CHAPTER 6: RESEARCH RESULTS (II): SURVEY DATA

This chapter presents the results of the preliminary statistical analysis and measurement assessment of confirmatory factor analysis as well as the hypotheses testing results using structural equation modelling (SEM). First, the descriptive statistical data analysis will be presented. These include the response rate, data cleaning, and respondentsô characteristics. Second, exploratory measurement assessment, which includes exploratory factor analysis and scale reliability are discussed. Third, additional statistical analyses using chi-square, independent sample t-tests, and one-way ANOVA to examine the demographic differences in each construct and correlations between the hypothesised constructs are presented. The assumptions for multivariate analysis are examining before presenting the SEM technique. In using SEM, two stages are applied in this study, one is the measurement model by confirmatory factor analysis, which includes purifying the measurement model and construct validity testing and the other stage is hypotheses testing.

6.1 Response Rate for the Survey

Of the 1,200 questionnaires distributed, 946 responses were returned giving a response rate of 69.5 per cent. Of those returned, only 834 complete questionnaires were usable for data analysis; 112 questionnaires were unacceptable for various reasons including: (1) incomplete response; (2) responses with little variance; (3) patterns of responses showed that the respondent did not understand the content and/or instructions; and (4)

ered by respondents who did not qualify for participation. The questionnaires with unacceptable responses were discarded. Among of 834 available questionnaires, 354 respondents (42.4%) were collected through shopping malls, second way for data collection were 237 respondents (28.4%) through the National Consumer Complaint Central (NCCC) office, and another 234 respondents (29.1%) were obtained from the TCC office in Kuala Lumpur (see Table 6.1).

Table 6.1: Three Different Ways for Data Collection

Actions	Frequency (N=834)	Per cent (%)
Through Shopping Malls	354	42.4
Through NCCC Office	237	28.4
Through TCC in KL Office	243	29.1

6.2 Cleaning the Data

A codebook was created in order to facilitate the data coding and entry (Refer to **Appendix E**). It is necessary to check the data for error before starting to analyse the data (Pallant, 2005). Detecting the outliers and the missing values and manipulating the data will be discussed in the following subsections.

6.2.1 Detecting the Missing Values and Outliers

All item responses in the questionnaire were converted into a number for data analysis. A total of 79 items were keyed into SPSS. To manage the problem, the data entry process was double checked to minimise error. Before any tests were conducted using the data set, frequency distributions for each variable in the study were examined to check the extent of item non-responses, errors, any extreme values or outliers and

efined as ñan observation that is substantially different from the other observations (such as extreme value) on one or more characteristics (variables)ò (Hair, et al., 2006, p. 40). Thus, it is important to check whether the score for outliers is a real value or not, and differentiate between outliers that can be deleted and those that cannot be deleted. After running the frequencies and descriptive tables, the results show that no extreme values or missing data were found in the data set for the current study.

6.2.2 Manipulating the Data

After detecting the missing values and outliers, all of the negatively worded items had to be reversed before doing statistical analysis, such as t-test, ANOVA, factor analysis, to ensure that the data did not violate any of the assumptions made by the individual tests. In the current study, 18 negatively worded items were revised, 17 items from Section 1 ï perceptions of consumer attitude towards complaining and personal trait; 1 item was from Section 3 ï perception of consumerôs complaint intention. As Pallant (2005) suggests that the negatively worded items need to be reversed before a total score can be calculated for the particular scale, the seven-point Likert-type scale for the negatively worded items was transformed from 1 (strongly disagree) ï 7 (strongly agree) to 1 (strongly agree) to 7 (strongly disagree). Once the negatively worded items were reversed, the data checks for normality, validity, reliability and so forth commenced.

6.3 Respondent Characteristics

The demographic characteristics of the respondents, such as gender, ethnicity,

atus, education level and personal monthly income were examined in the study. The results of the descriptive analysis for all the demographic items are reported in Table 6.2.

Table 6.2: Profile of the Respondents

Demographic Characteristics	Frequency (N=834)	%	Demographic Characteristics	Frequency (N=834)	%
Gender			Ethnicity		
Male	408	48.9	Malay	395	47.4
Female	426	51.1	Chinese	313	37.5
			Indian	126	15.1
Occupation			Age		
Government Employees	110	13.2	Less than 25	260	31.2
Private Sector Employees	414	49.6	26 to 40 years old	406	48.7
Self-Employed	92	11	41 to 55 years old	148	16.5
Housewife	37	4.4	Older than 56 years old	30	3.6
Student	144	17.3			
Others	37	4.4			
Marital Status			Education Level		
Single	394	47.2	LCE/SRP/PMR[a] or below	13	1.6
Married Without Children	106	12.7	MCE/SPM/SPVM[b]	111	13.3
Married With Children	324	38.8	HSC/STP/STPM[c]	120	14.4
Others	10	1.2	College Diploma	265	31.8
			University Degree/Professional	325	39
Personal Monthly Income [d]					
Below RM1,000	219	26.3			
RM1,000 to RM2,999	336	40.3			
RM3,000 to RM4,999	165	19.8			
RM5,000 to RM6,999	52	6.2			
RM7,000 and above	62	7.4			

Note: [a] : LCE/SRP/PMR is equivalent to nine years of formal elementary and middle school education;

[b] : MCE/SPM/SPVM is equivalent to O-Level

[c] : HSC/STP/STPM is equivalent to A-Level

[d] : Exchange rate: USD1= RM3.55 August 2009.

As mentioned early in this chapter, 354 respondents complained to the firms, 237 respondents took complaint action in the NCCC, and 234 respondents sought redress at the Tribunal for Consumer Claims in Kuala Lumpur. Based on the data collected, the

respondents was constructed (see Table 7.2). The sample was almost fairly representative to the population composition of Kuala Lumpur in Peninsular Malaysia. The target quota requirement was not fulfilled 100 per cent, because the researcher could not control the enumerators 100 per cent while they were in the field.

Referring to the **gender** of respondents in this study, 48.9% of the respondents were male, while 51.1% were female respondents. This result was almost consistent with the expectation in the quota sampling for gender group at 50:50 for male and female respondents. In terms of **ethnicity** groups, 47.4% were Malays, followed by the Chinese at 37.5% and the Indians at 15.1%. The present study set at 50:30:20 for Malays: Chinese: Indians to represent the Malaysian population distribution of 60:30:10 (Malays: Chinese: Indians) in the 9th Malaysia Plan (2006-2010) for obtaining the good statistical analysis. However, the result found that Malay and Indian respondents were less than the target sampling at 50% and 20%; Chinese respondents were higher than the target sampling at 30%. This result was reasonable due to Chinese are majority in the capital city compare with Malays and Indians.

Regarding to the **occupation** of the respondents, 49.6% were Private Sector Employees, followed by ñStudentò (17.3%), ñGovernment Employeesò (13.2%), ñSelf-Employedò (11%) and ñHousewifeò (4.4%) and ñOthersò (4.4%). Talking about the **age**, the highest group was ñ26 to 40 years oldò respondents (48.7%), ñLess than 25ò respondents was the second highest group (31.2%), following groups were ñ41 to 44 years oldò (16.5%)

ò (3.6%) respondents.

In terms of **marital status**, 47.2% respondents were single; married with children respondents were 38.8%; 12.7% respondents were married without children; and the 1.2% respondents were in the ñotherò groups (refers to the divorce). Regarding to the **education level** of the respondents, the highest education level were ñUniversity Degree / Professionalò respondents (39%); following were ñCollege Diplomaò respondents group (31.8%), ñHSC/STP/STPMò respondents (14.4%) and ñMCE/SPM/SPVMò respondents group (13.3%). Only 1.6% of respondents were at ñLCE/SRP/PMR or belowò. Taking account of the **personal monthly income**, the respondents in the ñRM1,000 to RM2,999ò were around 40.3%, followed by ñBelow RM1,000ò (26.3%), ñRM5,000 to RM6,999ò (19.8%), ñRM7,000 and aboveò (7.4%), and ñRM5,000 to RM6,999ò (6.2%).

6.4 Preliminary Data Analysis

In this sub-section, the following analysis will be conducted: exploratory factor analysis, items analysis, and coefficient alpha and reliability. Each of analysis results will be presented in the following sub-sections.

6.4.1 Exploratory Factor Analysis (EFA)

The reason for performing factor analysis is to determine whether the data can be condensed or summarised into a smaller set of factors (Malhotra, 2004; Hair, et al., 2006). In order to determine the underlying dimensions of the multi-item measurement

nalysis was performed separately on dependent variable (complaint action), independent variable (perception of business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, number of prior experiences of dissatisfaction, internal locus of control, external locus of control and perceived value of complaint), mediating variable (complaint intention) and moderating variable (difficulty of making a complaint and importance of products) in the present study.

To justify the application of factor analysis in the current study, the Kaiser-Meyer-Olkin (KMO) index, ranging from 0.5 to 1 as the measure of sampling adequacy, was used to examine the appropriateness of factor analysis. The null hypothesis of the Bartlettôs test of sphericity assumes that variables are uncorrelated (Hair, et al., 2006). In terms of sample size, Hair, et al. (2006) suggest that the minimum sample required for factor analysis is ten times (at least five times) as many observations as there are variables to be analysed. In the current study, the total number of items to measure all the variables is 70, i.e. independent variables (45 items), dependent variable (5 items), mediating variable (10 items) and moderating variables (10 items), and ten times (five times) 70 equals 700 (at least 350). The sample size of this study at 834 is more than sufficient.

Therefore, the dimensions of the scale were examined by factor analysing the items using the principal components analysis with Varimax rotation. Minimum eigenvalues of 1.0 helped determine the number of factors or dimensions for each scale (Hair, et al.,

oadings of 0.30 to 0.40 are considered acceptable; however factor loadings greater than 0.50 are generally necessary for practical significance (Hair, et al., 2006). Hence, the items were only retained when the absolute size of their factor loading exceeded 0.50.

a. Factor Analysis of the Independent Variables

In terms of the independent variables, the principal component factor analysis was conducted to determine the structures. Table 6.3 presents the results of KMO, Bartlettôs test of Sphericity and other statistics. The KMO value of 0.822 signified that factor analysis was appropriate to be used to analyse the dimensionality of the independent variables. Based on the p value of Bartlettôs Test of Sphericity, reported at 0.000, the null hypothesis was rejected and, thus, all items on each scale were correlated.

Table 7.3 also presents the factor loadings of the significant items on these ten factors (for full results refer to **Appendix F**). The principal components analysis performed extracted ten factors having eigenvalues greater than 1.0. These factors (F1 to F10), represented 45 of the items and account for 61.03% of the total variance. It is common to consider a solution of about 60% as satisfactory in social sciences research (Hair, et al., 2006). The factor loadings of the items statements on their posited underlying constructs were all higher than 0.5, and the factor loadings of the item on other constructs (i.e., cross-loadings) were all well below 0.5. This further supports the unidimensionality of each construct (Anderson and Gerbing, 1982).

), Bartlett's test and Rotated Factor Matrix [a] for Independent Variable

17269.820, d.f. = 990, p = 0.000; **Kaiser-Meyer-Olkin** (KMO) Measure of Sampling Adequacy = 0.825

Items	Factors									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
PB1: Store employees are often quite unpleasant to customers who return unsatisfactory products.										
PB2: Firms are usually willing to replace faulty products.		0.757								
PB3: Most firms are willing to replace faulty products.		0.707								
PB4: Firms do not take notice of complaints made.		0.561								
PB5: Most businesses will cheat you if you don't stand up for your rights.										0.701
PB6: Firms are usually willing to provide refunds for faulty products.		0.702								
PB7: Advertisements usually present a true picture of the products.										
PB8: Firms take a long time to respond to a complaint.										0.743
PB9: Most stores say they want their customers satisfied, but they are not willing to stand behind their word.										0.715
PB10: Firms are willing to provide repairs for faulty products.		0.585								
A1: It doesn't bother me much if I don't complain about an unsatisfactory product.						0.665				
A2: It sometimes feels good to get my dissatisfaction and frustration with the product off my chest by complaining.						0.738				
A3: I often complain when I am dissatisfied with business or products because I feel it is my duty to do so.						0.712				
A4: People are bound to end up with unsatisfactory products once in a while, so they should not complain about them.						0.725				
A5: I don't like people who complain to stores, because usually their complaints are unreasonable.						0.694				

tlett's test and Rotated Factor Matrix [a] for Independent Variable (Continue)

Items	Factors									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
S1: By complaining about defective products, I may prevent other consumers from experiencing the same problem.								0.808		
S2: People have a responsibility to tell stores when a product they purchased was defective.								0.851		
S3: By making complaints about unsatisfactory products to stores, in the long run, the quality of products will improve.								0.807		
PL1: If you complain about your dissatisfaction to the retailer, the retailer will take appropriate action (e.g. exchange, refund, apology, reward).					0.892					
PL2: If you complain about your dissatisfaction to the retailer, the retailer will take appropriate action and will give better service in the future.					0.934					
PL3: If you complain about your dissatisfaction to the retailer, the retailer will give better service in the future and this will also benefit other consumers.					0.904					
K1: Consumer Rights	0.798									
K2: Consumer Protection Acts	0.874									
K3: Ministry of Domestic Trade and Consumer Affairs	0.874									
K4: Tribunal for Consumer Claims Malaysia	0.851									
K5: Federation of Malaysian Consumer Associations (FOMCA)	0.867									
K6: Consumer Associations	0.854									
K7: National Consumer Complaints Centre	0.837									

tlett's test and Rotated Factor Matrix [a] for Independent Variable (Continue)

	Factors									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
IL1: If it happens that I buy an unsatisfactory item, I try to do something about it.				0.574						
IL2: Usually, when I plan to buy something I can find the best deal.				0.706						
IL3: Making good buys depends on how hard I look.				0.718						
IL4: Being able to wait for sales and looking for information about the item has really helped me get good deals.				0.680						
IL5: I have often found it useful to complain about unsatisfactory products.				0.590						
IL6: Usually I make an effort to ensure that I don't end up with a low quality product when I go shopping				0.592						
EL1: Sometimes when I don't know much about a product, I might as well decide which brand to buy just by flipping a coin.							0.664			
EL2: There have been times when I just could not resist the pressure of a good salesperson.									0.710	
EL3: Itôs hard for me to know whether or not something is a good buy.									0.536	
EL4: To me, there's not much point in trying too hard to discover differences in quality between products.							0.598			
EL5: I find that there's no point to shop around because prices are nearly the same everywhere.							0.626			
EL6: When I buy something that is unsatisfactory, I usually keep it because complaining doesn't help.							0.642			
EL7: Sometimes I can't understand how I end up buying the kind of things that I do.									0.765	
EL8: I am vulnerable to rip-offs, no matter how hard I try to prevent them.									0.636	

tlett's test and Rotated Factor Matrix [a] for Independent Variable (Continue)

	Factors									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
PV1: If you believe the retailer will take appropriate action (e.g. exchange, refund, apology, reward), will you complain about your dissatisfaction to the retailer?			0.933							
PV2: If you believe the retailer will take appropriate action and give better service in the future, will you complain about your dissatisfaction to the retailer?			0.958							
PV3: If you believe the retailer will give better service in the future and this will also benefit other consumers, will you complain about your dissatisfaction to the retailer?			0.945							
Eigenvalues	5.899	4.206	3.452	2.919	2.826	2.277	1.841	1.609	1.320	1.115
Total Variance Explained (%)	13.109	9.346	7.671	6.487	6.281	5.061	4.091	3.575	2.934	2.477
Cumulative Variance Explained (%)	13.109	22.455	30.126	36.613	42.894	47.955	52.045	55.620	58.555	61.032

Note: [a] Rotated Factor Matrix only shows the factor loading higher than 0.5, factor loadings less than 0.4 are not shown in the matrix.

to belong to the appropriate domains for the independent lge of consumer rights and consumer agencies) comprised seven items (K1 to K7), explaining 13.11% of the total variance. As for perceived value of complaint component, three items (i.e. PV1 to PV3) were loaded on Factor 3, explaining 7.67 % of the total variance. Factor 4 (internal locus of control) consisted of six items (IL1 to IL6), explaining 6.49% of the total variance. While Factor 5, indicating probability of successful complaint, had three items (PL1, PL2 and PL3); Factor 6, consisting the attitude towards complaining items, comprised five items (A1 to A5); and Factor 8, consisted of societal benefits items, had three items (SB1 to SB3), explaining 6.29%, 5.06% and 3.58% of the total variance, respectively.

In terms of perception on business practices and responsiveness to complaint, two factors were loaded which were Factor 2 and Factor 10. Under the Factor 2, five items (PB2, PB3, PB4, PB6 and PB10) were found as the factor loadings were higher than 0.5. Three items (PB6, PB8 and PB9) were under Factor 10 since the factor loadings were higher than 0.5. These two factors (Factor 2 and Factor 10) were explained the total variance as 9.35% and 2.48% respectively. Two items were dropped from the perception on business practices and responsiveness to complaint construct due to the factor loadings were less than 0.5. Referring to the external locus of control construct, there were two factors under this construct, such as Factor 7 and Factor 9. Four items (EL1, EL4, EL5 and EL6) were found under the Factor 7, and another four items (EL2, EL3, El7 and EL8) were under Factor 9 due to accepted factor loadings (higher than 0.5). The total variance of these two factors (Factor 7 and Factor 9) explained as 4.01% and

No study has produced empirical evidence to argue that these two constructs should be modelled as disaggregated multi-component measures (the perception of business practices and responsiveness to complaint constructs and the external locus of control construct). In order to provide more convincing empirical support for the disaggregated multi-component structures, alternative model comparison was conducted and discriminant validity was also tested using confirmatory factor analysis (CFA) before these two constructs were modelled as disaggregated multi-components structure in the final structure model. The current factor analysis results could not be compared with past studies as most studies that examined complaint behaviour either did not conduct or report exploratory factor analysis.

b. Factor Analysis of the Mediating Variable

Referring to the mediating variable, the 10-item complaint intention scale was factor analysed to identify the dimensionality. Principal component factor with Varimax rotation method was used to assess the factor loadings of each item on different complaint intention factors. Table 6.4 presents the results of KMO, Bartlettôs test of Sphericity and other factor analysis statistics. The KMO value of 0.782 expressed that factor analysis was appropriate to be used to analyse the dimensionality of the complaint intention factors. As the p value of Bartlettôs Test of Sphericity was reported as 0.000, the null hypothesis was rejected and, thus, all items on each scale were correlated.

s test and Rotated Factor Matrix for Mediating Variable

Bartlett's Test of Sphericity: Approx. Chi-Square = 2410.892, d.f. = 45, p = 0.000
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy = 0.782

Items	Factors		
	F1	F2	F3
CI1: Forget about the incident and do nothing?	0.078	0.001	**0.767**
CI2: Definitely complain to the store/company manager on your next trip?	0.074	0.143	**0.786**
CI3: Go back or call the shop/company immediately and ask them to take care of your problem.	0.262	0.126	**0.723**
CI4: Decide not to use that shop/company again?	-0.004	**0.811**	0.079
CI5: Speak to your friends and relatives about your bad experience?	0.109	**0.820**	0.140
CI6: Convince your friends and relatives not to use that shop/company?	0.143	**0.855**	0.046
CI7: Complain to a consumer agency and ask them to make that shop/company take care of your problem.	**0.632**	0.163	0.248
CI8: Write a letter to the local newspaper about your bad experience?	**0.790**	0.039	0.064
CI9: Report to the consumer agency so that they can warn other consumers?	**0.841**	0.100	0.110
CI10: Take some legal action against the shop/manufacturer/ company.	**0.816**	0.009	0.088
Eigenvalues	3.321	1.810	1.356
Total Variance Explained (%)	32.206	18.098	13.557
Cumulative Variance Explained (%)	33.206	51.304	64.861

The rotated factor matrix in Table 7.4 shows that three factors can be identified to explain the underlying characteristics of complaint intention. The principal components analysis performed extracted three factors having eigenvalues greater than 1.0. Together, the three factors accounted for approximately 64.86% of the variance in responses. The suggestion from Hair, et al. (2006) is that it is common to consider a solution of about 60% as satisfactory in social science research. The factor loadings of the items statements on their posited underlying constructs were only reported if higher than 0.5.

Overall, each item appeared to belong to the appropriate domains for the complaint intention as the mediating variable. Factor 1 (CI7 to CI10), third party complaint intention which was range from 0.632 to 0.841, comprised four items, explaining

Three items (CI4, CI5 and CI6) (range from 0.811 to 0.855) on was loaded on Factor 2, explaining 18.10% of the total variance. While Factor 3 (range from 0.723 to 0.786), indicating voice complaint intention, had three items (CI1, CI2 and CI3), were explaining 13.56% of the total variance.

The present factor analysis results were consistent with the argument of Singh (1989), who suggests that the complaint intention construct should comprise three specific components (voice complaint intention, private complaint intention and third party complaint intention), which should be modelled as disaggregated multi-components measure. The study from Singh (1989) has produced empirical evidence to support the discriminant validity on the complaint intention. In order to provide more convincing empirical support for the disaggregated multi-components structure for complaint intention, alternative models comparison was conducted and discriminant validity was also tested using confirmatory factor analysis (CFA) before this construct was modelled as disaggregated multi-components structure in the final structure model.

c. Factor Analysis of the Moderating Variables

Lastly, a principal component factor analysis was also conducted to determine the dimensionality of the difficulty of making a complaint and the importance of product constructs (see Table 6.5). The Bartlettôs test of Sphericity was significant (p = 0.000), the KMO value of 0.674 expressed that factor analysis was appropriate to be used to analyse the dimensionality.

ett's test and Rotated Factor Matrix for Moderating Variable

Bartlett's Test of Sphericity: Approx. Chi-Square = 977.806, d.f. = 10, p = 0.000 **Kaiser-Meyer-Olkin** (KMO) Measure of Sampling Adequacy = 0.674		
Items	**Factors**	
	F1	**F2**
D1: Making complaint would take a lot of time.	**0.681**	0.114
D2: Making complaint would disrupt family routines.	**0.745**	0.079
D3: Making complaint would require substantial out-of-product expenses.	**0.770**	0.101
D4: Making complaint would require a lot of effort to find out whom to contact.	**0.718**	0.081
D5: My health is poor and I am unable to go to service/product provider and/or any "public" agency to make complaint.	**0.580**	-0.090
D6: Making complaint would be a hassle, which I don't need.	**0.638**	-0.040
IP1: The higher the price of the product, the more likely I am to complain.	0.100	**0.722**
IP2: If the product is meant to be used for a long time, I am more likely to complain if it is faulty.	0.024	**0.811**
IP3: If the faulty product is one which is often seen by my friends. I am more likely to complain.	0.019	**0.777**
IP4: The more frequently I have to use the product, the more likely I am to complain if it is faulty.	0.006	**0.793**
Eigenvalues	3.041	2.297
Total Variance Explained (%)	30.413	22.966
Cumulative Variance Explained (%)	30.413	53.379

The rotated factor matrix in Table 6.5 shows that two factors can be identified to explain the underlying characteristics of moderating variables. The principal components analysis performed extracted two factors having eigenvalues greater than 1.0, accounting for 53.38% of the total variance. The factor loading of the item statements on their posited bolded constructs were only reported as being higher than 0.5. The factor loading for the difficulty of making a complaint (six items) were found to range from 0.58 to 0.77 in Factor 1; the factor loading of all four items (IP1 to IP4) for the importance of the product were found to range from 0.722 to 0.811 in Factor 2. These two factors explained 30.41% and 22.97% of the total variance, respectively. The present factor analysis results could not be compared with past research as most

nt behaviour did not conduct or report exploratory factor

d. Factor Analysis of the Dependent Variable: Complaint Action

As mentioned in the earlier chapters, complaint action is the dependent variable. This variable was measured by Guttman scale which was adapted from the study by Singh (1988). Complaint action as a Guttman scale can be applied to reflect increasing ñintensityò of possible complaints actions (Singh, 1988). Therefore, complaint action in this study measured by asking respondents to recall their various complaint actions range from ñwarned family and friendsò to ñtook some legal action (Tribunal for Consumer Claims Malaysia)ò.

When evaluating Guttman scale, the Coefficient of Reproducibility (CR[2]) and the Coefficient of Scalability (CS[3]) are the two important indexes for examining construct is unidimensional. Acceptable ranges for CR and CS are 0.90 ï 1.0 and 0.7 ï 1.0, respectively (White and Saltz, 1974; Guttman, 1950). According to the formula, the result of CR and CS were 0.98 and 0.90 respectively in the current study. Compare with the previous studies, this result was consistent with the studies by Richins (1982) and Bearden and Teel (1983). Thus, the result indicated that cumulative and unidimensial Guttman scales exist in complaint action, and five items are homogeneous and relate to explain the complaint action.

[2] CR is calculated by dividing the total number of errors (responses not in predicted pattern) by the total number of responses, then subtracting that number from 1. (White and Saltz, 1974)

[3] CS is calculated by dividing CR minus the minimum reproducibility (the total number of responses scored right or wrong, whichever is larger, divided by the total number of responses) by 1 minus the minimum reproducibility. (White and Saltz, 1974)

vides unidimensilaity between the items, it is then required to test the consistency of this relationship in the further test (Ekinici and Riley, 1999). Green, Lissitz and Mulaik, (1977) and Winstead (1997) suggest that some of analytical techniques, such as factor analysis, Coefficient Alpha, or a variety of inter-correctional analysis, establish scale unidimensionality in marketing. In exploratory factor analysis, a principal component factor analysis was conducted to determine the structure of the complaint action. Table 7.6 presents the results of the Kaiser-Meyer-Olkin (KMO), Bartlettôs test of sphericity and other factor analysis statistics. The KMO value of 0.674 signified that factor analysis was appropriate to be used to analyse the dimensionality of complaint action constructs. As the p value of Bartlettôs test of Sphericity was reported at 0.000, the null hypothesis was rejected and, thus, all items on each scale were correlated.

Table 6.6: KMO, Bartlett's test and Rotated Factor Matrix for Dependent Variable

Bartlett's Test of Sphericity: Approx. Chi-Square = 977.806, d.f. = 10, p = 0.000 **Kaiser-Meyer-Olkin** (KMO) Measure of Sampling Adequacy = 0.674		
Items	**Factors**	
	F1	**F2**
CA1: Warned family and friends.	-0.084	**0.850**
CA2: Returned product for rework and/or complained to management	0.380	**0.663**
CA3: Contacted manufacturer/shop/company.	**0.743**	0.364
CA4: Contacted state office of consumer affairs, National Consumer Complaints Centre or private consumer agency.	**0.876**	0.138
CA5: Took some legal action (Tribunal for Consumer Claims Malaysia).	**0.783**	-0.083
Eigenvalues	2.337	1.068
Total Variance Explained (%)	46.732	21.351
Cumulative Variance Explained (%)	46.732	68.083

Factor loadings are also presented in Table 6.6. The principal components analysis performed extracted two factors having eigenvalues greater than 1.0. These two factors

ounted for 68.08% of the total variance. It is common to 60% as satisfactory in social sciences research (Hair, et al., 2006). The bolded factor loadings of the items were all higher than the value of 0.5, and factor loadings of the items on other constructs (i.e., cross-loading) were all well below 0.5.

Each item appeared to belong to the appropriate domains of complaint actions. That is, Factor 1 comprised three items (CA3 to CA5), explaining 46.73% of the total variance. Two items of Factor 2 representing complaint actions (CA1 and CA2) explained 21.35% of the total variance. The present factor analysis results could not be compared with past study as most studies that examined complaint behaviour either did not conduct or report exploratory factor analysis.

6.4.2 Scale Reliability

The internal consistency reliabilities of the scale were next assessed after the exploratory factor analysis. Cronbachôs alpha coefficient, which is the most popular indicator of internal consistency, was employed in the current study to assess the reliabilities of the measurement scales adopted (Malhotra, 2004). Reliability is defined as the degree to which the observed variable measures the ñtrueò value and is ñerror-freeò; it is the opposite of measurement error (Hair, et al., 2006). Generally, an acceptable level of coefficient alpha to retain an item in a scale is at least 0.70 (Nunnally, 1978; Hair, et al., 2006). Robinson and Wrightsman (1991) argue that researchers often use 0.60 for emerging construct scales and 0.70 for established scales. The present study

ation of Robinson and Wrightsman (1991) when assessing The results of the internal consistency reliability tests for the dependent variable, independent variables, mediating variable and moderating variables are shown in Table 6.7.

Table 6.7: Internal Consistency Reliability for Each Construct

Variables	Number of Items	Cronbach's Alpha
Perception of Business Practice and Responsiveness to Complaint	**8**	**0.751**
- *Perception of Complaint Responsiveness*	*5*	*0.752*
- *Perception of Business Practices*	*3*	*0.651*
Attitude towards Complaining	**5**	**0.760**
Societal Benefits	**3**	**0.804**
Probability of Successful Complaint	**3**	**0.931**
Knowledge of Consumer Rights and Consumer Agency	**7**	**0.940**
Internal Locus of Control	**6**	**0.747**
External Locus of Control	**8**	**0.749**
- *No Confidence*	*4*	*0.655*
- *External Characteristics*	*4*	*0.685*
Perceived Value of Complaint	**3**	**0.952**
Complaint Intention	**10**	**0.773**
- *Voice Complaint Intention*	*3*	*0.673*
- *Private Complaint Intention*	*3*	*0.787*
- *Third Party Complaint Intention*	*4*	*0.796*
Difficulty of Making a Complaint	**6**	**0.781**
Importance of Products	**4**	**0.778**
Complaint Action	5	0.704
- *Factor 1*	**3**	**0.760**
- *Factor 2**	2	0.251*

*: Factor or Items were dropped from the factor based on the scale reliability

For the **perception of business practice and responsiveness to complaint** construct, two factors were under this construct ï the perception of complaint responsiveness (5 items) and the perception of business practices (3 items) ï the reliability test results were 0.752 and 0.651, respectively. The overall result of the reliability test of perception of business practice and responsiveness to complaint construct (8 items) was 0.751. The coefficient alpha values were in the acceptable level of reliability for preliminary

nnally (1978). The overall results of the reliability score for practice and responsiveness to complaint construct used in this study was similar to the reliability score obtained by the previous studies, such as 0.76 in the report from Phau and Sari (2003).

In terms of **attitude towards complaining**, 5 items were included in this construct, the coefficient alpha value was 0.760; it was in the acceptable level of reliability for preliminary research by Nunnally (1978). The result of the reliability scores for attitude towards complaining construct used in the current study was higher than the score of 0.71 in Kim, Kim, Im and Shin (2003) study, 0.70 in Phau and Sari (2004) and the adopted study from Singh (1990) with an internal consistency reliability of 0.67. Therefore, the current study has good reliability for this construct compared with previous studies.

Referring to the **societal benefits**, the overall result of the reliability test was 0.804 with three items. Thus, the coefficient alpha value was in the acceptable level above 0.70, which is the cut-off point of reliability score recommended by Nunnally (1978) and Hair, et al. (2006). Comparing the result of the reliability test score with previous studies, such as 0.66 in a study by Singh (1990) and 0.471 in the study by Oh (2003), the present study produced a better Cronbachôs coefficient Alpha on this construct.

In terms of **probability of successful complaint**, 3 items were used in this construct as similar to previous studies (Keng, Richmond and Han, 1995). The reliability test was

much higher than the cut-off point of internal consistency of the reliability score for the probability of successful complaint was higher than the previous studies, i.e. 0.87 in the study by Kim, Kim, Im and Shin (2003) and 0.70 in the study by Singh (1989).

Regarding the **knowledge of consumer rights and consumer agencies**, the scale displayed a high degree of reliability with a Cronbachôs alpha coefficient of 0.940 with 7 items, exceeding the cut-off point of reliability recommended by Hair, et al. (2006). The result of the current study could not be compared with past studies as no previous studies had been done on these elements of knowledge of consumer rights and consumer agencies in complaint behaviour.

Referring to the **internal locus of control** construct, it was found that the Cronbachôs coefficient alpha was 0.747, which was higher than the 0.7 cut-off point recommended by Hair, et al. (2006). The results of the present study could not be compared with previous studies as no past studies had been done on these elements of internal locus of control in complaint behaviour.

In terms of the **external locus of control** construct, the result of the reliability test was found to be 0.749, exceeding the threshold of 0.7. There were two sub-factors under this construct, which were the no confidence variable (4 items) and the external characteristics variable (4 items). The reliability test results were 0.655 and 0.682, respectively, still higher than the minimum acceptable level of reliability for preliminary

Robinson and Wrightsman (1991). The results of this compared with past studies as no previous studies had been done on these elements of this construct in the complaint behaviour domain.

Regarding the **perceived value of complaint**, the Cronbachôs Coefficient alpha was 0.952, much higher than the acceptable level of 0.7 for preliminary research as suggested by Hair, et al. (2006), and Nunnally (1978). The result of the reliability test for the perceived value of complaint construct used in the current study was higher than previous studies, such as 0.87 in the Singapore research of Kim, Kim, Im and Shin (2003) and 0.87 in a research by Singh (1989).

Referring to the **complaint intention** construct as the mediating variable, the results of factor analysis were consistent with the findings by Singh (1989), which is explained by voice complaint intention (3 items), private complaint intention (3 items) and third party complaint intention (4 items). The overall result of Cronbachôs coefficient alpha for complaint intention was 0.773, exceeding 0.7 as the cut-off point of reliability. The reliability test results of voice complaint intention, private complaint intention and third party complaint intention were 0.673, 0.787 and 0.796, respectively, thereby exceeding 0.6 as the minimum acceptable level of reliability for preliminary research as suggested by Robinson and Wrightsman (1991). Comparing the overall reliability test score for the complaint intention (0.773), the current study was lower than the reliability test result (0.83) from Singh (1988). The internal consistency value on dimensions for voice complaint intention (0.673), private complaint intention (0.787) and third party

in this study were also lower than the reliability test by 0.75 (voice complaint intention), 0.77 (private complaint intention) and 0.84 (third party complaint intention).

Regarding the **difficulty of making a complaint** construct, the Cronbachôs coefficient Alpha was 0.781, exceeding 0.7 as the acceptable level of reliability for preliminary research as suggested by Hair, et al. (2006), and Nunnally (1978). The result of the reliability score for the difficulty of making a complaint construct used in this report was somewhat higher than the reliability score obtained from Oh (2003), which was 0.728.

In terms of the **importance of product**, the result of the internal consistency reliability was 0.778, exceeding 0.7 as the acceptable level of the reliability for preliminary research as suggested by Hair, et al. (2006), and Nunnally (1978). The result of the reliability score for the importance of product construct used in this report was somewhat higher than the reliability score obtained from Phau and Sari (2002), which was 0.71.

In terms of the dependent variable, which was **complaint action**, the resulting reliability test of five items (Factor 1 and Factor 2) was 0.704, exceeding the cut-off point of reliability recommended by Nunnally (1978). For the separate groups of Factor 1 and Factor 2, the reliability of Factor 1 (3 items) was 0.760 which was exceeding the cut-off point. However for the Factor 2 (2 items), the result of reliability was 0.251, it

ge of the reliability cut-off point. The Factor 2 was dropped ty cut-off point recommended by Nunnally (1978). Thus, factor 1 with 3 items used to explain the complaint action construct. The result of the reliability test could not be compared with past studies since no previous studies had been done on these elements of complaint action construct.

According to the above results of the exploratory factor analysis and scale reliability on the independent variables, mediating variables, moderating variables, and dependent variable, four items (PB1, PB7, CA1 and CA2) were dropped. Thus, the final items which were used in subsequent analysis are presented in Table 6.8.

Table 6.8: Final Factors/Variables used for Subsequent Analysis

Factors/Variables	Items
Independent Variables	
Perception of Business Practice and Responsiveness to Complaint	
- Perception of Complaint Responsiveness	PB2: Firms are usually willing to replace faulty products.
	PB3: Most firms are willing to replace faulty products.
	PB4: Firms do not take notice of complaints made.
	PB6: Firms are usually willing to provide refunds for faulty products.
	PB10: Firms are willing to provide repairs for faulty products.
- Perception of Business Practices	PB5: Most businesses will cheat you if you don't stand up for your rights.
	PB8: Firms take a long time to respond to a complaint.
	PB9: Most stores say they want their customers satisfied, but they are not willing to stand behind their word.
Attitude Towards Complaining	A1: It doesn't bother me much if I don't complain about an unsatisfactory product.
	A2: It sometimes feels good to get my dissatisfaction and frustration with the product off my chest by complaining.
	A3: I often complain when I am dissatisfied with business or products because I feel it is my duty to do so.
	A4: People are bound to end up with unsatisfactory products once in a while, so they should not complain about them.

	A5: I don't like people who complain to stores, because usually their complaints are unreasonable.
	S1: By complaining about defective products, I may prevent other consumers from experiencing the same problem.
	S2: People have a responsibility to tell stores when a product they purchased was defective.
	S3: By making complaints about unsatisfactory products to stores, in the long run, the quality of products will improve.
Probability of Successful Complaint	PL1: If you complain about your dissatisfaction to the retailer, the retailer will take appropriate action (e.g. exchange, refund, apology, reward).
	PL2: If you complain about your dissatisfaction to the retailer, the retailer will take appropriate action and will give better service in the future.
	PL3: If you complain about your dissatisfaction to the retailer, the retailer will give better service in the future and this will also benefit other consumers.
Knowledge of Consumer Rights and Consumer Agency	K1: Consumer Rights
	K2: Consumer Protection Acts
	K3: Ministry of Domestic Trade and Consumer Affairs
	K4: Tribunal for Consumer Claims Malaysia
	K5: Federation of Malaysian Consumer Associations (FOMCA)
	K6: Consumer Associations
	K7: National Consumer Complaints Centre
Internal Locus of Control	IL1: If it happens that I buy an unsatisfactory item, I try to do something about it.
	IL2: Usually, when I plan to buy something I can find the best deal.
	IL3: Making good buys depends on how hard I look.
	IL4: Being able to wait for sales and looking for information about the item has really helped me get good deals.
	IL5: I have often found it useful to complain about unsatisfactory products.
	IL6: Usually I make an effort to ensure that I don't end up with a low quality product when I go shopping
External Locus of Control	
- No Confidence	EL1: Sometimes when I don't know much about a product, I might as well decide which brand to buy just by flipping a coin.
	EL4: To me, there's not much point in trying too hard to discover differences in quality between products.
	EL5: I find that there's no point to shop around because prices are nearly the same everywhere.
	EL6: When I buy something unsatisfactory, I usually keep it because complaining doesn't help.
- External Characteristics	EL2: There have been times when I just could not resist the pressure of a good salesperson.

	EL3: Itôs hard for me to know whether or not something is a good buy.
	EL7: Sometimes I can't understand how I end up buying the kinds of things that I do.
	EL8: I am vulnerable to rip-offs, no matter how hard I try to prevent them.
Perceived Value of Complaint	PV1: If you believe the retailer will take appropriate action (e.g. exchange, refund, apology, reward), will you complain about your dissatisfaction to the retailer?
	PV2: If you believe the retailer will take appropriate action and give better service in the future, will you complain about your dissatisfaction to the retailer?
	PV3: If you believe the retailer will give better service in the future and this will also benefit other consumers, will you complain about your dissatisfaction to the retailer?
Mediating Variable	
Complaint Intention	
Voice Complaint Intention	CI1: Forget about the incident and do nothing?
	CI2: Definitely complain to the store/company manager on your next trip?
	CI3: Go back or call the shop/company immediately and ask them to take care of your problem.
Private Complaint Intention	CI4: Decide not to use that shop/company again?
	CI5: Speak to your friends and relatives about your bad experience?
	CI6: Convince your friends and relatives not to use that shop/company?
Third Party Complaint Intention	CI7: Complain to a consumer agency and ask them to make that shop/company take care of your problem.
	CI8: Write a letter to the local newspaper about your bad experience?
	CI9: Report to the consumer agency so that they can warn other consumers?
	CI10: Take some legal action against the shop/manufacturer/ company.
Moderating Variables	
Difficulty of Making a Complaint	D1: Making complaint would take a lot of time.
	D2: Making complaint would disrupt family routines.
	D3: Making complaint would require substantial out-of-product expenses.
	D4: Making complaint would require a lot of effort to find out whom to contact.
	D5: My health is poor and I am unable to go to service/product provider and/or any "public" agency to making complaint.
	D6: Making complaint would be a hassle, which I don't need.

	IP1: The higher the price of the product, the more likely I am to complain.
	IP2: If the product is meant to be used for a long time, I am more likely to complain if it is faulty.
	IP3: If the faulty product is one which is often seen by my friends. I am more likely to complain.
	IP4: The more frequently I have to use the product, the more likely I am to complain if it is faulty.
Dependent Variable	
Complaint Action	CA3: Contacted manufacturer/shop/company
	CA4: Contacted state office of consumer affairs, National Consumer Complaints Centre or private consumer agency.
	CA5: Took some legal action (Tribunal for Consumer Claims Malaysia).

6.5 Demographic Variables and Complaint Actions

This section examines the relationship between demographic differences and study variables. Descriptive statistical procedures were used to examine possible significant group differences in the demographic variables and study variables for the proposed integrated model constructs.

6.5.1 Demographic Variables and Study Variables

This section reports the relationship between demographic variables and study variables. in each construct (except for complaint action as it was presented in the previous section). Descriptive statistical procedures were used to examine possible significant group differences in each construct based on gender, ethnicity, occupation, age, marital status, education and personal monthly income. Independent sample t-test was used for examining the gender differences for all constructs. One-way analysis of variance was utilised to determine the significant differences in terms of ethnicity, occupation, age, marital status, education and personal monthly income with respect to their responses

significant differences were found, Post Hoc Test (Tukey) e particular groups that differed significantly within a significant overall one-way analysis of variance.

a. ***Gender and Study Variables***

The relationship between gender and the main constructs were explored by testing the significance of the mean differences between males and females. The results in Table 6.9 show that the mean differences between males and females were significant for the knowledge of consumer rights and consumer agencies, the internal locus of control, the complaint intention and the complaint action.

In terms of the **knowledge of consumer rights and consumer agencies**, the mean for males (4.14) showed higher than the mean for females (3.93). It indicated that males had more knowledge and were more aware about their rights and consumer agencies than females (see Table 6.9). This result contrasts with the studies by Agbonifoh and Edoreh (1986), and Zussman (1983) which found no significant differences between genders in the level of awareness of rights. Thus, males were more aware about their rights than female in the current study.

In terms of **internal locus of control**, the mean for males (5.36) was higher than the mean for females (5.22) (see Table 7.9). This result indicated that male respondents had a greater internal locus of control orientation than females; this meant that males were more agreeable to this statement than females. However, no previous studies had done

p between the internal locus of control and gender.

Table 6.9: Gender Differences with Respect to each Main Construct

Constructs	Mean [a]			
	Male	Female	t-value	Sig[b].
Perception of Business Practices and Responsiveness to Complaint	3.62	3.56	0.794	0.427
Attitude towards Complaining	4.38	4.46	-1.028	0.304
Social Benefits	5.74	5.82	-1.215	0.225
Probability of Successful Complaint	4.96	4.94	0.295	0.768
Knowledge of Consumer Rights and Consumer Agencies	4.14	3.93	2.052	0.040*
Number of Prior Experiences of Dissatisfaction	2.40	2.15	0.984	0.325
Internal Locus of Control	5.36	5.22	2.164	0.031*
External Locus of Control	3.60	3.67	-1.005	0.315
Perceived Value of Complaint	4.97	5.18	-1.637	0.102
Complaint Intention	4.87	4.74	2.144	0.032*
Difficulty of Making a Complaining	4.01	4.02	-0.201	0.841
Importance of Product	5.21	5.21	-0.057	0.954
Complaint Action	3.18	2.86	2.650	0.008*

Note: [a] : Higher scores represent greater agreement with the attributes;

[b] : Significant level of T-test;

*: The mean difference is significant at p Ò0.05

The current study also found significant gender differences in the **complaint intention**, whereby the male respondents (4.87) were more likely to make complaints than females (4.74) (see Table 6.9). No study had been done on examining the relationship between complaint intention and gender. Therefore, there was no study to compare the finding of this study that male respondents have a greater propensity to make complaining than female respondents.

Regarding to the **complaint action**, the mean differences of gender were found significant. The result indicated that male respondents (3.18) preferred to take complaint

nts (2.86) (see Table 6.9). This result was different with the and Han (1995), Huefner and Hunt (2000) and Kolodinsky (1985), they found that females are more likely to seek redress than males. However, this finding was consistent with the previous studies by Hogarth, English and Sharma (2001), Tipper (1997), and Reiboldt (2003). Compare with the previous studies, it is reasonable to obtain the result that male respondents were more likely to take complaint action than female respondents in the current study.

Nine out of thirteen were non-significant relationship between study variables and gender, this results indicated that male and female respondents had the same perception respect to the perception of business practices and responsiveness to complaint, the attitude towards complaining, the social benefits, the probability of successful complaint, the number of prior experiences of dissatisfaction, the external locus of control, the perceived value of complaint, the difficulty of making a complaining, and the importance of product.

b. ***Ethnicity and Study Variables***

Although many researchers have looked at race or ethnic impact on complaint behaviour, they focused on the ethnic group of Asians and non-Asians in the USA (Foxman and Raven, 1994), Chinese and non Chinese in Singapore (Keng, Richmond and Han, 1995), and so on. There has been no empirical study done on the three major ethnic group differences in Malaysia. An examination of ethnic group differences in each construct in the present study reveals that ethnic differences were found in the

ices and responsiveness to complaint, the attitude towards successful complaint, knowledge of consumer rights and consumer agencies, internal locus of control, complaint intention, difficulty of making a complaint and complaint action (see Table 6.10).

Table 6.10: Ethnicity Differences with Respect to each Main Construct

Constructs	Mean [a]			F	Sig[b]	Group Comparison
	Malay	Chinese	Indian			(Tukey)
Perception of Business Practices and Responsiveness to Complaint	3.71	3.44	3.57	7.364	0.010*	Chinese<Malay
Attitude towards Complaining	4.53	4.31	4.33	3.345	0.036*	Chinese<Malay
Societal Benefits	5.85	5.69	5.78	2.323	0.099	Not Significant
Probability of Successful Complaint	5.14	4.75	4.85	5.985	0.003*	Chinese<Malay
Knowledge of Consumer Rights and Consumer Agencies	4.28	3.77	3.93	10.452	0.000*	Chinese<Malay
Number of Prior Experiences of Dissatisfaction	2.23	2.29	2.37	0.091	0.913	Not Significant
Internal Locus of Control	5.43	5.17	5.17	8.625	0.000*	Chinese<Malay Indian<Malay
External Locus of Control	3.65	3.59	3.69	0.517	0.597	Not Significant
Perceived Value of Complaint	5.16	4.99	5.01	0.868	0.420	Not Significant
Complaint Intention	4.92	4.71	4.68	7.002	0.001*	Chinese<Malay Indian<Malay
Difficulty of Making a Complaining	3.97	4.15	3.83	3.278	0.038*	Indian<Chinese
Importance of Product	5.22	5.25	5.06	1.277	0.280	Not Significant
Complaint Action	3.29	2.70	2.92	9.702	0.000*	Chinese < Malay

Note: [a] : Higher scores represent greater agreement with the attributes;
[b] : Significant level of one-way ANOVA
*: The mean difference is significant at p Ò0.05

In terms of the **perception of business practices and responsiveness to complaint**, the current study found that Malay samples (3.71) had a higher mean score than the Chinese samples (3.44). This outcome was borne out by consumer experience in the Malaysian market where firms are generally more reluctant to refund customers for faulty products; Malay respondents in particular had a stronger belief than Chinese respondents. These

y respondents to take third party action for promoting their nt transaction than Chinese complainers (see Table 7.10).

In terms of **attitude towards complaining**, Malay respondents (4.53) had a higher mean score than Chinese respondents (4.31) (see Table 6.10). As suggested by Azjen (1985), Singh (1989, 1990) and Richins (1982), attitude towards complaining concerns individual norms about performing the complaining behaviour, the present study found that Malay consumers feel that making a complaint about discontent with products or services is their moral obligation and is an appropriate behaviour, which differs from the Chinese consumers perception about complaining. Thus, Malays were more likely to make complaints to third parties than the Chinese in Malaysia. No study has been done to compare the ethnic differences concerning the attitude towards complaining.

Referring to the **probability of successful complaint**, the current study found that Malay respondents (5.14) had a higher mean score than Chinese respondents (4.75) (see Table 6.10). The probability of successful complaint is the consumerôs probability of getting a reward from the firm, such as a refund, exchange, or apology. Malay respondents perceived the likelihood of a successful complaint as more probable than Chinese respondents, thus, they were more likely to take complaint actions than Chinese consumers.

In terms of **knowledge of consumer rights and consumer agencies**, the Malay sample (5.14) showed a higher mean score than the Chinese sample (3.77) in the present study

respondents have more information or knowledge and rights and consumer agencies than Chinese respondents. Hence, because of the higher awareness or understanding of consumer rights and consumer protection agencies in Malaysia, Malay consumers were more likely to seek complaint action than their Chinese counter parts.

With reference to the **internal locus of control**, Malay respondents (5.43) had a higher mean score than Chinese respondents (5.17) and Indian respondents (5.17) (see Table 6.10). The current study found that Malay consumersô internal locus of control showed greater belief in their capabilities to control events and attain their goals, and were more likely to make an effort to master the situation and obtain satisfaction from a situation than Chinese and Indian consumers in Malaysia.

Regarding the relationship between **complaint intention** and ethnic groups in Malaysia, the present study found that Malay samples (4.92) have a higher mean score than both the Chinese (4.71) and Indian samples (4.68) (see Table 6.10). This indicated that Malay consumers are more inclined to make complaints if they are dissatisfied with products or services than Chinese and Indians. This may be because Malay consumers have greater knowledge of consumer rights and consumer protection agencies. Once they have a strong intention to make a complaint, they were more likely to take complaint action.

The post-hoc Tukey test reported that the **difficulty of making a complaint** construct is

respect to ethnic groups. Specifically, Chinese respondents ificantly scoring higher than Indian respondents (3.83) (see Table 6.10). In the present study, Chinese respondents believed that making complaint was troublesome, involved a lot of time and monetary costs more than Indian respondents.

Lastly, the relationship between **complaint action** and ethnicity was found to be significant. The result found that Malay respondents (3.29) had higher significant score than the Chinese respondents (2.70) (see Table 6.10). In the current study, Malay consumers were more likely to seek redress in the company or the third party complaint agencies than the Chinese respondents. There was no study to compare this finding.

Referring to the non-significant constructs with the ethnicity groups, five out of thirteen variables showed non-significant influence on ethnicity, there were the societal benefits, the number of prior experiences of dissatisfaction, the external locus of control, the perceived value of complaint and the importance of product. These results indicated that Malay consumers have same perception on these study variables with Chinese and Indian respondents.

c. Occupation and Study Variables

The relationships between the occupation variable and all the main constructs of the present study were investigated by testing the significance of the mean differences between six different occupational groups (see Table 6.11). Among all these constructs,

nificant occupational group difference for the knowledge of sumer agencies, the number of prior experiences of dissatisfaction, the internal locus of control, the external locus of control, the perceived value of complaint, the complaint intention and the complaint action.

Table 6.11: Occupation Differences with Respect to each Main Construct

Constructs	Mean [a]						F	Sig[b]	Group Comparison
	G1	G2	G3	G4	G5	G6			(Tukey)
Perception of Business Practices and Responsiveness to Complaint	3.58	3.59	3.72	3.61	3.48	3.65	0.742	0.592	Not Significant
Attitude towards Complaining	4.42	4.48	4.32	4.19	4.35	4.45	0.750	0.586	Not Significant
Societal Benefits	5.91	5.80	5.80	5.73	5.65	5.69	0.939	0.455	Not Significant
Probability of Successful Complaint	5.05	4.95	4.87	4.69	4.99	5.01	0.589	0.709	Not Significant
Knowledge of Consumer Rights and Consumer Agencies	4.27	4.04	4.26	3.95	3.71	4.11	2.408	0.035*	G5<G1
Number of Prior Experiences of Dissatisfaction	1.95	1.92	3.27	2.38	2.73	2.81	3.138	0.008*	G2<G3
Internal Locus of Control	5.49	5.31	5.30	5.38	5.06	5.31	3.030	0.010*	G5<G1
External Locus of Control	3.60	3.65	3.57	3.48	3.79	3.19	2.443	0.033*	G6<G5
Perceived Value of Complaint	5.09	5.05	4.62	5.10	5.33	5.39	1.994	0.077[m]	G3<G5
Complaint Intention	4.94	4.90	4.78	4.53	4.55	4.62	5.122	0.000	G5<G1, G5<G2
Difficulty of Making a Complaint	4.06	4.00	3.97	4.02	4.03	4.11	0.106	0.991	Not Significant
Importance of Product	5.27	5.19	5.05	5.37	5.23	5.34	0.622	0.683	Not Significant
Complaint Action	3.17	3.21	3.38	3.05	2.15	2.89	9.167	0.000*	G5<G1, G5<G2, G5<G3

Note: [a] : Higher scores represent greater agreement with the attributes;
[b] : Significant level of one-way ANOVA
*: The mean difference is significant at p Ò0.05; [m] : Marginally significant
G1: Government Employees; G4: Housewife
G2: Private Sector Employees G5: Student
G3: Self-Employed G6: Others

In terms of **knowledge of consumer rights and consumer agencies**, the result found that the respondents working in the governments (4.27) had a higher mean score than the student respondents (3.71) (see Table 6.11). It could be accepted due to government employees are easy to obtain the information or knowledge about the consumer rights

gencies than the student respondents. This study cannot study due to no study had been done on the knowledge of consumer rights and consumer agencies with respect to the government employees and students.

In terms of **number of prior experiences of dissatisfaction**, the current study found that the self-employed sample (3.27) had a higher mean score than the private sector employees sample (1.92) (see Table 6.11). Self-employed as someone who works for his or herself, may make more purchases of products or services than persons who were working in the private sector in Malaysia. Thus, they had a higher number of dissatisfied experiences due to attitudinal or personality differences. This finding maybe related with the study by Liefeld, Edgecombe and Wolfe (1975), which they found that managerial/professional and unemployed consumers complain more than office-clerical.

In terms of **internal locus of control**, the current study found that the mean score of government employees (5.49) was higher than students (5.06) (see Table 6.11). This was possible as government employees, being in full-time employment in various government departments. They knew how to collect the information that they needed and were more likely to make a greater effort and opportunity in obtaining the required knowledge than students. No previous study had been done on comparing with this current study.

In terms of **external locus of control**, this study found that student respondents (3.79)

n other respondents (3.19) (see Table 6.11). In the current ed respondents who were working in non-government organizations (NGO) or retired (respondents did not refer the name of NGO). For the respondents in the other group, they may feel making complaint about the dissatisfied products or services were unpredictable due to successful complaining depends on fate, luck or powerful others. Therefore, the lower mean score for other respondents could be accepted in the current study. No previous study had been done on examining the relationship between external locus of control and occupation groups.

In terms of **perceived value of complaint**, the present study found marginally significant affect on the occupation groups. It was found that the mean score for students (5.33) is higher than the self-employed respondents (4.62) (see Table 6.11). Self-employed respondents may perceive complaint benefit were lower than the student respondents. Therefore, the studentsô sample had different perceived values of the dissatisfaction products or services than the self-employed respondents. The present study could not compare with previous study due to no studies had been done on the relationship between the perceived value of complaint and occupation groups.

With reference to the **complaint intention**, the F-ratio from one-way ANOVA analysis suggests a significant difference in the mean response. The means of government employees (4.94) and private sector employees (4.90) were higher than the students mean score (4.55) (see Table 6.11). These findings showed that respondents who were government employees and private sector employees were more likely to make a

respondents because the respondents who are government r employees had more knowledge of consumer rights and consumer agencies, and, therefore, more prior experience of dissatisfaction and internal locus of control orientation. However, no previous studies had been done on the relationship between the perceived value of complaint and occupation groups.

In terms of the **complaint action**, the F-ratio from one-way ANOVA analysis suggests a significant difference in the mean response. The means of government employees (3.17), private sector employees (3.21), and self-employed (3.38) were higher than the students mean score (2.15) (see Table 6.11). These findings showed that respondents who were government employees, private sector employees and self-employed were more likely to take complaint action than the student respondents. There were no previous studies to make compare about the relationship between complaint action and occupation groups.

Regarding to the non-significant findings about relationship between study variables and occupation groups, six out of thirteen study variables were found. It indicated that respondents in each occupation group had same perception of the business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of successful complaint, difficulty of making a complaint and importance of product.

d. Age and Study Variables

A one-way ANOVA was computed to compare the mean differences among the four age groups in terms of each of the main construct. Table 6.12 presents a summary of the

here were significant associations between the number of

faction, the internal locus of control, complaint intention, complaint action and age.

Table 6.12: Age Differences with Respect to each Main Construct

Constructs	Mean [a]				F	Sig[b]	Mean Comparison
	G1	G2	G3	G4			(Tukey)
Perception of Business Practices and Responsiveness to Complaint	3.53	3.61	3.60	3.74	0.629	0.596	Not Significant
Attitude towards Complaining	4.43	4.43	4.38	4.39	0.093	0.964	Not Significant
Societal Benefits	5.73	5.84	5.78	5.48	1.481	0.218	Not Significant
Probability of Successful Complaint	4.90	4.97	4.93	5.11	0.231	0.875	Not Significant
Knowledge of Consumer Rights and Consumer Agencies	3.92	4.11	4.14	3.56	2.139	0.094	Not Significant
Number of Prior Experiences of Dissatisfaction	2.44	2.10	2.09	4.07	3.235	0.022*	G2<G4 G3<G4
Internal Locus of Control	5.15	5.34	5.38	5.41	3.201	0.023*	G1<G2
External Locus of Control	3.69	3.61	3.54	3.85	1.147	0.329	Not Significant
Perceived Value of Complaint	5.05	5.03	5.14	5.60	1.030	0.379	Not Significant
Complaint Intention	4.62	4.95	4.75	4.59	8.795	0.000*	G1<G2
Difficulty of Making a Complaint	3.92	4.04	4.11	4.11	0.783	0.504	Not Significant
Importance of Product	5.20	5.22	5.13	5.48	0.755	0.519	Not Significant
Complaint Action	2.51	3.39	2.92	2.90	3.201	0.023	G1<G2, G3<G2

Note: [a] : Higher scores represent greater agreement with the attributes;
[b] : Significant level of one-way ANOVA
* : The mean difference is significant at p Ò0.05
G1: Less than 25
G2: 26 to 40 years old
G3: 41 to 55 years old
G4: Older than 56 years old

In terms of **number of prior experiences of dissatisfaction**, it appears that different age groups had considerably different evaluations about participating in complaining behaviour. Specifically, the mean score of respondents ñolder than 56 years oldò (4.07) were higher than the mean score of ñ26 to 40 years oldò (2.10) and ñ41 to 55 years oldò respondents (2.09) (see Table 6.12). Based on the previous study, those aged less than 25 years old are considered as young consumers (Fan and Xiao, 1998), those aged 56

ered as old consumers (Carrigan, 1998). The present study had a greater number of prior experiences of dissatisfaction compared to middle age respondents. The suggestion from Bernhardt (1981) about older consumers having more market experience can be used to explain why the older respondents had a relatively higher score concerning the number of prior experiences of dissatisfaction than the other age groups. No study has been done to examine the relationship between the number of prior experiences of dissatisfaction and age groups.

The Tukey post-hoc group found the mean score of **internal locus of control** for age groups of ñ26 to 40 years oldò (5.34) to be significantly higher than those subjects in the age group of ñless than 25ò (5.15) (see Table 6.12). This study found that the middle age respondents generally had more belief that the complaint outcome is based on their own action compared to young aged respondents. Based on the researcherôs knowledge, there are no studies exploring the relationship between internal locus of control and age groups.

In terms of **complaint intention**, the mean score for ñ26 to 40 years oldò age respondents (4.95) was significantly higher than the respondents of ñless than 25 years oldò age group (4.62) (see Table 6.12). It is possible that respondents of ñ26 to 40 years oldò were more likely to have complaint intention than young respondents as older consumers had more experience and were more confident that their dissatisfaction could be resolved than the younger consumers (Bernhardt, 1981).

action, the mean score of respondents ñ26 to 40 years oldò mean score of ñLess than 25ò (2.51) and ñ41 to 55 years oldò (2.92) (see Table 6.12). The present study found that middle age respondents were more likely to take complaint action than the young and old respondents. These findings were same with the studies by Liefeld, Edgecombe and Wolfe (1975), Moyer (1985) and Reiboldt (2003), they found that consumers in middle age are more likely to take complaint action.

According to the findings of the age difference on the study variables, nine out of thirteen were found non-significant related. It indicated that there were not age difference on the these variables, such as the perception of business practices and responsiveness to complaint, the attitude towards complaining, the societal benefits, the knowledge of consumer rights and consumer agencies, the external locus of control, the perceived value of complaint, the difficulty of making a complaint and the importance of product.

e. Marital Status and Study Variables

The association between marital status and each main construct of the present study was investigated by testing the significant of the mean differences (see Table 6.13 for the results). Based on the one-way ANOVA analysis, the results showed that consumerôs marital status exerts an influence on the probability of successful complaint, the knowledge of consumer rights and consumer agencies, the internal locus of control, and the complaint action. No previous studies had been done looking at the relationship

nstructs and marital status in the complaint behaviour area.

Table 6.13: Marital Status Differences with Respect to each Main Construct

Constructs	Mean [a]				F	Sig[b]	Group Comparison (Tukey)
	G1	G2	G3	G4			
Perception of Business Practices and Responsiveness to Complaint	3.54	3.71	3.61	3.92	1.373	0.250	Not Significant
Attitude towards Complaining	4.45	4.49	4.37	4.04	0.736	0.531	Not Significant
Societal Benefits	5.76	5.74	5.81	5.90	0.270	0.847	Not Significant
Probability of Successful Complaint	4.89	4.86	5.08	3.77	3.158	0.024*	G4<G3
Knowledge of Consumer Rights and Consumer Agencies	3.86	4.18	4.20	4.33	3.714	0.011*	G1<G3
Number of Prior Experiences of Dissatisfaction	2.44	2.31	2.02	3.40	1.155	0.326	Not Significant
Internal Locus of Control	5.15	5.34	5.45	5.02	6.653	0.000*	G1<G3
External Locus of Control	3.68	3.75	3.52	3.98	2.623	0.050	Not Significant
Perceived Value of Complaint	5.06	5.02	5.14	3.80	1.872	0.133	Not Significant
Complaint Intention	4.72	4.92	4.86	4.91	2.252	0.081	Not Significant
Difficulty of Making a Complaint	3.98	4.11	4.02	4.23	0.419	0.739	Not Significant
Importance of Product	5.24	5.22	5.19	4.80	0.512	0.674	Not Significant
Complaint Action	2.72	3.17	3.31	3.60	7.292	0.000*	G1<G3

Note: [a] :Higher scores represent greater agreement with the attributes;
[b] :Significant level of one-way ANOVA
*: The mean difference is significant at p Ò0.05
G1: Single
G2: Married Without Children
G3: Married With Children
G4: Others

In terms of the **probability of successful complaint**, the present study found that married with children respondents (5.08) had a higher mean score than other groups (divorced or widowed) (3.77) (see Table 6.13). This means that married with children respondents had a higher score on the probability of successful complaint than the divorced or widowed respondents.

With reference to the **knowledge of consumer rights and consumer agencies**, the current study found that married with children samples (4.20) had higher mean scores

ible 6.13). This may mean that married with children ledge concerning consumer rights and consumer agencies. It is possible that this group difference is because married couples with children had more information channels and time available for searching for information than single consumers.

In terms of **internal locus of control** construct, the present study found that respondents who were married with children (5.45) had a higher internal locus of control orientation than the single respondents (5.15) (see Table 6.13). It can be said that respondents who are married with children are more confidence on their behaviour, and they believe that the predictable outcomes based on their own action.

Referring to the **complaint action** construct, the mean score of ñmarried with childrenò respondents (3.31) were higher than ñsingleò respondents (2.72) (see Table 6.13). It indicated that ñmarried with childrenò respondents were more likely to take complaint action than ñsingleò respondents. This result is similar with a study by Reiboldt (2003), he found that 46% to 53% complainers are married and have children respectively.

Based on the findings about relationship between the marital status and study variables, nine out of thirteen non-significant relationships were found. It indicated that marital status were same influence on the study variables, such as the perception of business practices and responsiveness to complaint, the attitude towards complaining, the social benefits, the number of prior experiences of dissatisfaction, the external locus of control,

mplaint, complaint intention, the difficulty of making a

e of product.

f. Education and Study Variables

The same statistical tool was used to examine the association between education level and each main construct (see the results of Table 6.14). Based on the one-way ANOVA analysis, the results show that complainerôs education level exerts an influence on the perception of business practice and responsiveness to complaint, the perceived value of complaints and complaint action.

Table 6.14: Education Differences with Respect to each Main Construct

Constructs	Mean [a]					F	Sig[b]	Group Comparison
	G1	G2	G3	G4	G5			(Tukey)
Perception of Business Practices and Responsiveness to Complaint	4.17	3.82	3.59	3.57	3.50	3.598	0.006*	G5<G1
Attitude towards Complaining	4.08	4.39	4.51	4.27	4.53	2.221	0.065	Not Significant
Societal Benefits	5.59	5.83	5.73	5.68	5.87	1.498	0.201	Not Significant
Probability of Successful Complaint	5.18	5.02	4.92	4.91	4.95	0.175	0.951	Not Significant
Knowledge of Consumer Rights and Consumer Agencies	4.59	4.03	4.30	3.97	3.96	1.725	0.142	Not Significant
Number of Prior Experiences of Dissatisfaction	3.77	2.24	1.75	2.41	2.30	1.338	0.254	Not Significant
Internal Locus of Control	5.35	5.29	5.34	5.30	5.27	0.166	0.956	Not Significant
External Locus of Control	4.13	3.76	3.57	3.66	3.57	1.649	0.160	Not Significant
Perceived Value of Complaint	3.49	4.72	5.27	4.93	5.30	5.848	0.000*	G1<G3,G1<G4, G1<G5
Complaint Intention	5.18	4.86	4.78	4.81	4.77	0.834	0.503	Not Significant
Difficulty of Making a Complaint	4.53	4.09	3.86	4.14	3.92	2.081	0.081	Not Significant
Importance of Product	5.50	5.16	5.06	5.17	5.31	1.339	0.254	Not Significant
Complaint Action	3.38	3.21	3.39	3.12	2.71	4.481	0.001*	G5<G4, G5<G3

Note: [a] :Higher scores represent greater agreement with the attributes;

[b] :Significant level of one-way ANOVA

*: The mean difference is significant at p Ò0.05

G1: LCE/SRP/PMR or below
G2: MCE/SPM/SPVM/O-Level
G3: HSC/STP/STPM/A-Level
G4: College Diploma
G5: University Degree/Professional

usiness practices and responsiveness to complaint, the Tukeyôs post-hoc group comparison found that the mean score for education groups of ñLCE/SRP/PMR or belowò (4.17) was significantly higher than those respondents in the group of ñUniversity Degree/Professionalò (3.50) (see Table 6.14). It can be said that respondents with the education lever in ñLCE/SRP/PMR or belowò perceived the business had better performance on the practices and responsiveness to remedy the complaint than respondents with education lever in ñUniversity Degree/Professionalò. It is possible that this is because of different education level had different expectation (Liefeld, Edgecombe and Wolfe, 1975).

In terms of **perceived value of complaint**, the current study also found that the mean score of respondents in the group of ñHSC/STP/STPM/A-Levelò, ñCollege diplomaò, and ñUniversity degree/Professionalò were significantly higher than respondents in the group of ñLCE/SRP/PMR or belowò (see Table 6.14). This means that respondents with a higher level of education had a higher educational level were more likely to believe that it was worth the effort to make a complaint than the respondents in the lower education level. This result was same with the study by Richins (1982).

Regarding to the complaint action, the Tukeyôs post-hoc group comparison found that the mean score for education groups of ñHSC/STP/STPM/A-Levelò (3.39) and ñCollege Diplomaò (3.12) were higher than the group ñUniversity Degree / Professionalò (2.71). it can be said that respondents with the education level in ñHSC/STP/STPM/A-Levelò

e more likely to take complaint action than the respondents ñUniversity Degree / Professionalò. These findings were similar with a study by Hogarth, Hilgert, Kolodinsky and Lee (2001), which they found that consumers who complain to third party agencies tend to be less educated.

Talking about the non-significant relationship between educational level and study variables, ten out of thirteen study variables were found in the present study. it indicated that respondents with different education level had same results respect to the attitude towards complaining, the societal benefits, the probability of successful complaint, the knowledge of consumer rights and consumer agencies, the number of prior experiences of dissatisfaction, the internal locus of control, the external locus of control, the complaint intention, the difficulty of making a complaint and the importance of products.

g. Personal Monthly Income and Study Variables

The mean differences of five income groups concerning each main construct were compared using one-way ANOVA (see Table 6.15). The present study only found a significant income group differences for internal locus of control, complaint intention and complaint action.

In terms of **internal locus of control**, the present study reported a significant relationship with income level. The consumers with a monthly income of ñRM1,000 to RM2,999ò (5.33), ñRM3,000 to RM4,999ò (5.34), ñRM5,000 to RM6,999ò (5.52) and

9) had higher mean score for the internal locus of control onthly income ñbelow RM1,000ò (5.11) (see Table 6.15). It can be seen that consumers with a higher monthly income strongly feel that they can control the outcome by their own ability than the consumers with lower monthly income. No studies have been done on the internal locus of control construct and income level in complaint behaviour.

With reference to the **complaint intention**, the mean score of respondents with ñRM1,000 to RM2,999ò (4.87), or ñRM3,000 to RM4,999ò (4.92), or ñRM5,000 to RM6,999ò (4.97) were all higher than the respondents with ñbelow RM1,000ò (4.59) (see Table 6.15). The current study found that consumers with a higher personal monthly income had a greater intent to make a complaint than those with a lower personal monthly income concerning dissatisfaction with products or services as they purchase more goods or services (Liefeld, Edgecombe and Wolfe, 1975).

Regarding to the **complaint action**, the mean score of respondents with ñRM1,000 to RM2,999ò (3.21), or ñRM3,000 to RM4,999ò (3.22), or ñRM5,000 to RM6,999ò (3.58) were all higher than the respondents with ñbelow RM1,000ò (4.59) (see Table 6.15). The results indicated that respondents with higher income were more likely to take complaint action than the respondents with lower income. This result was consistent with the studies by Tipper (1997) and Singh (1989).

Referring to the non-significant relationship between personal monthly income and

hirteen variables were found in the present study. It can be

nonthly income explained same results with respect to the ten variables, such as the perception of business practices and responsiveness to complaint, the attitude towards complaining, the social benefits, the probability of successful complaint, the knowledge of consumer rights and consumer agencies, the number of prior experience of dissatisfaction, the external locus of control, the difficulty of making a complaint and the importance of product.

Table 6.15: Personal Monthly Income Differences with Respect to each Main Construct

Constructs	Mean [a]					F	Sig[b]	Group Comparison (Tukey)
	G1	G2	G3	G4	G5			
Perception of Business Practices and Responsiveness to Complaint	3.61	3.57	3.56	3.60	3.67	0.209	0.933	Not Significant
Attitude towards Complaining	4.40	4.46	4.43	4.42	4.26	0.380	0.823	Not Significant
Societal Benefits	5.69	5.83	5.74	5.72	6.03	1.653	0.159	Not Significant
Probability of Successful Complaint	4.90	5.00	4.89	5.06	4.90	0.279	0.892	Not Significant
Knowledge of Consumer Rights and Consumer Agencies	3.92	4.06	4.11	4.25	3.93	0.826	0.509	Not Significant
Number of Prior Experiences of Dissatisfaction	2.51	1.88	2.67	1.90	2.81	2.271	0.060	Not Significant
Internal Locus of Control	5.11	5.33	5.34	5.52	5.39	3.300	0.011*	G1<G4
External Locus of Control	3.73	3.64	3.65	3.37	3.41	2.250	0.062	Not Significant
Perceived Value of Complaint	5.19	5.05	5.06	4.85	5.03	0.473	0.755	Not Significant
Complaint Intention	4.59	4.87	4.92	4.97	4.76	5.070	0.000*	G1<G2,G1<G3, G1<G4
Difficulty of Making a Complaint	3.93	4.05	4.18	3.85	3.88	1.414	0.227	Not Significant
Importance of Product	5.19	5.18	5.20	5.24	5.46	0.766	0.547	Not Significant
Complaint Action	2.54	3.21	3.22	3.58	2.66	7.552	0.000*	G1<G2, G1<G3, G1<G4

Note: [a] :Higher scores represent greater agreement with the attributes;

[b] :Significant level of one-way ANOVA

*: The mean difference is significant at p Ò0.05

G1: Below RM1,000

G2: RM1,000 to RM2,999

G3: RM3,000 to RM4,999

G4: RM5,000 to RM6,999

G5: RM7,000 and above

een Complaint Action and Study Variables

investigation of the relationship between complaint action and study constructs. Based on the previous studies, the complaint action was measured by Guttman scale. Richins (1982) suggests that Guttman scale as an interval level is created out for dichotomous items relating to complaining. Thus, to examining the relationship between complaint action and study variables, the Pearson Correlation analysis was used to test. Among these constructs, the present study found that six out of twelve variables were significant with the complaint action (see Table 6.16); there were perception of business practices and responsiveness to complaint, knowledge of consumer rights and consumer agencies, internal locus of control, perceived value of complaint, complaint intention, and importance of product. The rest six out of twelve constructs were not significant on examining the complaint action.

Refers to the **perception of business practices and responsiveness to complaint**, the negatively significant relationship was found with complaint action (r = -0.07) in the current study. It indicated that there was negative relationship between the perception of business practices and responsiveness to complaint. However, no previous studies were found to compare the correlations between these two constructs.

In terms of the **knowledge of consumer rights and consumer agencies**, the present study found significantly relationship with complaint action (r = 0.304). The result indicated that there was a positively relationship between the knowledge of consumer rights and consumer agencies and complaint action. There were no previous studies

ation between these two variables.

Table 6.16: Complaint Action Differences with Respect to each Main Construct

Constructs	Correlation	Sig
Perception of Business Practices and Responsiveness to Complaint	-0.070	0.022*
Attitude towards Complaining	-0.008	0.404
Societal Benefits	0.041	0.116
Probability of Successful Complaint	-0.010	0.390
Knowledge of Consumer Rights and Consumer Agencies	0.304	0.000*
Number of Prior Experiences of Dissatisfaction	0.049	0.081
Internal Locus of Control	0.114	0.000*
External Locus of Control	0.003	0.466
Perceived Value of Complaint	-0.160	0.000*
Complaint Intention	0.334	0.000*
Difficulty of Making a Complaint	0.003	0.934
Importance of Product	0.092	0.008*

*: p Ò0.05

Regarding the **internal locus of control**, the positive relationship were found with the complaint action (r = 0.114). This finding meant that there was a relationship between the internal locus of control and complaint action. No previous studies had been made about these correlations in consumer complaint behaviour field.

With reference to the **perceived value of complaint**, this current study found negatively significant relationship with the complaint action as r = -0.160. The results indicated that there was a negative relationship between the perceived value of complaint and complaint action. However, no previous studies reporting about the correlation between these two constructs were made.

Regarding the relationship between **complaint intention** and complaint action, the

ely significant relations (r = 0.334). This finding indicated p between complaint intention and complaint action. The previous studies by Sheppard, Hartwick and Warshaw (1988), Hausenblas Carron and Mack (1997) and Saunders, Motl, Dowda, Sishman and Pate (2004) were found consistent correlation between intention and behaviour.

Lastly, regarding to the **importance of product** construct, the result found a significant relationship with complaint action (r = 0.092) in the present study. it indicated that there was a positive relationship between the importance of product and complaint action. However, there was no previous studies had been done to compare the correlations between these two constructs.

6.6 Correlations between the Main Constructs

The Pearson Correlation analysis was employed to better understand the associations between the main constructs of the proposed model. The estimated correlation matrix is presented in Table 6.17. According to Cohen (1988), a correlation coefficient between ±0.1 and ± 0.3 indicates a weak correlation, a correlation coefficient between ± 0.30 and ± 0.49 indicates a medium correlation, and a correlation coefficient between ± 0.50 to ± 1.0 indicates a strong correlation. The present study is based on Cohenôs (1988) benchmark in interpreting the findings.

Generally, in this study all correlation coefficient values were less than ± 0.50. This indicated that the correlation coefficient values are all in the weak or medium

e 6.17). The table shows that 33 out of 78 correlation nificant at the 0.01 level, and 11 out of 78 correlation coefficient values were significant at the 0.05 level, while another 34 correlation coefficient values were found to be not significant at all.

When the correlation between predictors and complaint action was examined (see Table 6.17), medium correlation was found between knowledge of consumer rights and consumer agencies (r = 0.304), complaint intention (r = 0.334) and complaint action. As for the link between perceived value of complaint, internal locus of control, importance of product, perception of business practices and responsiveness to complaint and complaint action, weak correlations were found ranging from r = 0.160, r = 0.114, r = 0.092 to r = 0.070. However, complaint action is found to have no correlation with attitude towards complaining, societal benefits, probability of successful complaint, number of prior experiences of dissatisfaction, external locus of control and difficulty of making a complaint.

On examining the correlation between the predictors and complaint intention, a weak correlation was found for the links between perception of business practices and responsiveness to complaint (r = 0.075), attitude towards complaining (r = 0.143), societal benefits (r = 0.256), probability of successful complaint (r = 0.159), knowledge of consumer rights and consumer agencies (r = 0.143), internal locus of control (r = 0.277) and complaint intention. The correlation coefficients between complain action (r = 0.334) and complaint intention were moderate. However, complaint intention was

n with the number of prior experiences of dissatisfaction, perceived value of complaint and difficulty of making a complaint (see Table 6.17).

The correlation coefficient result could not be compared with past studies as no previous study has been done on these relationships. Additionally, the intention of the current studyôs research purpose includes ï analysing the relationship between constructs; predicting the value of the dependent variables from the values of the independent variables; examining the role of complaint intention as a potential mediating variable; and difficulty of making a complaint and the importance of product as moderating variables. Obviously, these objectives could not be accomplished through Pearson correlation analysis alone. Thus, analytical statistical tools, including the SEM technique, were subsequently employed for hypotheses testing.

6.7 Testing the Assumption of Multivariate Analysis

Assumption testing is a basic requirement as a violation of assumptions affects subsequent use of multivariate statistical techniques and their univariate counterparts (Hair, et al. 2006). Although, there are many assumptions associated with univariate and multivariate analysis, four assumptions potentially affect every univariate and multivariate statistical technique, namely, normality, homoscedasticity, linearity and multicollinearity.

Table 6.17: Correlations between Main Constructs

Factor	CA	PB	A	S	PL	K	NP	IL	EL	PV	CI	D	IP
CA	1												
PB	-0.070*	1											
A	-0.008	0.026	1										
S	0.041	-0.065*	0.205**	1									
PS	-0.010	0.134**	0.079*	0.065*	1								
K	0.304**	0.170**	0.010	0.070*	0.040	1							
NP	0.049	-0.035	0.021	0.053	-0.009	0.001	1						
IL	0.114**	0.024	0.140**	0.304**	0.124**	0.180**	0.051	1					
EL	0.003	-0.037	-0.072*	-0.051	-0.069	-0.047	-0.047	-0.120**	1				
PV	-0.160**	-0.049	0.109**	0.072*	0.344**	-0.078*	0.041	0.062*	-0.111**	1			
CI	0.334**	-0.075*	0.143**	0.256**	0.159**	0.143**	0.040	0.277**	0.000	0.032	1		
D	0.003	0.181**	0.161**	0.013	0.050	0.131**	0.056	0.039	-0.316**	0.096*	0.042	1	
IP	0.092**	0.116**	-0.109**	-0.243**	-0.113**	0.043	-0.029	-0.273**	-0.025	-0.156**	-0.220**	0.110**	1

CA: Complaint Action
PB: Perception of Business Practices and Responsiveness to Complaint
A: Attitude towards Complaining
S: Societal Benefits
PS: Probability of Successful Complaint
K: Knowledge of Consumer Rights and Consumer Agencies
NP: Number of Prior Experiences of Dissatisfaction
IL: Internal Locus of Control
EL: External Locus of Control
PV: Perceived Value of Complaint
CI: Complaint Intention
D: Difficulty of Making a Complaint
IP: Importance of Product
* : Correlation is significant at P < 0.05 (2-Tailed)
** : Correlation is significant at P < 0.01 (2-Tailed

lity

e of the data distribution for an individual metric variable and its correspondence to the normal distribution (Hair, et al. 2006). Normality can occur at two levels: 1. univariate normality concerns the distribution of individual observed variables; 2. multivariate normality refers to the joint distribution of observed variables (Kline, 2005). Two approaches were adopted to assess univariate assumptions. First, the distribution of data was examined using kurtosis and skewness. According to Hair, et al. (2006), if the calculated z value for either skewness or kurtosis exceeds the critical values of ±2.58 (0.01 significant level) or ±1.96 (0.05 significance level), the distribution of data is considered non-normal. The distributional statistics are presented in Table 6.18.

Table 6.18: Summary of Distributional Statistics

Constructs	Skewness	Kurtosis
Perception of Business Practices and Responsiveness to Complaint	0.036	0.002
Attitude towards Complaining	-0.161	-0.609
Societal Benefits	-0.582	-0.398
Probability of Successful Complaint	-0.640	-0.238
Knowledge of Consumer Rights and Consumer Agencies	-0.138	-0.644
Number of Prior Experiences of Dissatisfaction	6.289	63.046
Internal Locus of Control	-0.575	0.516
External Locus of Control	0.123	-0.149
Perceived Value of Complaint	-0.817	-0.479
Complaint Intention	-0.129	-0.182
Complaint Action	-0.171	-1.812
Difficulty of Making a Complaint	-0.191	-0.558
Importance of Product	-0.561	-0.133

Based on the results of the univariate estimation of skewness and kurtosis, no serious violations of univariate normality were found in the present study. However, for the

s of dissatisfaction construct, the output was out of the for skewness (±2.58) and Kurtosis (±1.96), as the measurement of this construct is the exact dissatisfied numbers in the previous experience. Particularly, as for the skewness of data, it was found that 2 variables were positively skewed out of 12 variables ï the perception of business practices and responsiveness to complaint and the external locus of control. This suggests that the distribution of data for these two variables were positively skewed, the other ten variables were negative skewed. For the kurtosis values, it was found that all variables except the internal locus of control were negative. This suggests that the distribution of data for all eleven variables was platykurtic (i.e. flatter than a normal distribution) while the internal locus of control construct with positive kurtosis value was leptokurtic (i.e. more peaked than a normal distribution).

Second, histograms were also used to compare the observed data values with a distribution approximating the normal distribution (Hair, et al., 2006). All histograms generated for individual variables are presented in **Appendix G.** It can be said that the histogram of the individual variable does meet the expectation for the normal shape distribution of data.

2.7.2 Testing for Homoscedasticity

Homoscedasticity refers to the assumption that dependent variable(s) exhibit equal levels of variance across the range of independent variable(s) (Hair, et al., 2006). The test of homoscedasticity is needed because the variance of the dependent variable being

e relationship should not be concentrated in only a limited values (Hair, et al., 2006). The current study tested the homoscedasticity for two metric variables using scatterplots (see **Appendix H**). The assumption on randomness of residuals will not be violated if the scatterplot does not show a definite pattern in the scatter of the data points. As presented in **Appendix H**, a visual inspection of the scatterplot did not show any patten of increasing or decreasing residuals. Thus, homoscedasticity exists and did not violate the assumptions in the present study.

6.7.3 Testing for Linearity

The current study assessed linearity by running a series of simple linear regression analysis and to examine the residuals using Normal Probability P-P Plot (Hair, et al., 2006). The results for linearity assumptions are presented in **Appendix I**. It was expected that the points would be almost a straight line around the diagonal axis so as not to violate the assumptions on the randomness of the residuals. In this case, the Normal P-P plot appears to conform to the expectation and does not result in a violation of the assumptions.

6.7.4 Testing for Multicollinearity

Multicollinearity refers to a situation where two or more of the independent variables are highly correlated (Pallant, 2005). Multicollinearity is a measurement to check for intercorrelation among the independent variables. A high score of multicollinearity may result in bias on the regression of coefficient, in that standard errors and confidence

he significance level will be low (Hair, et al., 2006). A low

at independent variables are independent of each other.

In order to assess multicollinearity, this study makes comparisons of the Tolerance and variance of inflation factor (VIF) (Hair, et al., 2006). Tolerance is $1-R^2$ for the regressing of that independent variable on all other independents. Kline (1998) suggests that the higher the intercorrelations of the independents, the more the tolerance will approach zero. If the tolerance is less than 0.1, a problem with multicollinearity is indicated. VIF is the ratio of a variableôs total variance in standardised terms to its unique variance. The bigger the VIF, the higher the multicollinearity, and values above 10 suggest a multicollinearity problem. In the present study, the multicollinearity assessment using the tolerance and VIF is presented in Table 6.19. The tolerance values and VIF indicate the absence of a multicollinearity problem. In summary, it was concluded that the data in the current study met the normality, homoscedasticity, linearity, and multicollinearity assumptions.

Table 6.19: Multicollinearity Test

Constructs	Tolerance	VIF
Perception of Business Practices and Responsiveness to Complaint	0.887	1.128
Attitude towards Complaining	0.917	1.091
Societal Benefits	0.850	1.176
Probability of Successful Complaint	0.842	1.188
Knowledge of Consumer Rights and Consumer Agencies	0.838	1.193
Number of Prior Experiences of Dissatisfaction	0.986	1.014
Internal Locus of Control	0.809	1.236
External Locus of Control	0.880	1.136
Perceived Value of Complaint	0.816	1.226
Complaint Intention	0.827	1.209
Difficulty of Making a Complaint	0.836	1.196
Importance of Product	0.853	1.173

Modelling (SEM)

Hair, et al. (2006) suggest that SEM is the best multivariate procedure for testing both the construct validity and the theoretical relationships among a set of concepts represented by multiple measured variables. As Garver and Mentzer (1999) mention, the validity of measurement is one of the most important issues in conducting research. Generally, measurement validity has been evaluated using several analyses such as coefficient alpha, exploratory factor analysis (Fornell and Larcker, 1981). However, the recent development of the confirmatory factor analysis has gained popularity due to its advantages over other scale measurement evaluation methods (Anderson and Gerbing, 1988). Furthermore, the SEM also examines the structure of interrelationships expressed in a series of equations, similar to the series of multiple regression equations. In particular, it expresses the relationships among independent and dependent variables, even when a dependent variable becomes an independent variable in another relationship (Hair, et al., 2006). Hence, SEM is a powerful technique that combines the measurement model (confirmatory factor analysis) and structural model (path analysis) into a simultaneous statistical test (Aaker and Bogozzi, 1979; Hair, et al., 2006).

There are various reasons for using the SEM in this study: (1) SEM can incorporate both unobserved and observed variables into a model; provides an explicit estimate of the measurement error; and the estimates are based on the information from the full covariance matrix (Byrne, 2001). (2) SEM makes it possible to analyse multiple structural relationships simultaneously while maintaining statistical efficiency;

and dependence techniques, such that exploratory factor analysis can be conducted more comprehensively in one step; and it is an easily applied method for estimating the direct and indirect effects (Min and Mentzer, 2004; Hair, et al., 2006). (3) SEM is able to assess the relationships comprehensively and provides a transition from exploratory to confirmatory factor analysis, rather than an exploratory approach to data analyses (Byrne, 2001 and Hair, et al., 2006).

The model development was followed using model re-specification procedure, which aims to identify the source of misfit and then generate a model that achieves a better fit of data (Byrne, 2001). Based on the recommendations from Hair, et al. (2006), the current study examined multiple indices of model fit because a model may achieve a good fit in a particular fit index but be inadequate in others. To achieve goodness of fit for the empirical data, both the measurement and structural model should meet the requirements of selected indices. Hair, et al. (2006) suggest that researchers should report at least one incremental index and one absolute index, in addition to the chi-square value, and at least one of the indices should be badness-of-fit index. Generally, RMSEA was chosen as the badness-of-fit index to provide consistent results across different estimation approaches (Kline, 1998).

Based on the suggestions in Chapter 5, model fit for the present study was examined using multiple indices, which include normal chi-square (χ^2 / df) value, Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) and Root Mean

ion (RMSEA) (Hair, et al., 2006; Ahire and Devaraj, 2001; nd Kline, 1998). The first overall test of model fit selected was the chi-square test, however, the chi-square test is extremely sensitive to sample size (Hair, et al., 2006), thus, normal chi-square (χ^2 / df) value was also employed. An acceptable ratio for χ^2 / df value should be less than 3.0 (Hair, et al., 2006 and Kline, 1998). Normally, an acceptable model fit is indicated by a value greater than 0.90 for GFI, AGFI, CFI, TLI and a value of less than 0.08 for RMSEA. Table 6.20 presents the summary of the recommended benchmark for model fit indices adopted in the present study.

Table 6.20: Summary of the Benchmark for Model Fit Indices

Fit Index	Recommended Value
Absolute Fit	
Chi-square*	p > 0.05 at Ŭ= 0.05
Normal Chi-Square (χ^2 / df)	1 Òχ^2 / df Ò3
Goodness-of-fit Index (GFI)	GFI Ó0.90
Root Mean Square Error of Approximation (RMSEA)	RMSEA Ò0.08
Incremental Fit Index	
Tucker-Lewis Index (TCI)	TLI Ó0.90
Comparative Fit Index (CFI)	CFI Ó0.90

Source: Adapted from Hair, et al. (2006); Ahire and Devaraj (2001); Garver and Mentzer (1999) and Kline (1998).
Note: Chi-square is sensitive to large sample sizes.

Malhotra (2004) suggests that exploratory factor analysis can be used to reduce and summarise data, however, it is necessary to conduct confirmatory factor analysis in order to assess, develop, and modify the proposed framework in the current study. Therefore, the SEM technique can be used to specify, estimate and test a hypothesised model effectively. Employing the two-step approach proposed by Anderson and Gerbing (1988), which involves confirmatory factor analysis and structural modelling,

first tested using confirmatory factor analysis and followed ng the structural model.

6.8.1 Stage One: Measurement Model (Confirmatory Factor Analysis)

Hair, et al. (2006) suggest that confirmatory factor analysis (CFA) is a way of testing how well the measured variables represent the construct and the measurement model fit provides a basis for assessing the validity of the structural theory. CFA is a tool to either confirm or reject a preconceived theory; it is used to provide a confirmatory test of measurement theory. However, each latent variable must have multiple indicators (Steenkamp and Trijp, 1991). There are two methods commonly used by researchers in evaluating the validity of a measurement model: testing each construct separately or testing all constructs together at one time (Cheng, 2001).

In this study, testing all the constructs at once is preferable because of the ability to take into account the relationships between the indicators of different constructs. Based on this method, discriminant validity is not only assumed but also statistically tested. However, it should be noted that researchers attempting to model relationships among a large number of latent variables (for example, in the overall measurement model with CFA) have found it difficult to fit the model to predictions even with strong theoretical support (Joreskog and Sorbom, 1986).

According to the suggestion from Hair, et al., (2006), once the scale items are specified, the researcher should specify the measurement model. In the current study, all the final

EFA (as discussed earlier in exploratory factor analysis sed in assessing the measurement model. Hair, et al. (2006) suggest that EFA results can be useful in developing theory. This leads to a proposed measurement model; CFA is used to confirm the measurement developed from EFA. For specification of the latent constructs in the CFA, the loading for one of the indicators of each construct was fixed to 1.0 in the model to create a scale for the latent construct. This process was done automatically with the feature in the AMOS 7.0 programme. Thus, in this section, CFA was employed to decrease the number of indicators used to purify the measurement model and for testing the validation of the measurement model.

a. Purifying the Measurement Model

In this study, the two-step approach from Anderson and Gerbing (1988) was used for model construction and testing. This approach is strongly preferred as structural analyses are often unreliable if the measurement model is of low reliability and validity (Hair, et al., 2006). The first step was to ñpurifyò the measurement model by eliminating measured variables and latent factors that were not well fitted by an initial confirmatory factor analysis (CFA) model. The second step was to fit a theoretical base model, and a series of revised models, to the measured variables retained in the first step. According to Anderson and Gerbing (1988), the first assessment should be any structural model that exists with an acceptable goodness-of-fit. Thus, it could begin by fitting a CFA model that included covariance between all pairs of latent factors.

In the current study, the base model CFA1 for the CFA included the latent factors and

e derived from the exploratory factor analysis. The latent iables included perception on business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of success of complaint, knowledge of consumer rights and consumer agencies, internal locus of control, external locus of control, perceived value of complaint, complaint intention, difficulty of making a complaint, and importance of product and complaint action. The number of prior experiences of dissatisfaction was excluded as it was a single item variable. Among the variables, perception of business practice and responsiveness to complaint, external locus of control and complaint intention were all used as second order factors, which came from EFA (see Figure 6.1). All latent constructs and reflective indicators were depicted in a measurement model in which all latent constructs were allowed to correlate with each other.

In the present study, Maximum Likelihood Estimation (MLE) was used to iteratively improve the parameter estimates and minimise the specific fit of the CFA when using the calibration sample of 834 respondents. The model should be modified based on path estimates, standardised residuals and modification indices (Hair, et al. 2006). In the measurement model, factor loading should be at least 0.50 and ideally 0.70; a lower loading (less than 0.50) can be deleted from the model (Hair, et al., 2006). Standardised residual and MI are examined to see whether there is any cross-loading or misspecification in the model. No problem exists if standardised residuals are less than |2.5|, however, residuals greater than |4.0| are unacceptable for the measurement model (Hair, et al., 2006). For the modification indices (MI), it shows how much the overall

ue would be reduced by freeing that single path. The

nay be considered to be dropped if the value of MI is equal to approximately 4 or greater (Hair, et al., 2006). However, a substantial MI value is considered as 7.88 for a significant model improvement (Garver and Mentzer, 1999).

The absolute goodness-of-fit measures for the measurement models are displayed in Table 6.20. First, the measurement model should demonstrate a good model fit and meet the requirements of certain fit indices as discussed earlier. The initial measurement model (CFA1) of the present study (χ^2 = 5247.132, χ^2/df = 2.616, GFI = 0.833, TLI = 0.851, CFI = 0.861, RMSEA =0.044) did not yield an adequate model fit for the empirical data. For the normed chi-square (χ^2/df) and Root Mean Square Error of Approximation (RMSEA), the values fall within the acceptable ratio, however, the values of goodness-of-fit index (GFI), Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) were all less than the 0.90, indicating a poor fit of the model to the data (see the Table 6.21). According to the path estimates, standardised residuals and MI, some of the items were deleted from the initial measurement model CFA1 to improve the model fit indices. As summarised in Table 6.20 all measurement models were fitted to the calibration sample data. The final measurement model, CFA7 (see Figure 6.2), eliminated EL5, 8, D1, 5, 6, PB2, 4, A1, 3, K2, 3, 4, 7 and IL1, 4. The fit for this final model was excellent, with CFI=0.921, GFI=0.902, TLI=0.912, RMSEA = 0.036 and CMIN/DF=2.079 (see **Appendix H**).

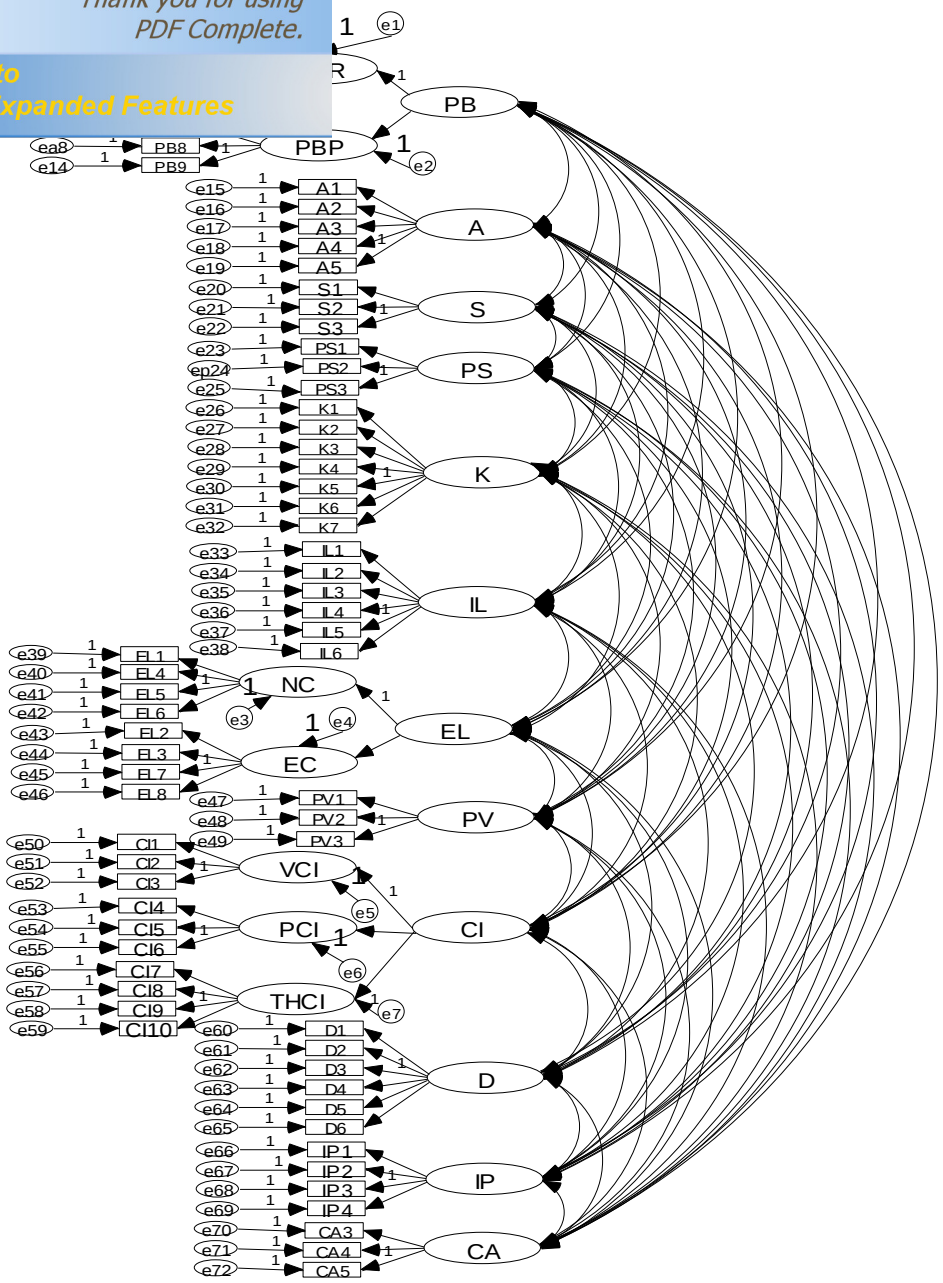


Figure 6.1: Initial Measurement Model for CFA1

PB: Perception of Business Practices and Responsiveness to Complaint

PCR: Perception of Complaint Responsiveness

PBP: Perception of Business Practices

A: Attitude towards Complaining

S: Societal Benefits

PS: Probability of Successful Complaint

K: Knowledge of Consumer Rights and Consumer Agencies

IL: Internal Locus of Control

EL: External Locus of Control

NC: No Confidence

EC: External Characteristics

PV: Perceived Value of Complaint

CI: Complaint Intention

PCI: Private Complaint Intention

VCI: Voice Complaint Intention

THCI: Third Party Complaint Intention

D: Difficulty of Making a Complaint

IP: Importance of Product

CA: Complaint Action

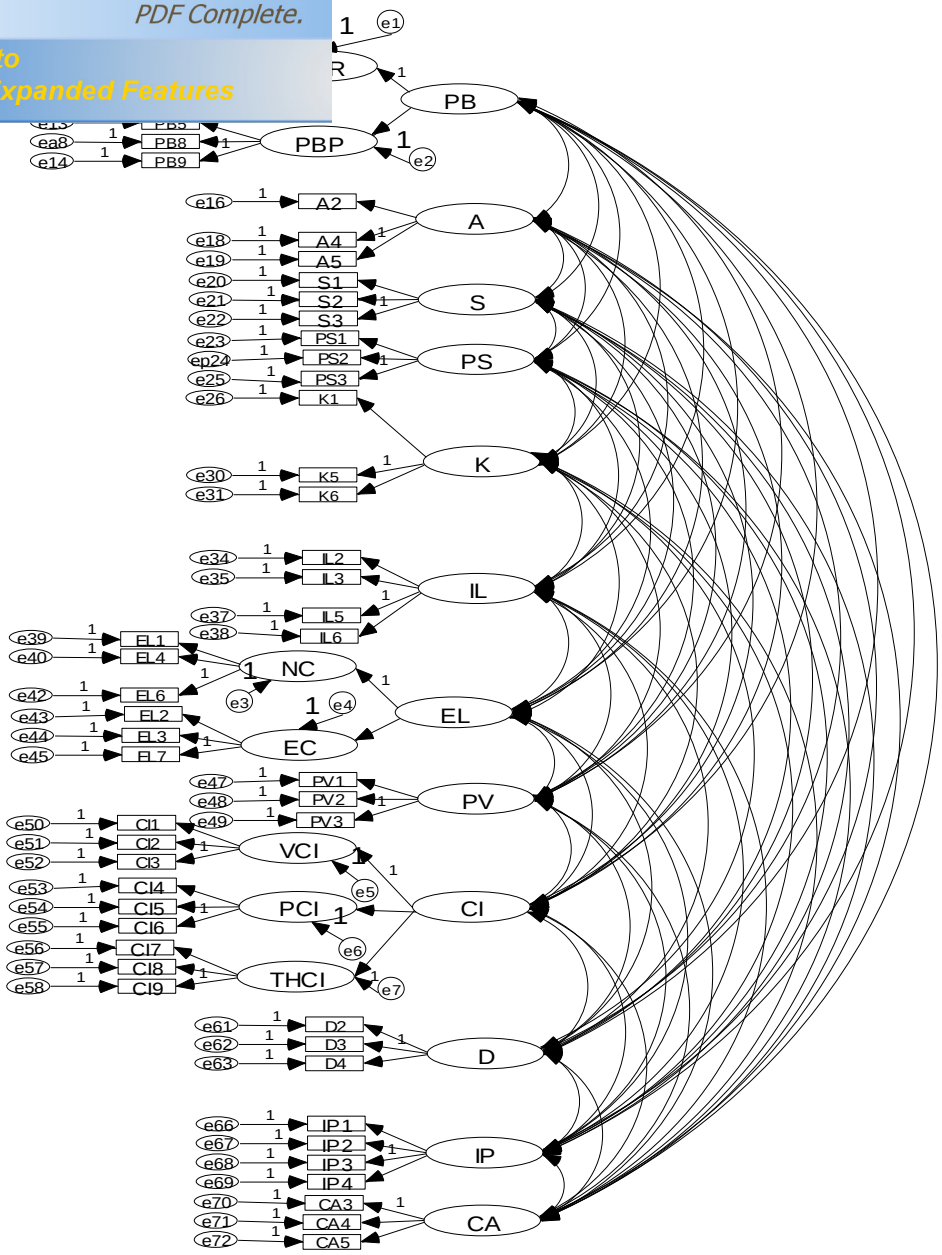


Figure 6.2: Final Measurement Model for CFA7

PB: Perception of Business Practices and Responsiveness to Complaint

PCR: Perception of Complaint Responsiveness

PBP: Perception of Business Practices

A: Attitude towards Complaining

S: Societal Benefits

PS: Probability of Successful Complaint

K: Knowledge of Consumer Rights and Consumer Agencies

IL: Internal Locus of Control

EL: External Locus of Control

NC: No Confidence

EC: External Characteristics

PV: Perceived Value of Complaint

CI: Complaint Intention

PCI: Private Complaint Intention

VCI: Voice Complaint Intention

THCI: Third Party Complaint Intention

D: Difficulty of Making a Complaint

IP: Importance of Product

CA: Complaint Action

of-fit Results for Purifying the Measurement Model

				GFI	TLI	CFI	RMSEA	Items Deleted	Reason for Deletion
				0.833	0.851	0.861	0.044		Base model for CFA
CFA2	4716.654	2.596	0.000	0.843	0.862	0.871	0.044	EL5, D5, D6	Lower factor loading
CFA3	4184.798	2.556	0.000	0.853	0.871	0.881	0.043	A1, PB4, CI10	High Standardised residuals
CFA4	3361.255	2.293	0.000	0.875	0.889	0.898	0.039	K2, K3, D1	High Standardised residuals
CFA5	2959.104	2.181	0.000	0.885	0.900	0.908	0.038	K4, EL8, IL1	High Standardised residuals
CFA6	2524.502	2.102	0.000	0.896	0.911	0.920	0.036	IL4, A3	High Modification Indices
CFA7	2291.469	2.079	0.000	0.902	0.912	0.921	0.036	PB2, K7	High Modification Indices

6.8.2 Justification for First Order and Second Order

Based on the results which were obtained from EFA, three constructs (perception of business practices and responsiveness to complaint, external locus of control and complaint intention) were involved into the second order (which were two or three dimensions under each construct). Therefore, , the first order and second order of constructs have been conducted to determine a better model fit In the study (see Figure 7.1 and Figure 7.2). This section will justify the reasons for conducting the second order for three constructs in this study.

a. Perception of Business Practices and Responsiveness to Complaint

For the perception of business practices and responsiveness to complaint construct, no previous studies mention it as first order or second order; therefore, it could not only based on the previous study. Therefore, comparing the first order model and second order model for the construct determine by the model fit (Faridah, 2009), the results found that both models performed identical results (see Table 6.22). However, where both models show acceptable fit indices as in this study, the use of second order model increases the validity of the construct (Hair, et al, 2006; Garver and Mentzer, 1999). If

a second order form, this would allow a statement where between dimensions of this construct; the dimensions are to be some extent distinct from each other (Hair, et al., 2006). In Figure 6.4, the factor loadings (or the structural relationships) covaried from one dimension to another (ranging from 0.58 and 0.76) in the second order of the construct. Thus, a decision to select the second order model was made.

Table 6.22: Compare the Model Fit for First Order and Second Order in Perception of Business Practices and Responsiveness to Complaint Construct

	χ^2	df	P	χ^2/ df	GFI	TLI	CFI	RMSEA
1st Order CFA								
	89.786	19	0.000	4.726	0.972	0.923	0.948	0.067
2nd Order CFA								
	89.786	19	0.000	4.726	0.972	0.923	0.948	0.067

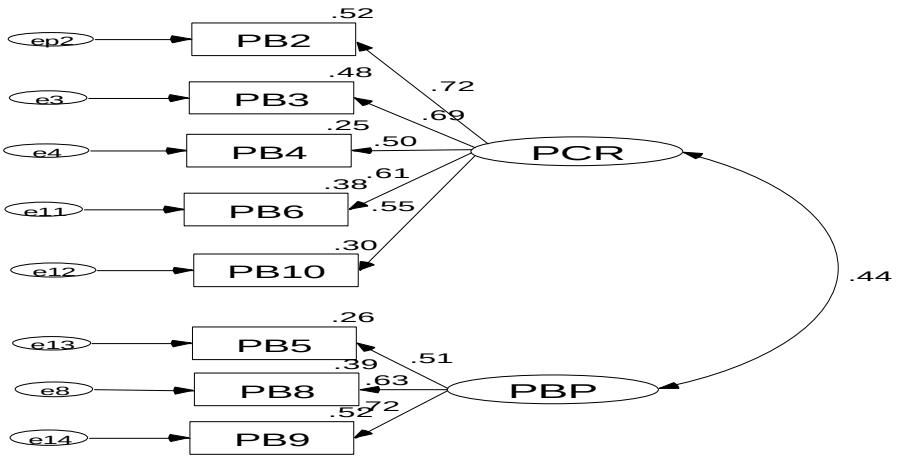


Figure 6.3: First Order of Perception of Business Practices and Responsiveness to Complaint Construct

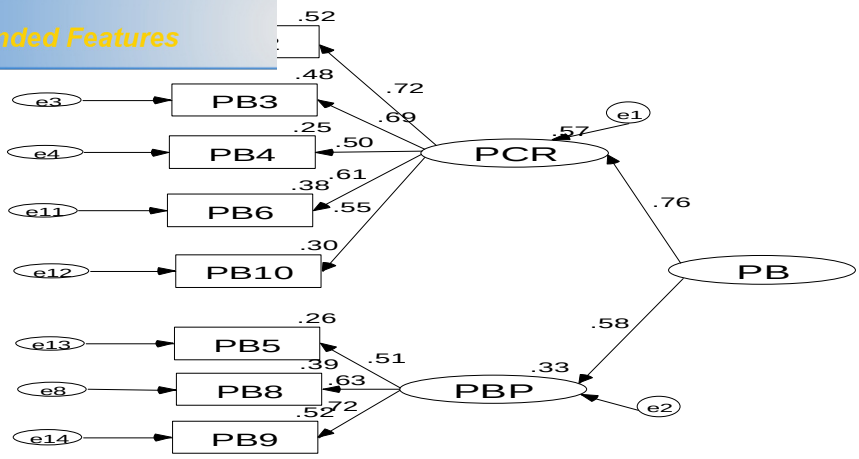


Figure 6.4: Second Order of Perception of Business Practices and Responsiveness to Complaint Construct

b. External Locus of Control

For the external locus of control construct, there is no previous studies mention the first order or second order about this construct. It could not only based on the previous study. Therefore, comparing the first order model and second order model for this construct determine by the model fit (Faridah, 2009), the results found that both models performed identical results (see Table 6.23). However, where both models show acceptable fit indices as in this study, the use of second order model increases the validity of the construct (Hair, et al, 2006; Garver and Mentzer, 1999). In other words, if the model could be tested in a second order form, this would allow a statement where there maybe some overlap between dimensions of the construct, the dimensions are to be some extent distinct from each other (Hair, et al., 2006). In Figure 6.6, the factor loadings (or the structural relationships) covaried from one dimension to another

) in the second order of the construct. Thus, a decision to

l was made.

Table 6.23: Compare the Model Fit for First Order and Second Order in External of Locus of Control Construct

	χ^2	df	P	χ^2/ df	GFI	TLI	CFI	RMSEA
1st Order CFA								
	46.660	19	0.000	2.456	0.986	0.963	0.975	0.042
2nd Order CFA								
	46.660	19	0.000	2.456	0.986	0.963	0.975	0.042

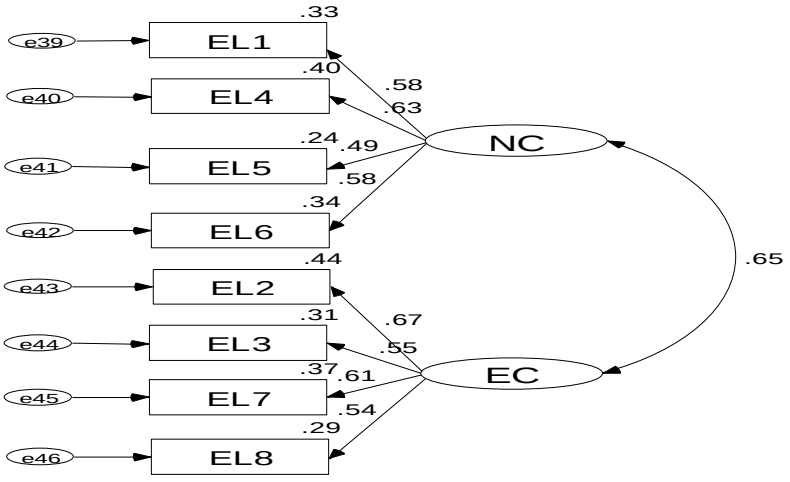


Figure 6.5: First Order of External Locus of Control Construct

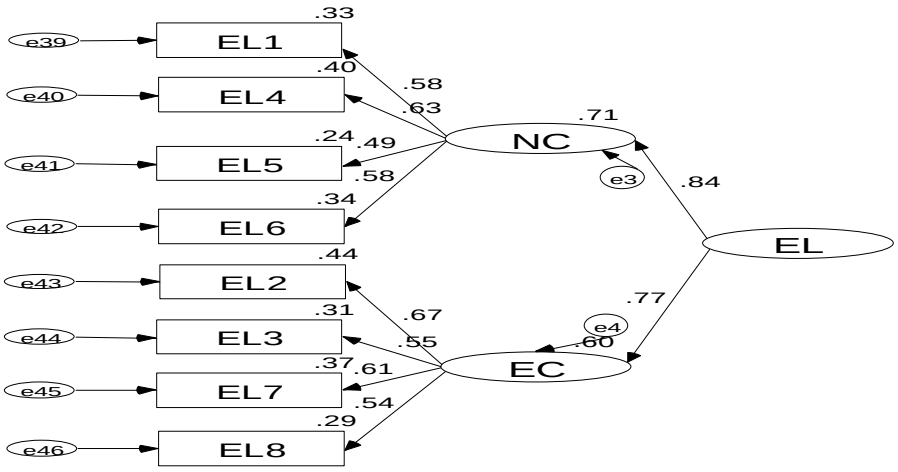


Figure 6.6: Second Order of External Locus of Control Construct

c. Complaint Intention

When comparing the first order model and second order model in CFA for complaint intention construct, it is determined by a better model fit. The results found that both models performed identical results (see Table 6.24). However, where both models show acceptable fit indices as in this study, there are two ways in which a decision concerning which model to choose for further analysis can be made. Firstly, it should based on the priori studies of the complaint intention construct, whereby complaint intention consists of multidimensional constructs with three dimensions of role modelling (such as voice complaint intention, private complaint intention, and third party complaint intention) (Singh, 1988). Therefore, the second order of complaint intention may be preferable.

the Model Fit for First Order and Second Order in Complaint Intention Construct

	f	P	χ^2/ df	GFI	TLI	CFI	RMSEA
1st Order CFA							
	124.959	32	0.000	3.905	0.972	0.938	0.956	0.059
2nd Order CFA							
	124.959	32	0.000	3.905	0.972	0.938	0.956	0.059

Secondly, the use of second order model increases the validity of the construct (Hair, et al, 2006; Garver and Mentzer, 1999). If the prior structure demonstrates multimensionality, then all dimensions should ñmeasure the same thing and should covary at a higher level if they are good measures of underlying variables (Bagozzi and Phillips, 1991). In other words, if the model could be tested in a second order form, this would allow a statement where there maybe some overlap between dimensions of this construct; the dimensions are to be some extent distinct from each other (Hair, et al., 2006). In Figure 6.6, the factor loadings (or the structural relationships) covaried from one dimension to another (ranging from 0.54, 0.60 and 0.74) in the second order of the construct. Thus, a decision to select the second order model was made.

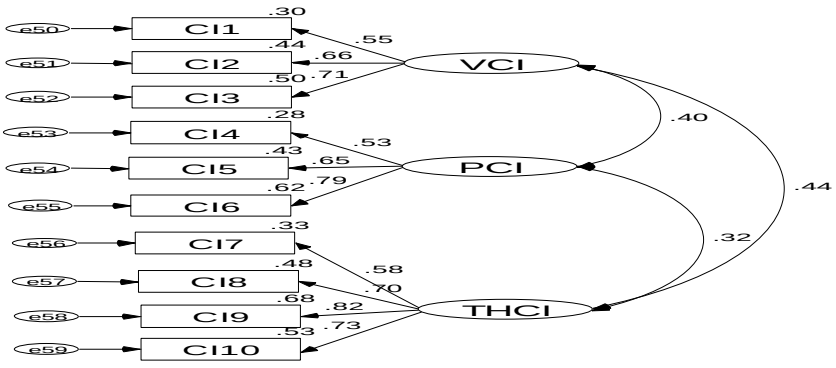


Figure 6.7: First Order of Complaint Intention Construct

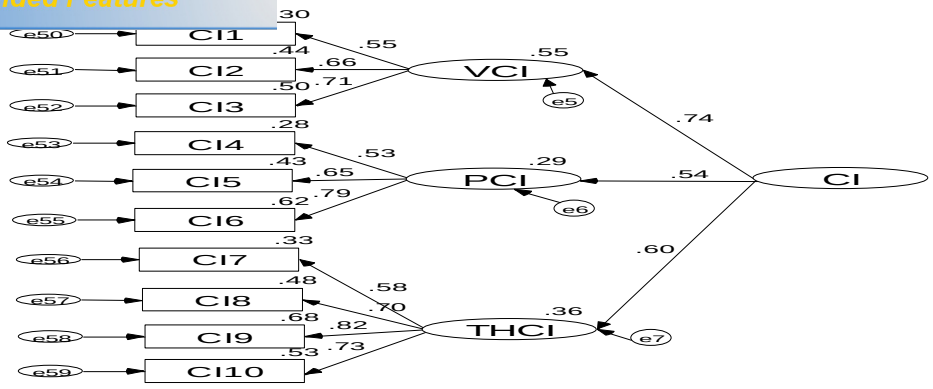


Figure 6.8: Second Order of Complaint Intention Construct

6.8.3 Construct Validity

As mentioned in the earlier section, scale validity is the most important in measurement. Mentzer and Flint (1997) state that validity in research is a hierarchy of procedures to ensure that the concluded results can be shared with confidence. Construct validation is a multifaceted process that is comprised of three basic steps ï content validity, construct validity and nomological validity (OðLeary-Kelly and Vokurka, 1998, Garver and Mentzer, 1999). Construct validity is ñthe extent to which the constructs or a set of measured items actually reflects the theoretical latent construct those items are designed to measureò (Hair, et al., 2006) (p. 776). OðLeary-Kelly and Vokurka, (1998) and Garver and Mentzer (1999) suggest that construct validity should possess the unidimensionality, convergent validity, reliability and discriminant validity (Hair, et al., 2006). Nomological validity refers to the ability to correlate with other standard measures of the same construct (Zikmund, 2003). According to Peter (1981), nomological validity is commonly used in earlier research, however, its popularity has

ed use of construct validity as nomological validity is t validity, and, thus, assessment of the latter will mean that the former was satisfied (Zikmund, 1994). In this section, a discussion on validity is given, beginning with content validity, which is then followed by unidimensionality, convergent validity, construct reliability and discriminant validity. Since convergent validity is used to test the construct validity, it can be assumed that nomological validity is also accounted for.

a. Content Validity Testing

Content validity is the degree that the construct is represented by items that cover the domain of meaning for the constructs (Dun, Seaker and Waller, 1994). When it appears evident that the measure shows adequate coverage of the concept, the measure has content validity (Zikmund, 2003). Content validity cannot be examined using statistical analysis and, thus, a thorough exploration of the literature and an extensive search of measures used in the literature must be applied. Moreover, pre-testing is used to check the validity of the constructs. Thus, the measures used will be reviewed by experts, academicians or professionals on the relevancy and adequacy of the constructs (Zikmund, 2003).

However, for the single item measure, it is adequate to only check its content validity in which the researcherôs judgment and insight must be applied (Garver and Mentzer, 1999). In this study, measurement for the number of prior experiences of dissatisfaction involved a single-item measure and content validity was applied to test the validity of

ime, content validity was also applied for the remaining items were reviewed by several academicians in the management field.

b. Unidimensionality

Once the measurement model is specified, unidimensionality must be examined by the researcher (Garver and Mentzer, 1999). Unidimensionality involves establishing a set of empirical indicators relating to one and only one construct (O'Leary-Kelly and Vokurka, 1998). Anderson and Gerbing (1988) emphasize the importance of unidimensionality in the scale development process. Unidimensionality is a necessary condition for reliability analysis and construct validation (Hair, et al., 2006). Unidimensionality can be assessed by using EFA (exploratory factor analysis) and CFA (confirmatory factor analysis). However, Garver and Mentzer (1999) strongly suggest that CFA is a more rigorous and precise test of unidimensionality compared to traditional techniques such as EFA. Thus, generally CFA provides different conclusions about the acceptability of scales (Anderson and Gerbing, 1988). Garver and Mentzer (1999) suggest that the criteria for assessing construct unidimensionality in CFA include: (1) evaluating overall measurement model fit; and (2) components of the measurement model fit.

As discussed earlier, the measurement model in the present study was examined by correlating all the variables to be tested in the structural model. Each variable was allowed to correlate with each other and none of the error terms was allowed to covary in any of the CFA models. Therefore, the first criteria of construct unidimensionality

CFA having a well fitting model of CFI=0.921, GFI=0.902, .036. Standardized residuals and modification indices can be used to test whether undimensionality exists for the constructs for the measurement model (Hair, et al., 2006) to fulfil the second criteria of construct unidimensionality (Anderson and Gerbing, 1988; Cheng, 2001). Sixteen items were dropped in order to improve the model fit by using the standardised residual and modification indices. As a result, the unidimensionality of the measurement model was achieved in the current study.

c. Convergent Validity Testing

Anderson and Gerbing (1988) state that convergent validity can be defined as the degree to which different methods used to measure the same construct produce similar results, it is used to check the loading of each observed indicator on their underlying latent construct. In other words, convergent validity is tested by determining whether the items in a scale converge or load together on a single construct in the measurement models (Garver and Mentzer, 1999). Anderson and Gerbing (1988) suggest that convergent validity is achieved when all the indicators have significant factor loadings; this means that the indicators are effectively measuring the same construct. In other words, convergent validity exists when the factor loadings are statistically significant. In assessing convergent validity, Steenkamp and van Trijp (1991) state that researchers should assess the overall fit of the measurement model, the magnitude, direction, and statistical significance of the estimated parameters between latent variables and their indicators.

all fit of the measurement models was estimated using GFI, CFI, TLI, and RMSEA fit indices. The results of the magnitude, direction, and statistical significance of the estimated parameters between latent variables (perception of business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, internal locus of control, external locus of control, perceived value of complaint, voice complaint intention, private complaint intention, third party complaint intention, difficulty of making a complaint, importance of product, complaint action) and their indicators are shown in Table 6.25.

Table 6.25: The Magnitude, Direction, and Statistical Significance of the Estimated Parameters between Latent Variables and Their Indicators – Testing for Convergent Validity

Indicator		Latent Variable	Standardized Factor Loading	Standard Error (S.E.)	Critical Ratio (C.R.)	P
A5	<--	A	0.654			
A4	<--	A	0.764	0.097	12.048	***
A2	<--	A	0.543	0.071	11.349	***
S1	<--	S	0.714	0.054	18.029	***
S3	<--	S	0.751			
S2	<--	S	0.825	0.054	19.397	***
PB6	<--	PCR	0.585	0.099	10.746	***
PB3	<--	PCR	0.661	0.104	11.281	***
PB10	<--	PCR	0.592			
PB5	<--	PBP	0.512	0.067	10.133	***
PB9	<--	PBP	0.722			
PB8	<--	PBP	0.627	0.083	10.92	***
IL5	<--	IL	0.596			
IL3	<--	IL	0.566	0.085	10.428	***
IL2	<--	IL	0.632	0.086	11.28	***
IL6	<--	IL	0.531	0.073	10.799	***
EL1	<--	NC	0.576	0.084	10.04	***
EL4	<--	NC	0.625	0.093	10.403	***
EL6	<--	NC	0.582			

			0.692	0.097	11.696	***
			0.610			
			0.534	0.078	10.444	***
D3	<--	D	0.860			
D2	<--	D	0.731	0.055	15.338	***
D4	<--	D	0.516	0.043	12.91	***
IP1	<--	IP	0.614	0.066	14.388	***
IP3	<--	IP	0.677			
IP2	<--	IP	0.750	0.054	16.849	***
IP4	<--	IP	0.717	0.065	16.489	***
K5	<--	K	0.892			
K1	<--	K	0.663	0.035	20.642	***
K6	<--	K	0.886	0.035	28.134	***
PV1	<--	PV	0.897	0.021	44.101	***
PV3	<--	PV	0.928			
PV2	<--	PV	0.971	0.019	55.424	***
PS1	<--	PS	0.834	0.026	35.014	***
PS3	<--	PS	0.917			
PS2	<--	PS	0.962	0.022	47.268	***
CI4	<--	PCI	0.517	0.061	11.667	***
CI6	<--	PCI	0.807			
CI5	<--	PCI	0.645	0.061	12.612	***
CI7	<--	THCI	0.580	0.047	13.636	***
CI9	<--	THCI	0.829			
CI8	<--	THCI	0.678	0.047	17.43	***
CI1	<--	VCI	0.555	0.07	10.917	***
CI3	<--	VCI	0.719			
CI2	<--	VCI	0.642	0.074	12.023	***
CA3	<--	CA	0.654			
CA5	<--	CA	0.567	0.062	15.058	***
CA4	<--	CA	0.970	0.103	16.902	***

PB: Perception of Business Practices and Responsiveness to Complaint

PCR: Perception of Complaint Responsiveness

PBP: Perception of Business Practices

A: Attitude towards Complaining

S: Societal Benefits

PS: Probability of Successful Complaint

K: Knowledge of Consumer Rights and Consumer Agencies

IL: Internal Locus of Control

EL: External Locus of Control

NC: No Confidence

EC: External Characteristics

PV: Perceived Value of Complaint

CI: Complaint Intention

PCI: Private Complaint Intention

VCI: Voice Complaint Intention

THCI: Third Party Complaint Intention

D: Difficulty of Making a Complaint

IP: Importance of Product

CA: Complaint Action

***: p Ò0.05

The output of all the criteria for the GFI, CFI and TLI yielded results of higher than 0.9,

with RMSEA of 0.036. These results suggest evidence of whether convergent validity exists, the results indicate that the magnitude for all variables and their indicators were above the reasonable benchmark of 0.5 (Hair, et al., 2006) (refer to the standardised factor loading), the direction for all the estimated parameters were also in the same direction as what the researcher wanted (based on the previous study). In addition, the critical ratio (C.R.) for all the estimated parameters exceeded the benchmark of ± 1.96, which was found to be statistically significant, and the standard error (S.E.) was not excessively large or small (Byrne, 2001).

d. Construct Reliability Testing

Hair, et al. (2006) suggest that reliability can be seen as another indicator of convergent validity. Traditionally, coefficient alpha is used as the index of scale reliability. Bollen (1989) suggests that the accuracy of reliability estimation tends to underestimate scale reliability and is inflated if scale has large number of items. However, in SEM, the value associated with each latent variable-to-item correlation measures the reliability of that individual item, and SEM approaches can overcome the limitation of coefficient alpha (Garver and Mentzer, 1999). The stronger the correlation of the systematic component, the higher the reliability associated with the indicator to its latent variable. Thus, in current study, the results of construct reliability, which is often used in conjunction with SEM models, are also presented to show that convergent validity exists for the constructs of study. It is computed from the squared sum of factor loading (ক) for each construct and the numerator plus the summed measurement error, which is one minus

standardised factor loading ($1-\partial_j^2$) for each construct. The

ty (Hair, et al., 2006) is as follows:

$$\textbf{Construct Reliability (CR)} = (\Sigma\lambda)^2 / [(\Sigma\lambda)^2 + \Sigma(1-\lambda_j^2)]$$

Hair, et al. (2006) suggest that for reliability estimates that are 0.7 or higher, the construct demonstrate a good reliability. However, Hatcher (1994) asserts that reliability estimates of 0.6 and above are considered acceptable for exploratory studies. A complementary measure of construct reliability is the variance extract measure (Garver and Mentzer, 1999). It measures the total amount of variance in the indicators accounted for by the latent variable. It can be simply calculated using standardised factor loadings; the formula of variance extracted (Hair, et al., 2006) measure to estimate construct reliability is:

$$\textbf{Variance Extracted (VE)} = \Sigma \lambda^2 / n$$

By using the same logic, a variance extracted that is less than 0.5 indicates that on average more error remains in the items than the variance explained by the latent factor structure in the measurement model (Hair, et al., 2006). Table 6.26 presents the results of the construct reliability and variance extracted for all constructs.

In the current study, the results showed that the construct reliability value for all latent variables were above 0.6, as suggested by Hatcher (1994). This indicated the existence of reliability. As a complementary measure of construct reliability, the results in Table 6.26 showed that some of the variance extract estimates were below 0.5. However, Hatcher (1994) posits that this kind of situation does not cause concern as previous studies show that it is quite common to find estimates below 0.50 even when the

able.

Table 6.26: Construct Reliability and Variance Extracted for all Constructs

Constructs	No. of Items	Item Loadings	Construct Reliability	Variance Extracted
Perception of Business Practices and Responsiveness to Complaint	6	0.512 - 0.722	0.79	0.38
Attitude towards Complaining	3	0.543 - 0.764	0.70	0.44
Societal Benefits	3	0.714 - 0.825	0.81	0.58
Probability of Successful Complaint	3	0.834 - 0.962	0.93	0.82
Knowledge of Consumer Rights and Consumer Agencies	3	0.663 - 0.892	0.86	0.67
Internal Locus of Control	4	0.531 - 0.632	0.68	0.34
External Locus of Control	6	0.534 - 0.692	0.77	0.40
Perceived Value of Complaint	3	0.897 - 0.971	0.95	0.87
Complaint Intention	9	0.517 - 0.829	0.88	0.50
Difficulty of Making a Complaint	3	0.516 - 0.860	0.75	0.51
Importance of Product	4	0.614 - 0.750	0.78	0.50
Complaint Action	3	0.567 - 0.970	0.79	0.56

e. Discriminant Validity Testing

Discriminant validity describes the extent to which a construct is truly distinct from other constructs (Hair, et al., 2006). High discriminant validity provides evidence that a construct is unique and captures some phenomena that other measures did not. Garver and Mentzer (1999) suggest that items from one scale should not load or converge too closely with items from a different scale and different latent variables that correlate too highly may indeed be measuring the same construct rather than different constructs. Therefore, relatively low correlation between constructs indicates the presence of discriminant validity. Hair, et al. (2006) propose that a better test for discriminant validity is ñto compare the variance-extracted percentages for any two constructs with the square of the correlation estimate between these two constructsò (p. 778), and the variance extracted estimated should be higher than the squared correlation estimate. In

nd that the variance extracted of each construct was above

ıate with other constructs. The results are shown in Table 6.27. In other words, the findings reveal good discriminant validity for all constructs.

Table 6.27: Result for Correlation Estimates between Two Constructs - Testing Discriminant Validity

	PB	A	S	PS	K	IL	EL	PV	CI	D	IP	CA
PB	1											
A	0.007 (0.00)	1										
S	0.14* (0.02)	0.234* (0.05)	1									
PS	0.25* (0.06)	0.094* (0.00)	0.065 (0.00)	1								
K	0.28* (0.08)	-0.01 (0.00)	0.099* (0.01)	0.043 (0.00)	1							
IL	0.034* (0.00)	0.18* (0.03)	0.378* (0.14)	0.154* (0.02)	0.218* (0.05)	1						
EL	0 (0.00)	-0.211* (0.04)	-0.143* (0.02)	-0.094* (0.01)	-0.111* (0.01)	-0.23* (0.05)	1					
PV	-0.003 (0.00)	0.162* (0.03)	0.085* (0.01)	0.354* (0.13)	-0.056 (0.00)	0.08 (0.01)	-0.088* (0.01)	1				
CI	0.013* (0.00)	0.214* (0.05)	0.370* (0.14)	0.219* (0.05)	0.232* (0.05)	0.427* (0.18)	-0.066 (0.00)	0.041 (0.00)	1			
D	0.017* (0.00)	0.202* (0.04)	0.011 (0.00)	0.049 (0.00)	0.177* (.03)	0.095* (0.01)	-0.316* (0.10)	0.085 (0.01)	0.029 (0.00)	1		
IP	0.003 (0.00)	-0.126* (0.02)	-0.296* (0.09)	-0.135* (0.02)	0.023 (0.00)	-0.319* (0.10)	-0.01 (0.00)	-0.17* (0.03)	-0.309* (0.10)	0.156* (0.02)	1	
CA	0.005 (0.00)	0.018 (0.00)	0.053 0.00)	0.004 (0.00)	0.274* (0.08)	0.157* (0.02)	-0.082 (0.01)	-0.156* (0.02)	0.494* (0.24)	0.006 (0.00)	0.098* (0.01)	1
VE	**0.38**	**0.44**	**0.58**	**0.82**	**0.67**	**0.34**	**0.40**	**0.87**	**0.50**	**0.51**	**0.50**	**0.56**

PB: Perception of Business Practices and Responsiveness to Complaint

A: Attitude towards Complaining

S: Societal Benefits

PS: Probability of Successful Complaint

K: Knowledge of Consumer Rights and Consumer Agencies

IL: Internal Locus of Control

EL: External Locus of Control

PV: Perceived Value of Complaint

CI: Complaint Intention

D: Difficulty of Making a Complaint

IP: Importance of Product

CA: Complaint Action

Note: Values above the parentheses are the correlation estimate between two constructs

Values in the parentheses are the square of the correlation estimate between two constructs

VE: Variance Extracted

* Correlation is significant at p Ò0.05

ity and validity assessment demonstrated strong support for satisfactory unidimensionality, convergent validity, construct reliability and discriminant validity in Stage One. The results of the construct validity test could not be compared with past studies as no previous studies have been done on these constructs using SEM. Thus, the subsequent process of identifying the structural model that best fits the data was conducted to test the proposed hypotheses.

6.8.4 Stage Two: Structural Model (Testing of the Hypotheses)

Once all constructs in the measurement model (Stage One) were validated and a satisfactory fit achieved, a structural model can be tested as a second stage of the analysis (Anderson and Gerbing, 1988; Hair, et al., 2006; Kline, 1998). Arbucke (2005) defines structural model as ñthe portion of the model that specifies how the latent variables are related to each otherò (p. 90). The structural model aims to specify the relationship from one construct to another based on the proposed theoretical model (Hair, et al., 2006).

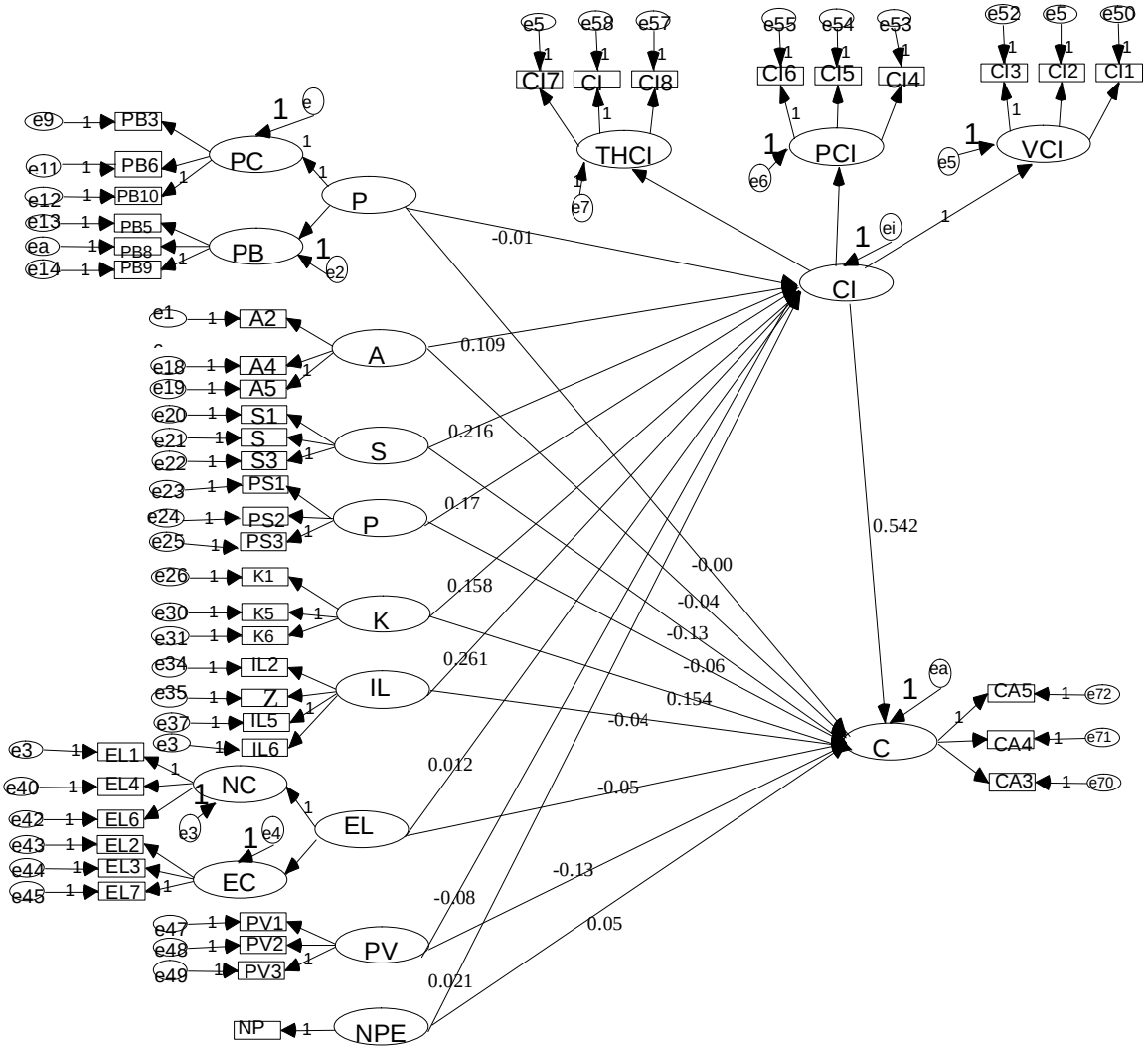
In the proposed theoretical model discussed in Chapter 3, the underlying constructs were classified into three groups, including nine exogenous constructs (perception of business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, number of prior experiences of dissatisfaction, internal locus of control, external locus of control and perceived value of complaint), two endogenous

ion and complaint action) and two moderating constructs laint and importance of product). Hence, the purpose of the structural model in the current study is to test the underlying hypotheses 2, 3, 4, 5, and 6 in order to answer some parts of the research questions in Chapter 1. This section involves specifying the structural model and structural model validity assessment.

a. Structural Model Specification

In specifying the structural model for this present study, the researcher used the results obtained from the measurement models to build the relationships based on the proposed integrated model. Based on the theorising and findings of past research (discussed in Chapter 3), the structural effects of the perception of business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, number of prior experiences of dissatisfaction, internal locus of control, external locus of control and perceived value of complaint were freed on both complaint intention and complaint action. The structural relationships between latent constructs represented by single headed straight arrows were specified according to the hypotheses established. In the path diagram shown in Figure 6.9, constructs in the left part that correlated with each other are exogenous factors. As suggested by Hair, et al. (2006), the single-item number of prior experiences of dissatisfaction was also included in the structural model with error free. There were a total of 41 indicators contained in the final structural model. Each indicator was connected to the underlying theoretical construct in a reflective manner.

odel above aimed to test the following three types of hypothesis: (1) Hypothesis 2 (H2a to H2i) ï independent variables have significant influence on the consumer complaint intention. (2) Hypothesis 3 (H3a to H3i) ï independent variables have significant influence on the consumer complaint actions. (3) Hypothesis 4 ï consumer complaint intention has a significant influence on consumer complaint actions. As discussed earlier, SEM has the ability to analyse groups of independent variables and dependent variables simultaneously.



GFI	TLI	CFI	RMSEA	χ^2 / df	χ^2
.912	0.918	0.927	0.037	2.142	1801.429
: Complaint Intention (0.281); Complaint Action (0.326)					

Figure 6.9: The Proposed Structural Model (Partial Mediation Model)

b. Structural Model Validity Assessment

The proposed structural model in the path diagram in Figure 6.9 was tested for overall model fit. The same set of fit indices used to assess the measurement model was employed to evaluate the full structural model. The results of the model fit indices shown below the diagram reveal that GFI, TLI, CFI were all higher than the 0.90, and RMSEA also showed a good model fit. Therefore, the overall fit indices indicated acceptable fit of the model to the observed data. Hair, et al. (2006) suggest that structural models cannot have a χ^2 lower value than that obtained in CFA. In the present study, the value of χ^2 = 1801.429 in the structural model is lower than χ^2 = 2291.469 in the CFA model as the CFA model included two moderating variables (difficulty of making a complaint and importance of product). However, in the structural model, two moderating variables were not included. The two moderating variables will be presented in a different section. Thus, χ^2 value which was in the proposed structural model was lower than in the CFA model, this difference can be accepted in the current study. For assessing the structural model validity, one approach is to compare the CFA fit and the structural model fit (Hair, et al., 2006). Anderson and Gerbing (1992) suggest that the structural theory lacks validity if the structural model fit is substantially worse than the CFA model fit. In the current study, goodness-of-fit in the structural model (GFI=0.912, TLI=0.918, CFI=0.927, and RMSEA=0.037) was better than in the CFA model (GFI=0.902, TLI=0.912, CFI=0.921, and RMSEA=0.036). It can be concluded that the

he validity in the current study. The results are shown in

The squared multiple correlations reported that 28.1% of the variance associated with complaint intention was accounted for by its nine predictors: perception of business practices and responsiveness to complaint, attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agency, internal locus of control, external locus of control, perceived value of complaint and number of prior experiences of dissatisfaction (see Figure 6.9). Accordingly, it was determined that 32.6% of the variation in complaint behaviour was accounted for by its ten predictors including complaint intention. Hypotheses testing should be discussed after the structural model assessed the validity. The hypotheses testing was conducted based on the proposed structural model (G^2 = 1801.429, G^2/df = 2.142, GFI = 0.912, TLI = 0.918, CFI = 0.927, RMSEA = 0.037) that has the best overall model fit. The significance of each hypothesised path in the research model was first determined.

c. Alternative Model Comparison for Mediation Effect

According to the suggestion from Kelloway (1995), any proposed model with mediating effects ought to be tested against substantially meaningful alternative models, such as the fully mediated and non-mediated model. Hair, et al. (2006) argue that the hypothesised model not only has an acceptable model fit, but also performs better than the alternative models. Thus, Kelloway (1995) suggests that full mediated and

l be nested within the partially mediated model (alternative ame number of variables as the partially mediated model) (see Figure 6.10).

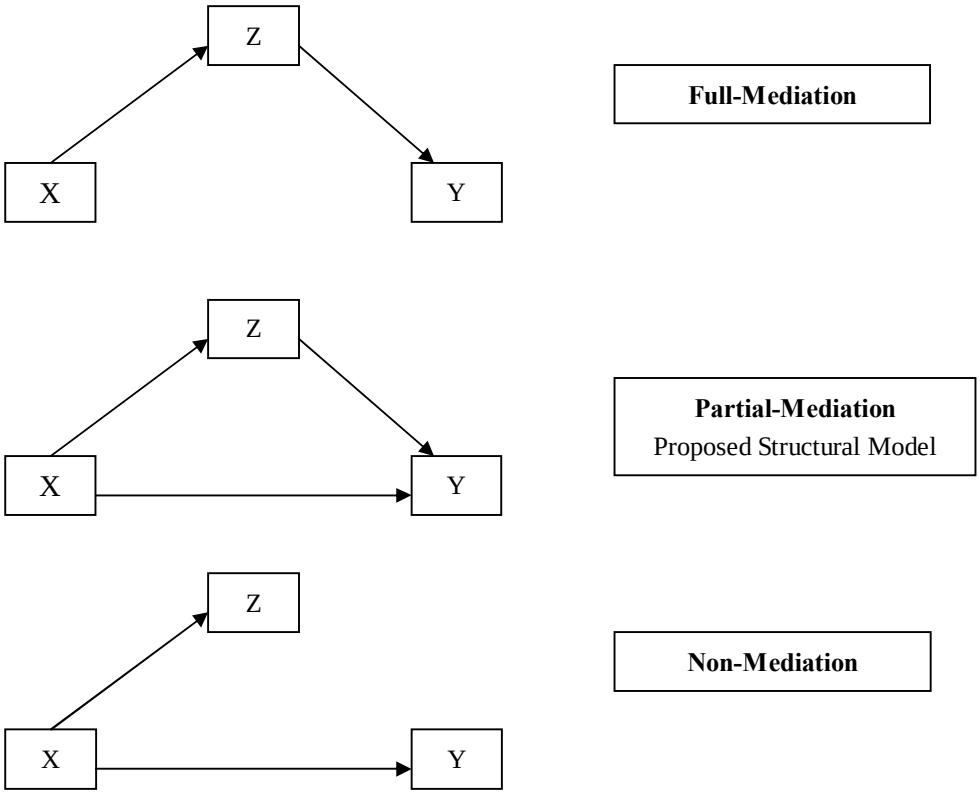


Figure 6.10: Diagram of the Alternative Models

Source: Adapted from Kelloway (1995)

Regarding Kellowayôs recommendation, comparative tests were conducted to determine which model had the best overall fit to the empirical data. First, the full-mediated model (Figure 6.11) was tested against the partially mediated model as the hypothesised proposed structural model (see Figure 6.9). Next, the non-mediated model (see Figure 6.12) was also tested against the hypothesised partially mediated model (see Figure 6.9). Kelloway (1995) advises that the sequence of tests (contrasting the fit of the full mediated model and non-mediated model to the partial mediated model) provides an

essity and sufficiency of the mediated relationship. If the

rtially mediated model provide equivalent fits to the data, the necessity of the mediated relationship is impugned. If the partial mediated model and fully mediated model provide equivalent fits, the sufficiency of the mediated relationship is impugned.

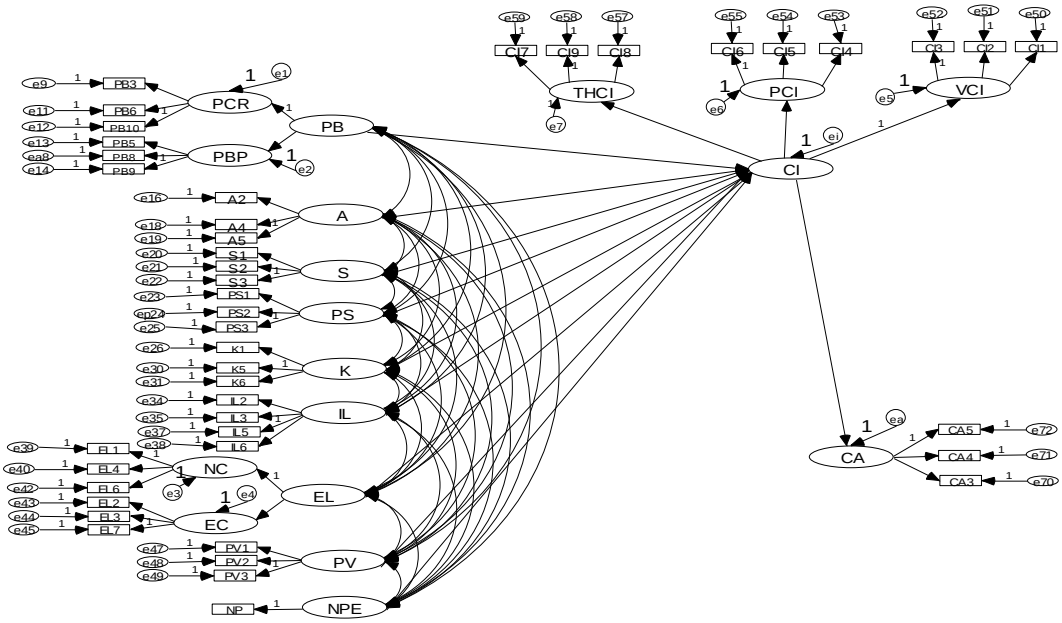


Figure 6.11: Full-Mediated Model

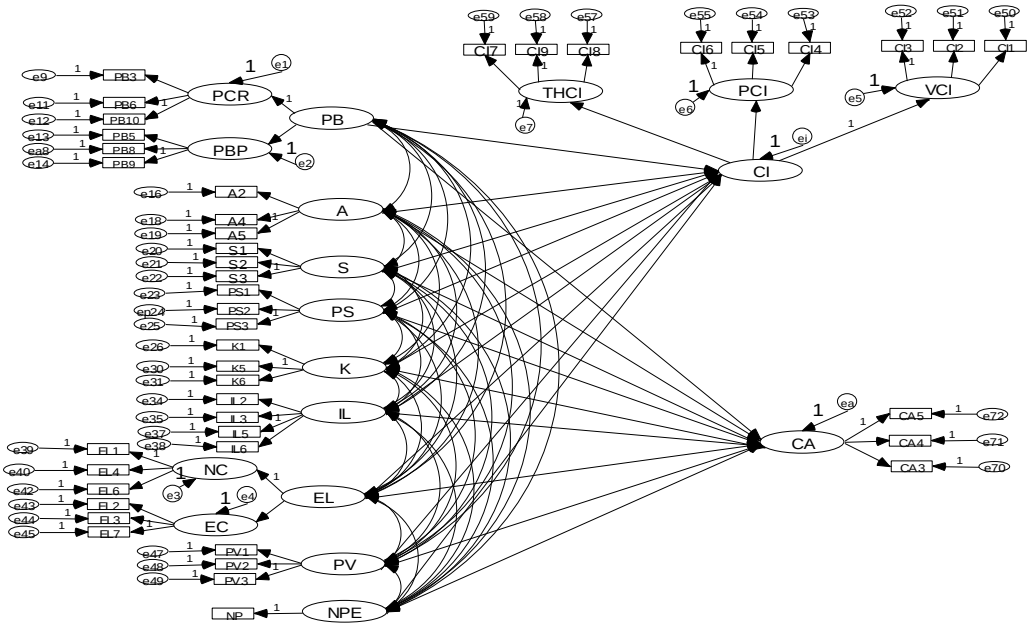


Figure 6.12: Non-Mediated Model

om Baron and Kenny (1986) and Kelloway (1995), model comparison was conducted by assessing the model fit indices value along with differences in chi-square for each model (Hair, et al., 2006). In the present study, chi-square difference (æG^2) test was used to determine whether the addition or deletion of the paths could significantly affect the overall model fit (see Table 6.28).

Table 6.28: Model Comparison for Mediation Effect Testing

	GFI	TLI	CFI	RMSEA	χ^2	æχ^2	p
Partial Mediated Model	0.912	0.918	0.927	0.037	1801.429	61.465	0.000
Full Mediated Model	0.908	0.914	0.923	0.038	1862.994		
Partial Mediated Model	0.912	0.918	0.927	0.037	1801.429	84.835	0.000
Non-Mediated Model	0.908	0.910	0.920	0.035	1886.264		

First, the partially mediated model was compared with the fully mediated model. It would offer support for the hypothesised partially mediated model if the æG^2 test was significant, and the G^2 value for partial mediation (G^2 = 1801.429) was significantly lower than the full mediation model (G^2 = 1862.994). It was reported that the partial mediation model was a significantly better fit than the full mediation model (æG^2 = 61.465, p = 0.000). In addition, the results showed that the model fit indices indicated improvement to the hypothesised partial mediated model fit. Thus, the findings support that the partially mediated model has a better fit compared to fully mediated model.

Second, the partially mediated model against the non-mediated model was tested. Similarly, the results revealed that the partially mediated model (G^2 = 1801.429) was a significantly better fit than the non-mediated model (G^2 = 1886.264) due to æG^2 = 84.832,

he model fit indices indicated that the partially mediated odel fit compared to the non-mediated model. There have been no studies that provide a similar empirical approach as the current study to test the mediating role of complaint intention by comparing the alternative models in SEM. Hence, the partially mediated model was used for further analysis in this study, and hypotheses testing and findings will be discussed in the next section.

6.8.5 Hypotheses Testing on Independent Variables to Complaint Intention

This section will first discuss the findings regarding the effects of independent variables influence on complaint intention. In other words, the purpose of this analysis is to investigate the relationship between the nine independent variables and complaint intention (H2a to H2i). Table 6.29 displays the results of hypothesis testing in this study. Overall, attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, internal locus of control predicted complaint intention well except for perception of business practice and responsiveness to complaint, external locus of control, perceived value of complaint and number of prior experiences of dissatisfaction. Hence, Hypotheses 2a, 2g, 2h and 2i were not supported.

Among all the supported hypotheses, the internal locus of control (ß = 0.261, p Ò 0.01) and societal benefit (ß = 0.216, p Ò 0.01) play the most important role influencing complaint intention, followed by probability of successful complaint (ß = 0.170, p Ò 0.01), knowledge of consumer rights and consumer agencies (ß = 0.158, p Ò 0.01), and

g (b = 0.109, p Ò 0.05). This signifies that consumers who tcomes are based on their own actions have a greater intention to make a complaint. If consumers believe that complaining about inferior products or services can improve the service or that the product will be removed from the market place, they are more likely to make a complaint. If individuals have a higher probability of successful complaint, they will have higher complaint intention. If consumers have a good understanding and awareness of their own rights and consumer agencies, they will have a greater intention of making a complaint. Also, if consumers believe that complaining is appropriate behaviour, they are also more likely to make a complaint.

Table 6.29: The Influence of Independent Variables on Complaint Intention

Hypotheses	Direction	β	Standard Error	Critical Ratio	Supported
H2a: PBŸ CI	-	0.006	0.001	0.541	No
H2b: AŸ CI	+	0.109*	0.032	2.002	Yes
H2c: SŸ CI	+	0.216*	0.042	3.734	Yes
H2d: PSŸ CI	+	0.170*	0.022	3.364	Yes
H2e: KŸ CI	+	0.158*	0.021	3.227	Yes
H2f: NPEŸ CI	+	0.021	0.008	0.503	No
H2g: ILŸ CI	+	0.261*	0.054	3.545	Yes
H2h: ELŸ CI	+	0.012	0.011	0.358	No
H2i: PVŸ CI	-	0.077	0.017	1.655	No

PB: Perception of Business Practices and Responsiveness to Complaint
A: Attitude towards Complaining
S: Societal Benefits
PS: Probability of Successful Complaint
K: Knowledge of Consumer Rights and Consumer Agencies
NPE: Number of Prior Experience of Dissatisfaction
IL: Internal Locus of Control
EL: External Locus of Control
PV: Perceived Value of Complaint
CI: Complaint Intention
D: Difficulty of Making a Complaint
IP: Importance of Product
*: pÒ0.05;
b: Standardized Regression Weight

In order to examine the influence of the perception of business practices and responsiveness to complaint on complaint intention, the hypothesis below was developed.

H2a: Consumers with a negative perception of business practice and responsiveness to complaint are more likely to have a high complaint intention.

From the results displayed in Table 6.29, the perception of business practice and responsiveness to complaint was found to have a non-significant influence on the complaint intention (p Ó 0.05). This result was consistent with the results found by Halstead and Droge (1991). However, the present study was found to be inconsistent with the result of Richins (1982). In her study, Richins (1982) found that consumers who perceive that businesses are willing to remedy the complaint are more likely to make a complaint. Thus, it can be concluded that the hypothesis ï that consumers with a negative perception of business practice and responsiveness to complain are more likely to have high complaint intention ï is not supported.

b. The Influence of Attitude towards Complaining on Complaint Intention

The results in Table 6.29 were also used to examine the influence of the attitude towards complaining on complaint intention. The hypothesis below was developed:

H2b: Consumers with a higher attitude towards complaining are more likely to have a high complaint intention.

Based on the results shown in Table 6.29, the attitude towards complaining was found to

laint intention (p Ò 0.05). The result is consistent with the rch, which found that attitude towards complaining is positively significant to the complaint intention (Richins, 1982; Kim, Kim, Im and Shin, 2003; Singh, 1989; Singh and Wilkes, 1996). This indicates that if consumers perceive that making a complaint is appropriate behaviour or is their moral obligation, they are more likely to make a complaint. Thus, the results support the hypothesis ï that consumers with a higher attitude towards complaining ï are more likely to have high complaint intention.

c. The Influence of Societal Benefits on Complaint Intention

In order to examine the influence of the societal benefits on complaint intention, the hypothesis below was developed:

H2c: Consumers who believe that complaining is beneficial for society are more likely to have a high complaint intention.

Based on the results shown in Table 6.29, the societal benefits were found to significantly influence complaint intention (p Ò 0.001). The related hypothesis pertaining to the influence of societal benefits on complaint intention is supported. Predicting that the complaint intention, societal benefits plays an important role (ß = 0.216). This result is consistent with Richins (1982), Singh (1990) and Ajzen (1985, 1990). Societal benefits come from the subjective norms of the TPB model in the study of Ajzen (1985). This signifies that if an individual believes that complaining about a particular poor quality product or service will improve it or have it removed from the marketplace, they are more likely to complain. Therefore, from the results it can be

who believe that complaining is beneficial for society are

t intention.

d. The Influence of Probability of Successful Complaint on Complaint Intention

The results in Table 6.29 were also used to examine the influence of the probability of successful complaint on complaint intention. The hypothesis below was developed:

H2d: Consumers with a higher probability of successful complaint are more likely to have high complaint intention.

From the results presented in Table 6.29, the probability of successful complaint was found to significantly influence complaint intention (p Ò 0.001). The result is consistent with past studies, such as Singh (1985) and Kim, Kim, Im and Shin (2003). The probability of successful complaint was of third importance in the role of understanding the complaint intention in the present study (ß = 0.170). Singh (1985) found a positive relationship between the probability of successful complaint and complaint intention; Kim, Kim, Im and Shin (2003) also report that the probability of successful complaint can increase an individualôs intention for making a complaint. Thus, it can be concluded that the result of this current study supports the hypothesis ï that consumers with a higher probability of successful complaint are more likely to have complaint intention.

e. The Influence of Knowledge of Consumer Rights and Consumer Agencies on Complaint Intention

In order to examine the influence of the knowledge of consumer rights and consumer agency on complaint intention, the hypothesis below was developed:

knowledge of consumer rights and consumer agencies are
mplaint intention.

The results in Table 6.29 showed that there was a significant relationship between the knowledge of consumer rights and consumer agencies on complaint intention (p Ò 0.001). It is one of the important factors in examining the complaint intention (ß = 0.158). The results of this construct correspond with the results found in Day and Landon (1979). This indicates that if individuals hold relatively good information on their consumer rights and are more aware of possible help from third parties, they are more likely to have the intention of making a complaint. Thus, it can be concluded that the result of this present study support the hypothesis ï that consumers with more knowledge of consumer rights and consumer agencies are more likely to have high complaint intention.

f. The Influence of the Number of Prior Experiences of Complaining on Complaint Intention

In order to examine the influence of the number of prior experience of complaining on complaint intention, the hypothesis below was developed:

H2f: Consumers with a higher number of prior experiences of complaining are more likely to have high complaint intention.

The results in Table 6.29 showed that the number of prior experiences of complaining had not influence on complaint intention (p Ó0.05). This result is not consistent with the previous studies of Singh (1989), Singh (1990), Singh and Wilkes (1996). Perhaps this proves that prior experience of dissatisfaction is not necessary for third party

). Therefore, it can be concluded that the hypothesis ï that nber of prior experiences of complaining are more likely to have high complaint intention, is not supported.

g. The Influence of Internal Locus of Control on Complaint Intention

Pertaining to the influence of internal locus of control on complaint intention, the hypothesis below was developed:

H2g: Consumers with a higher internal locus of control are more likely to have a high complaint intention.

The results in Table 6.29 also showed that there was a significant relationship between the internal locus of control and complaint intention (p Ò 0.001). The results showed that the internal locus of control factor played a central role in predicting complaint intention (ß = 0.261). Individuals with high internal locus of control perceive themselves as controlling their own destiny (Rinehart, 1995). They are more active in attention and assimilation of information pertinent to the outcome than the external locus of control orientation (Lefcourt, 1982). They are more interested about dissatisfied goods (Rudnice and Deni, 1980). This result indicated that consumers with internal locus of control were more ready to make complaints as they believe that making a complaint can help resolve their dissatisfaction (Kowalski, 1996). Therefore, it can be concluded that the current result supports the hypothesis ï that consumers with a higher internal locus of control are more likely to have high complaint intention.

h. The Influence of External locus of control on Complaint Intention

ence of the external locus of control on complaint intention,

veloped:

H2h: Consumers with a higher external locus of control are less likely to have a high complaint intention.

The results in Table 6.29 showed that there was a non-significant relationship between the external locus of control and complaint intention (p Ó 0.05). Individuals with an external locus of control perceive that the outcome is unpredictable due to some external variables, such as fate, luck or powerful others. As no study has been made on predicting the relationship between external locus of control and complaint intention, this study could not make a comparison with previous studies. Thus, it can be concluded that the result of this study failed to find support for the hypothesis ï that consumers with a higher external locus of control are less likely to have high complaint intention.

i. The Influence of Perceived Value of Complaint on Complaint Intention

Pertaining to the influence of the perceived value of complaint on complaint intention, the hypothesis below was developed:

H2i: Consumers with a higher perceived value of complaint are more likely to have a high complaint intention.

The results in Table 6.29 showed that there was a non-significant relationship between the perceived value of complaint and complaint intention (p Ó 0.05). This result is consistent with Singh (1989) where the weight of perceived value of complaint is on the borderline (ß = 0.077). This indicates that the perceived value of complaint does not play an important role in this research; however, the direction of its proposed hypothesis

se consumers perceive that the cost of complaining was were less likely to have complaint intention. Thus, based on the result of the negative direction, it can be concluded that the result of this study failed to find support for the hypothesis ï that consumers with higher perceived value of complaint are more likely to have high complaint intention.

6.8.6 Hypotheses Testing on Independent Variables to Complaint Action

This section will discuss the findings regarding the effects of independent variables influence on complaint action. In other words, the purpose of this analysis is to investigate the relationship between the nine independent variables and complaint action (H3a to H3i). Table 6.30 showed the results of hypothesis testing in this study. Overall, societal benefits, knowledge of consumer rights and consumer agencies and perceived value of complaint were good predictors of complaint action. Other variables, such as perception of business practice and responsiveness to complaint, attitude towards complaining, probability of successful complaint, internal locus of control, external locus of control and number of prior experiences of dissatisfaction were all non significant on predicting complaint action. Hence, only Hypotheses 3c, 3e and 3h are supported in this study.

The results also showed that knowledge of consumer rights and consumer agencies played an important role in predicting the complaint action (ß = 0.154, p Ò 0.01), followed by societal benefits (ß = - 0.128, p Ò 0.01) and the perceived value of complaint (ß = - 0.127, p Ò 0.01). This result indicates that consumers with a good

s about their consumer rights and consumer agencies will tions to release their dissatisfaction. If consumers disagree that by complaining the particular inferior product or service will eventually be improved or removed inferior product or service from the marketplace, they are less likely to take complaint action. Once consumers perceive that the cost of complaining is higher than the complaint benefit, they are less likely to take complaint action.

Table 6.30: The Influence of Independent Variables on Complaint Action

Hypotheses	Direction	β	Standard Error	Critical Ratio	Supported
H3a: PBŸ CA	-	0.002	0.000	0.418	No
H3b: AŸ CA	-	0.036	0.010	0.083	No
H3c: SŸ CA	-	0.128*	0.013	2.780	Yes
H3d: PSŸ CA	-	0.057	0.007	1.451	No
H3e: KŸ CA	+	0.154*	0.007	3.757	Yes
H3f: NPEŸ CA	+	0.051	0.002	1.503	No
H3g: ILŸ CA	-	0.035	0.016	0.648	No
H3h: ELŸ CA	-	0.051	0.009	0.821	No
H3i: PVŸ CA	-	0.127*	0.006	3.290	Yes

PB: Perception of Business Practices and Responsiveness to Complaint
A: Attitude towards Complaining
S: Societal Benefits
PS: Probability of Successful Complaint
K: Knowledge of Consumer Rights and Consumer Agencies
NPE: Number of Prior Experience of Dissatisfaction
IL: Internal Locus of Control
EL: External Locus of Control
PV: Perceived Values of Complaint
CI: Complaint Intention
D: Difficulty of Making a Complaint
IP: Importance of Product
CA: Complaint Action
*: p Ò0.05
ɓ : Standardized Regression Weight

a. The Influence of Perception of Business Practices and Responsiveness to Complaint on Complaint Action.

In order to examine the influence of the perception of business practices and responsiveness to complaint on complaint action, the hypothesis below was developed.

ative perception of business practice and responsiveness to take complaint action.

From the results displayed in Table 6.30, the perception of business practice and responsiveness to complaint was found to be non-significant on complaint action (pÓ0.05). This result is consistent with the results found by Phau and Sari (2004). Thus, it can be concluded that the hypothesis ï that consumers with a negative perception of business practice and responsiveness to complaint ï are more likely to take complaint actions, is not supported.

b. The Influence of Attitude towards Complaining on Complaint Action

The results in Table 7.26 were also used to examine the influence of the attitude towards complaining on complaint action. The hypothesis below was developed:

H3b: Consumers with a higher attitude towards complaining are less likely to take complaint action.

Based on the results shown in Table 6.30, the attitude towards complaining was found to be not significant on complaint action (p Ó0.05). The finding is the same as the research from Oh (2003). However, the present result was found to be not consistent with other studies (Richins, 1982; Phau and Sari, 2003), which found that consumers believe that making a complaint is not in accordance with their moral obligation and that complaining embarrasses them. Thus, it can be concluded that this result failed to support the hypothesis ï that consumers with a higher attitude towards complaining are less likely to take complaint actions.

c. The Influence of Societal Benefits on Complaint Action

fluence of the societal benefits on complaint action, the

oped:

H3c: Consumers who believe that complaining is beneficial for society are less likely to take complaint action.

Based on the results shown in Table 6.30, the societal benefits were found to significantly influence complaint action (p Ò 0.001). The related hypothesis pertaining to the influence of societal benefits on complaint intention is supported. In predicting the complaint action, societal benefits play the second important role in the current study (ß = 0.128). This result is consistent with Richins (1982) and indicated that individuals who believe that making a complaint is beneficial for society were less likely to take a complaint action as they disagree that complaining can eventually improve or remove the faulty product from the marketplace. Therefore, it can be concluded that consumers who believe that complaining is beneficial for society are less likely to take complaint action.

d. The Influence of the Probability of Successful Complaint on Complaint Action

The results in Table 7.26 were also used to examine the influence of the probability of successful complaint on complaint action. The hypothesis below was developed:

H3d: Consumers with a higher probability of successful complaint are more likely to take complaint action.

The results in Table 6.30 showed that there was a non-significant relationship between the probability of successful complaint and complaint action (p Ó 0.05). This result is not consistent with previous research, which found that the probability of successful

cts the complaint action (Ursic, 1985; Oh, 2003). Perhaps ability of successful complaint was measured only in terms of the consumerôs perception about the supplier or manufacturer. In the present study, the probability of successful complaint is defined as the individualôs perception about the chances that satisfying outcomes (such as refund, exchange, or apology) will result if they perform one or more third party complaint actions. Therefore, the respondents may not notice the chances of satisfied outcomes, leading to the non-significant result of the probability of successful complaint on complaint actions. It can be concluded that the hypothesis ï that consumers with a high probability of successful complaint are more likely to take complaint action ï is not supported.

e. The Influence of Knowledge of Consumer Rights and Consumer Agencies on Complaint Action

In order to examine the influence of the knowledge of consumer rights and consumer agencies on complaint action, the hypothesis below was developed:

H3e: Consumers with more knowledge of consumer rights and consumer agencies are more likely to take complaint actions.

The results of Table 6.30 showed that there was a significant relationship between the knowledge of consumer rights and consumer agencies on complaint intention (p Ò 0.001). It was the first important factor in examining the complaint action (ß = 0.154) in the current study. The result of this study corresponds with the results found in previous studies, such as Jacoby and Jaccard (1981), Moyer (1985) and Tippter (1997). This indicates that individuals who seek information and are more interested in the consumer

tive in expressing their dissatisfaction to sellers and third

ncluded that the result of this present study supports the hypothesis ï that consumers with more knowledge concerning consumer rights and consumer agencies ï are more likely to take complaint action.

f. The Influence of Number of Prior Experiences of Complaining on Complaint Action

In order to examine the influence of the number of prior experiences of complaining on complaint actions, the hypothesis below was developed:

H3f: Consumers with a higher number of prior experiences of complaining are more likely to take complaint action.

The results displayed in Table 6.30 showed that the number of prior experiences of complaining did not significantly influence complaint action (p Ó 0.05). This result is not consistent with the previous studies of Huppertz (2003), Kolodinsky (1995), and Reiboldt (2003). Perhaps prior experience of dissatisfaction is not necessary in third party complaining behaviour (Reibodlt, 2003). Therefore, it can be concluded that the hypothesis ï that consumers with a higher number of prior experiences of complaining are more likely to take complaint action ï is not supported.

g. The Influence of Internal Locus of Control on Complaint Action

Pertaining to the influence of internal locus of control on complaint intention, the hypothesis below was developed:

H3g: Consumers with a higher internal locus of control are more likely to take

also showed that there was a non-significant relationship between the internal locus of control and complaint intention (p Ó 0.05). This result is inconsistent with the findings of Dolinsky, Gould, Scotti and Sinerock (1998). However, Ajzen (1985) suggests that personal traits are assumed to have no direct effect on behaviour, internal locus of control as one of the personal trait constructs (Biddle and Nigg, 2000; Cherry, 2006, Busseri and Kerton, 1997 and so on) did not influence the complaint action in the present study. This result supports the opinions of Ajzen (1985) in the complaint domain. Thus, based on the result, it can be concluded that the result of this study failed to find support for the hypothesis that consumers with a higher internal locus of control are more likely to take complaint action.

h. The Influence of External Locus of Control on Complaint Action

In order to examine the influence of the external locus of control on complaint action, the hypothesis below was developed:

H3h: Consumers with a higher external locus of control are less likely to take complaint action.

The results in Table 6.30 showed that there was a non-significant relationship between the external locus of control and complaint action (p Ó 0.05). Individuals with external locus of control perceive that the outcome is unpredictable due to external variables, such as fate, luck or powerful others. As no study has been made on predicting the relationship between external locus of control and complaint intention, this study could not make a comparison with previous studies. However, this study supports the opinion

al traits are assumed to have no direct effect on behaviour. that the result of this study failed to find support for the hypothesis that consumers with a higher external locus of control are less likely to have high complaint intention.

i. The Influence of Perceived Value of Complaint on Complaint Action

Pertaining to the influence of the perceived value of complaint on complaint action, the hypothesis below was developed:

H3i: Consumers with a higher perceived value of complaint are less likely to take complaint action.

The results in Table 6.30 showed that there was a significant relationship between the perceived value of complaint and complaint action (p Ò 0.001). The weight of the perceived value of complaint shows that this construct plays an important role in predicting the complaint action (ß = 0.127). This result is consistent with Richins (1982) who found a negative relationship between the perceived value of complaint and complaint action. It signifies that consumers are less likely to take action for their discontent because complainers feel that the perceived cost is higher and involves a lot of trouble or time. It can be concluded that the result of this study supports the hypothesis that consumers with a higher perceived value of complaint are less likely to take complaint action.

6.8.7 Hypothesis Testing on Complaint Intention to Complaint Action

In order to examine the influence of the complaint intention on complaint action, the

pped:

H4: Consumers with a higher complaint intention are more likely to take complaint action.

Hypothesis 4 examines the effect of complaint intention on complaint action. From the empirical results shown in Table 6.31, the path coefficient from complaint intention to complaint action was significant (ϐ = 0.542, p Ò 0.001), indicating that complaint intention had a positive significant direct effect on complaint action. This result corresponds with the results of previous studies, such as Ajzen and Driver (1992), Hurbes and Ajzen (2001), Conner, Povey, Sparks, James and Shepherd (2003), Richins (1982), Singh (1988) and so on. This supports the suggestion by Ajzen (2001) that intention plays an important role in guiding human action and performs a goal-directed behaviour in a specific context; the weight of complaint intention shows that it is the most important variable in predicting the complaint action due to ϐ = 0.542 is the highest than others. Thus, it can be concluded that the hypothesis ï that consumers with higher complaint intention are more likely to take complaint action ï is supported.

Table 6.31: The Influence of Complaint Intention on Complaint Action

Hypotheses	Direction	β	Standard Error	Critical Ratio	Supported
H4: CIŸ CA	+	0.542*	0.034	6.261	Yes

CI: Complaint Intention
CA: Complaint Action
*: p Ò0.001
ϐ: Standardized Regression Weight

6.8.8 Model Re-specification

Taking into account the theoretical basis of the model, the results obtained from testing the proposed structural model (Figure 6.9) indicate that ten paths needed to be deleted

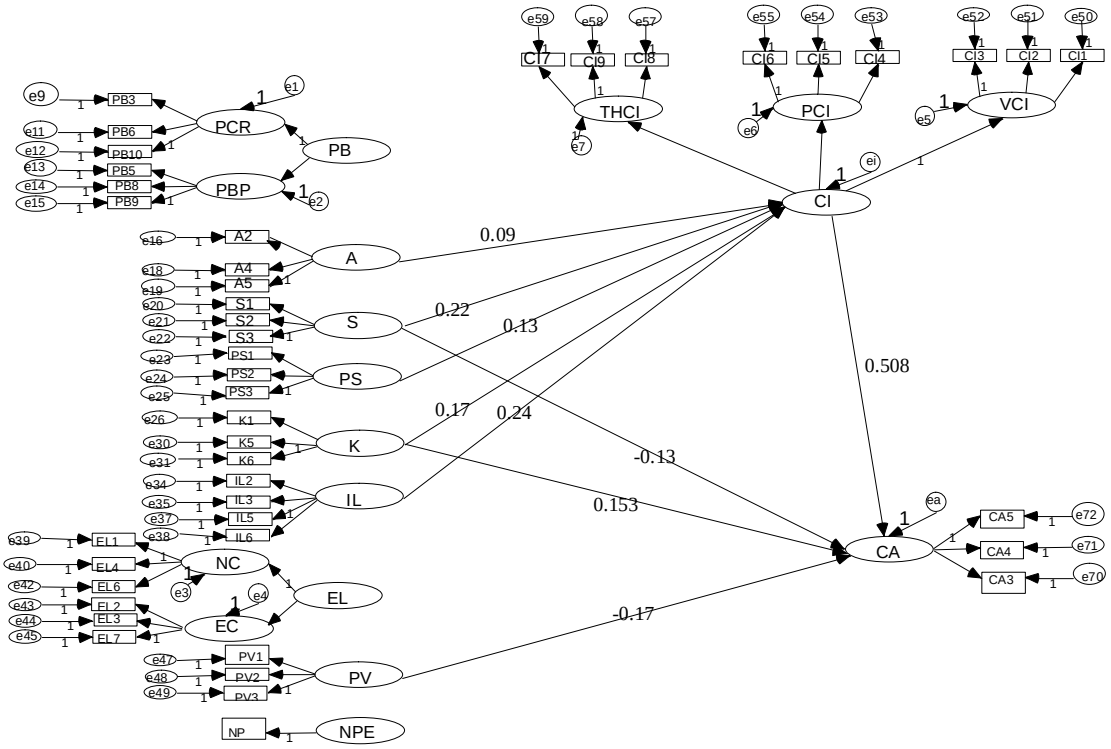
ignificant paths in the proposed structural model. However, ay change the modification indices, structural coefficients and study significance, hence, the deleting procedure was performed by removing one non-significant hypothetical path at a time as suggested by Holmes-Smith, Coote, Cunningham (2006). Therefore, the non-significant path between perception of business practices and responsiveness to complaint and complaint intention (H2a) was deleted first, as it had the lowest standardized estimate value. Following this, the process of re-specified model was shown in the Table 6.32.

Table 6.32: Goodness-of-fit Results for Revised Structural Model

Model	G^2 /df	GFI	TLI	CFI	RMSEA	Path Deleted	Reason for Deletion
Structural Model	2.142	0.912	0.918	0.927	0.037		Proposed Structural Model
Model 1	2.142	0.912	0.918	0.927	0.037	PBŸ CI (H2a)	Lowest Standardized estimate
Model 2	2.141	0.912	0.918	0.927	0.037	PBŸ CA (H3a)	Lowest Standardized estimate
Model 3	2.138	0.912	0.918	0.927	0.037	NPEŸ CI (H2f)	Lowest Standardized estimate
Model 4	2.140	0.912	0.918	0.927	0.037	NPEŸ CA (H3f)	Lowest Standardized estimate
Model 5	2.137	0.912	0.918	0.927	0.037	ELŸ CI (H2h)	Lowest Standardized estimate
Model 6	2.143	0.911	0.918	0.927	0.037	ELŸ CA (H3h)	Lowest Standardized estimate
Model 7	2.141	0.911	0.918	0.926	0.037	AŸ CA (H3b)	Lowest Standardized estimate
Model 8	2.138	0.911	0.918	0.926	0.037	ILŸ CA (H3g)	Lowest Standardized estimate
Model 9	2.138	0.911	0.918	0.926	0.037	PSŸ CA (H3d)	Lowest Standardized estimate
Model 10	2.138	0.911	0.918	0.926	0.037	PVŸ CA (H3i)	Lowest Standardized estimate

In the proposed structural model, G^2/df = 2.142, GFI = 0.912, TLI = 0.918, CFI = 0.927, RMSEA = 0.037, the goodness-of-fit indices were all higher than the accepted cut off point. Based on the significant parameter estimates result, the analysis was conducted with the path connecting the perception of business practices and responsiveness to complaint (H2a) removed (see Model 1 in Table 6.32); the results of the goodness-of-fit indices presented were the same as the proposed structural model. After moving H2a,

nificant coefficient still existed in the model. Thus, in a aths were dropped ï H3a, H2f, H3f, H2h, H3h, H3b, H3g, H3d, H3i. The results of the goodness-of-fit indices in the revised model were χ^2/df = 2.138, GFI = 0.911, TLI = 0.918, CFI = 0.926, RMSEA = 0.037, and all path estimations were significant (see Figure 6.13). The goodness-of-fit indices in the revised model were almost the same as the proposed structural model, and χ^2/df was improved from 2.141 to 2.138. These findings imply that the revised structural model is the best model.



	GFI	TLI	CFI	RMSEA	χ^2 / df	χ^2
Goodness-of-fit Indices	0.911	0.918	0.926	0.037	2.138	1819.861

Figure 6.13: The Revised Structural Model

According to the hypotheses testing about independent variables on complaint intention, independent variable on complaint action and complaint intention on complaint action, the results of the revised structural model showed that perception of business practice

nplaint, external locus of control and number of prior n were non-significant with either the complaint intention or the complaint action. Attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies and internal locus of control significantly predicted complaint intention. Societal benefits, knowledge of consumer rights and consumer agencies and perceived value of complaint showed a significant relationship with complaint action. Finally, the results also showed that complaint intention significantly predicted and played the most significant role in predicting the complaint action.

Referring to the TPB model, Ajzen (1985, 1990) suggests that concerning attitude towards behaviour, subjective norms should positively influence behavioural intention, and perceived behaviour control may also have a direct and indirect effect on the behaviour. However, in the current study, the results show that attitude towards complaining, societal benefits and probability of successful complaint affected the complaint intention; societal benefits showed a direct influence on the complaint action, and the probability of successful complaint did not show a direct effect on the complaint action.

Concerning the knowledge of consumer rights and complaint agencies, the results presented in this construct played an important role in predicting the complaint intention and complaint actions. Ormrod (1999) suggests that reinforcement response only increases when the learner is aware of the connection. Ajzen (1985) suggests that

ed by the individual will ultimately influence their further heoretical studies, learning and information can affect the individualôs intention and change their action. This study supports these theoretical points.

Based on previous studies, the locus of control presents personal traits of individual. Consistent with the suggestion from Rotter (1966), people with different beliefs about their action will have an effect on the outcome of their lives; individuals with internal locus of control orientation and external locus of control orientation will have a different perception about their control and responsibility. In the current study, consumers with internal locus of control will make a greater effort concerning their dissatisfaction and are more action-oriented than consumers with external locus of control orientation. They believe in their capabilities to perform behaviours for controlling events, they have their own goals, are likely to exert more effort to master situations, and can get more satisfaction from the situations around them (Hoffman, Novak and Schlosser (2000). Therefore, they are more likely to have a high complaint intention. However, consumers with internal locus of control had no direct effect on the complaint action. This result supports the suggestion from Ajzen (1985) that personal traits are assumed to have no direct effect on behaviour.

Generally, making a complaint can involve a lot of trouble, time and monetary costs. Thus, consumerôs perception about the benefit and the cost of complaint should affect their complaint behaviour. In the present study, the results show that perceived value of

t on the complaint action. This indicates that if complaint efits, they are less likely to take complaint action.

6.8.9 Hypotheses Testing on Independent Variable to Complaint Action Mediated by Complaint Intention

In the diagram used for hypotheses testing (see Figure 6.9), complaint intention is hypothesised as mediating the relationships between the proposed integrated model constructs and complaint actions. From the earlier discussion about the comparison of three alternative models, the partial mediated model was deemed to be the best overall fitting model as compare to the fully mediated model and non-mediated models. Hypotheses 5 were to determine which path involved a mediated relationship as the fit of the hypothesised partial mediated model was accepted. The result of the indirect effect and direct effect of proposed integrated model constructs on complaint actions was used to examine hypotheses 5 regarding complaint intention as the mediator in this study (see Table 6.33).

a. Mediating Effects of Complaint Intention on the Relationship between Perception of Business Practices and Responsiveness to Complaint and Complaint Action

In order to examine the mediating effect of complaint intention on the relationship between perception of business and responsiveness to complaint and complaint action, the Hypothesis below was developed:

H5a: Complaint intention will mediate the relationship between the perception of business practice and responsiveness to complaint and complaint action.

ypotheses Testing on the Mediation Effect

Construct	Direct Effect	Indirect Effect	Total Effect	Hypothesis Supported	Type of Mediation
H5a: PBŸ CA	-0.002	-0.003	-0.005	No	-
H5b: AŸ CA	-0.036	-0.059	0.023	No	-
H5c: SŸ CA	-0.128*	0.117*	-0.011	Yes	Partial Mediation
H5d: PSŸ CA	-0.057	-0.092*	0.035	Yes	Full Mediation
H5e: KŸ CA	0.154*	0.085*	0.239	Yes	Partial Mediation
H5f: NPEŸ CA	0.051	0.011	-0.062	No	-
H5g: ILŸ CA	-0.035	0.141*	0.106	Yes	Full Mediation
H5h: ELŸ CA	-0.051	0.006	-0.045	No	-
H5i: PVŸ CA	-0.127*	-0.042	-0.169	No	-

PB: Perception of Business Practices and Responsiveness to Complaint
A: Attitude towards Complaining
S: Societal Benefits
PS: Probability of Successful Complaint
K: Knowledge of Consumer Rights and Consumer Agencies
NPE: Number of Prior Experiences of Dissatisfaction
IL: Internal Locus of Control
EL: External Locus of Control
PV: Perceived Value of Complaint
CI: Complaint Intention
D: Difficulty of Making a Complaint
IP: Importance of Product
CA: Complaint Action
* : p Ò0.0

Referring to Table 6.33, the findings showed that the indirect effect of perception of business practice and responsiveness to complaint actions was -0.003, which is less than 0.08 (Hair, et al., 2006). Thus, complaint intention did not mediate the relationship between perception of business practice and responsiveness to complaint and complaint actions. The p value for the direct effect of the perception of business practices and responsiveness to complaint and complaint actions (-0.002) was not significant. This indicates that complaint intention does not mediate the relationship between perception of business practice and responsiveness to complaint and complaint actions (Hair, et al., 2006). Therefore, the hypothesis ï complaint intention mediates the relationship between the perception of business practice and responsiveness to complaint and complaint action ï is not supported.

omplaint Intention on the Relationship between Attitude Towards Complaining and Complaint Action

In order to examine the mediating effects of complaint intention on the relationship between attitude towards complaining and complaint action, the Hypothesis below was developed:

H5b: Complaint intention will mediate the relationship between attitude towards complaining and complaint action.

According to Table 6.33, the findings showed that the indirect effect of attitude towards complaining on complaint actions was -0.059, which is less than 0.08 (Hair, et al., 2006). Thus, complaint intention did not mediate the relationship between attitude towards complaining and complaint actions. The p value for direct effect on attitude towards complaining and complaint actions (-0.036) was not significant. This indicates that complaint intention did not mediate the relationship between the attitude towards complaining and the complaint actions (Hair, et al., 2006). Therefore, the hypothesis ï complaint intention mediates the relationship between the attitude towards complaining and complaint action - is not supported.

c. Mediating Effects of Complaint Intention on the Relationship between Societal Benefits and Complaint Action

To examine the mediating effects of complaint intention on the relationship between societal benefits and complaint action, the Hypothesis below was developed:

H5c: Complaint intention will mediate the relationship between societal benefits and complaint action.

re, the findings in Table 6.33 showed that the indirect effect of the societal benefits on the complaint actions was 0.117, which is higher than 0.008 (Hair, et al. 2006). Thus, complaint intention mediated the relationship between the societal benefits and the complaint actions. The p value for the direct effect on the societal benefits and complaint actions (-0.128) was significant. This indicates that complaint intention partially mediated the relationship between societal benefits and complaint actions (Hair, et al., 2006). No previous study has been made on the mediating effect of the societal benefits and complaint actions. This result supports the suggestion by Ajzen (1985, 1991) that the subjective norm and a particular action is mediated by behaviour intention. Thus, the hypothesis ï that complaint intention will mediate the relationship between probability of successful complaint and complaint action ï is supported.

d. Mediating Effects of Complaint Intention on the Relationship between Probability of Successful Complaint and Complaint Action

To examine the mediating effects of complaint intention on the relationship between probability of successful complaint and complaint action, the Hypothesis below was developed:

H5d: Complaint intention will mediate the relationship between the probability of successful complaint and complaint action.

The findings in Table 6.33 showed that the indirect effect on the probability of successful complaint to the complaint actions was -0.092 which was higher than 0.08 (Hair, et al. 2006). Thus, complaint intention mediated the relationship between the

nplaint and the complaint actions. However, the p value for

ot significant. This indicates that complaint intention fully mediates the relationship between societal benefits and complaint actions (Hair, et al., 2006). No previous study has been made on the mediating effect of the probability of successful complaint and the complaint actions. This result supports the suggestion from Ajzen (1985, 1991) that perceived behavioural control and particular action is mediated by behaviour intention. Thus, the hypothesis ï that complaint intention will mediate the relationship between probability of successful complaint and complaint action ï is supported.

e. Mediating Effects of Complaint Intention in the Relationship between Knowledge of Consumer Rights and Consumer Agencies and Complaint Action

In order to examine the mediating effects of complaint intention in the relationship between the knowledge of consumer rights and consumer agencies and complaint action, the Hypothesis below was developed:

H5e: Complaint intention will mediate the relationship between knowledge of consumer rights and consumer agencies and complaint action.

Following the same procedure, the findings shown in Table 6.33 indicate that the indirect effect of the knowledge of consumer rights and complaint agencies to the complaint actions was 0.085, which is higher than 0.08 (Hair, et al. 2006). Thus, complaint intention mediated the relationship between the knowledge of consumer rights and complaint agencies and the complaint actions. The p value for the direct effect on the knowledge of consumer rights and consumer agencies and the complaint

icant. This indicated that complaint intention partially etween the knowledge of consumer rights and complaint agencies and the complaint actions (Hair, et al., 2006). No previous study has been made on the mediating effect of the knowledge of consumer rights and complaint agencies and the complaint actions. This result supports the suggestion by Ajzen (1985, 1991) that the information variable and particular actions is mediated by behaviour intention. Thus, the hypothesis ï that complaint intention will mediate the relationship between the knowledge of consumer rights and complaint agencies and the complaint action ï is supported.

f. Mediating Effects of Complaint Intention on the Relationship between Number of Prior Experiences of Dissatisfaction and Complaint Action

In order to examine the mediating effect of complaint intention on the relationship between the number of prior experiences of dissatisfaction and the complaint action the following Hypothesis was developed:

H5f: Complaint intention will mediate the relationship between the number of prior experiences of dissatisfaction and the complaint action.

Referring to Table 6.33, the findings showed that the indirect effect of the number of prior experiences of dissatisfaction on the complaint actions was -0.062, which is less than 0.08 (Hair, et al. 2006). Thus, the complaint intention did not mediate the relationship between the number of prior experiences of complaining and the complaint actions. The p value for the direct effect on the number of prior experiences of dissatisfaction and the complaint actions was not significant (0.051). This indicates that

t mediate the relationship between the number of prior n and complaint action (Hair, et al., 2006). Therefore, the hypothesis ï that complaint intention mediates the relationship between the number of prior experiences of dissatisfaction and the complaint action ï is not supported.

g. Mediating Effects of Complaint Intention on the Relationship between Internal Locus of Control and Complaint Action

In order to examine the mediating effects of complaint intention on the relationship between the internal locus of control and the complaint action, the following Hypothesis was developed:

H5g: Complaint intention will mediate the relationship between the internal locus of control and the complaint action.

In Table 6.33, the results showed that the indirect effect on the internal locus of control to the complaint actions was 0.141, which is higher than 0.08 (Hair, et al. 2006). Thus, complaint intention did mediate the relationship between the internal locus of control and the complaint actions. Although the p value for the direct effect (-0.035) is not significant, it indicates that complaint intention fully mediated the relationship between the internal locus of control and the complaint actions (Hair, et al., 2006). Although no previous study has been made on the mediating effect on the internal locus of control and the complaint actions, this result supports the suggestion by Ajzen (1985, 1991), that personality trait and particular actions is mediated by behaviour intention. Thus, the hypothesis ï that complaint intention will mediate the relationship between probability of successful complaint and complaint action ï is supported.

omplaint Intention on the Relationship between External Locus of Control and Complaint Action

In order to examine the mediating effect of complaint intention on the relationship between the external locus of control and the complaint action, the following Hypothesis was developed:

H5h: Complaint intention will mediate the relationship between the external locus of control and the complaint action.

Referring to Table 6.33, the findings showed that the indirect effect of the external locus of control to the complaint actions was -0.045, which is less than 0.08 (Hair, et al. 2006). Thus, complaint intention did not mediate the relationship between the external locus of control and the complaint actions. The p value for the direct effect of the external locus of control and the complaint actions was non significant (-0.051). This indicates that complaint intention did not mediate the relationship between the external locus of control and the complaint actions (Hair, et al., 2006). Therefore, the hypothesis ï that complaint intention mediates the relationship between the external locus of control and the complaint action ï is not supported.

i. Mediating Effects of Complaint Intention on the Relationship between Perceived Value of Complaint and Complaint Action

In order to examine the mediating effect of complaint intention on the relationship between the perceived value of complaint and the complaint action, the following Hypothesis was developed:

ll mediate the relationship between the perceived value of action.

Referring to Table 6.33, the findings showed that the indirect effect of the perceived value of complaint to the complaint actions was -0.042 which is less than 0.08 (Hair, et al. 2006). Thus, complaint intention did not mediate the relationship between the perceived value of complaint and the complaint actions. However, the p value for the direct effect on the perceived value of the complaint and the complaint actions (-0.127) was significant. This indicates that complaint intention did not mediate the relationship between the perceived value of the complaint and the complaint actions (Hair, et al., 2006). Therefore, the hypothesis ï that complaint intention mediates the relationship between the perceived value of complaint and the complaint action ï is not supported.

6.8.10 Hypotheses Testing on Moderating Variable

The moderating effect occurs when a third construct changes the relationship between two related constructs. It may act to reduce the magnitude and/or reverse the direction of the relationship between the predictor and outcome variables (Hair, et al., 2006). To test the hypothesized moderation model in the SEM, Zhao and Cavusgil (2006) suggest that a two-group model can be used in the core model, which is tested for high and low groups. This suggestion is consistent with the argument for testing moderating effects from Baron and Kenny (1986) in which ñthe levels of the moderator are treated as different groupsò (p. 1175). Rigorous pre-tests were done to verify that the changes in coefficient are truly due to group differences and not due to measurement errors (Zhao and Cavusgil, 2006).

ffect, a series of structural analysis may be applied to the model. The first analysis is the parameter (ϐ: relationship between complaint intention and complaint action), which is constrained to be equal across the group and the second analysis is not constrained. Thus, a difference in the chi square value (æG2) between two models determines the moderating effect on the independent and dependent relationship. If æG2 is significant, it means that the model has a better fit when the relationship is allowed to be a different group, based on the moderator variable. Thus, the moderation effect would be supported.

Singh (1989) and Richins (1982) suggest that individual believe attitudes affect a general tendency to behave in a certain way, and this general tendency further affects actual behaviour. However, in any specific instance, tendency and actual behaviour is moderated by situational variables. Based on the suggestion from the previous study, the difficulty of making a complaint and the importance of product were used as moderators in the current study. As Hair, et al., (2006) suggest that multi-group SEM is often used to test moderating effects; this study applied the moderating effect in the proposed structural model in SEM. In accordance with the studies by Hair, et al. (2006) and Zhao and Cavusgil (2006), the two-group model was applied into the proposed structural model (see Figure 6.9), which was used for high and low groups in the current study. The procedure for testing the moderating effect will be presented in the following sub-section.

…r the Difficulty of Making a Complaint

difficulty of making a complaint, the sample was split into two groups (mean = 12). The respondent scores above the mean were defined as the high group on the difficulty of making a complaint (N = 356); the respondent scores below the mean were defined as the low group on the difficulty of making a complaint (N = 479) (Zhao and Cavusgil, 2006).

b. Dividing the Groups for the Importance of Product

Using the mean score of the importance of product, the sample was split into two groups (mean = 11). The respondent scores above the mean were defined as the high group on the importance of product (N = 354); and the respondent scores below the mean as the low group on the importance of product (N = 480) (Zhao and Cavusgil 2006).

As suggested by Zhao and Cavusgil (2006), once the two groups (low group and high group) are created, it is necessary to determine whether there are any significant differences in the structural parameters between the low group and high group in the study. First, the parameter from the consumer complaint intention to the complaint action was constrained to be equal (Model A). Second, the parameter was not constrained (it was kept free) (Model B). The chi-square difference between the two models determined if the moderator factor had a moderating effect on the relationship between complaint intention and complaint action. In the current study, æG2 values showed significant differences between two groups on each moderator (see Table 6.34).

heses on the moderating effect, the parameter ß should be

nd the high group based on each moderator. The results for hypotheses testing are shown in Table 6.35.

Table 6.34: Structure Equations Model Results for Moderating Effects

Moderating Variable		χ^2	df	$\Delta\chi^2$	p[a]
The Difficulty of Making Complaints					
Low Group (N = 478)	Model A	1471.431	842	32.632	0.000*
	Model B	1438.799	841		
High Group (N = 356)	Model A	1530.397	842	19.537	0.000*
	Model B	1510.860	841		
The Importance of Product					
Low Group (N = 480)	Model A	1472.424	842	34.747	0.000*
	Model B	1437.677	841		
High Group (N = 354)	Model A	1457.755	842	23.073	0.000*
	Model B	1434.682	841		

p[a]: Probability that the two models tested are significantly different.
ç[2]: Chi-Square (CMIN); df: Degree of freedom.

Table 6.35: Results for Hypotheses Testing on Moderating Effects

Relationships	Moderator	Hypotheses	β	C.R.	P	Support
CA Ŷ CI	**Difficulty of Making a Complaint**	**H6a**				**Yes**
	Low Group		0.541	4.699	0.000*	
	High Group		0.578	3.986	0.000*	
	Importance of Product	**H6b**				**Yes**
	Low Group		0.467	4.443	0.000*	
	High Group		0.604	4.602	0.000*	

CI: Complaint Intention; CA: Complaint Action. ß: Standardized Regression Weights (coefficients);
C.R.: Critical Ratio *: P Ò0.05

c. Moderating Effect of the Difficulty of Making a Complaint on the Relationship between Complaint Intention and Complaint Action

In order to examine the moderating effect of difficulty of making a complaint on the relationship between complaint intention and complaint action, the hypothesis below

Hoa: The relationship between complaint intention and complaint action is moderated by difficulty of making a complaint.

First, the chi-square difference (Model A and Model B) on the difficulty of making a complaint in the low group and high group were all significant (see Table 6.34). The æ2 value in the low group was 32.632 between Model A and Model B. This indicated that the lower group of the difficulty of making a complaint had a moderating effect on the complaint intention and complaint action. In the high group, the æ2 value was 19.537 between Model A and Model B. This indicated that the high group of the difficulty of making a complaint had a moderating effect on the complaint intention and complaint action. This result supported that difficulty of making a complaint had a moderating effect on the relationship between complaint intention and complaint action.

For testing the hypothesis, the result is presented in Table 6.35. The value of the relationship between complaint intention and complaint action for the high group (ɓ = 0.578) was greater than for the lower group (ɓ = 0.541). High group of difficulty of making a complaint tend to have higher propensity than lower group. This revealed that difficulty of making a complaint significantly moderated the impact of complaint intention on the complaint action. Thus, the results support the hypothesis ï that the relationship between complaint intention and complaint action is moderated by difficulty of making a complaint. This hypothesis demonstrated the suggestion by Richins (1982).

f the Importance of the Product on the Relationship between Complaint Intention and Complaint Action

In order to examine the moderating effect of the importance of the product on the relationship between complaint intention and complaint action, the hypothesis below was developed.

H6b: The relationship between complaint intention and complaint action is moderated by importance of the product.

In terms of the importance of product, the same procedure was applied. The æG2 value in the low group was 34.747 between Model A and Model B (see Table 6.34). This indicates that the lower group of the importance of product has a moderating effect on the complaint intention and complaint action. In the high group, the æG2 value was 23.073 between Model A and Model B. This indicates that the high group of the importance of product has a moderating effect on the complaint intention and complaint action. this result supported that importance of product had a moderating effect on the relationship between complaint intention and complaint action.

For testing the hypothesis, the result is presented in Table 6.35. The value of the relationship between complaint intention and complaint action for the low group (ß = 0.467) was lower than for the high group (ß = 0.604). High group of importance of product tend to have higher propensity than lower group. This revealed that importance of product significantly moderated the influencing of complaint intention on the complaint action. Thus, the results support the hypothesis ï that the relationship between complaint intention and complaint action is moderated by importance of product. This hypothesis demonstrated the suggestion by Richins (1982).

theses

theses tested in the current study, fifteen (15) hypotheses were supported. This section summarises the findings of the hypotheses testing (see Table 6.36). Hypotheses 2a to 2i expected effects of nine independent variables on complaint intention. The findings indicated that five out of hypotheses linking independent variables to complaint intention were found to be significant, there were attitude towards complaining, societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, and internal locus of control predicted the complaint intention. Hypotheses 3a to 3i examined the direct influence of the nine independent variables on complaint action. It was found that three out of nine independent variables were found to be significant. There were societal benefits, knowledge of consumer rights and perceived value of complaint had significant effects on predicting complaint action.

Hypothesis 4 proposed a positive association between complaint intention and complaint action. According to Baron and Kenny (1986), one of the conditions for a mediation effect is that the mediator must have an effect on the dependent variable. Based on the suggestions from Kelloways (1995) and Hair, et al. (2006), Hypotheses 5a to 5i predicted the relationship between nine independent variables and complaint action, which were mediated by complaint intention. This research found that four out of nine variables were found to be significant. There were societal benefits, probability of successful complaint, knowledge of consumer rights and consumer agencies, and internal locus of control significantly supported the hypotheses.

nary of the Tests of Hypothesised Relationship

otheses Statements	**Findings**
egative perception of business practice and responsiveness to complaint are more likely to have a high complaint intention.	Not supported
H2b: Consumers with a higher attitude towards complaining are more likely to have a high complaint intention.	Supported
H2c: Consumers who believe that complaining is beneficial for society are more likely to have a high complaint intention.	Supported
H2d: Consumers with a higher probability of successful complaint are more likely to have a high complaint intention.	Supported
H2e: Consumers with more knowledge of consumer rights and consumer agencies are more likely to have a high complaint intention.	Supported
H2f: Consumers with a higher number of prior experiences of complaining are more likely to have a high complaint intention.	Not supported
H2g: Consumers with a higher internal locus of control are more likely to have high complaint intention.	Supported
H2h: Consumers with a higher external locus of control are less likely to have high complaint intention.	Not supported
H2i: Consumers with a higher perceived value of complaint are more likely to have a high complaint intention.	Not supported
H3a: Consumers with a negative perception of business practice and responsiveness to complaint are more likely to take complaint action.	Not supported
H3b: Consumers with a higher attitude towards complaining are less likely to take complaint action.	Not supported
H3c: Consumers who believe that complaining is beneficial for society are less likely to take complaint action.	Supported
H3d: Consumers with a higher probability of successful complaint are more likely to take complaint action.	Not supported
H3e: Consumers with more knowledge of consumer rights and consumer agencies are more likely to take complaint actions.	Supported
H3f: Consumers with a higher number of prior experiences of complaining are more likely to take complaint action.	Not supported
H3g: Consumers with a higher internal locus of control are more likely to take complaint action.	Not supported
H3h: Consumers with a higher external locus of control are less likely to take complaint action.	Not supported
H3i: Consumers with a higher perceived value of complaint are less likely to take complaint action.	Supported
H4: Consumers with a higher complaint intention are more likely to take complaint action.	Supported
H5a: Complaint intention will mediate the relationship between the perception of business practice and responsiveness to complaint and complaint action.	Not supported
H5b: Complaint intention will mediate the relationship between attitude towards complaining and complaint action.	Not supported
H5c: Complaint Intention will mediate the relationship between societal benefits and complaint action.	Supported
H5d: Complaint intention will mediate the relationship between the probability of successful complaint and complaint action.	Supported

will mediate the relationship between ghts and consumer agencies and complaint	Supported
will mediate the relationship between the number of prior experiences of complaining and complaint action.	Not supported
H5g: Complaint intention will mediate the relationship between the internal locus of control and complaint action.	Supported
H5h: Complaint intention will mediate the relationship between the external locus of control and complaint action.	Not supported
H5i: Complaint intention will mediate the relationship between the perceived value of complaint and complaint action.	Not supported
H6a: The relationship between complaint intention and complaint action is moderated by difficulty of making a complaint.	Supported
H6b: The relationship between complaint intention and complaint action is moderated by difficulty of making a complaint.	Supported

Finally, hypotheses 6a and 6b were established to identify the moderating effect on the relationship between complaint intention and complaint action. The findings indicated that difficulty of making a complaint and the importance of product moderate the relationship between complaint intention and complaint action.

6.9 Chapter Summary

The sample population of this study consisted of consumers who shopped at the selected shopping malls. The total number of usable questionnaires was 834. Data entry was carefully examined, and the items that have been stated negatively in the questionnaire have been reverse coded. Before testing the hypotheses in this study, both techniques of exploratory factor analysis and confirmatory factor analysis were performed for construct validation purposes. In order to use the appropriate techniques for hypotheses testing, the distribution of data was found to meet the assumptions of multivariate analyses, such as normality, linearity and homoscedasticity. The structural equation modelling analysis was performed to test hypotheses 2a to 2i, hypotheses 3a to3i, hypothesis 4, hypotheses 5a to 5i, and hypotheses 6a and 6b.