UNIVERSITI PUTRA MALAYSIA

CONSUMER COMPLAINT BEHAVIOUR, SATISFACTION WITH COMPLAINT HANDLING, MOBILE PHONE DEPENDENCY AND RELATIONSHIP QUALITY IN MOBILE PHONE SERVICE INDUSTRY

MOHD. KHIRZANBADZLI BIN A. RAHMAN

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By

MOHD. KHIRZANBADZLI BIN A. RAHMAN

Thesis Submitted to the School of Graduate Studies, Universiti Putra
Malaysia, in Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

June 2016
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DEDICATION

This thesis is dedicated to

My Parents
My Teachers
My Wife
My Daughter
My Brothers and Sisters
My Relatives
And all of my friends

Without whom none of my success would be possible.
Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Doctor of Philosophy

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By

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June 2016

Chairman : Associate Professor Sharifah Azizah binti Haron, PhD
Faculty : Human Ecology

The insignificant number of complaints as compared to the huge number of mobile phone subscribers generated the interest to conduct this study. This study is related to consumer complaint behavior, relationship quality, satisfaction with complaint handling and mobile phone dependency in the mobile phone services industry. The main purpose of the study is to examine the relationship between consumer complaint behavior (CCB) and relationship quality. This study also examines the relationship between consumer complaint behavior and satisfaction with complaint handling as well as the relationship between satisfaction with complaint handling and relationship quality. Further, the role of satisfaction as mediator is also investigated in this study. Considering this study is involving mobile phone services users, the final aim of this study is to examine the Effects of mobile phone dependency as moderator on the hypothesized relationships. Social exchange theory, theory of exit, voice and loyalty, attachment theory as well as the results from previous studies were adopted in developing the framework for the study. Correlational design and purposive sampling technique were used on 285 samples for complainer and 230 for non-complainer residing in Selangor, Wilayah Persekutuan Kuala Lumpur and Putrajaya. Data were analysed by using Statistical Package for Social Sciences (SPSS) version 21 for exploratory factor analysis (EFA) and descriptive statistics while AMOS version 21 for structural equation modelling (SEM). Consistent with the outcome of EFA, the measurement model shows excellent fit for the complainers’ and non-complainers’ dataset and confirmed that CCB has four factors namely Public Complaint Soft Action (PCSA), Public Complaint Extreme Action (PCEA), Private Complaint Soft Action (PVSA) and Private Complaint Extreme Action (PVEA) for the complainers. For the non-complainer, the result of the measurement model has identified two factors namely Private Complaint Soft Action (PVSA) and Private Complaint Extreme...
Action (PVEA). Both measurement models have met the required values for goodness-of-fit, average variance extracted (AVE), construct reliability and convergent validity. Fifteen hypotheses were developed to study the relationships among the variables for the complainers’ dataset and four hypotheses for the non-complainers.

The results of the structural model explained PCSA, PCEA and PVSA have significant relationship with relationship quality for the complainers. Besides, the result also showed PCSA has significant relationship with SATCOM and SATCOM has significant relationship with relationship quality. For the non-complainers, only PVSA shows significant relationship with relationship quality. Using bootstrapping technique, this study revealed that SATCOM mediated the relationship between PCSA and relationship quality. The \( \chi^2 \) difference test was used to assess the Effects of MPD as the moderator. The results confirmed that MPD moderated the relationship between PCSA, PCEA, PVSA and relationship quality. MPD also moderated the relationship between PCSA and SATCOM for the complainers’ dataset. For the non-complainers, the result showed that MPD moderated the relationship between PVSA and relationship quality. The results proven that CCB consists of four factors for complainer and two factors for non-complainers. Factors that are not extreme have significant relationship with relationship quality. The results also indicate the important of relationship quality and satisfaction with complaint handling in the relationship between the consumers and the service provider. As mobile phone services industry involved huge number of Malaysian population this issue should become the focal point to the parties concerned.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

GELAGAT ADUAN PENGUNGA, KEPUASAN TERHADAP PENGENDALIAN ADUAN, KEBERGANTUNGAN TERHADAP TELEFON MUDAH ALIH DAN KUALITI PERHUBUNGAN DALAM INDUSTRI PERKHIDMATAN TELEFON MUDAH ALIH

Oleh

MOHD. KHIRZANBADZLI BIN A. RAHMAN

Jun 2016

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Fakulti : Ekologi Manusia

Bilangan aduan yang tidak signifikan berbanding dengan jumlah pelanggan telefon mudah alih telah menggerakkan minat untuk melaksanakan kajian ini. Kajian ini berkaitan dengan gelagat aduan pengguna, kualiti perhubungan, kepuasan terhadap aduan dan kebergantungan terhadap telefon mudah alih dalam industri perkhidmatan telefon mudah alih. Tujuan utama kajian ini adalah untuk mengkaji hubungan antara gelagat aduan pengguna keatas kualiti hubungan. Kajian ini juga menguji hubungan diantara gelagat aduan pengguna keatas kepuasan terhadap aduan serta hubungan diantara kepuasan terhadap aduan keatas kualiti hubungan. Selanjutnya, kajian ini menguji peranan kepuasan terhadap aduan sebagai pemboleh ubah perantaraan. Memandangkan kajian ini melibatkan pengguna perkhidmatan telefon mudah alih, tujuan terakhir kajian ini adalah mengkaji kesan kebergantungan terhadap telefon mudah alih sebagai pemboleh ubah penyederhanaan keatas hubungan yang telah dihipotesisikan. Teori pertukaran sosial, teori keluar, menyuara dan ke setiaan, teori keberikatan serta hasil kajian-kajian lepas digunakan dalam pembentukan kerangka kajian

Kajian ini menggunakan rekabentuk korelasi dan kaedah persampelan mudah keatas 285 orang sampel pengadu dan 230 orang bukan pengadu yang tinggal di Selangor, Wilayah Persekutuan Kuala Lumpur dan Putrajaya. Data kajian dianalisis dengan menggunakan perisian Statistical Package for Social Sciences (SPSS) versi 21 untuk analisis faktor penerokaan dan deskriptif manakala AMOS versi 21 untuk pemodelan persamaan struktur. Konsisten dengan dapatan analisis faktor penerokaan, model pengukuran menunjukkan ketepatan padanan yang baik keatas kumpulan pengadu dan bukan pengadu dan mengesahkan gelagat aduan pengguna mempunyai empat faktor iaitu Aduan Awam Tindakan Lembut (PCSA), Aduan Awam Tindakan Ekstrim (PCEA), Aduan Peribadi Tindakan Lembut (PVSA) dan Aduan Peribadi
Tindakan Ekstrim (PVEA) untuk kumpulan pengadu. Untuk kumpulan bukan pengadu, hasil daripada model pengukuran telah mengenal pasti dua faktor iaitu Aduan Peribadi Tindakan Lembut (PVSA) dan Aduan Peribadi Tindakan Ekstrim (PVEA) dengan mencapai nilai ketepatan padanan, varian purata diekstrak, kebolehpercayaan konstruk dan kesahihan tumpuan yang baik. Sejumlah lima belas hipotesis telah dibangunkan untuk mengkaji hubungan antara pembolehuhub-pembolehuhub dalam kajian bagi kumpulan pengadu dan empat hipotesis bagi kumpulan bukan pengadu.


Dapatan kajian ini membuktikan gelagat aduan pengguna mempunyai empat faktor bagi pengadu dan dua faktor bagi bukan pengadu. Faktor-faktor yang bukan ekstrim mempunyai hubungan yang signifikan dengan kualiti hubungannya kualiti hubungan. Dapatan kajian ini menjadi petunjuk terhadap pentingnya kualiti hubungan dan kepuasan terhadap aduan dalam hubungan diantaranya penyedia perkhidmatan dan pengguna. Oleh kerana industri perkhidmatan telefon mudah alih melibatkan bilangan besar penduduk Malaysia, isu ini perlu menjadi tumpuan utama kepada pihak-pihak yang berkenaan.
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I certify that a Thesis Examination Committee has met on 28 June 2016 to conduct the final examination of Mohd. Khirzanbadzli bin A. Rahman on his thesis entitled "Consumer Complaint Behaviour, Satisfaction with Complaint Handling, Mobile Phone Dependency and Relationship Quality in Mobile Phone Service Industry" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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This is to confirm that:
• the research conducted and the writing of this thesis was under our supervision;
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<tr>
<td>AfCM/AFC</td>
<td>Affective Commitment</td>
</tr>
<tr>
<td>AfCN</td>
<td>Affective Conflict</td>
</tr>
<tr>
<td>AGFI</td>
<td>Adjusted goodness-of-fit</td>
</tr>
<tr>
<td>AMOS</td>
<td>Analysis of Moment Structure</td>
</tr>
<tr>
<td>AVE</td>
<td>Average Variance Extracted</td>
</tr>
<tr>
<td>CCB</td>
<td>Consumer Complaint Behavior</td>
</tr>
<tr>
<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
</tr>
<tr>
<td>CFI</td>
<td>Comparative Fit Index</td>
</tr>
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<td>CFM</td>
<td>Communication and Multimedia Consumer Forum of Malaysia</td>
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<tr>
<td>CR</td>
<td>Construct Reliability</td>
</tr>
<tr>
<td>EFA</td>
<td>Exploratory Factor Analysis</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GFI</td>
<td>Goodness-of-Fit Index</td>
</tr>
<tr>
<td>IBM</td>
<td>International Business Machine</td>
</tr>
<tr>
<td>MCMC</td>
<td>Malaysian Communication and Multimedia Commission</td>
</tr>
<tr>
<td>MMS</td>
<td>Multimedia Message Services</td>
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<tr>
<td>MPD</td>
<td>Mobile Phone Dependency</td>
</tr>
<tr>
<td>MPDQ</td>
<td>Mobile Phone Dependency Questionnaire</td>
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<tr>
<td>NCCC</td>
<td>National Consumer Complaint Centre</td>
</tr>
<tr>
<td>NFI</td>
<td>Normed Fit Index</td>
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<tr>
<td>NTP</td>
<td>National Telecommunication Policy</td>
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<td>PCEA</td>
<td>Public Complaint Extreme Action</td>
</tr>
<tr>
<td>PCSA</td>
<td>Public Complaint Soft Action</td>
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</table>
PNFI  Parsimonious Normed Fit Index
PVEA  Private Complaint Extreme Action
PVSA  Private Complaint Soft Action
RMSEA Root Mean Square Error of Approximation
SAT/SATIS  Satisfaction
SATCOM Satisfaction with Complaint Handling
SE  Standard Error
SEM  Structural Equation Modelling
SET  Social Exchange Theory
SMS  Short Messages Services
SPSS  Statistical Package for Social Sciences
TiPB/TPB  Trust in Partner’s Benevolence
TiPH/TPH  Trust in Partner’s Honesty
TLI  Tucker Lewis Index
CHAPTER 1

INTRODUCTION

1.1 Introduction

The Malaysian government determination on developing the telecommunication technology was manifested by the inception of the National Telecommunication Policy (NTP), 1994 – 2020 (Ministry of Energy, Telecommunication and Multimedia, n.d). The policy outlines the objectives, strategies and features of the NTP for the period of 1994 to 2020. It was formulated to ensure that the growth of telecommunications services utilized technology to support the national development, in line with national aspirations. Undoubtedly, telecommunication technology facilitates business and industry to grow rapidly while at the same time contributing to the economic development.

Revenue from the communications industry as a whole in Malaysia has increased by 11% to RM45.8 billion from to RM41.2 billion in 2009. Retrospectively the industry has grown at a compounded annual growth rate of 46%, an increase of RM14.4 billion in the period of five (5) years. In 2010 also, the domestic revenue for communications and multimedia is at RM35.4 billion, representing 6.3% of Gross Domestic Product (GDP) (MCMC, 2010). Clearly, telecommunication infrastructure can be a reliable indicator of economic development. Hence, many countries give more focus to improve their telecommunication technology.

Mobile phone or also known as cellular or hand phone was an output of telecommunication technology. Owing to the availability of telecommunication technology, mobile phones become more and more important in daily life (Yang & Lay, 2011). The number of mobile phone users has increased gradually over the years. Noticeably people use mobile phones absolutely far more than other consumer products because of their diverse usage. Besides being used as a mean of communication, it can also be used to perform work-related tasks. Seemingly, people nowadays are so dependent on mobile phones and this device becomes one of the mandatory items for modern people.

Mobile phones in particular have helped to create a new world since they provide a variety of functions that touch upon every aspect of social life (Katz & Aakhus, 2002). According to Katz and Sugiyama (2005), more than one out of six people worldwide now have mobile phones. Malaysia is currently going through the same phenomenon. Zulkefly and Baharudin (2009) said that, Malaysians tend to use their mobile phone compared to the fixed line telephone as a way to keep in touch with their family members, friends,
colleagues and business associates. Essentially mobile phone is viewed as an important communication tool and has become an integral part of the society. Table 1.1 shows that in 2013 the number of mobile phone subscribers exceeded the number of the Malaysian population totaled of 29,947 (Department of Statistics, 2013). This denotes that some people in Malaysia subscribe to more than one mobile phone services at a time, an indication of Malaysians consumers dependency on mobile phones.

Table 1.1: The number of cellular telephone subscriptions and penetration rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>Post-paid ('000)</th>
<th>Pre-paid ('000)</th>
<th>Total</th>
<th>Penetration rate per 100 inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td>7,375</td>
<td>33,950</td>
<td>41,325</td>
<td>142.5</td>
</tr>
<tr>
<td>2012</td>
<td>1</td>
<td>7,471</td>
<td>34,974</td>
<td>42,445</td>
<td>143.3</td>
</tr>
<tr>
<td>2012</td>
<td>2</td>
<td>7,534</td>
<td>35,070</td>
<td>42,604</td>
<td>143.4</td>
</tr>
</tbody>
</table>

Adapted from Malaysian Communication and Multimedia Commission, (2013)

In line with the tremendous increment of mobile phone services usage, service providers are continuously playing their roles to provide variety of services. Mobile phone services provide voice and non-voice telecommunication services that give benefits to the user to communicate, and increase profit to the service providers. Mobile phone users are expected to experience more sophisticated telecommunication services as the technology in this area develop rapidly. Alongside with the rapid development and the increasing number of subscribers the revenue gain by the service provider is predictably increased. In point of fact, the billions of Malaysian Ringgit revenue gained were generated by only a handful of service providers. Service providers are expected to be responsible in providing excellent services to the subscribers who helped them to generate the revenue.

Generally, complaints can help to identify factors that hinder organization from providing excellent services. This explains why it is important for service providers to provide excellent complaints handling for the benefit of both the company and the consumer. Excellent complaints-handling may benefit the service provider by avoiding undesirable outcomes and achieving desirable outcomes. Hence, many organizations are providing channels for the customers to lodge their complaints. A survey on the major mobile phone services players in Malaysia proven that various complaint channels are provided. Consumers are free to lodge their complaints via several methods. Table 1.2 presents the complaint channel facilities in four service providers.
Table 1.2: Examples of mobile phone service provider and complain channels facilities

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Counter/ Face-to-Face</th>
<th>Call</th>
<th>SMS</th>
<th>On-line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celcom</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>Maxis</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>DiGi Telecommunications</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>U Mobile</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

On top of the complaint channels provided by the service provider, mobile phone users in Malaysia are free to put forward their complaints to the Communication and Multimedia Consumer Forum of Malaysia (CFM), the Malaysian Communication and Multimedia Commission (MCMC), the National Consumer Complaints Center (NCCC) or any other Consumer Associations in Malaysia which also provide various channels for consumer to lodge their complaints.

Although various channels and organizations are available, the number of complaints received is deemed insignificant. It was reported in 2013 the number of complaints received by the National Consumer Complaint Center (NCCC) with regard to telecommunication sector was 6,404. Out of this, 64.5% (4,130) come from the mobile communication (NCCC, 2013). The NCCC is a non-profit organization that provides consumers with alternative, fair, independent and efficient complaints handling mechanism. At present, NCCC is the organization that can produce a reliable number of complaints on mobile phone services in Malaysia. The possible reason for the insignificant number of complaints could be the dissatisfied consumers opted for different type of complaint behaviors since it includes multiple sets of behavior and non-behavioral responses triggered by unsatisfactory purchase episode (Singh, 1990). As such, dissatisfied consumers can be categorized into complainer and non-complainer.

1.2 Problem Statement

It is mutually agreed that, the most appropriate tool to identify whether consumers are getting good returns from their investments is from the consumers’ feedback or complaints. The outcomes from this tool are not only beneficial to the consumers but also to the service providers’ business stability. On the other hand, complaining is also seen as communicating something negative regarding a product or service to the service provider or to some third-party entity (Jaccoby & Jaccard, 1981). However, in the Malaysian mobile phone services industry, there is enormous difference between the number of subscribers and number of complaints. This situation withholds several unknown issues that need to be addressed. One of the
important issues is either the needs of the users have been fulfilled that makes the number of complaints is insignificant as compared to the number of subscribers. As relationship quality shows the degree of appropriateness of a relationship to fulfill the needs of the customer (Hennig-Thurau & Klee, 1997) and to indicate the customers are able to rely on the service provider’s integrity (Crosby, Evans & Cowles, 1990) and therefore it is important to know the level of relationship quality in the mobile phone service industry for the benefits of 44 million subscribers (MCMC 2013).

Complaint behavior is one of the important consumers’ behaviors for any organization to focus on. The sizeable number of studies on consumer complaint behavior (CCB) shows that this behavior becomes increasingly critical to corporate actions. CCB has been increasingly recognized as having significant implications to core business activities – including the measurement of service quality (Choudhury, 2014), the development of innovative service solutions (Tax & Brown, 1998), repurchase intention (Davidow, 2003a), brand loyalty (Miller & Grazer, 2003; Ferguson & Johnston, 2011), general market strategy (Lovelock & Wirtz, 2011; Roschkn, Muller & Gelbrich, 2013), and positive word of mouth (Davidow, 2003a). The result from reviewing the literature shows that study specifically on the relationship between CCB and relationship quality is lacking. Hence, this study attempts to explain the outcomes of this relationship due to the fact that relationship quality is considered as an overall assessment of the strength of a relationship (Garbarino & Johnson, 1999; De Wulf, Oderkerken-Schroder & Iacobucci, 2001).

Generally, dissatisfaction toward services or products triggered complaints. Consumers do not simply complain to the organization or other agencies without any reason. Therefore, service providers in Malaysia provide various channels for the consumers to complain and it is important to ensure that consumers are satisfied with their complaints. Evidence shows that the satisfaction of complainers with a company’s response has enormous impact on the customers’ future behavior such as repeat buying or stop patronizing the products or services (Stauss, 2002). The insignificant number of complaints as compared to the number of mobile phone services subscribers indicates the need for a study on the impact of CCB on satisfaction with complaint handling. Since CCB consists of several actions (i.e: Day & Landon, 1977; Malhotra, Ndubisi & Agarwal, 2008), service providers also need to know the affected action to focus on.

Oliver (1997) mentioned that, satisfaction with complaint handling has significant effects on return intent, word-of-mouth behavior, and overall satisfaction. This indicates that satisfaction with complaint handling is an important concept that may give an effect to the service provider as well as to the consumer. Previous studies have shown the effects of satisfaction with complaint handling on the dimensions of relationship quality such as trust (Weun, Beatty & Jones, 2004; Kau & Loh, 2006) and commitment (Tax
et al., 1998; Weun et al., 2004). However, study specifically explaining the effects of satisfaction with complaint handling on relationship quality is lacking especially in the mobile phone services industry. Therefore, this study attempts to enlighten the effects of satisfaction with complaint handling toward relationship quality.

A steady growth of the service economy and the intensification of competition in the marketplace have stimulated the shift in marketing toward a relationship orientation (Wong & Sohal, 2002). Oh (2002) affirmed that establishing and nurturing ongoing relationships with their customers will benefit the organization. This means consumers must obtain the benefits from relationship marketing because relationship marketing offers customers personalized services, goods, and other benefits that foster satisfaction, trust, and commitment (Berry, 1999; Garbarino & Johnson, 1999). Evidently, the effect of satisfaction with complaint handling is return intent (Oliver, 1997). This is important for the company’s sustainability. Furthermore, satisfaction with complaint handling also has been found to be a mediator (Tax, Brown & Chandrashekaran, 1998). However, to the best knowledge of the researcher, study on the effects of satisfaction with complaint handling as a mediator on the relationship between CCB and relationship quality is unavailable in the literature. Thus this study attempts to clarify the role of satisfaction with complaint handling as mediator on the relationship between CCB and relationship quality.

High relationship quality implies the consumer depends on the service provider’s future performance because the level of past performance has been consistently satisfactory (Wong & Sohal, 2002). In mobile phone services industry, high relationship quality is required to sustain the service provider in the competitive market. The increasing number of subscribers denotes the dependency of Malaysian consumers on mobile phone services. Evidently, studies show that people are dependent on mobile phones (Toda et al., 2004; Yang & Lay, 2011). The reason for the dependency on mobile phone could be due to the varieties of its functions and that regards mobile phone as a necessity. Previous studies have also proven dependency as moderator (Orpen, 1996; Rodrigue & Biswass, 2004). However, to the best knowledge of the researcher there is no study conducted to explain the moderating effect of mobile phone dependency on the relationship between CCB and relationship quality as well as the relationship between satisfaction with complaint handling and relationship quality available in the literature.

The concepts of CCB, satisfaction with complaint handling and relationship quality are important concepts in relationship marketing and consumer studies (i.e: Day & Landon, 1977; Wong & Sohal, 2002; Maxham & Netemeyer 2002; Matilla & Wirtz, 2004; Vargo & Lusch, 2004). The result of reviewing the literature shows that there is no study specifically employed CCB as the dependent variable to relationship quality available. Based on Ndubisi (2007), this study attempts to fill the gap and to prove that there is a
significant influence of CCB on relationship quality, and to identify the most influential action of CCB toward relationship quality.

Relationship quality was chosen as the dependent variable due to the fact that this concept plays an important role to determine the relationship between the consumer and the service provider. Besides, this study also attempts to prove the role of satisfaction with complaint handling as mediator and mobile phone dependency as moderator on the relationship between CCB and relationship quality. The increasing number of mobile phone users indicates the importance of this device to Malaysian citizen. Malaysians are heavily depending on mobile phones in their daily lives to keep in touch with their family members, friends, colleagues and business associates (Zulkifly & Baharudin, 2009). Mobile phone is always attached to many Malaysians for various reasons. Therefore, these gaps are important to be researched to ensure the relationship between the subscribers and the service providers is perpetuated.

1.3 Research Questions

Several research questions have been formulated from the above problems to guide the study:

1. What is the level of relationship quality of the mobile phones services users?
2. What impact does CCB have on relationship quality?
3. What impact does CCB have on satisfaction with complaint handling?
4. What impact does satisfaction with complaint handling have on relationship quality?
5. What are the effects of satisfaction with complaint handling on the relationship between CCB and relationship quality?
6. What moderation role does mobile phone dependency have on the relationship between CCB and relationship quality?
7. What moderation role does mobile phone dependency have on the relationship between CCB and satisfaction with complaint handling?

1.4 Research Objectives

The purpose of this study is to investigate the impact of CCB toward relationship quality. More specifically, the objectives of this study are:

1. To determine the level of relationship quality of mobile phone services
2. To examine the effect of consumer complaint behavior (CCB) on relationship quality.

3. To examine the effect of consumer complaint behavior (CCB) on satisfaction with complaint handling (SATCOM).

4. To examine the effect of satisfaction with complaint handling (SATCOM) on relationship quality.

5. To explore the mediating effect of satisfaction with complaint handling (SATCOM) on the relationship between consumer complaint behavior (CCB) and relationship quality.

6. To investigate the moderating effect of mobile phone dependency (MPD) on the relationship between consumer complaint behavior (CCB) and relationship quality.

7. To investigate the moderating effect of mobile phone dependency (MPD) on the relationship between consumer complaint behavior and satisfaction with complaint handling (SATCOM).

1.5 Research Hypotheses

The hypotheses for this study are listed as follows:

HC¹1a Public complaint soft action (PCSA) has significant relationship with relationship quality.

HC¹1b Public complaint extreme action (PCEA) has significant relationship with relationship quality.

HC¹1c Private complaint soft action (PVSA) has significant relationship with relationship quality.

HC¹1d Private complaint extreme action (PVEA) has significant relationship with relationship quality.

HC²a Public complaint soft action (PCSA) has significant relationship with satisfaction with complaint handling (SATCOM).

HC²b Public complaint extreme action (PCEA) has significant relationship with satisfaction with complaint handling (SATCOM).

¹ The capital letter “H” for hypothesis is added with “C” to indicate complainer.
HC3  Satisfaction with complaint handling (SATCOM) has significant relationship with relationship quality.

HC4a  Satisfaction with complaint handling (SATCOM) mediates the relationship between public complaint soft action (PCSA) and relationship quality.

HC4b  Satisfaction with complaint handling (SATCOM) mediates the relationship between public complaint extreme action (PCEA) and relationship quality.

HC5a  Mobile phone dependency (MPD) moderates the relationship between public complaint soft action (PCSA) and relationship quality.

HC5b  Mobile phone dependency (MPD) moderates the relationship between public complaint extreme action (PCEA) and relationship quality.

HC5c  Mobile phone dependency (MPD) moderates the relationship between private complaint soft action (PVSA) and relationship quality.

HC5d  Mobile phone dependency moderates the relationship between private complaint extreme action (PVEA) and relationship quality.

HC5e  Mobile phone dependency moderates the relationship between public complaint soft action (PCSA) and SATCOM.

HC5f  Mobile phone dependency moderates the relationship between public complaint extreme action (PCEA) and SATCOM.

HNC²1a  Private complaint soft action (PVSA) has significant relationship with relationship quality.

HNC1b  Private complaint extreme action (PVEA) has significant relationship with relationship quality.

HNC2a  Mobile phone dependency (MPD) moderates the relationship between private complaint soft action (PVSA) and relationship quality.

HNC2b  Mobile phone dependency (MPD) moderates the relationship between private complaint extreme action (PVEA) and relationship quality.

² The capital letter "H" for hypothesis is added with "NC" to indicate non-complainer.
1.6 Scope of the Study

This study covers one of the most important industries in the Malaysian economy – the telecommunication industry which is also the main industry in the Malaysian services sector. However, this study focuses on mobile phone services and will cover a cross-section of all mobile phone services consumers in Selangor and Wilayah Persekutuan (Kuala Lumpur and Putrajaya). Mobile phone services consumers were chosen because these are the consumers of the major companies in the service industries. These companies are known to have extensively involved in managing its consumers’ complaints. Selangor and Wilayah Persekutuan (Kuala Lumpur and Putrajaya) were chosen because these two states have a large number of mobile phone subscribers. Besides that, these two states pooled abundant respondents that are able to represent other states in Malaysia with different background and socio economic status.

Although the literature suggests that the concept of CCB includes behavioral and non-behavioral actions of the consumers, this study focuses only the behavioral actions of the consumer. As suggested by Criè (2003), the behavioral actions include complaining, taking legal action, returning the item or request for repair which is also known as public action. At the same time the behavioral action consists of word-of-mouth, boycott and leaving are known as private action.

1.7 Significance of the Study

This study is significant to two major parties involved in the usage of the mobile phone services. The first party is the service providers who provide the services to the users. At present, the services provided by the mobile phone services are voice call, video calls, short messages services and multimedia messages services. The industry has experienced a tremendous increment in terms of the number of subscribers annually. The emergence of the mobile phone has made the penetration rate for fixed line to be on a declining trend, decreasing from 19.7 per 100 populations in 2000 to 15.1 per 100 populations in 2009. On the other hand, the penetration rate for mobile phones has been increasing from 21.8 per 100 populations in 2000 to 106.2 in 2009 (MCMC, 2012).

The service providers for the mobile phone services are the businesses that generate substantial income to the services sector. Under the Eighth and Ninth Plan of the Malaysia Economics Plan, the services sector has led the growth in terms of sectoral performance. Expanding by 6.8% per annum during the Plan period has increased its share to GDP of 58.0% in 2010 (Economic Planning Unit, 2012). Under the 10th Malaysia Plan (2011 to
the services sector is expected to grow at 7.2% annually until 2015, raising the contribution to GDP to 61% by end of the Plan period.

Apparently, the Malaysian government has high expectations for the services sector to stimulate the economy into faster growth and subsequently achieving the status of high income nation by 2020. In line with this aspiration, during the Plan period, the Government will make further improvements to its offers covering several areas including telecommunications services (Economic Planning Unit, 2010). Moving towards a high income economy requires involvement and commitment from the government and also from the private sector. The participation of the private sector in the transformation and development of the country’s communication infrastructure has ensured the creation of necessary information infrastructures.

Today Malaysia has one of the most advanced telecommunication networks compared to the rest of the developing world. Modern technologies such as optic fibers, wireless transmission, satellites and digitalization are being utilized with the offering of next generation networks, unified communication, 3G content, WIMAX digital TV, VOIP and sensor technology. In Malaysia, the main network operators are Telekom Malaysia, Maxis, Celcom and DiGi Communications. Axiata, Timedotcom, Astro and PacketOne are also some of the bigger players followed by emerging competitors like YTL Communication, U Mobile, XOX, Redtone and many other small and medium sized enterprises. Maxis, Celcom, DiGi Communications, U Mobile and XOX are the operators for the mobile services (MCMC, 2011).

In Malaysia, the telecommunications industry is mainly driven by the mobile phone services segment. In general, a wider subscriber base, increases in international calls and increased popularity in the usage of mobile data and multimedia services supported the growth of this segment especially with the introduction of 3G cellular phone (mobile phone) services in 2005 and the 4G in 2013. The mobile services have helped to generate income for the nation. Thus, it is highly important for the service providers to ensure that the income must be continuously generated to help sustain the nation’s economy.

In line with the government’s emphasis on the quality of service delivery, service providers have provided channels for consumers to lodge their dissatisfaction. Most mobile phone service providers have its complaints management unit to handle the consumers’ complaints. However, not all dissatisfied consumers will lodge their complaints (Zeelenberg & Pieters, 2004; Ferguson & Phau, 2012). Some may take other options when dealing with the dissatisfaction. This denotes CCB is important to be studied as it affects the relationship between the consumer and the service provider. Therefore, this study is significant to the service providers as well as to the
consumers especially when the number of mobile phone users is increasing tremendously as shown in Table 1.3.

Table 1.3 : The number of mobile phone and direct exchange line users from 2010 to 2013

<table>
<thead>
<tr>
<th>Item</th>
<th>2010 ('000)</th>
<th>2011 ('000)</th>
<th>2012 ('000)</th>
<th>2013 ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>28.4</td>
<td>28.7</td>
<td>29.0</td>
<td>29.91</td>
</tr>
<tr>
<td>Cellular (Mobile phones)</td>
<td>33,859</td>
<td>36,661</td>
<td>41,325</td>
<td>42,956</td>
</tr>
<tr>
<td>Penetration rate per 100 inhabitants / households</td>
<td>119.2</td>
<td>127.7</td>
<td>142.5</td>
<td>143.6</td>
</tr>
<tr>
<td>Direct Exchange Line</td>
<td>4,404</td>
<td>4,091</td>
<td>3,864</td>
<td>3,746</td>
</tr>
<tr>
<td>Penetration rate per 100 inhabitants / households</td>
<td>42.5</td>
<td>37.3</td>
<td>34.4</td>
<td>32.4</td>
</tr>
</tbody>
</table>

Adapted from Malaysian Communication and Multimedia Commission, (2013)

It is believed that in Malaysia, no employed citizen goes to work (especially in the office) without a mobile phone and most people on the road carry a mobile phone. Mobile phone users in Malaysia range from children in the primary school up to pensioners who stay at home. The most important issue for the consumer with regard to mobile phone is that the services provided are not free. Consumers pay the charges to talk, to text or to send Multimedia Message Services (MMS) to their friends, relatives or anyone else. The costs borne by the consumers deserve to be returned with good services. Although consumers are offered with various packages to choose from the choice sometimes cannot fit all purposes. Consumers need a service provider that is trustworthy, able to satisfy them and able to avoid conflict. Thus, service providers must have these qualities in order to make the consumers feel their relationship with the service provider commensurate with the cost.

Apart from that, relationship between the consumers and the service provider must remain in good terms for the benefit of both parties because in today’s marketplace and market space, firms are not only concerned about getting customers but also in keeping a long-term profitable relationship. Long term relationship grants consistent income to the service provider, however the consumer may or may not have gained the benefits unless the satisfaction is revealed. It is therefore important for firms to understand consumer behavior in order to manage their customer’s expectations, desires and requirements effectively.
1.8 Definition of Key Terms and Concepts

The following definitions describe the terms and concepts used in this study and their operationalization:

1.8.1 Consumer Complaint Behavior

**Conceptual Definition**
Consumer complaint behavior (CCB) has been described as the set of all behavioral and non-behavioral responses portrayed by consumers who are involved with communication of negative perceptions relating to a consumption episode that are triggered by dissatisfaction (i.e: Singh & Howell, 1985; Rogers & Williams, 1990).

**Operational Definition**
For the purpose of this study, CCB was operationalized as any action taken by the mobile phone users in response to the dissatisfaction they experienced while using the services. Action may include report to the service provider face to face or via other medium such as telephone or email, report to any other government and non-governmental agencies, telling friends or relatives or write on their social media applications. Besides, behavioral action consists of word-of-mouth, boycott and leaving are known as private action.

1.8.2 Satisfaction with Complaint Handling

**Conceptual Definition**
Satisfaction with complaint handling (SATCOM) is the satisfaction of a complainer with a company’s response to the consumer’s complaint. This satisfaction refers to the consumer’s assessment of the company’s response to a complaint (Stauss, 2002; Varela-Neira, Vazquea-Casielles & Iglesias, 2010).

**Operational Definition**
In this study satisfaction with complaint handling was operationalized as the assessment of the mobile phone users on the responses of the service provider to their complaints. The assessments on satisfaction with complaints handling were taken from the respondents who have complained to the service provider.

1.8.3 Mobile Phone Dependency

**Definition**
Mobile phone dependency (MPD) is defined as the consumers' dependent on their mobile phones when they viewed them as a necessity and have a
strong propensity for continuous high usage, being engaged and unwilling to part from it (Tian, Shi & Yang, 2009).

**Operational Definition**
In this study mobile phone dependency was operationalized as the excessive use of the mobile phone and the usage of mobile phone. The usage of mobile phone can be in public places when such use is considered to be nuisance or in private places.

### 1.8.4 Relationship Quality

**Conceptual Definition**
Relationship quality is defined as the degree of appropriateness of a relationship to fulfil the needs of the customer associated with the relationship (Hennig-Thurau & Klee, 1997). Relationship quality can be regarded as a meta-construct composed of several key dimensions. There is no common consensus regarding the dimensions that create relationship quality, however they must reflect the overall nature of relationships between companies and consumers.

**Operational Definition**
In this study relationship quality was operationalized as having five dimensions namely trust in partner’s honesty, trust in partner’s benevolence, affective commitment, satisfaction and affective conflict adapted from Roberts, Varki and Bordie (2003). Trust in partner’s honesty is the customer believes that his needs will be fulfilled by the service provider, trust on partner’s benevolence is a customer’s perception of the extent to which the service provider concerned about the welfare of the customer, affective commitment is a customer’s affective attachment to the service provider, satisfaction is the customer evaluation based on personal experience across all service episodes within the relationship and affective conflict is an ongoing tension between the customer and the service provider to a relationship that arises from the incomparability of actual and desired response.

### 1.8.5 Mobile Phone

**Definition**
The Cambridge Dictionary defined mobile phone as a phone that is connected to the phone system by radio instead of by a wire, and can be used anywhere its signals can be received. It is more commonly known as “mobile phone” in the United Kingdom, while “cell phone” is more widely adopted in the United States of America (Cambridge University Press, 2015).
Operational Definition
In this study mobile phone was operationalized as any hand phone including feature phone and smart phone that can get accessed to the internet. In Malaysia the term hand phone is commonly used to represent cell phone or mobile phone.

1.8.6 Mobile Phone Service

Definition
Mobile or telephone service (MTS) is a pre-cellular VHF radio system that links to the Public Switched Telephone Network (PSTN). MTS was the radiotelephone equivalent of land dial phone service (Wikipedia, 2015). In Malaysia the services are provided by mobile phone services companies such as Celcom, Maxis, DiGI and U-Mobile.

Operational Definition
The definition of mobile phone service was operationalized based on the previous studies (Rahman, Haque & Sayyed Ahmad, 2010; Abdul Karim, Darus & Hussin, 2006; Ting, Lim, Patanmacia, Low & Ker, 2011). The services available are ranged from telephone conversation and short messaging services (SMS), to multimedia messaging services (MMS) and internet access, depending on the capability of each mobile phone technology and services rendered.

1.8.7 Complainer

Definition
The term complainer is interchangeably used in the literature as complainant and is defined as a plaintiff (Hornby, Cowie & Lewis, 1982). It is also been defined as a person who makes a formal complaint in a law court (Cambridge University Press, 2015).

Operational Definition
In this study a complainer was operationalized based on the concept of public and private action in CCB (Kau & Loh, 2006; Phau & Baird, 2008). A complainer is a mobile phone user who reports a problem or issue to the service provider. A dissatisfied user may also tell his or her friend or relative with regard to the dissatisfaction.

1.8.8 Non-complainer

Definition
The results of reviewing several dictionaries show zero definition of non-complainer. However, in the literature non-complainers were referred to the
customers who experience service failure but did not make any complaint (Kau & Loh, 2006; Voorhees, Brady & Horowitz, 2006; Phau, 2008).

**Operational Definition**
In this study a non-complainer was operationalized based on the concept of private complaint in CCB to distinguish the category of dissatisfied consumer (Ndubisi & Ling, 2005). Non-complainer is a mobile phone user who has not made any complaint to the service provider due to the dissatisfaction he encountered but they take private actions such as telling friends and relatives.

### 1.8.9 Public Complaint Soft Action

**Conceptual Definition**
Public complaint soft action (PCSA) refers to the concept of public complaint in consumer complaint behavior (CCB). Most researchers defined CCB as public complain and private complaint based on the actions taken by the dissatisfied customer (i.e: Ndubisi & Ling, 2007; Malhotra et al., 2008; Kitapci & Dortyol, 2009).

**Operational Definition**
Public complaint soft action (PCSA) was operationalized based on the actions taken by a mobile phone user due to a service failure he experienced. The actions include discussing the problem with the service provider, requesting the service provider to take care of the problem and informing the service provider for improvement as a result from a service failure.

### 1.8.9.1 Public Complaint Extreme Action

**Conceptual Definition**
Public complaint extreme action (PCEA) refers to the concept of public complaint in consumer complaint behavior (CCB). Most researchers defined CCB as public complain and private complaint based on the actions taken by the dissatisfied customer (i.e: Ndubisi & Ling, 2007; Malhotra et al., 2008; Kitapci & Dortyol, 2009).

**Operational Definition**
Public complaint extreme action (PCEA) was operationalized based on the actions taken by a mobile phone user due to a service failure he experienced. The actions include writing a letter to the local newspaper, reporting the problem to a consumer agency, complaining to government agency or politician and taking legal action against the service provider taken by the mobile phone users with regard to the problem they experienced.
1.8.10 Private Complaint Soft Action

**Conceptual Definition**
Private complaint soft action (PVSA) refers to the concept of private complaint in consumer complaint behavior (CCB) as stated by previous researchers (i.e: Ndubisi & Ling, 2007; Malhotra et al., 2008; Kitapci & Dortyol, 2009).

**Operational Definition**
PVSA was operationalized based on the actions taken by a mobile phone user due to a service failure experience. The actions include speak to friends or relatives about the bad experience, convince friends or relatives not to do business with the service provider and tell friends or relatives never to use the service provider’s service again.

1.8.11 Private Complaint Extreme Action

**Conceptual Definition**
Similarly, private complaint soft action (PVEA) refers to the concept of private complaint in consumer complaint behavior (CCB) as stated by previous researchers (i.e: Ndubisi & Ling, 2007; Malhotra et al., 2008; Kitapci & Dortyol, 2009).

**Operational Definition**
PVEA was operationalized based on the actions taken by a mobile phone user due to a service failure experience. The actions include write on the internet social interactive mediums to tell others about the experience, use the service provider when absolutely have to and decided to use other service provider.

1.9 Organization of Thesis

This study is organized into five chapters. The first chapter provides the background of the study, the problem statement, research questions, research objectives, hypotheses, scope of the study, the significance of the study, and the definition of key concepts. Chapter two focuses on a review of the existing literature related to the variables in the study. This chapter draws attention to the concepts of consumer complaint behavior (CCB), relationship quality, satisfaction with complaint handling (SATCOM) and mobile phone dependency (MPD). The role of SATCOM and MPD as mediator and moderator are also discussed. Besides that, this chapter also highlights the theoretical background of the variables that formulates the conceptual framework and model of research.
Chapter three describes the research methodology used in this study. It discusses the research design, unit of analysis, population, sample size, sampling frame, sampling technique, shopping malls selection, data collection, research instrument, operationalization of variables, data analysis, reliability and validity. Chapter four discusses the findings of the study in relation to the research hypotheses. It starts by undertaking some descriptive statistics on the respondents’ profiles. These are followed by assessing the goodness of the measures. The tests for confirmatory factor analysis (CFA), measurement model are discussed to show the results of the hypotheses.

Finally, chapter five provides a summary of the findings. This chapter also discusses the findings with regard to the research objective of the study. The conclusion, limitations and recommendations for future research are also highlighted in this chapter.
REFERENCES


Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18, 382-388.


