressed as an odds ratio)(Hair et al. 1995: 131).

A logit analysis was performed to determine the influence of various demographic variables (VV226 to VV233) on the decision to purchase products or services via the Internet (V21).

It is important to note that the index value will be used for interpretation purposes. An index value of 1.000 is regarded as average and an index of >1.000 represents a higher probability (odds) of having purchased products or

services via the Internet before and an index <1.000 represents a lower probability of having purchased Online before.

An index value for a demographic variable reflects the influence of that particular demographic variable on the probability of a respondent having purchased Online before.

The results from the logit analysis are summarised in Table 7.77.

**TABLE 7.77: RESULTS FROM THE LOGIT ANALYSIS**

Demographic variable	Independent variable	Description	Index value
Gender:	VV226.1	Male	1.393
	VV226.2	Female	0.718
Age:	VV227.1	<35 years	1.263
	VV227.2	36-50 years	0.938
	VV227.3	>51 years and not specified	0.844
Household language:	VV228.1	Afrikaans	1.005
	VV228.2	English	1.542
	VV228.3	Other languages	0.645
Gross monthly household income:	VV229.1	Less than R 9 999	0.594
	VV229.2	R 10 000 – R 19 999	1.066
	VV229.3	R 20 000 or more	1.541
	VV229.4	Not specified	1.024
Highest qualification:	VV230.1	School only	0.758
	VV230.2	Diploma	1.043
	VV230.3	Degree	1.264
Geographic location:	VV231.1	Smaller town and cities	1.135
	VV231.2	Large cities	0.881
Population group:	VV232.1	Whites	1.560
	VV232.2	Other population groups	0.625
Marital status:	VV233.1	Single	1.001
	VV233.2	Living together	1.263
	VV233.3	Married	0.836
	VV233.4	Other marital status	0.946

The findings from the logit analysis will be based on the following calculation and interpretation (gender as demographic variable will be used for illustration purposes):

The probability (odds) of a male respondent having purchased via the Internet before can be calculated as 1.393:1.000 or  $(1.393 - 1.000) \times 100 = 39.3\%$ . It can therefore be derived that the probability of having purchased Online before is 39.3% higher than normal for male respondents. Following the same logic, it can be derived that the probability of having purchased via the Internet is 28.2% lower than average for female respondents, calculated as  $(1.000 - 0.718) \times 100$ .

**Considering the manner in which probability is determined, the following main findings can be made from the logit analysis in Table 7.77:**

- (E1) The probability of having purchased Online before are 39.3% higher than average for male respondents (VV226.1) and 28.2% lower than average for female respondents (VV226.2);**
  
- (E2) The probability of having purchased via the Net is 26.3% higher than average for respondents who are 35 years old or younger (VV227.1), 6.2% lower than average for the age group 36-50 years (VV227.2) and 15.6% lower than average for the age group older than 51 and those who did not specify their age (VV227.3);**
  
- (E3) The probability of having purchased via the Net is average (normal) for respondents from Afrikaans households (VV228.1), 54.2% higher than average for English speaking (VV228.2) and 35.5% lower than average for respondents speaking other household languages (VV228.3);**

- (E4) The probability of having purchased via the Internet is 40.6% lower than average for respondents with a gross monthly household income of less than R 9 999 (VV229.1); 6.6% higher than average for the income group R 10 000 – R 19 999 (VV229.2), 54,1% higher than average for the income group R 20 000 or more (VV229.3) and 2.41% lower than average for the groups of respondents who did not divulge their income group (not specified)(VV229.4);
- (E5) The probability of having purchased Online before is 24.2% below average for respondents falling in the “school only” category (VV230.1), 4.3% higher than average for the diploma-group (VV230.2) and 26.4% higher than average for the degree-group (VV230.3);
- (E6) The probability of having purchased via the Net is 13.5% higher than average for respondents from smaller towns and cities (VV231.1) and 11.9% lower than average for respondents living in or around large cities (VV231.2);
- (E7) The probability of having purchased via the Internet is 56% higher than average for Whites (VV232.1) and 37.5% lower than average for respondents from other population groups (VV232.2); and
- (E8) The probability of having purchased Online before is average (normal) for respondents who are single (VV233.1), 26.3% higher than average for respondents living together (VV233.2), 16.4% lower than average for respondents who are married (VV233.3) and 5.4% below average for respondents from the “other marital status”-group (VV233.4).



## 7.4 MAIN FINDINGS

A number of main findings can be derived from the study. Although these findings were highlighted throughout the chapter, they will be consolidated in this section to form the main findings of the study. The findings listed below will be used as a basis to either accept or reject the hypotheses that were formulated in Chapter 5.

- (A1) Ninety-one percent of respondents who participated in the study access the Internet at home and 48.86% at work (Section 7.3.1, p. 333).
- (A2) Seventy-two percent of respondents who participated in the study most frequently access the Internet from home and 26.66% most frequently from work (Section 7.3.1, p. 333).
- (A3) Fifty-five percent of respondents have been using the Internet for more than three years (Section 7.3.1, p. 334).
- (A4) Fifty-four percent of respondents who participated in the study have purchased products or services via the Internet before, while 45.97% have not purchased Online before (Section 7.3.1, p. 335).
- (A5) As the period of Internet usage increases, the percentage of Internet shoppers increases and the percentage of non-Internet shoppers decreases (Section 7.3.1, p. 338).
- (A7) The period of Internet usage significantly influences whether or not respondents have purchased products or services via the Internet (Section 7.3.1, p. 339).

- (A10) The period of Internet usage does not significantly influence non-Internet shoppers' decision to purchase products and services via the Internet in the future (Section 7.3.1, p. 341).
- (A13) The period of Internet usage does not significantly influence the decision to purchase via the Internet if more non-Internet based South African businesses offered products and services via the Internet (Section 7.3.1, p. 343).
- (A6) Seventy-two percent of respondents who have been using the Internet for four years and more have purchased via the Internet before, while only 20.35% who have been using the Internet for less than one year had purchased Online before (Section 7.3.1, p. 339).
- (A8) The majority of respondents (64.29%) who have not purchased via the Internet before, consider purchasing via the Internet in the future (Section 7.3.1, p. 340).
- (A9) Respondents who have not purchased via the Internet before and have been using the Internet for less than one year (55.56%) are least likely to purchase Online and those who have been Online for four years and more (70.10%) are most likely to purchase via the Net in the future (Section 7.3.1, p. 341).
- (A11) Eighty-three percent of respondents indicated that they have either purchased via the Internet before or consider purchasing via the Internet in future (Section 7.3.1, p. 341).
- (A12) Forty-four percent of respondents who showed that they will not purchase in the future, would consider purchasing via the Internet if more

non-Internet based South African businesses offer products and services via the Internet (Section 7.3.1, p. 342).

- (A14) Almost 91% of all respondents indicated that they have either purchased via the Internet before or that they consider doing so in the future (including non-shoppers who will only purchase Online if more South African business offered products or services Online)(Section 7.3.1, p. 344).
- (A15) Almost 50% of respondents have subscribed to only one Internet Service Provider while 2.09% of respondents have subscribed to five or more ISPs (Section 7.3.1, p. 344).
- (A16) Seventy-five percent of respondents have been subscribed to their current ISP for less than three years (Section 7.3.1, p. 345).
- (A17) Almost 86% of respondents who participated in the study currently subscribe to only one ISP (Section 7.3.1, p. 345).
- (A18) Viewing the Internet as a communication tool was the view that respondents most agreed with while they least agreed with the view that the Internet can be regarded as a buying channel (Section 7.3.1, p. 346).
- (A19) Respondents were most homogeneous on the view that the Internet can be viewed as a communication medium while respondents were most heterogeneous with the view that the Internet can be seen as an entertainment medium (Section 7.3.1, p. 346).
- (A20) Internet shoppers differ significantly from non-shoppers when viewing the Internet as a general information source and a specific source of product and service related information (Section 7.3.1, p. 347).

- (A21) There is not a significant difference between Internet shoppers and non-shoppers with regard to viewing the Internet as a communication tool, as a buying channel and as an entertainment medium (Section 7.3.1, p. 347).
- (A22) Sixty-six percent of respondents who participated in the study use Internet banking services (Section 7.3.1, p. 347).
- (A23) Sixty-five percent of respondents who do not use Internet banking services, are considering making use thereof in future (Section 7.3.1, p. 348)
- (A24) Almost 31% of respondents who have been using Internet banking services, have been using it for less than one year (Section 7.3.1, p. 348).
- (A25) Eighty-one percent of respondents have been using Internet banking services for less than three years (Section 7.3.1, p. 348).
- (A26) Twenty-four percent of respondents use or consider using Internet banking services daily, 50.11% weekly, 25.34% monthly and 0.56% annually (Section 7.3.1, p.349).
- (A27) The majority of respondents (41.59%) who use Internet banking services also shop Online (Section 7.3.1, p. 350).
- (A28) Twenty-four percent of respondents use Internet banking services but don't purchase Online and 12.44% shop on the Net but don't use Internet banking(Section 7.3.1, p. 350).

- (A29) Twenty-one percent of respondents neither use Internet banking services nor do they shop Online (Section 7.3.1, p. 350).
- (A30) The decision to use Internet banking services significantly influences whether or not respondents have purchased products or services via the Internet before (Section 7.3.1, p. 350).
- (A31) As the period of using Internet banking services increases, the percentage of respondents who uses Online banking services and purchases via the Net increases (Section 7.3.1, p.352).
- (A32) Eighty percent of respondents who have been using Online banking services for four years and more, have also purchased via the Internet before (Section 7.3.1, p. 352).
- (A33) The period of time using Internet banking services significantly influences whether or not respondents have purchased products and services via the Internet before (Section 7.3.1, p. 352).
- (BC1) There is a significant difference between the statements Internet shoppers and non-shoppers consider when deciding whether or not to purchase products and services via the Internet (Section 7.3.2, p. 357).
- (BC2) Non-Internet shoppers consider three factors when deciding to purchase via the Internet, namely: factor B1 is predominantly in the pre-purchase evaluation stage of the consumer decision-making process and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases; factor B2 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: the safety, ease and

convenience of purchasing from home; and factor B3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: privacy and security concerns in the search and purchase decision-making stages (Section 7.3.2, p. 364).

- (BC3) Internet shoppers consider three factors when deciding to purchase via the Internet, namely: factor C1 is predominantly in the pre-purchase and post-purchase evaluation stages of the decision-making process and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers; factor C2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet; and factor C3 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home (Section 7.3.2, p. 369).
- (BC4) There is an observable difference between the factors Internet shoppers and non-shoppers consider when deciding whether or not to purchase via the Internet (Section 7.3.2, p. 371).
- (BC5) Internet shoppers who have been using the Internet for less than two years consider four factors when deciding to purchase via the Net, namely: factor D1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: credibility of Internet sellers by considering their prices, guarantees and exchange policies offered; factor D2 is predominantly in the pre- and post purchase evaluation stages of the decision-process and consists of the following aspect: reputability of Internet sellers; factor D3 is predominantly in the search and purchase

stages of the decision-making process and consists of the following aspects: concerns regarding security, privacy and delivery of purchased goods; and factor D4 is predominantly in the pre-purchase evaluation and purchase stages of the decision process and consists of the following aspect: safety and convenience of purchasing from home (Section 7.3.2, p. 377).

- (BC6) Internet shoppers who have been using the Internet for two to less than three years consider four factors when deciding to purchase via the Net, namely: factor E1 is predominantly in the pre-purchase evaluation stage of the decision-process and consists of the following aspect: brands, prices, individual attention offered by Internet sellers and delivery of purchased goods and additional costs associated with Internet purchases; factor E2 is predominantly in the pre- and post purchase evaluation stages of the decision-making process and consists of the following aspects: Internet sellers' prices, guarantees and exchange policies; factor E3 is predominantly in the search and purchase evaluation stages of the decision-process and consists of the following aspect: security and privacy concerns; and factor E4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspect: safety and convenience of purchasing from home (Section 7.3.2, p. 383).
- (BC7) Internet shoppers, who have been using the Internet for three years to less than four years, consider four factors when deciding whether or not to purchase Online, namely: factor F1 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspects: ability to find and evaluate information on after-sales support offered by Internet sellers; factor F2 is predominantly in the search and purchase stages of the decision-process and consists of the following aspects: security and privacy concerns; factor F3 is

predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home; and factor F4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspects: concerns regarding the actual delivery and delivery costs when purchasing known brands via the Internet (Section 7.3.2, p. 389).

- (BC8) Internet shoppers who have been using the Internet for four years or more consider five factors when deciding to purchase via the Net, namely: factor G1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: prices and after-sales service offered by Internet sellers; factor G2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns; factor G3 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspect: personal attention offered by Internet sellers; factor G4 is predominantly in the pre-purchase evaluation stage of the decision-making process and consists of the following aspects: brands, prices and total cost associated with purchasing from Internet sellers; and factor G5 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of shopping from home (Section 7.3.2, p. 395).
- (BC9) There is a difference between the factors considered by Internet shoppers prior to purchasing via the Internet when the period of Internet usage is considered and the associated stages of the decision-making process (Section 7.3.2, p. 397).



- (BC10) The five product and service categories most non-Internet shoppers seriously consider purchasing from via the Internet are: CDs (music)(55.63%), airline tickets (52.81%), books and magazines (52.16%), hotel reservations (50.87%) and movie or event tickets (49.57%)(Section 7.3.2, p. 400).
- (BC11) The five product and service categories non-Internet shoppers least consider purchasing from via the Internet are: baby products (5.41%), jewellery (7.14%), cosmetics (8.01%), interior decorating/renovations (8.01%) and furniture (8.66%)(Section 7.3.2, p. 400).
- (BC12) The five product and service categories most Internet shoppers have purchased from before via the Internet are: books and magazines (63.54%), CDs (music)(40.88%), computer software (39.04%), movie or event tickets (34.99%) and airline tickets (27.07%)(Section 7.3.2, p. 404).
- (BC13) The five product and service categories Internet shoppers least purchased from via the Internet are: property (1.29%), interior decorating/renovations (1.47%), wine (2.03%), household appliances (2.39%), and garden related (2.58%)(Section 7.3.2, p. 404)
- (BC14) The five product and service categories most current Internet shoppers consider purchasing from via the Internet in the future are: books and magazines (79.19%), CDs (music) (64.09%), movie or event tickets (59.67%), computer software (59.48%) and hotel reservations (55.43%)(Section 7.3.2, p. 404).
- (BC15) The five product and service categories current Internet shoppers least consider purchasing from via the Internet in the future are: baby products (7.18%), property (9.21%), jewellery (9.39%), interior

decorating/renovations (9.58%) and adult entertainment (9.94%)(Section 7.3.2, p. 405).

- (BC16) More than 50% of respondents who have purchased from the 38 listed product and service categories before, will again in future purchase from the categories they have purchased from (with the exception of adult entertainment)(Section 7.3.2, p. 407).
- (BC17) The two product and service categories from which most respondents, who have purchased from a specific category before, will purchase from again, are: other liquor, with 97.96% of respondents who have purchased from the category will purchase from it again, and books and magazines, with 97.68% that will purchase from the category again (Section 7.3.2, p. 407).
- (BC18) The two categories from which most respondents, who have purchased from it before, will not purchase from again are: property, with 42.86% of respondents that will not purchase from the category again and adult entertainment, with 38.55% that will not repurchase (Section 7.3.2, p. 407).
- (BC19) Respondents who have purchased adult entertainment (16.87%) before are most uncertain whether or not they will purchase from this category again (Section 7.3.2, p. 407).
- (AP1) at least 20% of all non-Internet shoppers across all time periods (with the exception of those who have been using the Net for four years or more) consider to purchase from more product and service categories via the Internet in the future than Internet shoppers falling within the same periods (Appendix 10).

- (AP2) at least 45% of Internet shoppers and non-shoppers, who have been using the Internet for less than one year, consider purchasing from product and service categories that current Internet shoppers (who have been using the Net for between one and less than two years) have purchased from before (Appendix 10).
- (BC20) The period of Internet usage does not influence product and service categories respondents have purchased from via the Internet (Section 7.3.2, p. 411).
- (BC21) The period of Internet usage does not significantly influence the product and service categories respondents consider to purchase from via the Internet in the future (Section 7.3.2, p. 412).
- (BC22) More than 86% of respondents who have purchased via the Internet search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 413).
- (BC23) Almost 70% of respondents who have not purchased via the Internet before search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 413).
- (BC24) Larger numbers of non-shoppers, across all time periods, either search for or consider searching for information on the Net prior to purchasing from non-Internet based sellers than non-shoppers who don't search for information Online (Section 7.3.2, p. 414).
- (BC25) More than 83% of non-shoppers who have been using the Internet for four years and more search for information Online prior to Offline purchases (Section 7.3.2, p. 414).

- (BC26) The period of Internet usage significantly influences whether or not non-Internet shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services (Section 7.3.2, p. 415).
- (BC27) More than 90% of respondents who have purchased via the Internet and have been using the Internet for four years and more search for information Online prior to purchasing Offline (Section 7.3.2, p. 416).
- (BC28) The period of Internet usage significantly influences whether or not current Internet shoppers have searched for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services (Section 7.3.2, p. 416).
- (BC29) More than 78% of respondents who participated in the study either search for or consider searching for product or service information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 417).
- (BC30) The decision to search for (or consider searching for) product and service information Online (prior to purchasing Offline) is significantly influenced by whether or not respondents have purchased via the Internet before (Section 7.3.2, p. 418).
- (BC31) The decision of non-Internet shoppers to purchase via the Internet in future significantly influences whether or not respondents search for or consider searching for product and service related information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 419).

- (BC32) A greater number of current Internet shoppers search for more product and service categories Online than non-shoppers (more than 25% of shoppers search from 12 product and service categories as opposed to eight categories by non-shoppers)(Section 7.3.2, p. 422).
- (BC33) The five categories on which most searches are conducted by Internet shoppers for product and service information are: books and magazines (55.43%), computer software (55.43%), CDs (music)(52.49%), airline tickets (49.72%) and electronic equipment (45.86%)(Section 7.3.2, p. 432)(Section 7.3.2, p. 422).
- (BC34) The five categories most searched from for product and service information by non-Internet shoppers are: computer software (37.88%), airline tickets (33.77%), CDs (music)(32.90%), computer hardware (29.87%) and hotel reservations (29.65%)(Section 7.3.2, p. 422)
- (D1) Almost 70% of the respondents who participated in the study were male, while the remaining 30.05% was female (Section 7.3.3, p. 425).
- (D2) A greater percentage of male respondents (59.03%) indicated that they have purchased products and services via the Internet before than women (42.38%)(Section 7.3.3, p. 425).
- (D3) Almost 58% of female respondents have never purchased products or services via the Internet before (Section 7.3.3, p. 425).
- (D4) Gender significantly influences whether or not respondents have purchased products or services via the Internet (Section 7.3.3, p. 426).

- (D5) Gender significantly influenced the product and service categories Internet shoppers have purchased from via the Internet (Section 7.3.3, p. 426).
- (D6) Gender significantly influences the product and service categories respondents consider to purchase from via the Internet in future (Section 7.3.3, p. 427).
- (D7) Age group does not influence whether or not respondents have purchased products or services via the Internet (Section 7.3.3, p. 429).
- (D8) The majority of respondents indicated that English (56.22%) or Afrikaans (38.91%) was their household language. Only 4.87% of respondents speak languages other than English or Afrikaans at home (Section 7.3.3, p. 430).
- (D9) More than 51% of Afrikaans speaking and 57.88% of English speaking respondents have purchased via the Internet before (Section 7.3.3, p. 432).
- (D10) Household language significantly influences whether or not respondents have purchased via the Internet before (Section 7.3.3, p. 432).
- (D11) Household language did not significantly influence the product and service categories they have purchased from via the Internet (Section 7.3.3, p. 433).
- (D12) Household language does not significantly influence the product and service categories they consider purchasing from via the Internet in future (Section 7.3.3, p. 434).

- (D13) Household income groups significantly influence whether or not they have purchased products or services via the Internet before (Section 7.3.3, p. 436).
- (D14) Respondents' gross monthly household income did not significantly influence the product and service categories they have purchased from via the Internet (Section 7.3.3, p. 436).
- (D15) Respondents' gross monthly household income significantly influences the product and service categories they consider purchasing from via the Internet in the future (Section 7.3.3, p. 437).
- (D16) Whether or not respondents have purchased Online before is significantly influenced by their qualifications (Section 7.3.3, p. 439).
- (D17) Respondents' qualifications significantly influenced the product and service categories they have purchased from via the Internet (Section 7.3.3, p. 440).
- (D18) Respondents' qualifications significantly influence the product and service categories they consider purchasing from via the Internet in the future (Section 7.3.3, p. 441).
- (D19) The majority of respondents (79.60%) who participated in the study reside in or close to a metropolitan city. The remaining 20.40% of respondents either live in or close to a smaller city, large town or smaller town (Section 7.3.3, p. 443).
- (D20) Geographic location does not significantly influence whether or not respondents have purchased Online before (Section 7.3.3, p. 443).

- (D21) Almost 90% of respondents who participated in the study were White, followed by 2.89% of respondents who indicated that they were Black, and 2.39% Coloured (Section 7.3.3, p. 444)
- (D22) More than 56% of White respondents have purchased products or services via the Internet before, as opposed to 34.95% of respondents from other population groups (Section 7.3.3, p. 445).
- (D23) Sixty-five percent of respondents from other (than Whites) population groups have never shopped Online before (Section 7.3.3, p. 445).
- (D24) Respondents' population group significantly influences the decision to purchase products and services via the Internet (Section 7.3.3, p. 445).
- (D25) Respondents' population group did not significantly influence the product and service categories they have purchased from via the Internet before (Section 7.3.3, p. 446).
- (D26) Respondents' population group does not significantly influence product and service categories they consider purchasing from via the Internet in future (Section 7.3.3, p. 447).
- (D27) Marital status does not significantly influence the decision to purchase products and services via the Internet (Section 7.3.3, p. 449).
- (D28) In almost 43% of households that respondents belong to, two members of the household use the Internet more than once a week (Section 7.3.3, p. 450).



- (D29) Almost 98% of respondents indicated that four or less members of their households use the Internet more than once a week (Section 7.3.3, p. 450).
- (D30) Eighty-three percent of respondents indicated that there are four or less people living in their households (Section 7.3.3, p. 450).
- (D31) Gender, household language, gross monthly household income group, highest qualification and population group significantly influence whether or not respondents have purchased via the Internet before (Section 7.3.3, p. 450).
- (D32) Gender and qualification significantly influence the product and service categories respondents have purchased from via the Internet (Section 7.3.3, p. 451).
- (D33) Gender, gross monthly household income group and highest qualification significantly influence the product and service categories respondents consider purchasing from via the Internet in future (Section 7.3.3, p. 451).
- (E1) The probability of having purchased Online before is 39.3% higher than average for male respondents and 28.2% lower than average for female respondents (Section 7.3.4, p. 453).
- (E2) The probability of having purchased via the Net is 26.3% higher than average for respondents who are 35 years old or younger, 6.2% lower than average for the age group 36-50 years and 15.6% lower average for the age group older than 51 and those who did not specify their age (Section 7.3.4, p. 453).

- (E3) The probability of having purchased via the Net is average (normal) for respondents from Afrikaans households, 54.2% higher than average for English speaking and 35.5% lower than average for respondents speaking other household languages (Section 7.3.4, p. 453).
- (E4) The probability of having purchased via the Internet is 40.6% lower than average for respondents with a gross monthly household income of less than R 9, 999; 6.6% higher than average for the income group R10,000 – R19,999; for the income group earning more than R 20, 000 it is 54.1% higher than average; and it is 2.41% lower than average for the groups of respondents who did not divulge their income group (not specified)(Section 7.3.4, p. 454).
- (E5) The probability of having purchased Online before is 24.2% below average for respondents falling in the “school only” category, 4.3% higher than average for the diploma-group and 26.4% higher than average for the degree-group (Section 7.3.4, p. 454).
- (E6) The probability of having purchased via the Net is 13.5% higher than average for respondents from smaller towns and cities and 11.9% lower than average for respondents living in or around large cities (Section 7.3.4, p. 454).
- (E7) The probability of having purchased via the Internet is 56% higher than average for Whites and 37.5% lower than average for respondents from other population groups (Section 7.3.4, p. 454).
- (E8) The probability of having purchased Online before is average (normal) for respondents who are single, 26.3% higher than average for respondents living together, 16.4% lower than average for respondents

who are married and 5.4% below average for respondents from the “other marital status”-group (Section 7.3.4, p. 454).

## **7.5 ACCEPTANCE OR REJECTION OF HYPOTHESES FORMULATED FOR THE STUDY**

The hypotheses applicable to the study (formulated in Chapter 5) will again be listed in this section for convenience purposes and will, based on the main findings from the study, either be accepted or rejected.

### **7.5.1 Hypothesis 1**

The decision to purchase via the Internet is significantly influenced by factors consumers consider prior to purchase

The results from the empirical research, based on questions 11, 12 and 18, will be considered when accepting or rejecting Hypothesis 1. It could be concluded from question 11 that 54.03% of respondents have purchased via the Internet while 45.97% have not purchased Online before [(Main finding A4 (p. 335)].

Based on the findings from questions 12 and 18, a t-test was performed which established that there is a significant difference between Internet shoppers and non-shoppers with regard to the 24 listed statements (where respondents were requested to rate the importance thereof when deciding to purchase via the Net) [Main finding BC1 (p. 357)].

Following the t-test, a factor analysis was performed for question 12, indicating factors considered by non-shoppers when deciding whether or not to purchase via the Internet. The factor analysis was repeated for question 18 and identified factors considered by Internet shoppers prior to purchasing via the Internet.

Three different factors were identified for non-Internet shoppers [Main finding BC2 (p. 364)] as well as Internet shoppers [Main finding BC3 (p. 369)]. It could also be seen from the factor analyses that, in addition to the identified predominant stages of the decision-making process ascribed to each factor, different aspects were associated with the factors identified for shoppers and non-shoppers [Main findings BC1 (p. 357) and BC4 (p. 371)].

Based on the main findings it can be concluded that **Hypothesis 1 should be accepted.**

### **7.5.2 Hypothesis 2**

The factors Internet shoppers consider prior to purchasing via the Internet are significantly influenced by the period of Internet usage

Research findings from question 18 of the questionnaire (applicable to Internet shoppers) address Hypothesis 2.

Main finding BC5 (p. 377) listed four factors identified for Internet shoppers who have been using the Net for less than two years. Main finding BC6 (p. 383) identified four factors applicable to Internet shoppers who have been Online for two years to less than three years. Four factors were also identified for Internet shoppers using the Internet for three years to less than four years [Main finding BC7 (p. 389)] and five factors could be identified, portrayed in Main finding BC8 (p. 395), for Internet users who have been Online for four years and more.

Following an analysis from the main findings mentioned above, it can be concluded that the period of Internet usage influences the factors Internet shoppers consider prior to purchasing via the Internet [Main finding BC9 (p. 397)]. Main finding BC9 (p. 397) was also based on a comparison between the stages of the decision-making process ascribed to the factors identified for Internet shoppers across all time periods.

Based on the research findings, it can be concluded that **Hypothesis 2 should be accepted.**

### 7.5.3 Hypothesis 3

The period of Internet usage significantly influenced the decision to have purchased via the Internet

Hypothesis 3 is addressed by questions 3 and 11 of the questionnaire.

From question 3 it could be derived that 11.24% of respondents who participated in the study have been using the Internet for less than one year, 13.23% for one year to less than two years, 20.40% for two years to less than three years, 19.70% three years to less than four years and 35.42% have been Online for four years and more. The main finding from question 3 was that 55% of respondents have been using the Internet for three or more years [Main finding A3 (p. 334)].

From question 11 it could be deduced that 54.03% of respondents have purchased via the Internet before, while the remaining 45.97% of respondents have never purchased via the Internet before [Main finding A4 (p. 335)].

Main finding A5 (p. 338) stated that as the period of Internet usage increases, the percentage of Internet shoppers increases. When subjected to statistical testing, it was found that the period of Internet usage significantly influences whether or not respondents have purchased products or services via the Internet [Main finding A7 (p. 339)].

Based on the main findings pertaining to previous Internet purchases, it can be derived that **Hypothesis 3 should be accepted since the period of Internet usage influenced whether or not respondents have purchased via the Internet before.**

#### 7.5.4 Hypothesis 4

The period of Internet usage significantly influences the decision of non-shoppers to purchase via the Internet in the future

Hypothesis 4 is addressed by questions 3, 11, 13 and 14 of the questionnaire.

From question 13 (directed at non-Internet shoppers) it could be concluded that 64.29% of non-shoppers seriously consider purchasing via the Internet in the future [Main finding A8 (p. 340)]. From question 14 (directed at non-shoppers not considering to purchase via the Internet in the future) it could be concluded that 44.58% of respondents would consider purchasing via the Internet if more South African businesses sold products and services via the Net [Main finding A12 (p. 342)].

Responses for both questions 13 and 14 were statistically tested to determine whether or not there is a relationship between the period of Internet usage and consideration to purchase via the Internet. It was concluded that the period of Internet usage does not significantly influence the decision of non-shoppers to purchase via the Internet in the future [Main finding A10 (p. 341)], nor does it influence the decision to purchase via the Internet in the future if more South African businesses offered products and services via the Net [ Main finding A13 (p. 343)].

Based on the main findings pertaining to the consideration to purchase via the Internet in the future, it can be derived that **Hypothesis 4 should be rejected when considering the period of Internet usage and non-shopper's decision to purchase via the Internet in the future.**

### 7.5.5 Hypothesis 5

The period of Internet usage significantly influences the decision to search for product or service information on the Net prior to purchasing from non-Internet based sellers

Questions 3, 16 and 20 addressed Hypothesis 5.

From the results applicable to question 16 it could be concluded that almost 70% of non-Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC23 (p. 413)].

From the statistical tests performed to determine a possible influence due to the period of Internet usage and whether or not non-Internet shoppers search for information Online, it could be concluded that the period of Internet usage significantly influence whether or not non-Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC26 (p. 415)].

It could also be concluded, from the results pertaining to question 20, that 86.37% of Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC22 (p. 413)].

Based on statistical tests, it was concluded that the period of Internet usage significantly influences whether Internet shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC28 (p. 416)].

Considering the main findings highlighted above, it can be concluded that **Hypothesis 5 should be accepted.**

### 7.5.6 Hypothesis 6

There is a significant difference between Internet shoppers and non-shoppers in their decision to search for product and service information on the Internet prior to Offline purchases

Hypothesis 6 can be supported by the results from questions 11, 16 and 20.

As stated previously, question 11 distinguished between Internet shoppers and non-shoppers. Question 16 determined whether non-Internet shoppers search for or consider searching for Online product and service information, while question 20 determined if Internet shoppers search for or consider searching for product or service information.

Results from significance tests showed that the decision to have purchased via the Internet significantly influences whether or not respondents search for or consider searching for product and service information on the Internet [Main finding BC30 (p. 418)]. The statistical tests also showed that the decision to purchase via the Internet in the future (for non-Internet shoppers) significantly influence whether or not non-Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing Offline [Main finding BC31 (p. 419)].

It can therefore be concluded that **Hypothesis 6 should be accepted.**

### 7.5.7 Hypothesis 7

The period of Internet usage significantly influenced the product and service categories Internet shoppers have purchased via the Internet

Results from questions 3 and 19 can be used to determine if Hypothesis 7 should be accepted or not.



Statistical tests for significance were performed to determine if the period of Internet usage exerted an influence on the product and service categories Internet shoppers have purchased from via the Internet.

The statistical tests did not identify a relationship between the period of Internet usage and the product and service categories Internet shoppers have purchased from, enabling the researcher to conclude that the period of Internet usage does not significantly influence the product or service categories Internet shoppers have purchased from before [Main finding BC20 (p. 411)].

It can therefore be concluded that **Hypothesis 7 should be rejected.**

#### **7.5.8 Hypothesis 8**

The period of Internet usage significantly influences the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future

Hypothesis 8 can be addressed by questions 3, 15 and 19.

Question 3 considered the period of Internet usage, question 15 the product and service categories non-Internet shoppers consider to purchase from via the Internet in the future and question 19 the categories Internet shoppers consider purchasing from in the future.

Based on a statistical test for significance, it was concluded that the period of Internet usage does not influence the product and service categories respondents (both Internet shoppers and non-shoppers considering to purchase via the Internet in the future) consider purchasing from via the Internet in the future [Main finding BC21 (p. 412)].

It can therefore be derived that **Hypothesis 8 should be rejected.**

### 7.5.9 Hypothesis 9

Demographic variables of Internet users significantly influence whether Internet users have purchased products or services via the Internet

Hypothesis 9 can be addressed by questions 11 and 22 to 29.

From statistical tests for significance, the following could be concluded (with regards to demographic variables):

- Gender significantly influences whether or not respondents have purchased via the Internet before [Main finding D4 (p. 426)];
- Age group does not significantly influence whether or not respondents have purchased via the Internet before [Main finding D7 (p. 429)];
- Household language significantly influences whether or not respondents have purchased via the Internet before [Main finding D10 (p. 432)];
- Gross monthly household income significantly influences whether or not respondents have purchased via the Internet before [Main finding D13 (p. 436)];
- Highest qualification significantly influences whether or not respondents have purchased via the Internet before [Main finding D16 (p. 439)];
- Geographic location does not significantly influence whether or not respondents have purchased via the Internet before [Main finding D20 (p. 443)];
- Population group significantly influences whether or not respondents have purchased via the Internet before [Main finding D24 (p. 445)];
- Marital status does not significantly influence whether or not respondents have purchased via the Internet before [Main finding D27 (p. 449)].

**Hypothesis 9 should be accepted for gender, household language, gross monthly household income, highest qualification and population group,**

since these demographic variables significantly influence whether or not respondents have purchased via the Internet before [Main finding D31 (p. 450)].

**Hypothesis 9 should be rejected for age group, geographic location and marital status**, since these demographic variables did not significantly influence whether or not respondents have purchased Online before [Main findings D7 (p. 429), D20 (p. 443) and D27 (p. 449)].

#### 7.5.10 Hypothesis 10

Demographic variables of Internet users significantly influence the product and service categories Internet users have purchased from via the Internet

Questions 19 and 22 to 29 address Hypothesis 10.

Following statistical tests for significance, the following were derived:

- Gender significantly influences the product and service categories Internet shoppers have purchased from before [Main finding D5 (p. 426)];
- Household language does not significantly influence the product and service categories Internet shoppers have purchased from before [Main finding D11 (p. 433)];
- Gross monthly household income does not significantly influence the product and service categories Internet shoppers have purchased from before [Main finding D14 (p. 436)];
- Highest qualification significantly influences the product and service categories Internet shoppers have purchased from before [Main finding D17 (p. 440)];
- Population group does not significantly influence the product and service categories Internet shoppers have purchased from before [Main finding D25 (p. 446)].

Considering the main findings listed above, **Hypothesis 10 should be rejected for household language, income and population group**, since these demographic variables did not influence the product and service categories they have purchased from before [Main findings D11 (p. 433), D14 (p. 436) and D25 (p. 446)].

**Hypothesis 10 can be accepted for gender and qualification**, since these demographic variables significantly influenced the product and service categories Internet shoppers have purchased from before [Main finding D32 (p. 451)].

#### 7.5.11 Hypothesis 11

Demographic variables of Internet users significantly influence the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future

Hypothesis 11 can be addressed by questions 15, 19 and 22 to 29.

Following statistical tests for significance, the following could be concluded:

- Gender significantly influences the product and service categories respondents consider purchasing via the Internet in the future [Main finding D6 (p. 427)];
- Household language does not significantly influence the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D12 (p. 434)];
- Gross monthly household income significantly influences the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D15 (p. 437)];
- Highest qualification significantly influences the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D18 (p. 441)];

- Population group does not significantly influence the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D26 (p. 447)].

Considering the main findings listed above, **Hypothesis 11 should be accepted for gender, income and qualification**, since these demographic variables significantly influence the product and service categories respondents consider purchasing via the Internet in the future [Main finding D33 (p. 451)].

**Hypothesis 11 should be rejected for language and population group**, since these demographic variables do not significantly influence the product and service categories respondents consider purchasing via the Internet in the future [Main findings D12 (p. 434) and D26 (p. 447)].

## 7.6 SUMMARY

Chapter 7 provided the research findings obtained from 1 005 Internet users who participated in the research project.

Main findings were recorded throughout the discussion, forming the main findings from the empirical research-phase of the study. The main findings were then used to either accept or reject the hypotheses formulated for the study.

Hypotheses 1, 2, 3, 5 and 6 were accepted based on the main findings obtained from the study. Hypotheses 4, 7 and 8 had to be rejected. Hypothesis 9 was accepted for certain demographic variables, namely gender, language, income, qualification and population group. Hypothesis 9 was, however, rejected for three demographic variables, namely age, geographic location and marital status. Hypothesis 10 was accepted for gender and qualification, but rejected for language, income and population group. As with Hypothesis 10, Hypothesis 11

was accepted for gender, qualification as well as income, but was rejected for language and population group.

The final chapter, Chapter 8, will conclude the research study by providing recommendations based on the main findings recorded from the empirical research-phase of the study.