

**The Role of Identification, Participation and
Attachment in Building Brand Equity in
Social Networking Sites**

by

Faris Turki Al Said

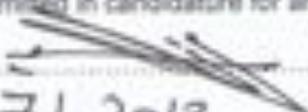
**Thesis Submitted in Fulfilment of the Requirements for the
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**Marketing & Strategy Section
Cardiff Business School, Cardiff University**

July 2013

DECLARATION

This work has not previously been accepted in substance for any degree and is not concurrently submitted in candidature for any degree.

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DEDICATION

*To my treasured mother and father
for their endless support and prayers*



*To my cherished wife and son
who give me the reason to grow and excel*

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In the beginning, I am thankful to Allah for paving the road of my PhD journey with success. My PhD journey has been an extraordinary one. It has been a journey like no other and has changed me in ways that I cannot count. It would not have been possible to complete this thesis without the help and support of numerous individuals at Cardiff Business School and in Oman.

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ABSTRACT

Although Social Networking Sites have become dominant in the lives of many consumers, research on virtual brand communities in the context of Social Networking Sites is scarce. This study focuses on addressing this gap by investigating how identification with the brand and the brand community, participation on official brand pages on Facebook, and attachment to the brand develop and support brand equity in the context of Social Networking Sites. Participation in virtual brand communities has been generally viewed as posting and lurking. This study has developed new participation scales to address the limited perspective of participation in the literature. In addition, this study aims to investigate the types of members of brand pages on Facebook and the nature of their participation. The author developed a model that provides a new understanding of how brand equity develops in Social Networking Sites.

The study was conducted in two stages. Firstly, a pilot study was conducted that used focus groups to build new scales to measure participation in Social Networking Sites, which were tested and validated by analysing quantitative data collected from an online and offline survey. Secondly, the main study was conducted by collecting data from an online panel of 436 UK consumers. Structural equation modelling techniques were then used to assess the validity of the new proposed participation scales and to test the set of interrelationships among the proposed variables.

The findings indicate that consumer identification with the brand and the community has a positive impact on participation on brand pages as well as on attachment to the brand. The findings also reveal that brand loyalty, perceived quality, willingness to pay a price premium, and word-of-mouth are all predicted by brand attachment. Finally, this study has shown that participation is a two level behaviour that is based on three member types: tourists, minglers, and fans.

The model and the new participation scales proposed in this study present a new perspective on online consumer behaviour. In addition, the findings of this study have implications for understanding and building consumer-brand relationships in Social Networking Sites.

Keywords: Brand Equity, Brand Identification, Brand Community Identification, Virtual Brand Community, Perceived Quality, Brand Loyalty, Word-of-Mouth, Willingness to Pay a Price Premium, Brand Attachment, Participation, Social Networking Sites, Structural Equation Modelling, Facebook.

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Chapter 1: Introduction

1.1 Introduction

This research project aims to investigate the extent to which consumers' participation in virtual brand communities enhances brand equity. In doing so, it explores the nature of participation in the virtual communities as well as the impact of participation on brand attachment and brand equity. Prior research has mainly focused on discussing the antecedents and outcomes of brand equity. This research contributes by extending this focus to the online and social media domains. However, research on the impact of participation in virtual brand communities on brand equity is scarce. This research project aims to contribute towards the growing literature on branding and virtual brand communities by addressing this gap.

This chapter introduces the research context. It also highlights the significance of this research and describes the motivation and rationale behind this research. It outlines the research questions and objectives. It briefly summarises the methodology adopted. Meanwhile, it presents the key contributions and the structure adopted for this thesis. The chapter is accordingly organised in nine sections. Section 1.2 provides an overview of the context of this research. Section 1.3 explains the motivation and rationale for conducting this research. The research questions and research objectives are listed in Sections 1.4 and 1.5, respectively. Section 1.6 explains the methodology employed in this study. This is followed by Section 1.7, which explains the contributions made by this research. The structure of this thesis is presented in Section 1.8. Section 1.9 concludes this chapter.

1.2 Research Context

1.2.1 Social Media, Consumer-Brand Relations, and Brand Equity

This study is conducted in the context of social media, which is defined as “*a variety of new sources of online information that are created, initiated, circulated and used by consumers intent on educating each other about products, brands, services, personalities, and issues*” (Mangold and Faulds 2009, pp. 357-358). In other words, social media is a collection of Internet-based applications that enable users to create and exchange content (Kaplan and Haenlein 2010). One of the key reasons for the

popularity of social media is its ability to empower consumers to generate their own content and to disseminate the content to other consumers. The impact of social media is felt in a variety of domains of everyday life, ranging from consumption behaviour and entertainment to political movements and dissent (Marandi et al. 2010, Shirky 2011). In particular, social media has had a considerable impact on civil society and the public sphere, where it can be a catalyst for long term change (Shirky 2011).

The impact of social media on how consumers and brands interact and connect together is central to this study. The explosion of social media options and the connectivity of consumers mean that many consumers are moving beyond the reach of passive consumption of marketing information. Instead, many scholars argue that consumers have become active participants in creating information about products and services (Hanna et al 2011, Kietzmann et al. 2011). There is, therefore, a power shift from corporate communications towards individuals and communities, who take and decide their own course of action (Kietzmann et al 2011). This means that brand managers have far less influence when it comes to the effectiveness of using the traditional forms of brand communications (Mangold and Faulds 2009). In this new communications paradigm, the consumers' ability to communicate with one another is amplified and information about the brand is manufactured in the marketplace (Mangold and Faulds 2009, Heinonen 2011). However, despite this, very little consumer research has explored how and in what sense consumers participate and communicate with one another via online communities.

Kaplan and Haenlein (2010) maintain that there are six types of social media, which are: collaborative projects, blogs, content communities, social networking sites, virtual game worlds, and virtual social worlds. These numerous platforms enable individuals to share information, photos, podcasts, text messages, and videos; whether they are on a computer or a mobile device (Kaplan and Haenlein 2010, Hanna et al. 2011). Social networking sites are a prominent type of social media (Kaplan and Haenlein 2010, Kietzmann et al 2011). Further significance can be highlighted by the fact that social networking websites draw individuals who wish to interact with individuals and organisations with common interests and have attracted millions of users (Edosomwan et al. 2011).

Social networking sites can be defined as “*web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connection and those made by others within the system*” (Boyd and Ellison 2008, p. 211). The primary focus of social networking sites is to create a publically visible profile, which can be shared with people that the user knows in the real world (Segrave et al. 2011). The implementation of social networking, however, differs from one provider to another (Boyd and Ellison 2008). The main driving force behind the popularity of social networking is the ability of members to communicate with others through mechanisms that allow private messages, public comments, and multimedia to be exchanged (Boyd and Ellison 2008). Furthermore, central to the design of many social networking sites is the ability to publicly display one’s connections in pursuit of social capital (Boyd and Ellison 2008, Segrave et al. 2011). Some of the popular social networking sites are Facebook, Twitter, YouTube, Google+ and Flickr. This study specifically focused on Facebook.

A review of the literature suggests that social networking sites such as Google+, Facebook, YouTube, and Flickr have become popular among Internet users (Boyd and Ellison 2008, Edosomwan et al. 2011, Hanna et al. 2011, Kunz et al. 2011). For instance, in January 2013, Facebook (the world largest social networking site with over a billion active members) was ranked third in global Internet traffic, just after Google and Microsoft (Nielsen 2013, Facebook 2013). Furthermore, Facebook was ranked second in the top ten online video destinations in the US, beating Yahoo!, VEVO, AOL, and MSN, and behind YouTube (Nielsen 2013).

Given the popularity of social networking sites, marketers have realised the potential of these sites to enhance and reinforce the strengths of their brands (Kaplan and Haenlein 2010, Kunz et al. 2011). Brand managers and retailers have started to use these sites to try to connect with consumers (Mangold and Faulds 2009, Kaplan and Haenlein 2010, Kunz et al. 2011). One way to achieve this is by creating a brand page, which is the focus of this research project. An increasing number of marketers are already creating their virtual brand presence on social networking sites in the form of brand pages (Kunz et al. 2011). Websites such as Facebook and Google+

provide celebrities, organisations, and companies with the ability to create dedicated brand pages to promote their cause, ideas, and brands. This is an important shift in the adoption of digital media and it helps brands build relationships with consumers. Social media marketing is becoming an important channel of supporting the customer through the purchasing process (Chaffey and Ellis-Chadwick 2012). Incorporating social media into the brand's marketing strategy is a recent approach and so far little is known about how it affects the brand. Moreover, little is known about how the brand equity is influenced, if at all, by forming a brand presence in the social media space.

Hanna et al. (2011) maintain that social networking sites are about the experience rather than the websites that host the service. It is through the engagement that consumers have on brand pages, on their computers or mobile devices, that they achieve value and not through their experience of a particular website. Zhang (2010) maintains that 'Brand' pages are influential in boosting brand awareness, building the brand's social capital, improving the flow of communication with consumers, and building consumer-brand relationships. Moreover, through the use of social networking sites, marketers can reinforce brand names and help to boost the brand experience (Edosomwan et al. 2011). Consumers gain value because they can control the flow of information by choosing information sources catering for their needs (Mangold and Faulds 2009, Kaplan and Haenlein 2010). Furthermore, empowered by social media, consumers become co-creators of brand experiences (Marandi et al. 2010).

Recent scholarly work argues that social networking sites can be used to create a platform for consumer-brand relationships and for fostering brand communities. This can foster brand loyalty and thereby lead to brand equity (Segrave et al. 2011). Social networking sites have greater relationship functionality in comparison to other types of social media and, therefore, are suited to establishing communities of brand users (Kietzmann et al. 2011). Such platforms allow the company to listen to its customers, and engage and respond to them (Kietzmann et al. 2011). However, despite its significance, very little research has explored the nature of participation on brand pages in the marketing context. Previous research in the area of social networking sites has focused on impression management and on friendships'

performance, networks and network structure, bridging online and offline networks, and privacy issues (Boyd and Ellison 2008). However, in the marketing domain there is a scarcity of research examining the impact of consumers' participation in social networking sites on enhancing brand equity (see, for instance, Christodoulides et al. 2012). Hence, this research aims to fill this gap in the literature by exploring the implications of brands participation in the context of social networking sites (such as Facebook) on consumer-brand relationships and brand equity (see, for instance, de Valck et al. 2009, Quinton and Harridge-March 2010).

An important outcome of the growth of the social web is the ability to foster consumer-brand relations. An important starting point for such relations is relationship marketing. From the consumers' perspective, building a relationship with the supplier minimises risk and reduces the costs associated with the purchasing process (Dall'Olmo Riely and de Chernatony 2000). Recent research appears to have taken into account the notion that consumers form emotional connections and long-term relationships with brands (e.g. Fournier 1998). This research appears to conclude that the consumers develop relationships with brands where brands are personified and are treated as relationship partners (Fournier and Alvarez 2012). The current research subscribes to this notion that consumer-brand relationships are valuable and that they transcend economic explanations of consumer behaviour.

Despite this, very little research has explored the extent to which consumers develop attachment with the brand as a consequence of their participation in online communities. Following prior research, this current research takes the position that consumer attachment to the brand is a good indicator of the strength of the consumer-brand relationship (Park et al. 2010). Furthermore, this current research contends that attachment to the brand can be fostered in social networking sites that represent brand communities (de Valck et al. 2009, Quinton and Harridge-March 2010, Zhang 2010).

This research focuses on exploring the factors that enhance brand equity in the online context. However, a significant majority of existing studies involving brand equity research have focused on fast moving consumers goods rather than online

communities. Some of the existing research has explored the dimensions of brand equity in an online context (Na et al. 1999, Page and Lepkowska-White 2002, Christodoulides et al. 2006, Rios and Riquelme 2008). In both cases, the original conceptualisation and its derivatives are explored in a new context. However, one can still note some limitations of existing research. For instance, those exploring online brand equity have largely ignored the recent phenomenal growth in social networking sites and social media.

The limited understanding of what drives consumer-brand relationships in the context of social media compounds the challenge of leveraging social media for the benefit of brands. In this context, it can be argued that virtual brand communities on social media platforms serve as an important focal point for consumer-brand relationships to prosper and grow. However, no prior research has explored the extent to which consumers participate in online communities on social networking sites and the extent to which they can engage in differential activities leading to brand attachment and higher levels of brand equity. This current research project aims to fill this gap in the literature by exploring factors impacting dimensions of online brand equity in the context of social media.

1.2.2 Social Networking Websites as Virtual Brand Communities

The idea behind social networking sites is the focus on promoting an individual's persona (Beer 2008). The consumers appear to use such social networks not only to connect with their friends but also to create their profile pages to market themselves. Many marketers are taking advantage of the growth in social networking sites on the Internet to reach existing and potential customers. This allows for the consumer-brand connection put forward by Fournier (1998), Muniz and O'Guinn (2001), and McAlexander et al. (2002).

A review of the literature suggests that there can be many forms of virtual brand communities (Kozinets 1999) and this research focuses on a specific social networking context, which is the Facebook brand page as a virtual brand community. There are a number of reasons for selecting brand pages on Facebook as

the representation for virtual brand communities. Firstly, Facebook is considered the largest social networking website with more than a billion active users (Facebook 2013). Secondly, social networking sites have strongly moved to smartphones where in December 2012 the Facebook app was the number one app reaching 76% of the US smartphone market ahead of Google maps app (comScore 2013a). In the UK, Facebook came second to Google sites in the mobile browsing category with over 15 million unique visitors in December 2012 (comScore 2013b). In addition, social networking sites like Facebook, MySpace, Google + and Twitter allow companies to set up brand pages to display their messages to the network of users and everyone online. Social networking sites allow consumers to *follow* and become friends with the brand (Rood and Bruckman 2009). Facebook members can click on a *Like* button and become friends with their favourite celebrities, groups, causes, and brands.

There also many features that distinguish social networking sites like Facebook from regular virtual brand community website. Facebook brand pages allow the synchronous and asynchronous posting of information. Companies can use various multimedia and programming tools to interact with consumers. Discussion boards are available for consumers to share their views and interact with one another. One important tool for consumer brand interaction is the use of the *Wall* feature, which allows continuous news feeds from the brand to the consumers Facebook personal profile.

Consumers can also see other members who are fans of, or who *Like*, the brand. This heightens the sense of community where many members use their names and pictures when they present themselves on the brand pages. In addition, consumers are able to befriend other consumers who share a virtual link with the brand. The Facebook *Timeline* feature allows consumers to respond to the brand's status messages, comment on them, and also share them. In addition, members can indicate if they like the messages posted by the brand. Figure 1-1 presents the Pepsi brand page on the Facebook website, which represents a typical set-up for a brand page. In a number of Facebook brand pages, consumers actually get responses from the brand when they voice their concerns or opinions. In this way, social networking

sites present a dynamic virtual brand community with functions beyond regular brand communities on the web.

Figure 1-1 Pepsi's Official Brand Page on Facebook



(Source: www.facebook.com/pepsi)

1.2.3 The Significance of Studying Consumer-Brand Relationships in Virtual Brand Communities

An exploration of the literature on online brand equity has led to the conclusion that there is a limited understanding of how brand equity is formed online from a consumer perspective. Specifically, the marketing literature has neglected the growth of the Internet as a medium of communication and interaction between consumers and companies. The earlier discussions also highlighted a rising trend in virtual brand communities and social media. Companies are investing in their virtual existence to capitalise on the rising trends on the Internet. This area has, until recently, been the domain information technology journals or popular press. There is more research required to understand consumer behaviour in the context of the social web. The proliferation of blogs, online forums, social networking sites, consumers initiated virtual communities, consumer review sites, and podcasts has enabled consumers to disseminate their own content, which may include content

from brands, trademarks or copyrighted material. It is evident that the consumers are beyond the passive receivers of information.

Today's consumers are highly connected to each other and many brands have addressed this opportunity by creating a presence on the social web. The interest in researching virtual behaviour of consumers is limited and the opportunity to contribute to the field is wide open. In the study of consumer-brand relationship, research has begun to focus on emotions for brands and constructs such as brand love and attachment have been proposed (Thomson et al. 2005, Park et al. 2010). In addition, many companies have been pushed to establish relationships with consumers through establishing a presence in the conversations that consumers are having on the web. It is not surprising and not uncommon to find a brand inviting consumers to be their friends on some social networking sites.

The aim of this study is, therefore, to link the virtual brand community concept to the well-established brand equity construct. However, the emphasis of this study is not to replicate prior research on brand equity from the offline context to the online context. The focus of the current study is to develop an understanding of the mechanisms by which brand equity develops in virtual brand communities on social networking sites. The reason for this focus is the limited understanding of the mechanisms by which brand equity is developed in the social media context (see for example Christodoulides et al. 2012).

There are also several gaps identified in the literature, including:

1. There is no research to date that has explored virtual brand communities from a consumer-brand relational perspective in the social media context, to the researcher's best knowledge.
2. Research on brand attachment has mainly focused on the emotional perspective in the traditional contexts.
3. There is a limited understanding of how interactions with the brand online would lead to brand equity gains.
4. The nature and context of virtual brand communities have been limited in general to the basic context of forums and news groups where there is scarce research on virtual social networks as brand communities.

5. Participation in virtual communities has been predominately conceptualised as posting and lurking.

Prior research also argues that virtual brand communities are rich platforms for consumers to establish relationships with other consumers and the brand (Muniz and O'Guinn 2001, McAlexander et al. 2002, Algesheimer et al. 2005, Schau et al. 2009). Harwood et al. (2008) contends that social networking websites also have the potential to enable the development of strong brand relationships. Carrera et al. (2008) have highlighted the need for further research on how social networking websites are the new online communities. In addition, social media has been adopted as a relationship-building channel (Chaffey and Ellis-Chadwick 2012, Fournier and Avery 2011). Despite the growing adoption of these websites (e.g. Facebook and Google+) by many companies, there are still uncertainties about their value to the brand (Carrera et al. 2008). This adoption was not always successful and some brands have struggled to leverage their presence on social media (Fournier and Avery 2011). Carrera et al. (2008) has also highlighted the need to examine who interacts in these new communities and how they interact in them.

This study aims to address the gaps identified in the literature and present a richer perspective of virtual brand communities and the consumer relationship that may develop as a result of consumer participation. The underlying framework for this study is the relationship marketing construct of consumer brand relations. This study also draws on the important theories of social identity theory, shopping motivation, attachment theory, brand community, and brand-self connection in order to present a model that explains how brand equity is developed in the social media context.

1.3 Motivation and Rationale of Research

The researcher began this research journey aiming to explore brand equity in the financial sector. However, an extensive review of literature on brand equity led the researcher to search for new grounds where brand equity research is not yet saturated. The social media boom presented an opportunity for exploring brand equity and consumer brand relationships in a new light: the virtual brand

community. The researcher's personal use of social networking sites and research interest in brand equity also presented a new direction for this study. In a rich and enlightening journey, this study has shown the potential of this research stream.

As stated earlier, the astronomical growth of social media has caught the eye of brand marketers who wish to capitalise on this trend. Today, Facebook dominates the social networking domain and it has more than a billion active users as of March 2013 (Facebook 2013). All of the major brands have built dedicated brand pages on Facebook to better communicate with their customers. As of July 2013, Coca-Cola has 68 million fans on their Facebook brand page, Disney has 44 million, and Red Bull has 39 million fans (Socialbakers 2013b). These brands have invested in sustaining significant interaction in terms of their presentation and communication with their customers on these pages.

This research argues that virtual brand communities on brand pages are powerful platforms to build meaningful relationships with existing consumers. The researcher, who is a user of social media sites (such as Facebook), is interested in understanding how a social networking site that originally targeted individuals became a platform for brands to build communities with an astronomical number of members. The researcher is also interested in understanding the role of the consumer's membership of brand pages on Facebook in influencing their relationships with brands. In addition, since so many companies have placed significant investments in running these pages, the author is also interested in understanding the impact that participation and the consumer-brand relations would have on the equity of companies' brands.

1.4 Research Questions

A number of research questions were developed for the purpose of this study; they are:

1. To what extent do brand pages on Facebook represent virtual brand communities?

2. What is the role of the consumer-brand relationships that are developed on brand pages on Facebook in building brand equity?
3. What are the antecedents and outcomes of consumer participation on Facebook brand pages?
4. To what extent does the consumers' identification with a brand and a brand community impact on their participation on brand pages on Facebook? And, what subsequent impact does this have on brand equity?
5. What impact does participation have on attachment to the brand? And, what impact does this have on the overall brand equity dimensions?
6. What is the nature of participation on a brand page on Facebook?
7. What types of brand page members exist, as based on their participation on brand pages on Facebook? What is the difference between brand page member types, as based on their relationships with the brand and the brand community?

1.5 Research Objectives

The following research objectives have been developed to answer the research questions:

1. To identify and empirically test a conceptual model of the antecedents and outcomes of the consumer's participation on brand pages on Facebook.
2. To investigate the specific role of identification with the brand and the brand community in predicting participation on brand pages on Facebook.
3. To explore the nature of the consumer's participation on brand pages on Facebook. Specifically, to explore what participation on brand pages on Facebook means and entails.
4. To explore what types of members exist, based on their participation profiles on brand pages on Facebook.
5. To examine the specific role of participation on brand pages on Facebook in predicting brand attachment.
6. To examine the specific role of brand attachment in predicting brand loyalty, perceived quality, willingness to pay a price premium, and word of mouth behaviour.

7. To discuss the implications of this research for theory development and practice concerning consumer participation in brand pages on Facebook and brand equity.

1.6 Research Methodology

This study employed a cross-sectional research design to address its research questions and objectives. The research methodology was driven by the positivist paradigm. In accordance to epistemological and ontological assumptions of the positivist paradigm, the researcher developed a conceptual framework and tested the hypotheses generated in this study. This study employed two modes of data collection, qualitative and quantitative. In the qualitative stage, focus groups were used to explore participation and consumer-brand relations in virtual brand communities and also to generate items for the new participation scales. The item generation and testing were conducted as part of a pilot study. In the second data collection mode, a survey questionnaire via a website was used to capture the perceptions of consumers.

Four hundred and thirty six completed responses were received and analyzed using Structural Equation Modelling (SEM). This study used this statistical methodology because it takes a confirmatory approach to the analysis of structural theory (Byrne 2001, Kline 2005). This type of analysis allows for the simultaneous analysis of a system of variables in order to determine its consistency with the data (Byrne 2001). This statistical methodology has more rigor than other multivariate techniques because it validates the measurement model before estimating and evaluating the structural model (Anderson and Gerbing 1988, Hair et al. 2006). SEM also has an edge over other statistical methodologies because it can assess and correct for measurement error (Byrne 2001). Finally, SEM is also a powerful analytical tool, unlike alternative methods, where it can incorporate unobserved (latent) and observed variables (Kline 2005). Consequently, these advantages led the researcher to employ SEM as the main data analysis technique.

The study also used cross-tabulation, correlation, and analysis of variance to explore and understand the nature of participation in virtual brand communities. These statistical techniques were also used to identify the different types and profiles of members in virtual brand communities.

1.7 Contributions of Present Research

This research aims to make a contribution towards the branding theory and practice by providing empirical analysis of the role of virtual brand communities in fostering consumer-brand relationships and supporting brand equity. Specifically, the current study will:

1. Establish that brand pages on social networking websites represent virtual brand communities.
2. Provide evidence that brand identification, brand community identification, participation at the platform level, participation in virtual brand community influence brand attachment in the context of social networking websites. This explains the important role of consumer participation and identification in brand pages on Facebook in fostering consumer-brand relationships and supporting brand equity.
3. Establish the effect of brand attachment on brand equity dimensions (brand loyalty and perceived quality) and outcomes (willingness to pay a price premium, and word of mouth action and valence). This offers further understanding of the drivers of dimensions and outcomes of brand equity on the Internet.
4. Contribute by supporting the multidimensionality of the participation construct and the richness of this behaviour. Specifically, that participation is more than the traditional classification of posting and lurking behaviours.
5. Provide support for the existence of different types of community users, beyond posters and lurkers, who perform participation behaviour in varying degrees. This offers further understanding on how consumer-brand relationships are formed in virtual brand communities.

1.8 Structure of the Thesis

This thesis has eleven chapters (see Figure 1-2). A brief summary of each chapter is presented below:

Chapter One – Introduces the background of this research and discusses the relevance and importance of this study. This chapter also presents the research questions and objectives that the researcher wished to address.

Chapter Two – Presents a discussion on brand equity. This chapter presents a detailed discussion of the manifestation of brand equity's most commonly agreed upon dimensions of brand equity and its drivers.

Chapter Three – Reviews the topic of brand communities. This chapter details the different types of brand communities and their importance.

Chapter Four – Presents the conceptual model, which was developed based on the objectives of this research and the postulated relationships between the variables.

Chapter Five – Details the methods followed by this study to collect the data for this research. This chapter contains six important methodological topics, which are: research paradigm, research design, research methods, sampling design, data analysis, and validity and reliability.

Chapter Six – Details the development of the new participation scales and the pilot study conducted to test it.

Chapter Seven – Provides the descriptive statistics of the data, profile of respondents, and responses to the survey questions. This chapter presents the reliability and validity analysis of the main study.

Chapter Eight – Reports the results of the hypotheses testing using SEM.

Chapter Nine – Presents the findings of the exploration and analysis of the nature of participation based on community member type and their behaviour in the community.

Chapter Ten – Presents the discussion of the key research findings from Chapter 8, and Chapter 9.

Chapter Eleven – Explicates the implications of this research to researchers and practitioners. The chapter also highlights the limitations of this research. Finally, this chapter presents the contributions of this study and suggests directions for future research.

Figure 1-2 Structure of this Thesis



(Source: This Research)

1.9 Summary

This chapter has presented an introduction and an overview of this research. The research context of social media was also presented and discussed. The topics of consumer-brand relations, brand equity, and brand community, and the significance of studying the influence of virtual brand communities on brand equity have been covered. This chapter also presented a discussion of the research questions, objectives, methodology, and contributions. Finally, this chapter presented the structure of the thesis. Chapter Two and Chapter Three will present a review of the literature on brand equity, brand community, and consumer-brand relations.

Chapter 2: Brand Equity

2.1 Introduction

This chapter aims to conduct an extensive review of the literature of brand equity. Section 2.2 explains the concept of brand equity and provides a brief background to brand equity research. Section 2.3 assesses the perspectives of brand equity. Meanwhile, Section 2.4 assesses brand equity as a multidimensional construct. Section 2.5 reviews the previous literature of online brand equity. Finally, Section 2.6 concludes this chapter.

2.2 Brand Equity

The purpose of branding products is to differentiate them from those of the competition (Farquhar 1989, Aaker 1991, Keller 1998). It also serves to simplify consumer choice because they can remember brands that they have bought in the past (Farquhar 1989). A brand can also be used to enhance a product's perceived value through building associations to the brand (Farquhar 1989, Keller 1998), which are important in brand equity (Keller 1993, Aaker 1991, 1996). In general, brand equity is the result of firms investing in brands to build a long-term, sustainable, and differential advantage over their competition (Kamakura and Russell 1993).

Many previous studies have argued that brand equity is the value that results from the benefits accrued from branding (Keller and Lehmann 2006). For example, Biel (1992, p. RC-7) argues that, "*brand equity deals with the value, usually defined in economic terms, of a brand beyond the physical assets associated with its manufacture and provision*". Similarly, Winters (1991) argues that brand equity relates to added value: "*brand equity involves the value added to a product by consumers' associations and perceptions of a particular brand name*" (Winters 1991, cited in Wood 2000, p. 663).

Brand equity can be either positive or negative. A positive and strong brand equity provides value for customers by enhancing interpretation and processing of information, by providing confidence in the purchase decision, and by providing use

satisfaction (Aaker 1991). A firm generates value from brand equity by enhancing the efficiency and effectiveness of its marketing program and by building brand loyalty, reducing price and margins and through brand extension, trade leverage, and competitive advantage (Aaker 1991).

An extensive review of the literature suggests that brand equity has been conceptualized and measured from a number of different perspectives (see for instance, Keller and Lehmann 2006), which is detailed in the following section.

2.3 Brand Equity Perspectives

Keller and Lehmann (2006) showed that there are three major perspectives of brand equity, which are: customer-based brand equity, company-based brand equity, and financially-based brand equity. However, company and financial perspectives can be collapsed into the same category since all companies have to meet financial obligations and goals. This leaves two main perspectives to brand equity in the literature, the value of the brand to the firm and the value of the brand to consumers (Farquhar 1989, Kamakura and Russell 1993, Erdem and Swait 1998, Tolba 2006). *“The firm-based perspective focuses on measuring the added value in terms of cash flows, revenues, market share, or similar measures”* (Sriram et al. 2007, p. 63). Meanwhile, customer-based brand equity is concerned with the consumers’ perspective of brand equity (Aaker 1991, Keller 1993, Cobb-Walgren et al. 1995, Erdem and Swait 1998, Yoo et al. 2000, Yoo and Donthu 2001, Washburn and Plank 2002, Christodoulides and de Chernatony 2010). Brand equity from this perspective emphasises the importance of brand value in the consumers’ minds (Keller 1993, Cobb-Walgren et al. 1995).

Tolba (2006) and Sriram et al. (2007) have argued that the two perspectives of brand equity are more complementary. Even though they are different, they are both useful for managing brand equity. The customer-based and company-based brand equity perspectives include various ways of defining, operationalising, and measuring brand equity. The financial value of brand equity is important for accountability purposes. Any investment in a brand has to be ultimately justified to all the

stakeholders. Customer based brand equity is also important because “*the level of customers-based brand equity contributes to the effectiveness of the firm’s marketing mix*” (Washburn and Plank 2002, p. 47). Given that this study is concerned with the consumers’ perspective of brand equity, the remainder of this chapter will focus on consumer-based brand equity.

2.3.1 Consumer-Based Brand Equity

Most of the previous research in consumer-based brand equity is founded on cognitive psychology, which focuses on consumer brand associations (Erdem and Swait 1998, Christodoulides and de Chernatony 2010). This approach perceives consumers as the main drivers of brand equity and finds that the consumers’ words and actions ultimately drive brand value (Keller and Lehmann 2006).

Erdem et al. (1999) identified three streams of research that have been adopted in the consumer-based brand equity perspective: firstly, Aaker (1991) proposes a framework that focuses on consumer-based concepts (e.g. brand associations) in building brand equity; secondly, Keller (1993) proposes the role of brand knowledge in the formation of brand equity; and thirdly, Erdem and Swait (1998) model of “*perceived clarity and credibility of the brand information under imperfect and asymmetric information*” (Erdem et al. 1999, p. 302). Meanwhile, Christodoulides and de Chernatony (2010) suggest that there are two approaches to consumer-based brand equity conceptualizations: the first is derived from cognitive psychology (i.e. Aaker 1991, Keller 1993) and the second is derived from information economics (Erdem et al 1999). This study is concerned with the cognitive psychology of consumer-based brand equity and, therefore, the literature review will heavily focus on the first perspective of brand equity (i.e. Aaker 1991 and Keller 1993).

2.4 Dimensionality of Brand Equity

Many of the conceptualisations and measures that have been developed to gauge consumer-based brand equity are built on David Aaker’s (1991) and Kevin Keller’s

(1993) conceptualisation of brand equity (Christodoulides and de Chernatony 2010). Brand equity consists of five main dimensions, which are: brand awareness, perceived quality, brand loyalty, brand associations and other proprietary assets (Aaker 1991). There are other views of the dimension of consumer-based brand equity, such as: brand awareness and brand image (Keller 1993); tangible and intangible brand components (Kamakura and Russell 1993); performance, value, social image, trustworthiness and commitment (Lassar, W., Mittal, B. et al 1995); and, attribute-based and non-attribute based components (Park and Srinivasan 1994).

The bulk of the models found in the research focus on the multidimensionality of the brand equity construct. For example, Cobb-Walgren et al. (1995), Yoo and Donthu (2001), Washburn and Plank (2002), and Pappu et al. (2005) have reported findings supporting the multidimensionality of consumer-based brand equity based on the work of Aaker (1991). In their investigation of brand equity dimensions, Yoo and Donthu (2001) report that three dimensions are discernible where brand awareness and brand association were merged into one dimension. On the other hand, Washburn and Plank (2002) scrutinise the work of Yoo and Donthu (2001) and conclude that both the four-dimension and the three-dimension brand equity frameworks exhibit acceptable fits. However, Washburn and Plank (2002) caution that the three-dimension brand equity framework proposed by Yoo and Donthu (2001) does not fit Aaker's (1991) definition where brand awareness and brand associations are not synonymous. Table 2-1 lists some of the more important conceptual research on consumer-based brand equity.

Table 2-1 Conceptual Research on CBBE	
Study	Dimensions of CBBE
Aaker (1991, 1996)	Brand awareness Brand associations Perceived quality Brand loyalty
Blackston (1992)	Brand relationship (trust, customer satisfaction with the brand)
Keller (1993)	Brand knowledge (brand awareness, brand associations)
Sharp (1995)	Company/brand awareness Brand image Relationships with customers/existing customer franchise
Berry (2000)	Brand awareness Brand meaning
Burmann et al. (2009)	Brand benefit clarity Perceived brand quality Brand benefit uniqueness Brand sympathy Brand trust

(Source: Christodoulides and de Chernatony 2010)

2.4.1 Brand Loyalty

Brand loyalty is an important concept for marketing because loyal customers can have a positive impact on the firm's profitability (Keller 1998, Oliver 1999, Bennett and Rundle-Thiele 2005). The availability of a loyal customer allows the firm to charge a premium price for its offering (Keller 1998, Bennett and Rundle-Thiele 2005). Meanwhile, loyalty is important to marketers because the very reason that brands are created is to deter competition and retain customers (Aaker 1996).

Research shows that companies have benefited for years from developing a loyal customer base (Aaker 1996). Higher brand loyalty means that the customer base is more immune to the competitors' persuasion efforts. Moreover, brand loyalty is linked to future profits since loyalty translates to future purchases (Jacoby and Kyner 1973, Oliver 1999, Gounaris and Stathakopoulos 2004). Aaker (1991) notes that brand loyalty is both one of the dimensions of brand equity and is affected by brand equity. However, Keller (1998) contends that brand loyalty and brand equity are interrelated but are two different concepts.

There are two main perspectives of brand loyalty: the first focuses solely on behaviour as an indication of loyalty (see Kahn et al. 1986, Sharp et al. 1999,

Ehrenberg 2000), while the second suggests that loyalty is a multidimensional construct that cannot only be confined to behaviour alone (Day 1969, Dick and Basu 1994). The behavioural perspective focuses on repeat purchases (Day 1969) whereas the second perspective (i.e. attitudinal loyalty) conceptualises loyalty as consisting of a strong internal predisposition leading to behaviour (Gounaris and Stathakopoulos 2004).

Researchers in the behavioural camp contend that behaviour “*determines sales and profitability... it is the independent variables that consumer researchers should focus on*” (Sharp et al. 1999, p.5). Moreover, the behavioural perspective argues that empirical results show that using attitude to predict future behaviour has provided poor results (Sharp et al. 1999). Dick and Basu (1994) and Amine (1998) argue that the behavioural approach is limited because it does not consider issues such as buying situations and personal motive that may induce behaviour. Furthermore, the behavioural approach has been criticised for only capturing the static outcome of the dynamic concept of brand loyalty (Dick and Basu 1994, Amine 1998, Oliver 1999, Bennett and Rundle-Thiele 2002). Many behavioural definitions and measures of loyalty focus on percent-of-purchase or a sequence definition of the concept (Jacoby and Kyner 1973).

Jacoby and Kyner (1973) provide an extensive definition that addresses both the behavioural and the affective perspectives of brand loyalty: “*brand loyalty is (1) the biased (i.e. nonrandom), (2) behavioural response (i.e., purchase), (3) expressed over time, (4) by some decision-making unit, (5) with respect to one or more alternative brands out of a set of such brands, and (6) is a function of psychological (decision-making, evaluative) processes*” (Jacoby and Kyner 1973, p. 2). They add that the psychological processes translate to an individual developing commitment to a brand and that it is the nature of this commitment that distinguishes brand loyalty from other forms of repeat purchase behaviour. On a similar note, Yoo and Donthu (2001, p. 3) define brand loyalty as “*the tendency to be loyal to a focal brand, which is demonstrated by the intention to buy the brand as a primary choice*”.

Dick and Basu (1994) suggest an integrated perspective of loyalty that looks at loyalty as attitude-behaviour relationships. They propose that there are two dimensions that underlie the notion of relative attitude (i.e. attitude towards one brand in relation to another brand), which includes attitude strength and attitudinal differentiation. The highest relative attitude is present when consumers have strong attitudes towards a brand and perceive it to be different from other brands. On the other hand, a weak attitude and no differentiation have the lowest relative attitude and less frequent patronage. Therefore, four important loyalty conditions arise when cross-classifying relative attitude with repeat patronage, which are: no loyalty, spurious loyalty, latent loyalty, and loyalty (Dick and Basu 1994). Gounaris and Stathakopoulos (2004) have also proposed a similar classification of brand loyalty. Table 2-2 presents the relative attitude-behaviour relationship framework proposed by Dick and Basu (1994).

Table 2-2 Relative Attitude-Behaviour Relationship			
Relative Attitude	Repeat Patronage		
		High	Low
	High	Loyalty	Latent Loyalty
Low	Spurious Loyalty	No Loyalty	

(Source: Dick and Basu 1994)

In contrast, Oliver (1999, p. 34) offers a loyalty framework that addresses the consumers' progression through loyalty stages and defines loyalty as:

A deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.

Oliver (1999) suggests that there are four important loyalty phases: cognitive loyalty, affective loyalty, conative loyalty and action loyalty. It is theorised that consumers go through these four phases before reaching what is called "action inertia" (Oliver 1999). Each one of these phases has vulnerabilities that may cause the consumer to switch; however, loyalty switching becomes more difficult as the consumer takes action. It is, therefore, action inertia that facilitates consumer repurchase (Oliver 1999).

This study employs this definition of brand loyalty because it comprises of both behavioural and attitudinal loyalty aspects. Furthermore, Oliver's (1999) definition of brand loyalty builds on the argument presented by Jacoby and Kyner (1973) and it also takes into account competitive and situational factors that might deter loyalty. It is, therefore, a more comprehensive definition of loyalty.

While substantial research has investigated the nature and concept of brand loyalty as well as its applications in a variety of contexts, very few have investigated the extent to which participation in a virtual brand community within the context of new social media can generate or enhance loyalty to the brand. A review of the literature suggests that research on brand loyalty in the virtual brand community domain is scarce. In particular, the role of participation in social media in developing and fostering loyalty to the brand is not well studied in the marketing literature.

It is the objective of this study to investigate the link between participation in a virtual brand community and the consumer's loyalty to the brand. This study speculates that consumers who fully engage in the virtual brand community may become more loyal to the brand because they become more attached to the brand psychologically. In contrast, those who engage in the community less are expected to show less loyalty levels as a result of lower levels of participation.

2.4.2 Perceived Quality

Perceived quality is *“not the actual quality of the product but the consumer's subjective evaluation of the product”* (Pappu et al. 2005, p. 145). Meanwhile, Aaker (1996) describes perceived quality as a brand association that is elevated to the status of a brand asset due to its importance. Among other brand associations, only perceived quality has been shown to drive financial performance (Aaker 1996). Perceived quality is defined as *“the customer's perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternatives”* (Aaker 1991, p. 85).

Similarly, Zeithaml (1988, p.3) maintains that “*perceived quality is (1) different from objective or actual quality, (2) a higher level of abstraction rather than a specific attribute level of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer’s evoked set.*” Furthermore, in her exploratory study, Zeithaml (1988) modelled perceived quality as a higher-level attribute that can be influenced by intrinsic and extrinsic attributes. The characteristics of branded products (including reliability and performance), may also be included in perceived quality. This present study adopts Aaker’s (1991) definition of perceived quality because of its focus on the product or service in relation to competing offerings. Hence, even if a brand is not the leader in its category it may still enjoy high perceived quality relative to its competitors. In addition, perceived quality has been found to be dynamic in that it changes over time as a consequence of added information, increased competition in a product category, and changing consumer expectations (Zeithaml 1988).

The importance of perceived quality stems from the value that it provides to customers (Pappu et al. 2005). Perceived quality helps differentiate and position brands, and it gives consumers a reason to buy (Aaker 1991, Aaker 1996, Pappu et al. 2005). It is also primary to customer-based brand equity because it is associated with the consumers’ willingness to pay a price premium, intention to purchase a brand, and brand choice (Netemeyer et al. 2004). Furthermore, perceived quality generates value by attracting channel members’ interest and it aids in brand extensions (Aaker 1991). Product and service quality are also linked to customer satisfaction, and company profitability (Atilgan et al. 2005, p. 240). In addition, perceived quality is a part of what customers buy and it has an impact on brand identity (Aaker 1996).

There are several theoretical frameworks that attempt to explain how perceived quality judgments are formed, two are of particular use: the means-end chain model and the expectancy value theory (Netemeyer et al. 2004). “*The means-end chain approach suggests that a consumer’s cognitive structure holds brand-related information in memory at different levels of abstraction*” (Netemeyer et al. 2004, p. 210). In this perspective the level of abstractions are represented by brand attributes, benefits and overall affective brand attitude (Netemeyer et al. 2004). The resulting

judgment is represented by the “*multiplicative function of the attributes and benefits espoused in expectancy value theory*” (Netemeyer et al. 2004, p. 211). Moreover, Zeithaml (1988) proposed a means-end model that relates to pricing, quality, and value. Her model has several levels of attributes. Lower-level attributes suggest “quality” benefits (such as functional benefits) that lead to an overall “value” from consuming the brand. Finally, perceived quality can be formed through promotion that stresses intrinsic and extrinsic brand attributes (Netemeyer et al. 2004).

Despite the significance of perceived quality, very few studies have attempted to explore the extent to which consumer participation in an online community can enhance or lower their perceptions of quality of brand. Consequently, this study aims to investigate the link between participation in brand communities and the consumer’s development of quality judgments.

The current research speculates that the consumer’s participation in a virtual brand community on social media websites influences their quality perception of the brand. It is argued that when consumers participate more in virtual brand communities, they evaluate brand attributes and develop quality judgments about the brand. The associations linked to the brand would become more salient through the consumer’s interaction with the brand and other brand patrons in the context of social media. These interactions aid the consumers in forming their perceptions of the quality of the brand, regardless of the objective quality of the marketing offering.

2.4.3 Brand Awareness

Brand awareness is an important dimension of customer-based brand equity because without it consumers will not recognise the brand (Aaker 1991, Aaker 1996). Creating brand awareness is often an important marketing communications objective because consumers are not able to consider and purchase brands that they are not aware of (Peter and Olson 2005).

Brand awareness is defined as “*the ability of a potential buyer to recognize or recall that brand is a member of a certain product category*” (Aaker 1991, p. 61). Brand

awareness is more of a continuum ranging from non-recognition to dominance (Aaker 1991, Atilgan et al. 2005, Pappu et al. 2005). Keller (1993) conceptualises brand awareness as consisting of recall and recognition, and adds that awareness is a dimension of brand knowledge. Keller (1993, p. 3) states that brand recall is “*the ability to retrieve the brand when given the product category*” whereas brand recognition relates to the “*ability to confirm prior exposure to the brand when given the brand as a cue.*” Many studies have argued that brand recognition is more important than recall when decisions are made at the store (Aaker 1991, Keller 1993, Kotler and Keller 2006).

It is critical that consumers are familiar with the brand for it to benefit from awareness (Aaker 1996). Previous research shows that consumers, under blind test conditions, will tend to choose different brands from the ones that they recognise (Aaker 1996). Additionally, if consumers were provided with brand cues they would tend to choose the brand they are familiar with, even if it is not perceived to be the best (Aaker 1996). Empirical evidence shows that brand awareness is able to lead consumers to sample products and choose those that are not of the highest quality (Hoyer and Brown 1990, Macdonald and Sharp 2000).

Brand awareness is created by the firm’s marketing efforts. Peter and Olson (2005) indicate that different promotional mix elements contribute to brand awareness. Advertising is seen as being the most influential marketing actions on brand awareness (Peter and Olson 2005). In addition, brands in the social media context are not immune from negative publicity. For example, negative information may be shared by existing customers to potential new customers. Hence, it is important that brands are remembered for all the right reasons and none of the wrong reasons (Aaker 1996).

Given that the focus of this research is on current users of ‘brand’ pages on Facebook, brand awareness takes a less central role as users should have some level of brand awareness before they start participating on brand pages. Furthermore, this research focuses on identification at the brand level and the brand community level and brand awareness may be incorporated at the brand identification level. This is supported by an extensive review of the brand community literature (see Chapter 3).

2.4.4 Brand Associations

Brand associations contain the meaning of the brand for consumers (Keller 1993). Aaker (1991, p. 109) explains that a brand association is “*anything linked in memory to a brand.*” Moreover, this link has a level of strength. Larger numbers of links will strengthen the brand image (Krishnan 1996). A brand image is a set of associations, which are usually arranged in some meaningful way (Aaker 1991). Associations and images are perceptual representations in the consumers’ minds that may not correspond to objective reality (Aaker 1991).

Brand associations can be classified into three major categories of increasing scope, which are: attributes, benefits, and attitudes (Keller 1993, p. 4). These associations can also vary according to their type, favourability, strength, and uniqueness (Keller 1993). Furthermore, the level of associations’ abstraction is a factor in the strength of the associations (Belen del Rio et al. 2001). A network of links between the brand and intangibles, attributes, benefits and other objects also further strengthens brand association (Aaker 1991). In contrast to product attributes associations (e.g. engine horse power) a more intangible association (e.g. family safety) is found to be more affective and longer lasting in consumer’s memory (Aaker 1991, Belen del Rio et al. 2001). However, it is important that these associations be more positive (favourable) than negative (unfavourable) (Krishnan 1996).

The strength of brand associations is that they give consumers a reason to buy a brand. They also create positive attitudes and feelings among consumers (Aaker, 1991, Pappu et al. 2005). In addition, Aaker (1991) argues that brand association will be strengthened by experience or exposures to marketing communication. Moreover, Belen del Rio et al. (2001) argue that brand associations are a key element in brand equity building and management. Brand associations are the basis for purchase decisions and brand loyalty (Aaker 1991).

The literature on brand associations has mainly covered the area of traditional brand marketing. However, there is still a lack of research investigating brand associations in the virtual brand community context. In this study, the researcher aims to focus on perceived quality as the main brand association that resulted from participation in

brand communities in the social media context. In addition, this research speculates that in the virtual brand community context, brand associations are related to identification with the brand rather than being a clear distinct brand equity dimension or outcome. Consumers are expected to identify with the brands based on the associations linked to the brand and the community. It may also be that brand associations develop as a consequence of participation in brand communities. However, there is no empirical research that can validate such assumptions. Consequently, the current research aims to fill this gap in the literature.

The current study is also interested in other manifestations of brand equity, such as word of mouth, and willingness to pay a price premium for the brand. These brand equity outcomes are important indicators of the health of the brand. This study aims to explore how these constructs are influenced by consumers' participation in virtual brand communities. The next section presents a discussion on these constructs.

2.4.5 Brand Equity Outcomes

A review of the literature suggests that there are two important brand equity outcomes: Word of Mouth (WOM) and willingness to pay a price premium for the brand (see Aaker 1991, Buttle 1998, Mangold et al. 1999, Netemeyer et al. 2004, Rios and Riquelme 2010). This study proposes that WOM and willingness to pay a price premium are two brand equity outcomes that are generated as a result of consumer participation in virtual brand communities. The following sections describe each construct and its importance to brand equity.

2.4.6 Brand Equity and Word of Mouth

Many studies have argued that WOM has a significant effect on consumer buying behaviour (Richins 1983, Buttle 1998, Mangold et al. 1999, Bush et al. 2005) and that WOM communications influence consumers' judgments (Burzynski and Bayer 1977, Herr et al. 1991, Bone 1995). Moreover, WOM communication is an important concept to marketers because it is free promotion for the brand (Harrison-Walker 2001). WOM is defined as the "*informal, person-to-person communication between a perceived non-commercial communicator and a receiver regarding a*

brand, a product, an organization, or a service” (Arndt 1968, Anderson 1998, Buttle 1998, Harrison-Walker 2001, p. 70). WOM can also be positive or negative (Richins 1983, Buttle 1998, Mangold et al. 1999, Brown et al. 2005).

Consumers who are loyal to the brand are expected to tell others about their brand experience (Buttle 1998, Harrison-Walker 2001). Moreover, the consumers tend to engage in WOM behaviour during the consumption process (Bone 1992). Previous research has conceptualised WOM from two perspectives: as a component of loyalty (see Zeithaml et al. 1996, Jones and Taylor 2007) and as a separate construct (see Harrison-Walker 2001, Maxham 2001). This study subscribes to the view that WOM is a distinct construct, which is in line with research showing that positive and negative WOM behaviour occurs in virtual brand communities beyond the scope of loyalty (Hennig-Thurau et al. 2004, Gruen et al. 2006). In addition, empirical research has shown that WOM is a distinct construct from loyalty (Harrison-Walker 2001).

Harrison-Walker (2001) demonstrated that WOM is a multidimensional construct that is composed of two dimensions: WOM Activity and WOM Praise. The majority of research has only conceptualised WOM as a unidimensional construct (Harrison-Walker 2001). Moreover, Buttle (1998) proposes that there are five characteristics of WOM, which are: valence, focus, timing, solicitation and intervention. Valence refers to the positive or negative aspects of WOM (Buttle 1998, Harrison-Walker 2001).

Previous studies have proposed several antecedents to WOM. For example, Richins (1983) reports that dissatisfied consumers are more likely to engage in negative WOM. Similarly, Anderson (1998) reports that dissatisfied customers tend to engage in greater WOM than satisfied customers. On the other hand, Brown et al. (2005) report that, although satisfaction has a direct effect on WOM, its effect on WOM is partially mediated, alongside identification, by commitment. Brown et al. (2005) maintain that for consumers to be committed to a retailer they should at least have had a positive satisfactory experience with that retailer. This highlights the important role of commitment as an antecedent of WOM, where commitment directly influences WOM behaviour (Harrison-Walker 2001, Brown et al. 2005). The link

between commitment and WOM is central to this study's theoretical model, where WOM is considered an important outcome in the process of attachment to the brand (see Chapter 4). Other antecedents to WOM behaviour have been suggested in the literature, which are: satisfaction, loyalty, quality, trust, and perceived value (De Matos and Rossi 2008).

Many studies have argued that WOM behaviour can represent participation in virtual brand communities (e.g. Hennig-Thurau et al. 2004, Gruen et al. 2006, Hung and Li 2007, Jansen et al. 2009, Bambauer-Sachse and Mangold 2011). Specifically, participation behaviour can be considered WOM when the consumers rate products and services on various online outlets, such as Amazon.com or Twitter (Hennig-Thurau et al. 2004, Jansen et al. 2009). Moreover, electronic WOM is motivated by the same drivers that motivate traditional WOM, including the desire for social interaction and economic incentives (Hennig-Thurau et al. 2004). On the other hand, in the context of online consumer-to-consumer knowledge exchange, Gruen et al. (2006) showed that when consumers exchange knowledge it is able to positively influence WOM.

There is, however, a lack of research investigating WOM (behaviour and valence) as an outcome of brand equity in the context of virtual brand communities. In this study, the researcher argues that the consumers develop attachment to a brand in the process of engaging the virtual brand community. This attachment is important since it is predicted to drive brand equity outcomes, such as WOM. Previous research on WOM highlights the link between commitment and WOM. Attachment is a broader construct than commitment (Park et al. 2010). Hence, it is plausible to suggest a link between attachment and WOM. To address this gap in the literature, the researcher aims to investigate the link between participation in virtual brand communities, attachment, and WOM behaviour and valence.

2.4.7 Brand Equity and Willingness to Pay a Price Premium

The second important brand equity outcome is willingness to pay a price premium for the brand, which is defined as *“the amount a customer is willing to pay for*

his/her preferred brand over comparable/lesser brands of the package size/quantity” (Netemeyer et al. 2004, p. 211). Price premium is important for brands and the willingness of consumers to pay a higher price for the brand over another brand is significant for brand equity (Aaker 1991, Lassar et al. 1995, Netemeyer et al. 2004, Rios and Riquelme 2010). In addition, Lassar et al. (1995) and Netemeyer et al. (2004) maintain that willingness to pay a price premium is the result of the consumer’s confidence in the brand and of customer-based brand equity.

Willingness to pay a price premium is a strong indicator of an individual’s loyalty to the brand and can be used as a measure of brand equity (Farquhar 1989, Aaker 1996, Netemeyer et al. 2004). According to Monroe (2003), cited in Ligas and Chaudhuri (2012, p. 249), willingness to pay a price premium pertains to “*the surplus that arise from perceived value which itself is derived from notions of perceived quality and actual price paid.*” In other words, when consumers perceive that the quality of the brand is higher than the actual price, they are willing to pay a higher price for the brand over other brands (Ligas and Chaudhuri 2012).

Previous research provides a number of antecedents to willingness to pay a price premium. Empirical research shows that willingness to pay a price premium is linked to perceived quality (Sethuraman and Cole 1999, Netemeyer et al. 2004, Steenkamp et al. 2010). Specifically, in the retailing context, perceived quality mediates the effect of marketing actions (such as advertising and price promotion) on willingness to pay a price premium (Steenkamp et al. 2010). The link between willingness to pay a price premium and perceived quality supports Aaker’s (1996) suggestion that willingness to pay a price premium is related to brand associations. Furthermore, Aaker (1991) maintains that a perceived quality advantage of the brand commands a price premium.

In the online context, empirical research reports that willingness to pay a price premium is influenced by: the consumer’s awareness of business websites, perceived value, and trust association and loyalty in the online business (Rios and Riquelme 2010). Moreover, previous research has shown that willingness to pay a price is influenced by affective and cognitive attachment (Thomson et al. 2005, Park

et al. 2010). This study is concerned with how consumers' willingness to pay a price premium for a brand develops as a consequence of their participation on brand pages in the social media context. In addition, the researcher aims to investigate role in attachment in mediating the relationship between participation and consumers' willingness to pay a price premium. Previous research has not addressed the impact of participation in virtual brand community on their willingness to pay a price premium. The majority of the research conducted on willingness to pay a price premium has been conducted in the traditional marketing context (e.g. Sethuraman and Cole 1999, Netemeyer et al. 2004, Steenkamp et al. 2010, Ligas and Chaudhuri 2012).

This study speculates that the consumers' membership and participation on brand pages on Facebook will encourage them to pay a higher price for the brand in comparison to its competitors. It is expected that the consumers' attachment to the brand, which is developed through participation, will positively affect their willingness to pay more for the brand. Previous research has not explored this connection in the context of virtual brand communities. Chapter 4 will elaborate on the different dimensions and outcomes of brand equity and how they relate to other constructs in the research model. The following section will focus on online brand equity, which is an important extension of the brand equity domain.

2.5 Online Brand Equity

So far this chapter has discussed brand equity in the offline context. This section will discuss online brand equity. This is important because many offline companies have extended their presence to include the web. Moreover, following the decrease of the barriers to entry, a large number of purely-online companies have been formed over the last two decades (Anderson 2001, Pandya and Dholakia 2005); however, this has come with a price, such as the "dot.com" flop (Anderson 2001, Pandya and Dholakia 2005). The high risk involved with Internet start-ups has indicated the need for sound business models and strategies (Pandya and Dholakia 2005).

The advancement in technology has changed the Internet landscape and allowed for the proliferation of dotcoms (Page and Lepkowska-White 2002); however, the basic marketing premises still apply (Varianini and Vaturi 2000). In the computer-mediated environment, the organisation's website is the core of the customer's experience (Rios and Riquelme 2008). Therefore, marketers need to adapt their strategies and brands to a new medium. However, despite the various advancements in the virtual world, research on branding and brand equity on the Internet is still limited (Kim et al. 2002, Martensen et al. 2004, Christodoulides et al. 2006, Rios and Riquelme 2008).

Brand equity is important for online B2C business because of the dynamic nature of the Internet environment. Kim et al. (2002) contend that it is difficult to differentiate in the web environment because:

1. It is easy to replicate a B2C business model;
2. It is easy for the consumer to obtain information; and,
3. It is difficult for consumers to assess the trustworthiness/legitimacy of on-line companies.

Brand equity is a major intangible resource (asset) that enables a B2C online business to differentiate itself from the competition (Kim et al. 2002, Rios and Riquelme 2008). Kim et al. (2002) add that brand equity 'immunises' online firms from the Internet characteristics that impede differentiation. It has been argued that in many ways Internet and service brands are similar (Christodoulides et al. 2006). As in services, online products and services are less tangible than real world (i.e. offline) offerings; therefore, assessing quality is challenging. Consequently, many consumers look for a signal of quality and brands provide such a signal (Erdem and Swait 1998, Kim et al. 2002, Christodoulides et al. 2006). This highlights the importance of online brand management. Trust is also an important requirement in the Internet B2C environment because without trust the consumers would not consider engaging with online businesses due to the perceived high risk (Christodoulides et al. 2006, Kim et al. 2002, Rios and Riquelme 2008).

The distinctive characteristics of the Internet demand a revision of the existing offline marketing tools and their applications online (Christodoulides et al. 2006). This does not mean that old rules do not apply to the Internet (Pandya and Dholakia

2005), but rather that the pace of marketing processes on the Internet is accelerated (Varianini and Vatuti 2000). An online competitive advantage can erode rapidly because functional benefits are quickly replicated and commoditised (Simmons 2007). Process and relationships benefits are important drivers of online purchase decisions and WOM (Simmons 2007). In particular, online brand equity conceptualisation and operationalisation should take into account these factors.

Previous research argues that it is possible to apply an offline brand equity framework to the online environment (Rios and Riquelme 2008). For example, Rios and Riquelme (2008) report partial support for such an application. In addition, Christodoulides et al. (2006) argue that many existing online marketing performance measures (e-metrics) (such as click through rates) are short-term oriented. The literature in this domain is scarce and few studies have attempted to conceptualise and build measures of online consumer-based brand equity (Kim et al. 2002, Christodoulides et al. 2006). This study is interested in understanding brand equity generation and development through virtual brand communities. Consequently, a brief overview of the online brand equity literature will be presented in the following sections.

2.5.1 Conceptualisations of Online CBBE

To date, the research on online CBBE is very limited (Christodoulides et al. 2006). However, a number of conceptualisations have been built around the work of Keller (1993). In addition, Kim et al. (2002), Page and Lepkowska-White (2002), and Na et al. (1999) provide frameworks for building online brand equity based on the brand awareness and brand image dimensions. On the other hand Christodoulides et al. (2006) and Rios and Riquelme (2008, 2010) offer relationship based online brand equity models that are tuned to the online context.

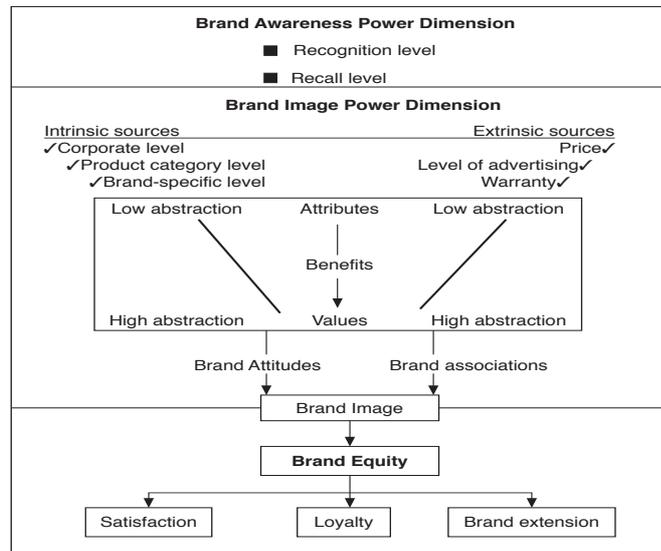
2.5.2 Online Brand Equity, Brand Awareness, and Brand Image

Kim et al. (2002), Page and Lepkowska-White (2002), and Na and Marshall (2005) have emphasised that online brand equity requires different strategies. Meanwhile,

Page and Lepkowska-White (2002) propose that web awareness and web image are two important dimensions of web equity. While these authors define web equity as online brand equity, web awareness has been defined as the familiarity of consumers with the company's website (Keller 1993, Page and Lepkowska-White 2002, Na and Marshall 2005). This can be developed by means of search engines, Web advertising, word-of-mouth (i.e. online WOM), and cross-promotion (Kim et al. 2002, Page and Lepkowska-White 2002). Web image is conceptualised to pertain to consumers' perceptions about an online company. In addition, web image is developed through experience with the company's website and can influence the likelihood of future visits (Page and Lepkowska-White 2002). Moreover, web image is also affected by other factors, such as ease of navigation, reliability, personalisability, speed, perceptions of trustworthiness, accessibility, responsiveness, and care for consumers' information privacy and security (Page and Lepkowska-White 2002). Hence, web equity is present if a website possesses and is differentiated by these factors; including site design, vendor characteristics and marketer and non-marketer communications (Page and Lepkowska-White 2002). A website attains web equity when value is added to customers by providing for their needs and expectations, which results in loyal customers (Page and Lepkowska-White 2002). Although this study is not focused on investigating company websites, brand pages on Facebook are an important customer touch-point and interactions on these brand pages are speculated to positively influence brand equity.

Na et al. (1999) provide a different online brand equity model, which they call a "brand power" model (see Figure 2-1). The brand power model aims at capturing the complex brand image construct. In their conceptualisation of brand image, Na et al. (1999) retain recognition level and recall level as indicators of brand awareness power. They conceptualise that the antecedents of brand image vary with rising levels of abstraction. They explain that this variation (or range) begins with low abstraction at the attribute level and progresses to the highly abstract values. Brand image is conceptualised to influence brand equity, which in turn influences satisfaction, loyalty and brand extension.

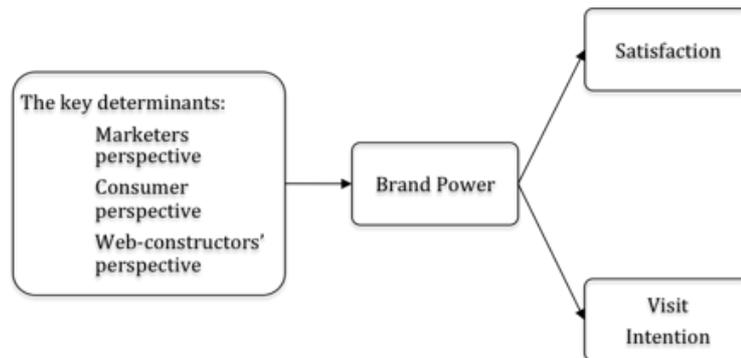
Figure 2-1 Brand Power



Source: (Na et al. 1999)

Na and Marshall (2005) provided an adjusted brand power model that had three key determinants of cyber brand power, which are: consumers, marketers, and web-constructors. Underlying these determinant variables are three perspectives, which are: attribute, benefit and value dimensions of the brand. The three key determinant perspectives reflect the multi-attribute nature of the proposed brand equity model. The model proposed by Na and Marshall (2005) builds and expands on the proposed conceptualisation that brand image is based on “a chunk of information” that consumers use as a heuristic to simplify their decision-making (see Na et al. 1999). Na and Marshall (2005) argue that information is developed over time and they consequently proposed that the multi-attribute approach to brand equity measurement is required. The other difference between the earlier conception of the brand power model (Na et al., 1999) and the later development of the cyber brand power model (Na and Marshall, 2005) is that the latter focuses on the outcomes of brand power. Internet brands that have more brand power will generate more customer satisfaction and a higher client visit intention than those that have less brand power (Na and Marshall, 2005). Figure 2-2 illustrates Na and Marshall (2005) proposed model.

Figure 2-2 Proposed Model of Cyber Brand Power



(Source: Na and Marshall 2005)

This review of the literature on online brand equity has highlighted the lack of a framework for a brand equity based on the relational perspective that can be applied in the social media context. The majority of the online brand equity models factor-in established dimensions of the construct and add some online relevant constructs (such as trust).

2.5.3 Relational Online Brand Equity Perspective

Christodoulides et al. (2006, p. 803) proposed a brand equity measure that is sensitive to the unique nature of the Internet and which conceptualises Online Retail Service (ORS) brand equity as “*a relational type of intangible asset that is co-created through the interaction between consumers and the e-tail brand.*” Their framework differs in two main ways from the traditional frameworks: firstly, it focuses on the relational aspect of brands; and secondly, it brings the idea of co-creation into the online brand equity domain. Christodoulides et al. (2006) point to their alignment with the new service logic proposed by Vargo and Lusch (2004), which advocates co-production of brand meaning. They maintain that the ORS brand equity is co-created rather than channelled down by marketers in forms of associations. Although the Internet has several unique characteristics, none are more

prevalent than the ability of consumers to co-create value. Brand equity is created through the online (e-tailer website) and off-line interactions of consumers.

The ORS framework has been conceptualised and operationalised in the online retail sector. Christodoulides et al. (2006) report that ORS has five dimensions:

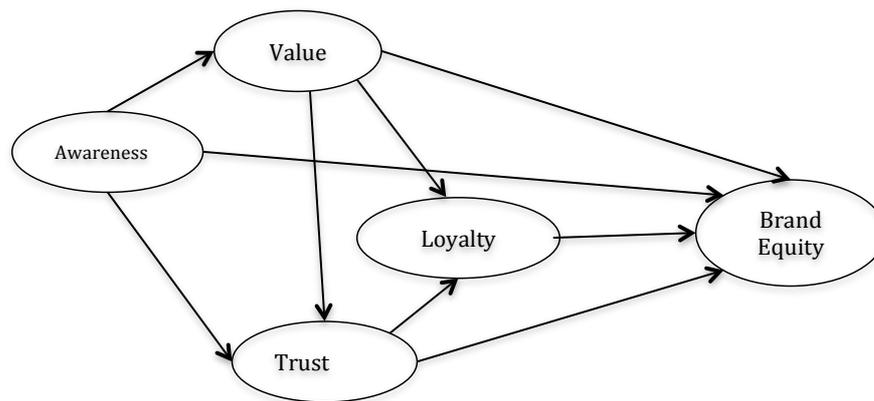
- **Emotional Connection:** which is a measure of the affinity between consumers and the ORS brand.
- **Online Experience:** which is the experience consumers have with the brand in the online context.
- **Response Service Nature:** which refers to the response and service mechanisms in support of the ORS storefront and the level of customer service interaction facilitated by the site.
- **Trust:** which is the confident expectation of the brand's reliability and intentions in the situation involving consumer risk.
- **Order Fulfilment:** this is the core of the online and off-line experience (e.g. goods delivery and consumption).

It must be emphasised that this conceptualisation, although rich and relationship based, is focused on e-tailers. This neglects other service offerings online, such as social and professional networking, job searching, and comparison websites. Furthermore, the ORS model proposed a co-creation perspective, although this is limited in the e-tailing context to consumer feedback on web experience and product/service development. Consumers do not create content that shapes the website or the service offering to a great extent.

Similarly, Rios and Riquelme (2008) have noted that an online brand equity framework should only differ in degree from the traditional framework. In contrast to earlier work by Page and Lepkowska-White (2002) and Na and Marshall (2005), Rios and Riquelme (2008) proposed an alternative online brand equity model where they make two important assumptions: firstly, the company's website is the brand name (e.g. Amazon); and secondly, the company's web site represents the company and that there is a relationship between the web site and the user. Figure 2-3 illustrates the online brand equity model proposed by Rios and Riquelme (2008). The model proposes that awareness affects brand equity positively and at the same

time affects the brand associations of value and trust (Rios and Riquelme 2008). Furthermore, the brand associations of trust and value have an influence on loyalty, which ultimately affects brand equity. In contrast, Rios and Riquelme (2010) adapt the traditional brand equity dimensions to the online context by introducing value and trust associations as important brand equity dimensions.

Figure 2-3 Model of Online Brand Equity



(Source: Rios and Riquelme 2008)

Rios and Riquelme (2008) report that awareness and trust have a strong indirect relationship with the other variables in the model. This may conflict with the conceptualisation of trust as an important direct contributing dimension in determining CBBE for consumers online (e.g. Christodoulides et al. 2006). They also show that loyalty had the greatest impact on online brand equity. They add that awareness influences value and trust, and trust influences loyalty, and value influences loyalty and trust (Rios and Riquelme 2008). On a similar note, trust associations, awareness and recognition, and brand loyalty are sources of online brand equity (Rios and Riquelme 2010).

2.5.4 The Limitations of Online Brand Equity Models

This literature review has shown some gaps in the online brand equity literature. The majority of the online brand equity models reviewed in this chapter are geared for retailer websites or basic brand websites. The empirical results are also conflicting and the dimensionality of online brand equity is (at best) vague. This study is

interested in how brand equity develops in the dynamic and relationship based context of virtual brand communities. However, the reviewed models seem to adapt the traditional brand equity dimensions and apply them to the virtual context with no clear distinction to the role of the consumer in the process. Meanwhile, brand equity can be developed and nurtured through other means, apart from company online storefronts or retail outlets.

Although the brand equity dimensions suggested in the traditional literature (e.g. Aaker, 1991; and Keller, 1993) provide a solid conceptualisation of brand equity, they are not without their shortcomings in the online context. However, the dimensions proposed by Christodoulides et al. (2006) and Rios and Riquelme (2010) are useful to compensate for the difference in the online brand equity context from that of the traditional context. The researcher speculates that virtual brand communities, in social media sites, are more tuned to the emotional connection, online experience, and trust dimensions proposed by Christodoulides et al. (2006). Furthermore, loyalty, awareness and values associations play a role in virtual brand communities.

This study maintains that consumers have to establish an emotional and psychological connection before brand equity is built and supported. Hence, in the current study's conceptualisation of emotional connection it is considered to be a precursor to brand equity. The online experiences in virtual brand communities have to be value driven to attract consumers and maintain their high engagement levels. This is evident in the collective participation of community members, which is conceptualised to precede brand equity. Ultimately, this study conceptualises that brand equity is manifested through loyalty, perceived quality, willingness to pay a price premium, and WOM. These dimensions and outcomes are based on the work of Aaker (1991) and are applicable to this study's context. Many of the brand pages on Facebook belong to brick-and-mortar brands and, hence, brand equity should also reflect that context. These aspects of brand equity are driven by the consumers' relationship and bond with the brand. In addition, these dimensions and outcomes are transferable between the offline and online brand environment.

These dimensions and outcomes of brand equity have so far been largely ignored in the context of virtual brand communities. The process that leads consumers to develop an affinity for the brand through engaging in virtual brand communities has not been explored at this broad level in previous studies. Consequently, there is a gap in the literature investigating how the presence of brands in the social media arena influence brand equity and its dimensions. With the exception of Christodoulides et al. (2012), who focused on how consumers perceptions of brand was affected by user-generated content, there is a lack of research exploring how consumer interactions on brand pages in social networking websites affect brand equity. In contrast to Christodoulides et al. (2012), this study focuses on consumer participation practices rather than on the content of brand pages and the role of attachment in affecting brand equity. This study speculates that the brand presence on social networking websites and the interaction with customers leads to brand equity gains and outcomes. Therefore, based on the gaps identified in the literature, this study aims to investigate how brand equity is developed in virtual brand communities. It will also investigate which dimensions and outcomes are most influenced by the consumers' participation in these communities.

2.6 Summary

This chapter has presented the brand equity construct and has highlighted its importance in marketing. It has found that brand equity is a key marketing construct that creates value for consumers and brands. The main perspectives on brand equity were presented, as was a detailed discussion on the dimensions of brand equity. Brand loyalty, perceived quality, brand awareness, and brand associations were highlighted as the core dimensions of consumer-based brand equity. Important concepts related to brand equity dimensions were also discussed. The chapter also presented a discussion on online brand equity. It was stated that there are gaps in the literature and limitations in this stream of research. The next chapter aims to present a detailed review of the concept of brand community.

Chapter 3: Brand Community

3.1 Introduction

The concept of brand community is central to this study's conceptual framework. Consequently, this chapter presents an extensive literature review of brand community, its manifestations, and the antecedents of participation in a community. The chapter also presents a discussion on brand attachment, which is conceptualised as an important relational outcome of participation in brand communities. Section 3.2 presents the background of brand community. The characteristics of brand community are discussed in Section 3.3. Meanwhile, Section 3.4 presents a detailed discussion of consumer relationships in brand communities. Online brand community is discussed in Section 3.5. This is followed by a discussion of participation in virtual brand communities in Section 3.6. Furthermore, Section 3.7 discusses the antecedents of participation in virtual brand communities. Section 3.8 presents a discussion on motivation to participate in virtual brand communities. The literature on consumer-brand relationships and brand attachment is discussed in Section 3.9. Finally, Section 3.10 will provide a summary of this chapter.

3.2 An Introduction to Brand Community

Research on communities started in sociology, where it was inspired by the development of postmodernism (Muniz and O'Guinn 2001, Ouwensloot and Odekerken-Schroder 2008, Veloutsou and Moutinho 2009). Sociologists criticised and warned of the negative effects of modernity on communities (Muniz and O'Guinn 2001). For example, commerce and consumer culture have replaced natural and real communities in modern societies (Muniz and O'Guinn 2001). In addition, many scholars have argued that consumption commonalities have led to the creation of new communities, brand communities or communities of consumption (Fischer et al. 1996, Muniz and O'Guinn 2001, McAlexander et al. 2002).

An understanding and realisation of the possibility of brand communities can be traced to the 1970s, where Boorstin (1974, cited in McAlexander et al. 2002) contends that following the Industrial Revolution the sense of community in the US has shifted from tight interpersonal bonds that are geographically bounded to bonds

that are formed around brand use and affiliation. Research on brand communities in the marketing domain began to thrive with the works of Muniz and O'Guinn (2001), McAlexander et al. (2002), Algesheimer et al. (2005), Bagozzi and Dholakia (2006) and others who aimed at developing measures and testing hypotheses regarding brand communities (Cova and Pace 2006, Ouwersloot and Odekerken-Schroder 2008). Previous to these contributions, research on brand communities was mostly conceptual and qualitative (see Cova 1997, Muniz and O'Guinn 2001).

Communities may form around communal consumption (Cova 1997) or brands (Muniz and O'Guinn 2001, McAlexander et al. 2002, Bagozzi and Dholakia 2006). Traditionally, brand communities have been explored in the real world (see Muniz and O'Guinn 2001, Algesheimer et al. 2005, Bagozzi and Dholakia 2006); however, communities may also be formed in cyberspace through the use of computer-mediated communication (Kozinets 1999, Fischer et al 1996, Bagozzi and Dholakia 2002, de Valck et al. 2009, Scarpi 2010).

Consumer communities that share common brand usage and patronage have been called by several names, such as "brand community, "consumption sub-cultures" and consumer or "brand tribes" (Cova and Pace 2006 and Veloutsou and Moutinho 2009). The connections that the consumers have with others who consume the brand are an important facet of brand communities. Consumers use brands to define their identity and express it to others, and engage in multiple relationships in brand communities in the process (McAlexander et al. 2002, Veloutsou and Moutinho 2009).

The literature on brand community has taken different themes and directions. A number of significant themes have emerged in the literature, such as the social influence of brand community (Algesheimer et al 2005), small brand communities (Bagozzi and Dholakia 2006), social construction of brand communities (Muniz and O'Guinn 2001), tribal marketing and brand tribes (Cova 1997, Cova and Cova 2002, Cova and Pace 2006), and psychological sense of brand community (Carlson et al. 2008).

Communities are identified on “*the basis of commonality or identification among their members, whether a neighbourhood, an occupation, a leisure pursuit, or devotion to a brand*” (McAlexander et al. 2002, p. 38). There is a strong social identification element to participating in brand communities that may lead consumer to be biased to a brand and, therefore, develop oppositional loyalty (Thompson and Sinha 2008). Intense brand loyalty is usually expressed and nurtured through participation in brand communities (Thompson and Sinha 2008) and the consumers develop emotional connections with the brand (Algesheimer et al. 2005, Bagozzi and Dholakia 2006, Cova and Pace 2006, Carlson et al. 2007). In addition, brand community membership and participation is synonymous with “consumer empowerment” and “co-creation” (Bagozzi and Dholakia 2006). Brand communities are generally communities of limited liability and as such their membership is voluntary and can be withdrawn at any time (Muniz and O’Guinn 2001, Fischer et al. 1996).

A community has been defined as consisting of member entities and the relationships among these entities (McAlexander et al 2002, p. 38). Specifically, brand community has been defined as “*a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand*” (Muniz and O’Guinn 2001, p. 412). Carlson et al. (2008) differentiates between a social and psychological brand community. They define a social brand community as “*a community of brand admirers who acknowledge memberships in the community and engage in structural social relations*” (Carlson et al. 2008, p. 284). On the other hand, “*a psychological brand community is an unbound group of brand admirers, who perceive a sense of community with other brand admirers, in the absence of social interaction*” (Carlson et al. 2008, p. 284-285).

The important difference between social and psychological brand community is the presence of social interaction. Previous research is not in agreement with regards to the importance of social interaction in brand communities. Anderson (1991) and Carlson et al. (2008) speak of imagined and psychological communities while Muniz and O’Guinn (2001) and McAlexander et al. (2002) describe brand communities that are coloured with high social interactions. Anderson (1991, p. 6) argues that communities are mostly imagined, “*In fact, all communities larger than*

primordial villages of face-to-face contact (and perhaps even these) are imagined". It is the brand and "not communal relations or shared consciousness" that incentivises the nurturing of the consumers' sense of community (Carlson et al. 2008, p. 285).

This study is concerned with brand communities on the Internet. Specifically, this study is concerned with brand pages on Facebook and how they represent virtual brand communities. Online or virtual brand communities are an extension of brand communities (this will be discussed in further detail in Section 3.5). This study views brand community based on the work of Muniz and O'Guinn (2001), where brand pages on Facebook are defined as "*specialized, non-geographically bound communities, based on a structured set of social relationships among admirers of a brand*". This research adopted this definition because it covers numerous types of social interactions revolving around the brand. In addition, this definition is used because it encompasses important characteristics that define brand communities. The following section elaborates on the characteristics of brand communities.

3.3 Characteristics of Brand Community

Muniz and O'Guinn (2001) argue that brand communities have three important characteristics that are found in traditional communities, which are: consciousness of kind, rituals and traditions, and moral responsibility. Previous research argues that brand communities are similar to other types of communities in that they both share these characteristics (Muniz and O'Guinn 2001, Madupu and Cooley 2010). In fact, empirical research shows that these three characteristics are present in brand communities in the real and virtual domains (Muniz and O'Guinn 2001, Madupu and Cooley 2010).

3.3.1 Consciousness of Kind

Consciousness of kind is the most important characteristics of a brand community (Muniz and O'Guinn 2001). This characteristic pertains to the feeling members have of their important connection with the brand and more importantly other members. Muniz and O'Guinn (2001) explain that that these links are important in brand

communities because they represent the sense of belonging to something for the community members. It is this sense of belonging to a brand community that can encourage or deter the users from joining a community (McAlexander et al. 2002).

Members of one community may exhibit consciences of kind by engaging in demarcation between users and non-users of the brand (Muniz and O'Guinn 2001, McAlexander et al. 2002). This is evident in the members of the Apple Macintosh brand community, who refer to themselves as "individuals" rather than "clones" in comparison to Windows (PC) users (Muniz and O'Guinn 2001). McAlexander et al. (2002) also contend that a barrier to community participation exists when consumers fear that they will not fit in the brand community. Hence, consciousness of kind is important for the existence of brand communities (Muniz and O'Guinn 2001).

Muniz and O'Guinn (2001) explicate that this consciousness extends beyond geographical boundaries. Therefore, brand communities can be described as imagined communities (Anderson 1991, Muniz and O'Guinn 2001, Carlson et al. 2008). Due to the importance of this characteristic, several studies have incorporated consciousness of kind as identification with group (see Carlson et al. 2008) and brand community identification (see Algesheimer et al. 2005). The self-characterisation of a member as a member of a particular community is a cognitive component of identification (Algesheimer et al. 2005). Identification with the community is important because it was found to influence consumer behaviour (Algesheimer et al. 2005).

An important social process that encourages consciousness of kind is oppositional brand loyalty (Muniz and O'Guinn 2001, Thompson and Sinha 2008). This opposition to competing brands is an important aspect of the community experience and brand meaning (Muniz and O'Guinn 2001, Thompson and Sinha 2008). For example, Thomson and Sinha (2008, p. 78) report that "*that higher levels of participation in a brand community lead to both loyalty and oppositional loyalty in adoption behaviour*". In this process, the brand meaning is developed based on the opposition to competitors, which also defines the identity of community members.

Although previous research has established the importance of oppositional loyalty, it presents problems for marketers (Cova and Pace 2006) because of the conflict between what the brand means to consumers and what the marketers intend it to mean. Companies target specific consumer profiles with their marketing offerings and brand messages in the brand communities. On the other hand, community members identify with each other, forming different consumer groups and developing their own brand meaning. Furthermore, Cova and Pace (2006) note that sometimes consumers hijack the brand and believe that they own the brand.

3.3.2 Rituals and Traditions

The second characteristic of brand communities is rituals and traditions. Rituals and traditions are important social processes because they aid in sustaining and exporting the meaning of the community (Muniz and O’Guinn 2001). Furthermore, rituals and traditions work to maintain the culture of a brand community (Muniz and O’Guinn 2001). Marketers, who are also considered community members, contribute to the development of the brand community by “*creating the context which owner interaction occurs*” (McAlexander et al. 2002, p.42). When markets create the context they encourage rituals and traditions that are in turn performed by consumers.

Although rituals and traditions take on different forms, they focus on the shared consumption experience with the brand (Muniz and O’Guinn 2001). Storytelling rituals and the “Wrangler wave” are two examples of such rituals and traditions in the Jeep brand community (McAlexander et al. 2002). Madupu (2006) maintains that not all brand communities share an intense presence of rituals and traditions. Older brands with a rich history will tend to have more rituals and traditions tied to the brand community (Madupu 2006).

Rituals and traditions may have positive or negative effects on the community and its members. Previous research shows that brand community members experience normative community pressures that may reduce the members’ associations and participation with the brand and brand community (Algesheimer et al. 2005). On the other hand, the consumers are encouraged to associate with the brand and participate

in the brand community through “community engagement”, where they can experience the positive side of brand communities (Algesheimer et al. 2005). Members are expected to have behavioural and participation intentions in the community and towards the brand because they are eager to reap positive rewards from community engagement (Algesheimer et al. 2005). Consequently, rituals and traditions are important to solidify the sense of brand community but they must be managed so as not to burden members with community demands (Algesheimer et al. 2005).

3.3.3 Moral Responsibility

Moral responsibility is another important characteristic that is exhibited by brand communities (Muniz and O’Guinn 2001). “*It is a sense of duty to the community as a whole, and to individual members of the community*” (Muniz and O’Guinn 2001, p. 424). There are two important “communal missions”: first integrating and retaining members and second assisting brand community members in the proper use of the brand (Muniz and O’Guinn 2001). These communal missions are important to the survival of the brand community (Madupu 2006).

Algesheimer et al. (2005) and McAlexander et al. (2002) explicate that the consumers act as advocates of the brand and provide support to other community members. Community members who identify with the brand community also recommend the community to other consumers (Algesheimer et al. 2005). Moral responsibility is an important characteristic of brand communities because it brings about collective actions and fosters group cohesion (Muniz and O’Guinn 2001). Moreover, the consumers gain appreciation for the brand and they also gain social capital when they help each other in brand communities. Another important issue to consider is that brand communities are communities of limited liability (Muniz and O’Guinn 2001). However, it must be noted at this point that moral responsibility is concerned with the scope of the brand community (Madupu and Cooley 2010).

Many scholars have argued that there is a lack of measures to capture the three characteristics of brand community (Madupu 2006, Madupu and Krishnan 2008, Madupu and Cooley 2010). They add that it is not clear when these characteristics

actually developed since the three characteristics of brand communities do not necessarily exist before participation in these communities (Madupu 2006). Previous literature argues that these characteristics developed after consumer participation in brand community event, such a brandfest (McAlexander et al. 2002, Madupu 2006, Madupu and Cooley 2010). In the online brand community context, Madupu (2006) and Madupu and Krishnan (2008) empirically show that participation is positively related to consciousness of kind, shared rituals and traditions, and moral responsibility in the online context. This evidence supports earlier findings which suggest that brand communities are similar to traditional communities (Muniz and O'Guinn 2001). These findings also support the proposition that virtual brand communities are similar to traditional brand communities (Muniz and O'Guinn 2001).

3.3.4 Other Brand Community Characteristics

McAlexander et al. (2002) suggest that there are four dimensions that add complexity to the study of communities, which are: geography, social context, temporality, and identification. McAlexander et al (2002) contend that these dimensions have not been explored in a dynamic manner and they add that prior literature has treated these dimensions from a static perspective rather than from the perspective of movement along each dimension. For instance, the geography dimension can vary from being non-geographically bounded (Muniz and O'Guinn 2001) to being geographically concentrated, or may even exist in cyber space. The social context can also vary from richness in social context to the lack of a social context (McAlexander et al. 2002).

There are also different modes for communication in brand communities, such as face-to-face, electronic means, or via mass media (McAlexander et al. 2002). The social context also varies across member's knowledge about other members. For example, the consumers might know the age, gender and history of other members or they may only know each other by their pseudonyms (McAlexander et al. 2002). Brand communities also have a varying temporal dimension whereby some communities are stable while others are temporary (McAlexander et al. 2002). Finally, the basis of identification can range from kinship ties to leisure pursuits (McAlexander et al. 2002). All these dimensions add to the complexity of exploring

brand communities because movement along any or all these dimensions creates a dynamic treatment of brand communities (McAlexander et al. 2002).

Previous research on brand community has mainly focused on the traditional sense of brand community in brandfests or other similar events. Relationships are an important factor in brand communities. The absence of physical contact in virtual communities reinforces the importance of consumer relationships in the community. In addition, there are many proposed frameworks of consumer relationships in brand communities. The next section elaborates on the relationships consumers develop in brand communities.

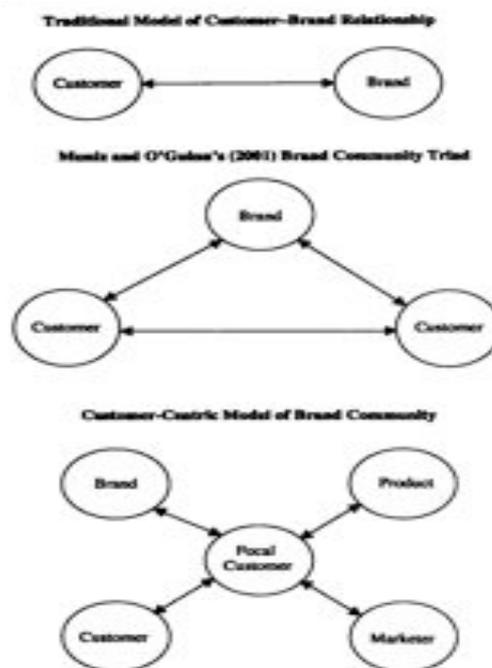
3.4 Consumer Relationships in Brand Communities

Brand communities are seen as an enhancement to the powerful concept of relationship marketing (Muniz and O'Guinn 2001, Szmigin et al. 2005). The aim of relationship marketing is to develop a long-term relationship with the customer. Furthermore, the one-to-one marketing perspective can also be expanded into the realm of consumption communities (Szmigin et al. 2005). In this perspective, a new and equitable power balance is created (Szmigin et al. 2005, Cova and Pace 2006) where a company is no longer "*a single economic actor adapting to the market, but a social actor relating to the societal context*" (Cova and Cova 2002, p. 616).

Fischer et al (1996, p.179) maintains that communities have been traditionally viewed as "*sets of social relations among people*". Individuals can develop bonds with other consumers in brand communities (Fischer et al. 1996, McAlexander et al. 2002, Szmigin and Reppel 2004). Community bonds can be in the form of strong or weak relationships. Some authors have argued that there are other bonds that may form in communities (Fischer et al. 1996). For example, the experiences, ideas, or things that people have in common may serve as bonds linking people in communities where social relationships are not always essential in brand communities (Fischer et al. 1996). These common bonds provide a sense of shared identity among community members (Fischer et al. 1996). It must be noted that these bonds will not translate into the provision of social and tangible resources as in social relationships (Fischer et al. 1996).

Muniz and O’Guinn (2001) view brand community as a triad of consumer-brand-consumer relationships (see Figure 3-1). This is a departure from the traditional model of consumer brand relationships where companies strive to establish one-to-one relationships with consumers. On the other hand, McAlexander et al. (2002) propose that brand communities actually consist of a complex web of relationships that has the consumer at its centre. McAlexander et al. (2002) propose that there are four key relationships that consumers engage in the brand community, which are: (1) consumer-product relationship, (2) consumer-brand relationship, (3) consumer-company relationship, and (4) consumer-consumer relationship. The cumulative impact of these four relationships is referred to as Integration in Brand Community (IBC) (McAlexander et al. 2002). IBC is broader than customer loyalty and encompasses consumers’ “total-life” experience with a brand (McAlexander et al. 2002, Stokburger-Sauer 2010). Figure 3-1 illustrates the key relationships in a brand community as per McAlexander et al. (2002).

Figure 3-1 Key Relationships in a Brand Community



(Source: McAlexander et al. 2002)

McAlexander et al. (2002) maintains that individual relationships (e.g. consumer-brand or consumer-consumer) are interdependent and mutually reinforcing. The connection of all the relationships is the consumer experience and is the basis for community existence and meaning (McAlexander et al. 2002). Brand experience is less central in this consumer-centric model (McAlexander et al. 2002). The more that relationships are internalised as part of the consumer experience, the more the consumer will integrate into the brand community (McAlexander et al. 2002, Stokburger-Sauer 2010). This integration also translates into more loyal consumers (McAlexander et al 2002, Stokburger-Sauer 2010). The social connections provided by brand communities drive customer value. If the customers are deprived of these social connections then the value of brand to customers will erode (Muniz and O'Guinn 2001).

Empirical research has found that social interactions are important in brand community; they are also multi-way interactions (Ouwersloot and Odekerken-Schroder 2008, Stokburger-Sauer 2010). In addition, Ouwersloot and Odekerken-Schroder (2008) demonstrated that consumers engage in relationships with brands, consumers, product, and the company. The consumers engage in relationships with the community and its actors because they are driven by various motives (Ouwersloot and Odekerken-Schroder 2008). Recent research related to brand community also reports that strong consumer integration in a brand community positively influences satisfaction and advocacy (Stokburger-Sauer 2010). In addition, recent research investigating the IBC construct reports that offline marketing activities are better at fostering brand community relationships (Stokburger-Sauer 2010). When marketers focus on offline events, they help encourage the consumer to foster online relationships (Stokburger-Sauer 2010). Moreover, Stokburger-Sauer (2010) reports that strong relationships between consumers, brands, and other consumers encourage IBC. These findings provide support to the initial results and framework proposed by McAlexander et al. (2002).

The Internet has facilitated a dramatic shift in the ways that the consumers interact with each other and with the companies (Evans, et al 2001). The medium has encouraged the rise of online communities, which has shifted the balance of power between consumers and companies. However, there is a lack of research focusing on

consumer interactions on social networking sites. In particular, the rise of brand pages on social networking sites and their derivatives has largely been ignored by previous consumer research. Little is known about the dynamics of consumer interactions with the brand and other consumers on websites such as Facebook. Specifically, there is a scarcity in the understanding of the nature of relationships between consumers and brand pages on Facebook. This study investigates the nature of participation on brand pages on Facebook and it aims to determine the relationships that the consumer develops with the brand and other members online. The next section will review the relevant literature on online or virtual brand communities.

3.5 Online Brand Community

3.5.1 The Nature of Online Brand Communities

Virtual communities are social aggregations that emerge from the net when enough people carry on those public discussions long enough, with sufficient human feelings, to form webs of personal relationships in cyberspace. (Rheingold 1993, p. xx)

Online brand communities have generally been referred to as “virtual communities”. Virtual communities have existed in many forms, such as discussion boards and mailing lists. Kozinets (1999, p. 254) describes online brand communities as virtual communities of consumption. He adds that they are “*a specific subgroup of virtual communities*” that focuses on consumption of products and brands. These communities are defined “*as affiliative groups whose online interactions are based upon shared enthusiasm for, and knowledge of, a specific, consumption activity or related group of activities*” (Kozinets 1999, p. 254).

Recent technological advancements have enabled online brand communities to grow on a global scale, which benefits both businesses and consumers alike. For example, members of online communities can benefit through “*offerings of physical, economic, cognitive, and emotional resources*” (Kim et al. 2008, p. 813). Recent research shows that community members generate two-thirds of all online sales, are twice as loyal, and purchase almost twice as often (Kim et al. 2008). Fans of a brand

can easily join a community regardless of their geographical locations. This is made possible by technologies such as e-mail, IRC (Internet Relay Chat), websites, mobile phones and other related technologies.

The focus of previous brand community literature has been on consumption communities in the offline environment (see Muniz and O'Guinn 2001, McAlexander et al. 2002, Algesheimer 2005) while considerably less attention has been paid to online brand communities. The Internet has grown in importance for researchers and (more importantly) the general public (Madupu and Cooley 2010). The Internet is considered an appropriate medium for building consumer-brand relationships (Thorbjornsen et al. 2002). Specifically, the Internet is a medium through which consumption communities centred on goods and services may be established and developed (Andersen 2005). The Internet may also be considered as a commodity around which consumption communities may form (Fischer et al. 1996). Internet technologies enable new means of communication and interactivity (Thorbjornsen et al. 2002). The spectrum of technologies available today has empowered the consumer to initiate conversations with each other (Madupu and Cooley 2010). This is in contrast to the traditional perspective of marketing where companies initiate one-way communication with their target markets.

Szmigin et al. (2005) suggest that the characteristics of brand communities as identified by Muniz and O'Guinn (2001) work to produce a community in the online context. Furthermore, empirical research reports that participation in virtual brand communities foster the characteristics of brand community, consciousness of kind, shared traditions and rituals, and moral responsibility (Madupu 2006, Madupu and Krishnan 2008). These findings support the notion that brand communities are feasible on the Internet. However, there is a shortage of research on web-enhanced brand communities and their benefit to marketing (Andersen 2005, Szmigin et al. 2005). Hence, it is important to explore and understand these communities in the online context. The following sections will explore the different types of virtual communities, consumer relationships in virtual communities, and the classification of users who engage in such communities.

3.5.2 Classification of Online Communities

There are a number of different forms of virtual brand communities, which have a variety of characteristics and which attract different types of consumers. For example, Armstrong and Hagel (1996) propose four types of online communities:

1. **Communities of Transaction:** These facilitate the buying and selling of products and services and deliver information related to those transactions.
2. **Communities of Interest:** These bring participants who interact extensively with one another on specific topics.
3. **Communities of Fantasy:** These are communities that participant creates new environments, personalities, or stories.
4. **Communities of Relationship:** These form around certain life experiences that often are very intense and can lead to the formation of deep personal connections.

Armstrong and Hagel (1996) explicate that these communities are not mutually exclusive and they add that one community can address more than one of participant's needs. Szmigin et al. (2005) also propose a similar classification of online communities, their four types of communities are: help group, value exchange, fan club, and defence organisation. The help and value exchange communities are based on a focus of dialogue among members whereas the latter two types of communities are information focused (Szmigin et al. 2005). The last shape of online community is defined as vendor focused and it arises where companies build websites to defend their brands (Szmigin et al. 2005).

Kozinets (1999) provide a similar classification of online communities based on social structure and group focus, which includes: boards, rooms, rings and lists, and dungeons. Kozinets (1999) explains that these segments are not all equally receptive to the same marketing strategies. For example, boards (i.e. interest-specific electronic bulletin boards) are the most obvious form of community of consumption. In boards, the consumers post and read messages that are chronologically organised and sorted by topic. Boards are also attractive to consumers who do not actually participate in the discussion but rather "lurk" and read what others have posted. Boards are more accessible to marketing activities as they are less intimate than

other forms of virtual brand communities. Rooms are virtual spaces where people engage in activities in real-time, which are higher on the social interaction dimension (Kozinets 1999). Rings are basically a network of connected homepages or “web-rings” that are more structured than rooms (Kozinets 1999). Meanwhile, lists are based on e-mail mailing lists where people gather together to share information about specific consumption topics (Kozinets 1999). Finally, dungeons cover computer-generated environments that individuals gather to interact through a highly structured format, which includes role- and game playing (Kozinets 1999).

The focus of this study is on virtual brand communities in the form of brand pages on Facebook. This type of brand community represents a subgroup of virtual communities, which is known as communities of consumption or fan clubs (Kozinets 1999, Szmigin et al. 2005). Understanding consumer relationships in such communities is important for the success of the brand and the community because the nature of consumer relationships in virtual brand communities is different from the traditional context. The next section presents the discussion on these relationships.

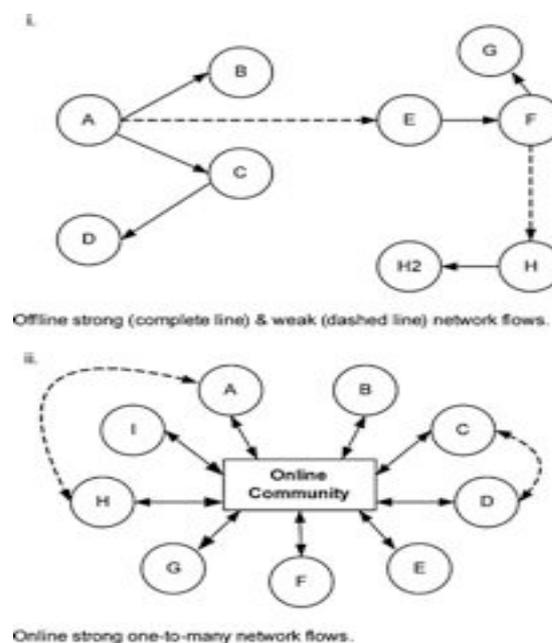
3.5.3 Consumer Relationships in Virtual Brand Communities

Although it is argued that face-to-face interaction is necessary for building relationships in brand communities (Shang et al. 2006), there is evidence that consumers have forged close relationships in online communities despite having no face-to-face interaction (Szmigin et al. 2005, Madupu 2006, Madupu and Krishnan 2008, Carlson et al. 2008). Through their online interactions, consumers have been known to develop relationships of an intimate nature that might (or might not) be coupled with real world interaction (Shang et al. 2006).

Social bonding in virtual brand communities develops overtime, creating a sense of community (Kozinets 1999, Thorbjornsen et al. 2002, Madupu and Cooley 2010). Virtual communities are empowering, especially because they provide a sense of a collective identity with other customers (Fischer et al. 1996). Consequently, brand-owners should engage in relationships with virtual consumption communities

because of the importance of this concept (Kozinets 1999). For example, Cova and Cova (2002, p. 615) assert that companies should engage consumers online because: “If you do not want to play with tribes of enthusiasts, never mind, they will play with you anyway!” Online consumers are proactive, passionate, social, and communitarian (Evans et al 2001, Kozinets 1999, Kim et al. 2008). Online customer relationships are beyond the bimodal relationships, they more closely resemble multinodal networks (Kozinets 1999). Brown et al. (2007) argue that the unit of relationships on the Internet is the online community rather than the individual. Figure 3-2 illustrates the offline and online network flows.

Figure 3-2 Online and Offline Network Flows



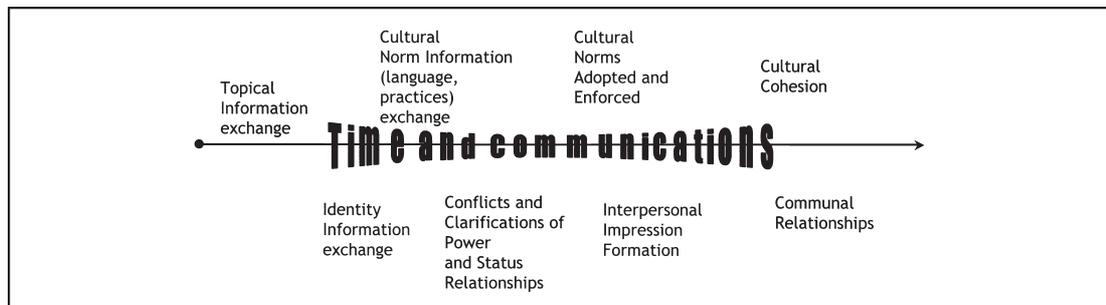
(Source: Brown et al. 2007)

Relationships in online communities are characterised as being interactive, which means that none of the participants involved are independent of the other participants (Szmigin et al. 2005). Furthermore, such an interactive and repetitive exchange will result in bonding between the parties involved in the relationship (Armstrong and Hagel 1996, Szmigin et al. 2005). Armstrong and Hagel (1996) argue that stronger and deeper relationships can be built with the customers by allowing them to interact with one another and with the company. When consumers

initiate interaction they also engage in co-creation of their brand experience (Kozinets 1999).

Previous research related to virtual communities suggests that Internet users have moved from asocial information gathering orientation to a more affiliative social orientation (Kozinets 1999). Meanwhile, Thorbjornsen et al. (2002) argues that brand communities on the Internet may also serve social and psychological functions. In contrast, Evans et al. (2001) reports evidence that novice consumers tend to focus on communal relationships while experienced users tend to focus on information exchange. Many argue that social motives are important for consumers joining and participating in virtual brand communities (Wang and Fesenmaier 2004, Nambisan and Baron 2007, Madupu and Cooley 2010). Consumers are also driven by functional and information motives when participating in virtual communities (de Valck et al. 2009, Nambisan and Baron 2009, Rood and Burckman 2009). Figure 3-3 illustrates the shift of online community members from a focus on information exchange to a focus on communal relationships.

Figure 3-3: The Progression of Members in an Online Community



(Source: Kozinets 1999)

Previous research argues that the value of any community lies in the volume of communication and interaction between consumers (McWilliam 2000). A community is stronger with a larger volume of communication and interaction. For the marketers, a strong community delivers better feedback on the brand (McWilliam 2000). Furthermore, Armstrong and Hagel (1996) contend that by creating online communities, the companies will be able to build customer loyalty above and beyond that achieved in traditional marketing activities. In addition,

virtual brand communities are more effective in building Brand Relationship Quality (BRQ) when consumers are less experienced with the Internet (Thorbjornsen et al. 2002).

3.5.4 Classification of Virtual Brand Community Users

Virtual community members do not all behave in the same manner. Different users exhibit different behaviour in such communities. Understanding the different classes of users provides a better understating of the dynamics of virtual brand communities. Previous literature provides a spectrum of community members that participate at different levels and maintain varying connections in the community.

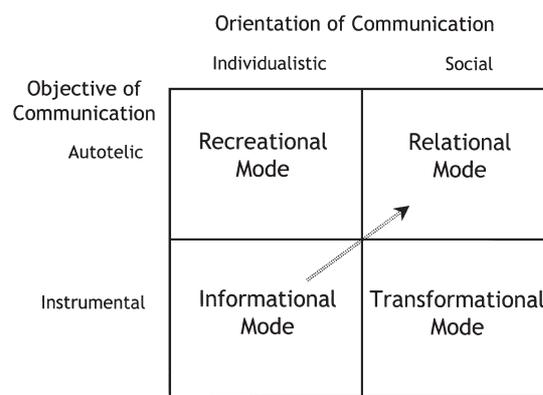
Kozinets (1999) classifies virtual community members into four groups, which are based on the relations with the consumption activity and relations with the virtual community. The first type of community members are the tourists who engage in superficial interests in the consumption activity and have low social ties to the community. On the other hand, minglers have strong social ties with the community but lack serious interest in the consumption activity. Devotees are strongly interested in the consumption activity and retain fewer social ties. Finally, insiders rate highly on both social ties to the community and self-centrality of consumption activity. Kozinets (1999) contends that devotees and insiders are the main target for marketers because they are high on self-centrality of consumption activity.

Other classifications of virtual brand community users are also given in the literature. For example, recent research shows that brand communities have six types of users, which are: opportunists, informationlists, conversationalists, hobbyists, and core members (de Valck et al 2009). Meanwhile, Toral et al. (2009) provide a three-tier membership classification that includes peripheral, active, and core members. A conclusion that can be drawn from these classifications is that consumer behaviour in virtual communities is complex and rich.

Furthermore, Kozinets (1999) described the importance of interaction modes in online communities. The four interaction modes are informational, relational,

recreational, and transformational. He proposes that firms segment community members based on these interactions (Kozinets 1999). Devotees and tourists engage in more informational interactions whereas insiders and minglers exhibit relational interactions. A deep understanding of these interactions will enable a company to build pinpointed strategies for consumers who are more likely to respond. Figure 3-4 illustrates the various consumption interactions modes.

Figure 3-4 Online Communities of Consumption Interaction Modes



(Source: Kozinets 1999)

Figallo (1998, cited in Szmigin et al. 2005, p. 486) identified three types of group behaviour within online communities that includes interactivity, focus, and cohesion. The ideal online community will incorporate form focused interactivity, a specific subject that draws the community together and which builds family cohesion (Figallo 1998 cited in Szmigin et al. 2005, p. 486). Evans et al. (2001) reports that consumer behaviour in virtual brand communities is rich and differs from one user to another. In particular, they found that the consumer’s main objective when joining a community is to gather and exchange information. Moreover, experienced community users tend to be members of several communities and seek information more often than novice users. Novice users are more focused on relational objectives when they join online communities. In addition, community members often “lurk” or engage in passive behaviour before actively participating in the community in order to “learn the ropes” (Evans et al. 2001).

The classification of community users is based on their participation orientation. Therefore, it is important to understand the nature of participation in virtual brand communities. The following section explores in depth the nature of participation in such communities.

3.6 The Nature of Participation in Virtual Brand Communities

Participation in brand communities is a key activity that fosters and enriches a community experience (Muniz and O'Guinn 2001). This is also true in virtual brand communities where participation is essential to the community's survival (McWilliam 2000, Casalo et al. 2007b, Koh et al. 2007a, Li and Lai 2007, Casalo et al. 2008, Woisetschlager et al. 2008). In addition, participation in virtual brand communities aids the development of the relationships between consumers and brands (Andersen 2005; Casalo et al. 2008; Ellonen et al. 2010). Virtual brand communities require active participation because it is a reflection of the communities' success and of the consumer's satisfaction (Casalo et al. 2008, Casalo et al. 2010a, Yoo et al. 2002). Higher levels of participation will lead to a higher level of the members' involvement in the virtual brand community (Yoo et al. 2002).

McLure Wasko and Faraj (2000, p. 169) concluded that people participate in virtual communities because they appreciate "*the on-line dialog, debate and discussion around topics of interest*". The authors add that people participate in virtual communities because they find it fun and because they find enjoyment and satisfaction from helping others. Casalo et al. (2008) suggest that participation may influence the consumer's behaviour beyond the virtual community (see Muniz and O'Guinn 2001, Anderson 2005). When members participate in virtual brand communities (such as through sharing knowledge, information and experiences) they develop consciousness of kind (Casalo et al. 2010a, Wu and Fang 2010). Although participation in an online brand community is important to its success, previous research has only focused on a narrow perspective of the concept. The next section will discuss the dominant perspective of participation and highlight its shortcomings.

3.6.1 Posting and Lurking

Previous literature on virtual communities has focused on two polar views of participation (Li and Lai 2007), which are posting and lurking (see Koh and Kim 2004, Madupu 2006, Shang et al. 2006, Nonnecke et al 2006, Koh et al. 2007, Ellonen et al. 2010). Although this classification is useful, it does not shed light on the specific practices that the consumers engage in when they participate in virtual communities. Recent research argues that there is more to participation than meets the eye (see Rood and Bruckman 2009, Schau et al. 2009, Muntinga et al. 2010, Wu and Fang 2010). In fact, there are a number of different activities that the consumers engage in when participating in virtual brand communities. These activities range from lurking (passive behaviour) to active participation (in its various forms) (Rood and Bruckman 2009). Active participation is defined by quality and not just quantity (Yoo et al. 2002). A brief description of the polar perspective of participation is warranted in order to contrast it with the more elaborate perspective of participation.

Posting is considered to be a positive activity in which the community members post information and interact with other members. This can be further dissected into the frequency of posting, the quality of posts, and the mode of interaction (Wu and Fang 2010). Another perspective views participation as an effort to stimulate the community, the value of the comments posted to help others, and the excitement and motivation with which the individual posts messages and interacts with the community (Koh and Kim 2004, Casalo et al. 2008, Casalo et al. 2010a). Koh and Kim (2004) argue that the objective knowledge sharing measures of posting and viewing is an accurate indicator of the health of the virtual community. They add that these objective measures indicate the positive perception and loyalty members have to their virtual community. Although Koh and Kim (2004) present posting and viewing as an objective measure, they view participation in a more expanded manner and propose that participation can be measured based on measures used to capture organisational citizen behaviour. A review of the measure presented in their study shows that participation may be viewed in a broader perspective than simply posting and lurking (see Table 3-2).

Lurkers, on the other hand, have been viewed from a less positive perspective (Nonnecke et al. 2006). Lurking is defined as the passive behaviour of reading other consumers' posts without contributing to the community (Nonnecke et al. 2006, Li and Lai 2007), which is not considered to be a constructive behaviour in virtual communities (Nonnecke et al. 2006). For example, a number of authors consider lurkers as taking a free ride and not adding value to the virtual community (Nonnecke et al. 2006). Community values and norms entice members to reciprocate posting behaviour (which is referred to as moral responsibility) by helping others with no return expectation (Muniz and O'Guinn 2001). Such norms may put lurkers to shame because they do not provide any information to the community. Furthermore, some scholars do not consider lurkers to be community members (Nonnecke et al. 2006). However, this negative view needs revision because there is a plausible argument to be made that lurking can benefit a virtual community (Nonnecke et al. 2006, Rood and Bruckman 2009). In other words, lurking may actually be a positive, even natural, behaviour. For example, the lurkers find that lurking behaviour enables them to learn more about the community, especially in the initial stages of their membership (Nonnecke et al. 2006, Rood and Bruckman 2009). Furthermore, lurkers may also be considered to be a poster in training. This entails that lurkers are not free riders (as some scholars have argued) but are instead learning the rules of the communities.

Explorative research has shown that lurkers consider themselves members of the virtual communities they visit (Nonnecke et al. 2006, Rood and Bruckman 2009). These findings provide some support to the concept of psychological sense of community (see Carlson et al. 2008). In other words, lurkers feel a psychological connection to the community, even though they do not interact with other community members. Table 3-1 provides the various perspective of participation in virtual brand communities.

Table 3-1 The various perspectives of participation in virtual brand communities

Studies	Participation
Li and Lai (2007), Nonnecke et al. (2006), Nambisan and Baron (2007, 2009)	<ul style="list-style-type: none"> ▪ Obtaining information (lurkers). ▪ Giving information (posters), in some cases only posting was measured as participation.
Koh and Kim (2004), Casalo et al. (2008), Casalo et al (2007a, 2007b), Casalo et al. (2010a, 2010b)	<ul style="list-style-type: none"> ▪ The effort to stimulate the community. ▪ The value of the comments posted in order to help other virtual community members. ▪ The excitement with which an individual posts messages and the response of the community. ▪ The motivation to interact with other community members.
Roy et al. (2004), Wu and Fang (2010)	<ul style="list-style-type: none"> ▪ Quantity: This relates to frequency and duration of consumer-to-consumer interactions. ▪ Scope: This component relates to the tendency of members to interact with different individuals and groups. ▪ Mode: This relates to the different forms of interaction (e.g. online, face-to-face).
Yoo et al (2002), Wang and Fesenmaier (2004)	<ul style="list-style-type: none"> ▪ Frequency of interaction. ▪ Quality of interaction.
de Valck et al (2007), Yoo et al. (2002)	<ul style="list-style-type: none"> ▪ Interaction with a virtual community (i.e. member-to-member, organiser-to-members, organizer-to-community, community site).
McAlexander et al. (2002), Ouwersloot and Odekerken-Schroder (2008), Stokburger-Sauer (2010)	<ul style="list-style-type: none"> ▪ Consumers have relationships with the company, product, brand and customers.

It is important to elaborate on lurking and posting, and to avoid defining these members from a positive or negative binary perspective. Lurking can be considered to be a positive step towards posting. This progression is important to the sustainability of a virtual community that is faced with an influx of new members. Previous research argues that lurkers and posters have different reasons for joining virtual communities (Nonnecke et al. 2006). This means that lurkers may start as information seekers in the community and then evolve to become more interactive members.

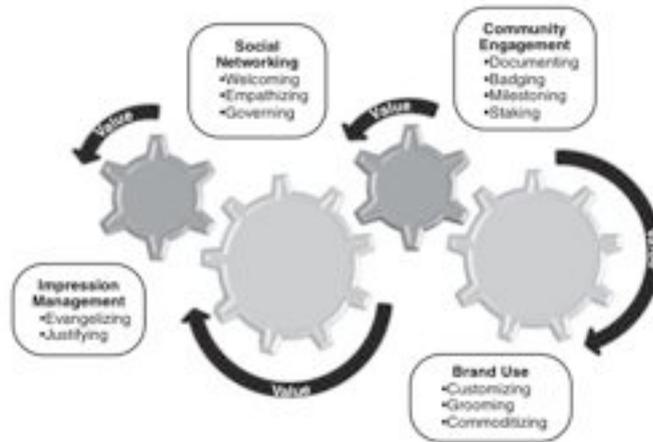
While previous research has established the importance of participation to the success of virtual brand communities, it has fallen short in providing a more detailed picture of participation in such communities. The evidence from previous research, and the scarcity of a detailed perspective of participation, warrants an investigation of the nature of participation in virtual brand communities. It is expected that the nature of participation will reflect the types of members in a virtual community as well as the potential behaviour that they will exhibit towards the brand, consumers, and the community. Schau et al. (2009) has suggested a useful model that would prove beneficial in expanding the participation construct in the virtual brand community context. Consequently, the following section reviews the brand community practices proposed by Schau et al. (2009).

3.6.2 Brand Community Practices

Schau et al. (2009) proposed that brand communities should be viewed from a collective consumption perspective. Based on practice theory and extensive qualitative research on brand communities, Schau et al. (2009) found that there are twelve brand community practices that create value for the consumer and the brand, which are: welcoming, empathising, governing, evangelising, justifying, documenting, badging, milestoneing, staking, customising, grooming, and commoditising. These practices are evident in brand communities across various online and offline contexts. In addition, they are grouped into four categories, which are: social networking, impression management, community engagement, and brand use. The authors describe the collective value creation in brand communities as four

gears that consist of value creating practices. Figure 3-5 illustrates that process of value creation in brand communities.

Figure 3-5 The Process of Value Creation in Brand Communities



Source: (Schau et al. 2009)

Although past research has explored the value of brand communities to customers (see Muniz and O’Guinn 2001, McAlexander et al. 2002, Mathwick et al. 2008), Schau et al. (2009) offer a comprehensive and sophisticated framework into the value creation in brand communities. These brand community practices have a physiology where they interact with one another and bring about positive effects for the consumer, firm, and the community as a whole (Schau et al. 2009). Schau et al. (2009) lists a number of positive effects of brand community practices, which include:

1. Practices endow participants with cultural capital;
2. Practices generate consumption opportunities;
3. Practices evince brand community vitality; and,
4. Practices create value through the enactment of practices where the marketing mix is affected.

Schau et al. (2009, p. 40) argue that “each practice serves to enable brand use and encourage deeper community engagement”. For practices to add value they have to be repeated. This means that consumers have to spend time in brand communities and must do so repeatedly in order to perform these practices (Schau et al. 2009).

“Practices structurally add value by making action reproducible and repeatable, thus allowing more consumers to derive greater value from the brand” (Schau et al. 2009, p. 40). Table 3-2 elaborates on each practice put forward by Schau et al. (2009).

Table 3-2 Brand Community Practices		
Category	Practice	Description
Social networking	Welcoming	Greeting new members, beckoning them into the fold, and assisting in their brand learning and community socialising. Welcoming occurs generally into the brand community and locally as members welcome one another to each practice. Welcoming can also be negatively valenced, as in discouraging participation in the brand community and/or a specific practice.
Social networking	Empathising	Lending emotional and/or physical support to other members, including support for brand-related trials (e.g., product failure, customizing) and/or for non-brand-related life issues (e.g., illness, death, job). Empathising can be divisive if the emotional support is in regard to intergroup conflict.
Social networking	Governing	Articulating the behavioural expectations within the brand community.
Impression management	Evangelising	Sharing the brand’s “good news,” inspiring others to use the brand, and preaching from the mountain top. It may involve negative comparisons with other competing brands. Evangelising can be negative (i.e. annoying, off-putting) if extreme.
Impression management	Justifying	Deploying rationales, generally for devoting time and effort to the brand, and collectively to outsiders and marginal members in the boundary. May include debate and jokes about obsessive-compulsive brand-directed behaviour.
Community engagement	Staking	Recognising variance within the brand community membership. Marking intragroup distinction and similarity.
Community engagement	Milestoning	Milestoning refers the practice of noting seminal events in brand ownership and consumption.
Community engagement	Badging	Badging is the practice of translating milestones into symbols.
Community engagement	Documenting	Detailing the brand relationship journey in a narrative way. The narrative is often anchored by and peppered with milestones. Documenting includes the Mini (Car Brand) birth stories of the car assembly and distribution. Customisation efforts, grooming practices, and so forth.
Brand use	Grooming	Caring for the brand (e.g. washing your “brand” car) or systematizing optimal use patterns (e.g. cleaning skin before applying “brand”).
Brand use	Customising	Modifying the brand to suit group-level or individual needs. This includes all efforts to change the factory specs of the product to enhance performance. Includes fan fiction/fan art in the case of intangible products.
Brand use	Commoditising	Distancing/approaching the market place. A valenced behaviour regarding marketplace. May be directed at other members (e.g. you should sell/should not sell that). May also be directed at the firm through explicit link or through presumed monitoring of the site (e.g., you should fix this/do this/change this).

(Source: Schau et al. 2009)

The brand community practices proposed by Schau et al. (2009) enrich the meaning of participation in the virtual community context. They add depth to the posting and lurking perspective of member behaviour in online consumer gatherings. However, researchers have paid little attention to participation in new forms of virtual brand communities (such as social networking websites). Brand pages on Facebook involve rich and varied interactions between consumers and the brand, and consumers and other consumers.

The lack of research on such platforms has encouraged the researcher to explore the nature of participation in these new virtual brand communities. Furthermore, the basic polar view of members as lurkers and posters is restricted in representing participation in virtual brand communities. Therefore, there is a need to address this research gap. Chapter 4 and Chapter 6 will discuss how the practices proposed by Schau et al. (2009) will be used to present a different view of participation in brand pages on Facebook. This perspective of participation is rich and useful to address the lack of understanding of the nature of participation in brand pages on Facebook.

Participation in virtual brand communities does not occur in a vacuum but is instead influenced by various factors. These antecedents are important since they influence what behaviour the consumer will exhibit in online communities. The following section discusses important antecedents to participation in virtual brand communities.

3.7 Antecedents to Participation in Virtual Brand Communities

The literature has provided different antecedents to consumer's intentions and behaviour in virtual brand communities (see Wang and Fesenmaier 2004, Algesheimer et al. 2005, Fuller 2006, Roberts et al. 2006, Nambisan and Baron 2007, Nambisan and Baron 2009). An extensive review of the literature suggests that identification is a major driver of consumer participation in virtual brand communities (Bergami and Bagozzi 2000, McAlexander et al. 2002, Hughes and Ahearne 2010, Stokburger-Sauer 2010, Yeh and Choi 2010). This section will focus

on two important antecedents to participation in virtual brand communities, which are brand identification and brand community identification.

3.7.1 Identification

Although little research has focused on the concept of brand identification in the marketing discipline (Kuenzel and Halliday 2008), much research has been devoted to the concept of identification in the organisational behaviour literature (see Ashforth and Mael 1989, Mel and Ashforth 1992, Dutton et al. 1994, Bergami and Bagozzi 2000, Riketta 2005). Brand identification has been sidelined for other constructs, such as brand personality (Aaker 1997) and self-image congruency (Sirgy 1985). Identification is important and useful in explaining how consumers relate to brands and how they behave as a result (McAlexander et al. 2002, Stokburger-Sauer 2010). Moreover, identity is fundamental to behaviour (Kuenzel and Halliday 2008, p. 294). Identification is more than matching consumer and brand image; it includes social identity and enhancement of self-esteem (Bhattacharya et al. 1995, Bergami and Bagozzi 2000, Hughes and Ahearne 2010). The next section will discuss the social identity theory, which is central to the identification constructs in this study.

3.7.2 Social Identity Theory

Identity is “*a self-referential description that provides contextually appropriate answers to the question ‘Who am I?’ or ‘Who are we?’*” (Ashforth et al. 2008, p. 327). The social identity theory proposes that the self-concept consists of a personal identity and a social identity (Tajfel and Turner 1986). Personal identity is made of characteristics that are particular to the individuals, such as interests and competencies (Bhattacharya and Glynn 1995, Myers 2005). Personal identity is defined as “*a person’s unique sense of self*” (Postmes and Jetten 2006 cited in Ashforth et al. 2008, p. 327). Social identity, on the other hand, is “*the perception of belonging to a group with the result that a person identifies with the group (i.e. I am a member)*” (Bhattacharya and Glynn 1995, p. 47).

Personal identity pertains, and is unique, to the individual. It distinguishes them from other individuals (Ashforth et al. 2008). On the other hand, social identity is related to other entities in the individual's social environment and it is shared amongst group members (Bhattacharya and Glynn 1995, Ashforth et al. 2008). Social identity is defined by the connections that an individual has with others (Myers 2005). Furthermore, social identity serves to distinguish between groups (Ashforth et al. 2008). Consequently, social identity is composed of salient group classification (Bhattacharya and Glynn 1995). There are several different bases for classification (e.g. religious group or gender). Individuals derive their social identity from these social categories and consequently tend to perceive a sense of belonging and self-definition (Tajfel and Turner 1979; cited in Cardador and Pratt 2006, Tajfel 1982).

Tajfel and Turner (1986) explicate that social identities are relational and comparative. Identity is relational in the sense that an individual's social identity addresses the question of 'who are we?' Social identity is comparative in the evaluative sense where an ingroup is contrasted with an outgroup on the basis of 'how good are we?' (Tajfel and Turner 1986). Social identity is created by the categorisation and comparison of ingroups and outgroups (Tajfel and Turner 1986). Ashforth et al. (2008) have summed the importance of identity as follows: *"Identification matters because it is the process by which people come to define themselves, communicate that definition to others, and use that definition to navigate their lives, work-wise or other"* (Ashforth et al. 2008, p. 334)

Previous research argues that social identification is made up of three components: cognitive (awareness of membership in a group), evaluative (self-esteem), and emotional (affective commitment) components (Ellemers et al. 1999, Bergami and Bagozzi 2000). These components are empirically distinct (Ellemers et al. 1999, Bergami and Bagozzi 2000, Donovan et al. 2006). This study supports the view that identification is a cognitive and perceptual construct (Ashforth and Mael 1989, Dutton et al. 1994, Donovan et al. 2006, Carlson et al. 2009, Hughes and Ahearne 2010). The current study is concerned with two types of identification; identification with the brand and the community. The next sections will discuss these constructs in detail.

3.7.3 Brand Identification

Identification with brands refers to the consumer's desire to obtain a self-identity based on the associations of brand (Bergami and Bagozzi 2000, Hughes and Ahearne 2010). Consumers acquire identity and personal meaning through ownership and relationships with brands (Belk et al. 1982, Donavan et al. 2006, Kuenzel and Halliday 2008). Brand identification has been described as "*the degree to which a person defines him- or herself by the same attributes that he or she believes defines a brand*" (Hughes and Ahearne 2010, p.84). Consumer brand identification can be conceptualised based on the theoretical framework of Social Identity Theory (SIT) (Donavan et al. 2006, Kuenzel and Halliday 2008). Ashforth and Mael (1989, p. 21) define social identification as "*the perception of oneness with or belongingness to some human aggregate.*" In this study, the brand is considered to be a human (social) aggregate or collective, where many people consume the brand. Stokburger-Sauer (2010, p. 352) suggests that "*brands and brand consumption, for instances, can build the basis for the classification of individuals into social categories.*"

An individual needs to identify with a group for social identification to occur. In doing so, they will define themselves in relation to that group and at the same time distance themselves from other social groups (Tajfel and Turner 1986). Consumers can identify with a group but they do not necessarily need to interact with other members as long as they perceive themselves as part of that group (Tajfel and Turner 1986, Ashforth and Mael 1989, Kuenzel and Halliday 2008). Turner (1982) argues that individuals engage in depersonalisation and self-stereotyping when they identify with a group. In other words, people stereotype themselves when they think in terms of their social identity (Turner 1982). This process affects the way that people behave as they bring in all the meaning of being a member of one group or another (Turner 1982). Brown (1986) maintains that SIT views groups as part of the individual's self-concept. In addition, "*social identity theory explains identification in the light of social need satisfaction*" (Stokburger-Sauer 2010, p. 352).

Brand identification, just like organisational identification, is a more specific form of social identification. Identification with the brand occurs when the brand, a social

collective, becomes self-referential or self-defining (Donavan et al 2006). According to social identification theory and organisational identification theory, individuals who are members of an organisation tend to link organisational images to their self-concepts (Bhattacharya et al. 2005). Furthermore, the membership of an organisation may extend positive and negative attributes to its members (Bhattacharya et al. 1995). To borrow and adapt from the social identification definition of Ashforth and Mael (1989) and Mael and Ashforth (1992, p. 104), brand identification is “*the perception of oneness with or belongingness to some brand(s), where an individual defines him or herself in terms of the brand(s) of which he identifies with*”. In this regard, brand identification is different from brand loyalty or commitment (Bhattacharya et al. 1995). Brand identification is goal directed and cause oriented (Bhattacharya et al. 1995). Meanwhile, “*consumers may be loyal to its products because they identify with the mission of the organization*” (Bhattacharya et al. 1995, p. 47). Although it is expected that those who identify with the brand will be loyal, not all loyal customers will identify with the brand (Bhattacharya et al. 1995).

There are two perspectives of identification, which are: “self-referential” and “self-defining” (Ashforth et al. 2008). The “self referential” perspective is about identification that occurs through “affinity” to the category or collective, where the individuals feel that the collective is similar to themselves (Ashforth et al. 2008). Identification is “self-defining” when the individual changes “to become more similar” to the collective or category or the process of “emulation” (Ashforth et al. 2008). This study adopts the latter perspective where identification with the brand is driven by the consumer’s need to define their identity and enhance their self-esteem (Bergami and Bagozzi 2000, Cardador and Pratt 2006, Donovan et al. 2006, Ashforth et al. 2008). In addition, this study adopts the view that brand identification is motivated by the need to belong on the consumer’s part (Ashforth et al. 2008, Ashforth and Mael 1989). Consumers can classify themselves and others into social categories based on brands and brand consumption (Stokburger-Sauer 2010).

Rao et al. (2000; cited in Stokburger-Sauer 2010) argue that there is a strong connection between social interactions and social identity. In order for the consumers to develop and enhance their social identity, they should engage in social

interactions. Consumer-brand identification is the consequence of the consumer's social interaction with the brand. Consumers who engage in contact with a brand through purchase, use, and brand community will tend to have a stronger brand identification (Bhattacharya and Sen 2003, Stokburger-Sauer 2010). On the other hand, many argue that, based on SIT, interaction is not critical for identification with an organisation to occur (Bhattacharya and Sen 2003, Ahearne et al. 2005, Kuenzel and Halliday 2008). Kuenzel and Halliday (2008) maintain that identification may occur where consumers are not formal members of an organisation or who are non-purchasers of a brand. This view is based on the notion that a consumer can psychologically accept a social collective, a brand in this case, as part of the self (Ashforth and Mael 1989, Mael and Tetrick 1995, Ashforth et al. 2008). This is important because many brand community authors argue that there are two main types of virtual brand community members: posters (active members) and lurkers (passive members). The so-called lurkers may genuinely identify with the brand and community but they do not feel obliged to post and engage the community, as posters do.

3.7.4 Brand Community Identification

Identification with a brand community is a signal of the relationship strength between consumers and a brand community (Algesheimer et al. 2005). Brand community identification is an important antecedent to brand community participation (McAlexander et al. 2002, Algesheimer et al. 2005, Carlson et al. 2008). Community identification is akin to consciousness of kind in brand communities. Consciousness of kind is one of three important characteristics of brand communities (Muniz and O'Guinn 2001) and it has been incorporated as identification with a group in many studies on brand communities (Carlson et al. 2008).

Brand identification is conceptualised based on social identity theory, as is brand community identification. Just as a consumer perceives "oneness or belongingness" to the brand, they can also perceive that they belong to the virtual brand community (Czaplewski and Gruen 2004, Dholakia et al. 2004, Bagozzi and Dholakia 2006a). This study focuses on the cognitive brand community identification. Algesheimer et

al. (2005) and Bagozzi and Dholakia (2006a) contend that an individual's self-categorisation as a member of a community is a cognitive component of identification. Social identity theory suggests that people identify with social categories in part to improve self-esteem (Ashforth and Mael 1989). In addition, *"the consequence of self-categorization to particular virtual brand community is a positive distinction of the community's values, norms, and behaviours toward other communities, which thereby results in an increase in group members' self-esteem"* (Woisetschlager et al. 2008, p. 243).

It is important to note that brand community identification, "consciousness of kind", is motivated by a social process, which is oppositional loyalty (Muniz and O'Guinn 2001, Thompson and Sinha 2008). Based on SIT, consumers perceive the "we" ingroup and the "they" outgroup, and in the process develop loyalty to the brand and the community and identify with them (Bhattacharya and Sen 2003, Thompson and Sinha 2008). In the marketing context, individuals who use a particular brand are classified as an "ingroup" whereas users of competing brands are classified as an "outgroup" (Czaplewski and Gruen 2004). Brand meaning is developed in opposition to competing brands. In addition, the member's community identity is defined based on oppositional loyalty (Muniz and O'Guinn 2001). This is a reflection of the influence of social identity in creating out-group bias (Thompson and Sinha 2008). Based on the SIT and the work of Mael and Ashforth (1992), brand-based community identification can be defined as *"the degree to which an online community participant defines himself or herself in terms of the community in which he/she participates"* (Czaplewski and Gruen 2004, p. 159). The community participant in this context is a brand user and the community is the virtual brand community sponsored by the company (i.e. the brand).

There are consequences of brand community identification, some are positive while others are negative (Algesheimer et al. 2005). McAlexander et al. (2002) have noted that the consumer's increased attachment to the product and the brand is a positive outcome of brand community identification. Muniz and O'Guinn (2001) have reported that members of a brand community share information among themselves to enhance their brand experience. In addition, the consumers act as advocates of the brand and support community members even after a product is discontinued

(Algesheimer et al. 2005). Algesheimer et al. (2005) term such positive effects as “community engagement”. Identifying with a brand community also entails that extrinsic demands may be perceived by the consumer (Algesheimer et al. 2005). This “normative community pressure”, as coined by Algesheimer et al. (2005), is the perception of demands to interact and cooperate within the community.

Algesheimer et al. (2005) have found that brand community identification has a strong and positive impact on community engagements; however, they also found that it has a significant negative impact on normative community pressure. Furthermore, community engagement was found to have a positive influence on normative community pressure (Algesheimer et al. 2005). In addition, Algesheimer et al. (2005) report that normative pressure results in reactance. They have also shown that behavioural intentions in the brand community setting do materialise in brand behaviour, including continuance recommendation, active participation, and loyalty to the brand (Algesheimer et al. 2005).

In a virtual brand community the consumers perceive that they identify with the community; however, in order for them to identify with the community they also need to identify with the brand (Yeh and Choi 2010). A brand “*represents a higher level of social categorization, and communities of the brand represent various subgroups*” (Yeh and Choi 2010, p. 4). Consequently, higher levels of identification with the brand will lead to higher levels of identification with the brand community (Yeh and Choi 2010). Consumers who are satisfied with the brand and who enjoy a strong relationship with it will put in more effort to find brand communities to share their brand consumption (Yeh and Choi 2010). Self-definition and enhancement will steer consumers in their social interactions in the virtual brand community and brand usage behaviour (Bergami and Bagozzi 2000, Donovan et al. 2006, Carlson et al. 2009, Hughes and Ahearne 2010, Stokburger-Sauer 2010). Identification is, therefore, an important precursor or driver of participation in virtual brand communities (McAlexander et al. 2002).

It is evident from the above discussion that consumers are driven by identification to join and participate in virtual brand communities. This study is concerned with the consumer-brand relationships that are forged on brand pages on Facebook. The

consumers may join brand pages because they identify with the brand. In addition, their identification with the brand effects their identification with the community of brand users. Since identification is a core antecedent to participation and engagement in brand communities, it is expected that it will also be core in influencing consumer participation in brand pages on Facebook since they define themselves by using brand associations. In addition, the Facebook platform allows the public self to be displayed by linking one's personal profile to the brand page. This will aid the consumer's need to satisfy their self-definition needs.

Consumers participate in virtual brand communities for various reasons. The motivational orientation of consumers may affect their behaviour in virtual brand communities (Fuller 2006, Nov et al. 2010). The next section discusses the literature relevant to consumers' motivation to participate.

3.8 Motivation to Participate in the Virtual Brand Community

The literature on virtual communities suggests that consumers have a number of motives and perceived benefits from joining online communities (Wang and Fesenmair 2004, Fuller 2006, Roberts et al. 2006, Nambisan and Baron 2007, Ouwersloot and Odekerken-Schroder 2008, Nambisan and Baron 2009, Nov et al. 2010). For example, the members of a virtual community are motivated by intrinsic and extrinsic factors to participate and interact with others (Fuller 2006, Nov et al. 2010). Fuller (2006) suggests that there are nine possible motivations for individuals to participate in virtual communities; such as, autotelic, curiosity, knowledge acquisition, making friends, and monetary rewards. Roberts et al. (2006) suggest similar motivations for consumers to participate in the virtual communities of open source software developers. Consumer relationships and activities, specifically with whom they interact, also form motives for the consumer's participation in brand communities. Ouwersloot and Odekerken-Schroder (2008) propose that these relationships are driven by motives.

In addition, there are a number of benefits that consumers perceive to gain from interacting in virtual brand communities (Wang and Fesenmair 2004, Nambisan and Baron 2007, Nambisan and Baron 2009). For example, Wang and Fesenmair (2004) argue for the importance of social and hedonic benefits in driving participation. Nambisan and Baron (2007, 2009) propose a similar relationship between benefits sought and virtual community participation. Lin (2006) also show that, amongst other variables, perceived usefulness has influenced attitude and has also influenced behavioural intention to participate in virtual communities.

Previous research in the context of the consumer's use of the Internet report that consumers seek social gratification through the use of the Internet (Parker and Plank 2000, Stafford et al. 2004). In their study, Stafford et al. (2004) report more traditional gratifications, which include process and content gratifications. They also contend that social gratification is unique to the Internet when compared with other mass media alternatives, such as the television. In the virtual community context, the four types of benefits (or gratifications) of consumer interactions in the community are: cognitive benefits, social integrative benefits, personal integrative benefits, and hedonic or affective benefits (Nambisan and Baron 2007). The beliefs that customers hold about acquiring these benefits was found to be positively associated with the customer's participation in product support virtual communities (Nambisan and Baron 2009).

In this study, virtual brand community participation is conceptualised as an activity that consumers perform, just as they would when shopping. Consequently, the retail literature provides a useful grounding work for this proposal. The next section will discuss motivation from the retailing perspective.

3.8.1 Motivation and Consumer Behaviour

Motivation is defined as "*an inner drive that reflects goal-directed arousal*" (Arnould et al. 2002, cited in Jamal et al. 2006). Therefore, motivation can be viewed as "*the driving force within consumers that makes them shop*" (Jamal et al. 2006, p. 68). The retail literature proposes that consumers are motivated to shop for

different reasons (Tauber 1972, Westbrook and Black 1985, Childers et al. 2001, Arnold and Reynolds 2003, Jamal et al. 2006).

Jamal et al. (2006) explicate that customer-shopping behaviour is either driven by personal or social needs, or by the value sought out from the shopping experience. Tauber (1972) proposed that shopping motives could be classified into personal motives (e.g. role-playing and learning) and social motives (e.g. social experiences and communication with others). A number of similar and overlapping shopping motivations have been proposed by the literature. Westbrook and Black (1985) have put forward seven dimensions of shopper's motivations, while Arnold and Reynolds (2003) focus mainly on hedonic shopping motivations. Another perspective of motivation in the retailing literature is the value perspective. Babin et al. (1994) argue that the consumer's shopping evaluation can be conducted in two dimensions, which are hedonic value and utilitarian value. These varying perspectives of motivation to shop suggest that consumers have more motives to shop than just to satisfy basic consumption needs. In general the literature acknowledges that there are two main perspectives to shopping motivation, hedonic and utilitarian shopping motivations (Westbrook and Black 1985, Arnold and Reynolds 2003).

Motivation to shop is a useful perspective that is used in this research to explore motivation to participate in virtual communities. In this study, it is expected that consumers who are participating for hedonic and pleasure reasons are expected to behave differently than those consumers who are motivated by utilitarian drives in virtual brand communities. It may be that consumers who are seeking pleasure will engage in social behaviour in brand pages on Facebook and identify more with the community. On other hand, consumers who are mainly motivated by information search needs may not engage in social behaviour and may not identify strongly with the brand community. In Chapter 4 the role of hedonic and utilitarian motivation to participate as a moderator will be detailed.

This study concerned with a facet of consumer-brand relationships, brand attachment, which is an important concept that represents the relationship consumers have with the brand. The researcher speculates that brand attachment will play an

important role in developing brand equity in the social media context. The next section will discuss the construct and how it relates to consumer-brand relationships.

3.9 Consumer-Brand Relationships and Brand Attachment

The literature on consumer-brand relations has focused primarily on brands as transaction facilitators (Veloutsou and Moutinho 2009). Many researchers argue that consumers may form bonds with brands (Fournier 1998, Blackston 2000, Thomson et al. 2005, Carroll and Ahuvia 2006, Esch et al. 2006, Park et al. 2006, Thomson 2006, Paulssen and Fournier 2007, Veloutsou 2007, Veloutsou and Moutinho 2009, Park et al. 2010). For example, “*brands are increasingly defined as symbolic devices with personalities that users value beyond their functional utilities*” (Dall’Olmo Riley and de Chernatony 2000, p. 140). Similar to the complex relationships between individuals, consumers may also engage in close relationships with brands (Fournier 1998, Thomson et al. 2005, Esch et al. 2006, Park et al. 2006, Paulssen and Fournier 2007, Park et al. 2010, Vlachos et al. 2010).

Consumer-brand relational bonds may be an important antecedent to engage in long-term relationships between suppliers and customers (Szmigin et al. 2005). For example, Esch et al. (2006) argue that brand knowledge alone is not enough when firms want to build strong brands. They maintain that managers must consider brand relationships elements and factor them into the pursuit of stronger brands. They suggest that brand knowledge affects behavioural outcomes through the mediations of brand relationship and they add that an important component of the brand relationship construct is brand attachment (Esch et al. 2006).

Attachment is a core construct in understanding human relationships (Bowlby 1969). It could also be equally important in understanding consumer-brand bonds. Recent research by Fournier (1998) and Paulssen and Fournier (2007) provide encouraging results into the applicability of the attachment construct to the relationships marketing domain. This study is interested in the potential of the brand attachment construct in mediating the relationship between participation in a virtual brand community and the potential brand equity outcomes of the consumer-brand

relationship. Brand attachment is conceptualised to be the outcome of the consumer's experience and interaction with the brand (Park et al. 2006, Park et al. 2010). When the consumer develops a history with the brand, attachment to that brand becomes more likely and the brand will become linked to their self-concept (Park et al. 2010). In their work on the extended self and attachment, Sivadas and Venkatesh (1995, p. 410) demonstrate that "*the more attached a consumer is to a possession the more that possession will be part of the consumer's extended self.*" Favourable marketing outcomes are expected when the consumer's attachment to the brand is strong (Park et al. 2010). The following sections will present an overview of the attachment theory and the brand attachment construct.

3.9.1 Attachment Theory

Attachment theory "*investigates human's tendency to form, maintain and dissolve affectionate ties with particular others*" (Vlachos et al. 2010, p. 1479). Consequently, attachment theory is an important concept in contemporary psychology. In the fields of social and emotional development, it "*is the most visible and empirically grounded conceptual framework*" (Cassidy and Shaver 1999, p. x). The original work on attachment was pioneered by John Bowlby (1969, 1973, 1980), who intended to investigate and explain the emotional attachment of infants to their primary caregiver and the distress they feel when separated from that caregiver (Hazan and Shaver 1987). Bowlby (1969, 1973, 1980) suggests that in order for an infant to secure protection from physical and psychological threats he or she has to gain proximity to the caregiver, who is the attachment figure. The infant is born with "*a repertoire of (attachment) behaviours designed by evolution*" to assure the closeness of an attachment figure (Park et al. 2006, p. 6). Recent research on attachment argues that humans have a basic need to make strong emotional attachments to other individuals (Park et al. 2006).

Research on attachment did not stop at the attachment and loss to an infant-caregiver; it has also expanded into other areas such as romantic, marital, or "pair-bond" relationships. Hazan and Shaver (1987) suggest that romantic love can be seen as an attachment process. They argue that this process is a "*biosocial process by which affectional bonds are formed between adult lovers, just as affectional*

bonds are formed earlier in life between human infants and their parent” (Hazan and Shaver 1987, p. 511). The bonds that developed are based on the attachment styles, which are determined in part by the individual’s childhood relationships with his or her parents (Hazan and Shaver 1987, Collins and Read 1994 cited in Park et al. 2006).

There is evidence to show that attachment does develop between pair-bonded partners. Prior research has investigated attachment behaviour in adulthood and reports evidence of “full-blown” attachment between adolescents and adults in the context of romantic partners (see Baldwin et al. 1996, Hazan and Zeifman 1999). Individuals may also develop several attachments. In the infant-mother attachment theory, Bowlby (1969) proposed that a child may have multiple attachments. Research has provided support to this proposition. For example, it has been found that an infant/child may develop a bond with several attachment figures, such as to the father and other siblings (Cassidy 1999).

There are two important concepts in the attachment theory: attachment bond and attachment behaviour (Cassidy 1999). Attachment bond “*refers to the affectional tie*” (Cassidy 1999, p. 11-12). Attachment behaviour, on the other hand, is the “*behaviour that promotes proximity to the attachment figure*”. Attachment can be identified through observing numerous behaviours (Bowlby 1980, Cassidy and Shaver 1999, Hazan and Zeifman 1999). For example, when attachment is strong the individuals are more likely to “*maintain proximity to the object*” (Thomson et al. 2005). However, attachment bond on the other hand is not easily observed.

There are several important criteria for an attachment bond to develop, which distinguishes it from other affection bonds (Cassidy 1999). An important criterion of an affectional bond is persistence. For an affectional bond to exist there has to be a particular person involved who is not exchangeable for any other person (Cassidy 1999). Bowlby (1979, cited in Cassidy 1999, p. 12) explicates that this bond represents “the attraction that one *individual* has for another *individual*” [emphasis in original]. The third criterion for affectional bonds is the emotional significance of the relationship to the individual (Cassidy 1999). The individual has to also desire to be close to and communicate with the other individual. Affectional bonds are also

characterised by the feeling of distress when involuntary separation occurs (Cassidy 1999). In addition to the above criteria, an attachment bond requires another important criteria, which is that “*the individual seeks security and comfort in the relationship with the person*” (Cassidy 1999, p. 12). This last criterion is important because security is important in the definition of the attachment bond (Bowlby 1969).

The marketing literature has also investigated the attachment concept in consumer-brand relationships. Recent research suggests that consumers develop attachment to celebrities (Thomson 2006), possessions (Kleine and Baker 2004), brands (Schouten and McAlexander 1995, Thomson et al. 2005, Esch et al. 2006, Park et al. 2006, Paulssen and Fournier 2007), services (Vlachos et al. 2010), and products (Ball and Tasaki 1992). This growing stream of research is encouraging since it allows for the expansion of the relationship marketing construct, especially the consumer-brand relations.

3.9.2 Brand Attachment

Brand attachment has received a growing level of interest in the marketing literature (see Ball and Tasaki 1992, Thomson et al. 2005, Park et al. 2006, Thomson 2006, Park et al. 2010). This interest is a natural progression from the object/possession attachment stream of research in consumer behaviour (see Schultz et al. 1989, Belk 1988, Kleine and Baker 2004, Sivadas and Venkatesh 1995). Although there are qualitative differences in possession attachment and brand attachment (Kleine and Baker 2004), the possibility of consumer brand bonds is still valid where possessions are tangible and brands are intangible. Furthermore, although there are similarities and differences between these two concepts, in both concepts bonding is a way for the consumer to define the self (Kleine and Baker 2004). What is more important is that the strength of the attachment to the brand “*may provide a parsimonious and unidimensional indicator of “relationship quality” or strength*” (Thomson 2006, p. 105). In her article on consumer-brand relationships, Fournier (1998) suggests that affective attachments are at the core of all strong brand relationships.

Park et al. (2006, p. 9) defines brand attachment as “*the strength of the cognitive and emotional bond connecting the brand with the self.*” This conceptualisation is based on the consumer’s mental representation of the brand, which includes thoughts and feelings about the brand and the brand’s relationship to the self. There are two critical factors that reflect the conceptual properties of brand attachment, which are brand-self connection and brand prominence (Park et al. 2010). In a similar conceptualisation, Park et al. (2006) explicate that brand attachment includes brand-self connection, and cognitive and emotional bonds. Schultz et al. (1989) have also defined attachment as a multidimensional construct that is represented by the linkage between the self and a particular object, as perceived by the consumers. In contrast to Fournier’s (1998) brand relationship quality framework, the focus of brand attachment is not on the attachment style but rather on the strength of the attachment (strong or weak) (Schultz et al. 1989, Park et al. 2010). Although brand relationships are actionable, attachment styles are not (Park et al. 2006, Paulssen and Fournier 2007). This study is concerned with the multidimensionality of the brand attachment construct. Consequently, the next section will explore the two dimensions of brand attachment proposed by Park et al. (2010), brand-self connection and brand prominence.

3.9.3 Brand-Self Connection

Brand-self connection refers to the bond between the consumer’s self-concept and the brand (Escalas and Bettman 2003, Escalas 2004, Escalas and Bettman 2005) where this connection is both cognitive and emotional (Park et al. 2010). The consumers use brands and products to create or represent social and personal self-images (Escalas 2004). Brands possess psychological and symbolic benefits that aid consumers in creating their desired social and personal self-identity (Escalas 2004). Meanwhile, the consumers use brands to portray the desired self-images with the process resulting in the brand and the self being linked (Escalas and Bettman 2003).

Escalas (2004, p. 170) maintains that brand-self connections are developed “*as consumers appropriate brand associations to meet self-motivated goals.*” The closer the brand associations are linked to the self, the more meaningful these associations will be (Escalas and Bettman 2003). In establishing the concept of brand-self

connection, where the brand is categorised as part of the self, consumers are viewed as developing a unity (oneness) with the brand, which “*establishes cognitive links that connect the brand with the self*” (Park et al. 2010, p. 2). It must be noted that the brand-self connections are also emotional and involve feelings about the brand (Thomson et al. 2005).

The consumer’s connection to the brand may be based on the brand’s representation of who one is (i.e. an identity base) or the meaning that the brand carries in terms of one’s goals, personal concerns, or life projects (Park et al. 2010). The consumer becomes attached to those brands that help them to fulfil their needs; however, this attachment only develops when “*a brand established a strong connection with the self- the strongest form of which involves the brand as an extension of the self*” (Park et al. 2006, p. 9). Strong attachments develop over time (Paulssen and Fournier 2007, Lambert-Pandraud and Laurent 2010) and are the result of real or imagined experiences (Park et al. 2006, Park et al. 2010). Through these experiences, the brand helps in creating personal brand meaning and memories (Park et al. 2006).

A brand that can create these connections is more likely to be considered an extension to the self (Belk 1988, Kleine and Baker 2004). Just as in human relations, the more that a brand is viewed as an extension to the self, the greater the attachment and the greater the distress and sadness experienced if the brand is lost or perceived to be lost (Park et al. 2006). Fournier (1998) maintains that brand-self connections (which are a core component of brand attachment) support the preservation of consumer brand relationships through various ways, such as increasing tolerance to bad situations and fostering feelings of uniqueness and dependency of the relationship. Moreover, Fournier (1998) conceptualise self-connection as a facet of brand relationships quality, which suggests the importance of its role in relationship stability (see also Kleine and Baker 2004).

3.9.4 Brand Prominence

Brand prominence is the second dimension of brand attachment. Park et al (2010, p. 5) contend “*the extent to which positive feelings and memories about the attachment object are perceived to be top of the mind also serves as an indicator of*

attachment.” Brand prominence occurs when the cognitive and affective bond that connects the brand to the self is salient (Park et al. 2010). The perceived ease and frequency of the retrieval of brand-related thoughts and feelings is a reflection of the salience of the cognitive and affective bond (Park et al. 2010). For example, consumers would be more attached to a brand that has high brand-self connections and salience than one with high brand-connection and low salience (Park et al. 2010).

Brand prominence is similar to the concept of brand resonance that was proposed by Keller (2003). In the brand relationships framework, brand resonance refers to “*the nature of the relationships that customers have with the brand and the extent to which they feel that that are “in sync” with the brand*” (Keller 2003, p. 15). The intensity or the depth of the psychological consumer-brand bond illustrates this brand resonance (Keller 2003). One of the important drivers of brand resonance is strong personal attachment (Keller 2003). Keller (2003) also states that sense of community is a category of brand resonance where consumers develop kinship or affiliation with other consumers associated with the brand.

Park et al. (2010) show empirical evidence that both these dimensions are important in conceptualising brand attachment: “*brand-self connection is a core component of attachment since it centrally reflects the definitions of attachment as the bond connecting the individual with the brand*” (Park et al. 2010, p 6). Brand prominence adds precision in the measurement of the strength of brand-self bond (Park et al, 2010).

It is possible for consumers to develop attachment to the brand through engaging the brand at a personal level in the social media context. For example, the two-way interactions on brand pages on Facebook may lead consumers to connect the brand with their self-concept. The reinforcement of brand associations through the two-way interaction is essential for brand-self connection to occur. Furthermore, the increasing instances of interactions also support the psychological attachment to the brand. However, there is a lack of research that explores how participation and interaction with brands on social networking sites impacts attachment to those brands. Therefore, one of the objectives of this study is to test this link.

3.10 Summary

This chapter has presented and reviewed the literature relevant to the concept of brand community. The characteristics of brand community were discussed. It was stated that consciousness of kind, rituals and traditions, and moral reasonability are important characteristics of brand community. A discussion on consumer relationships in brand communities was also presented. In addition, the concept of an online brand community was introduced. It was stated that there are different types of virtual communities and different types of members who participate in such communities.

The nature of participation in virtual brand communities was also discussed. A richer and broader perspective of participation based on value creating practices was reviewed. This chapter has also discussed two important antecedents of participation, which are: brand identification and brand community identification. This chapter presented a discussion on the various perspectives of motivation to participate. Finally, this chapter has discussed the relational construct of brand attachment. The next chapter will present the conceptual framework and the research hypothesis for this study.

Chapter 4: Conceptual Framework

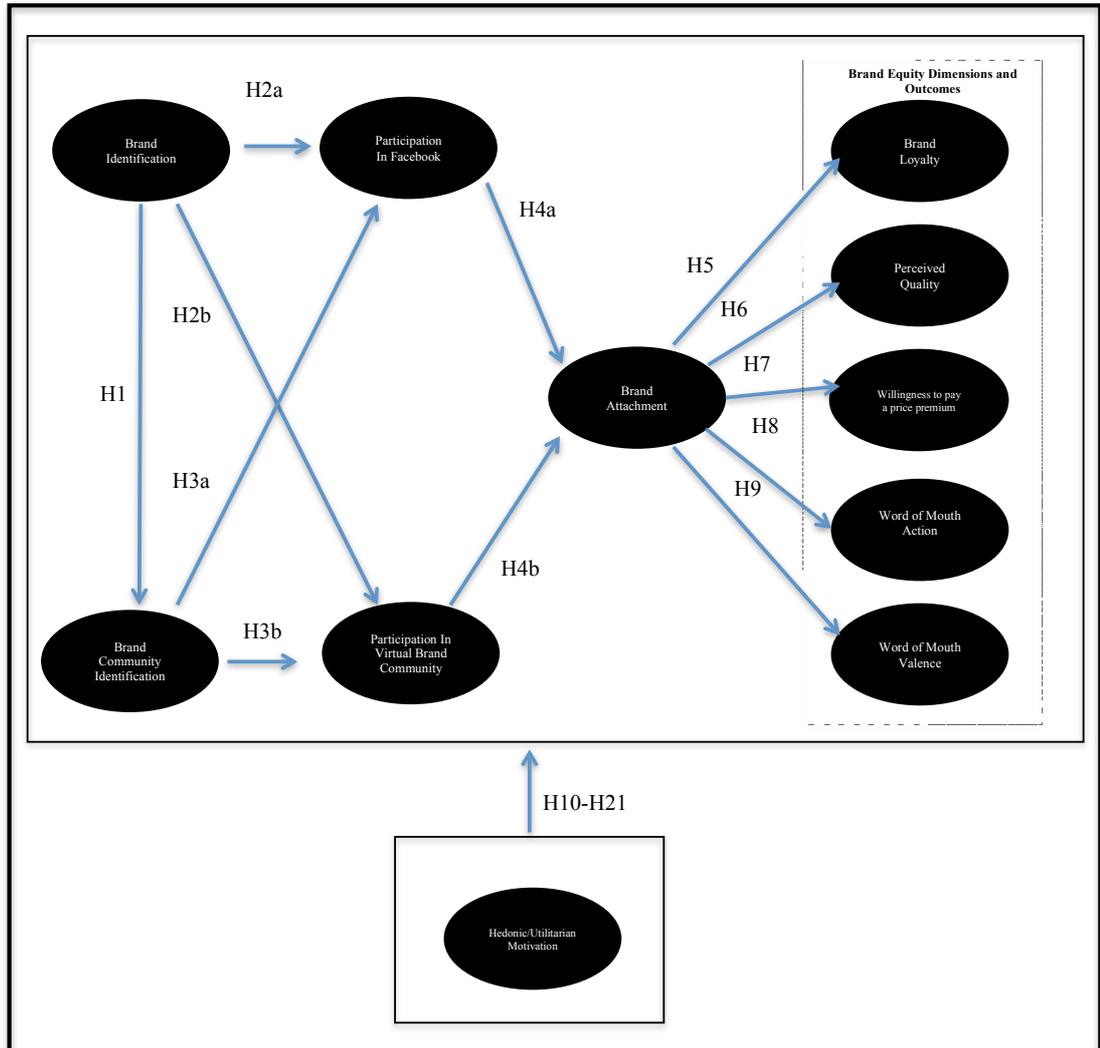
4.1 Introduction

This chapter presents a conceptual model that aims to address the research questions and objectives. This chapter will also present the hypotheses that describe the relationships between the constructs involved in this study. The research hypotheses will be presented in six sections that represent the stages of the conceptual framework that is used in this study. Section 4.2 will present the conceptual model for this study. Section 4.3 explicates the relationship between brand identification and brand community identification. Section 4.4 will demonstrate the relationship between participation in virtual brand communities and identification. A discussion on the relationship between participation in virtual brand communities and brand attachment will be presented in Section 4.5. Meanwhile, Section 4.6 will discuss the relationship between brand attachment and brand equity dimensions and outcomes. Section 4.7 will present a comparison of the proposed relationships based on the community member's motivational orientation to participate. Section 4.8 will demonstrate the nature of participation based on member type and on their behaviour. Finally, a summary of this chapter will be presented in Section 4.9.

4.2 The Conceptual Model

Figure 4-1 presents the proposed research model for this study. This model aims to explain how the relational bonds that consumers forge with brands in virtual brand communities develop brand equity. The research model is broken down into five segments. The first segment focuses on the relationship between brand identification and brand community identification. The second segment includes the effect of identification on participation. The third segment of the model is concerned with the effect of participation on brand attachment. The fourth segment of the model focuses on the effect of brand attachment on brand equity dimensions and outcomes. The fifth segment of the model is concerned with the effect of membership type and motivational orientation on the proposed relationships in the model. In this study, the term virtual brand community is used interchangeably with brand pages on Facebook since the aim is to generalise the theory.

Figure 4-1 The Proposed Research Model for This Study



4.3 The Relationship between Brand Identification and Brand Community Identification

Brand identification is defined as “the perception of oneness with or belongingness to some brand, where an individual defines him or herself in terms of the brand(s) of which he identifies with” (Mael and Ashforth 1992, p. 104). Social identity theory proposes that an individual’s self-concept is comprised of personal and social identity. The personal identity portion of one’s self-concept can be derived not just from their characteristics and competencies but also from the characteristics of one’s possessions (Belk 1988). The brand can also contribute in defining the personal and

social identity of the individual. The brand can define the individual's personal identity where consumers can incorporate the brand associations and characteristics into their self-concept. (Kuenzel and Halliday 2008, Donovan et al. 2006). Identification with the brand supports and defines personal identity, while identification with the brand community supports and defines the individual's social identity (Hughes and Ahearne 2010, Ashforth et al. 2008, Bergami and Bagozzi 2000)

Identification with a brand community is a signal of the relationship strength between consumers and a brand community (Algesheimer et al. 2005). Consumers identify with virtual brand communities to improve their self-esteem (Ashforth and Mael 1989, Woisetschlager et al. 2008). In addition, brand community identification is important for a consumer's self-definition needs (Czaplewski and Gruen 2004). Brand community identification is important to virtual brand communities because it is the basis for oppositional loyalty where "conciseness of kind" is fostered by members identifying with brand users as opposed to non-brand users (Muniz and O'Guinn 2001, Thompson and Sinha 2008). Brand users are the "ingroup" and non-brand users are the "outgroup" (Czaplewski and Gruen 2004, Dholakia et al. 2004).

Brand identification is linked to brand community identification (Yeh and Choi 2010). A consumer has to identify with the brand before they can identify with the brand community (Stokburger-Sauer 2010). Virtual brand communities in the form of social networking sites can be conceptualised as primary actors in the social network (Brown et al. 2007). This means that the brand fan pages on social networking sites are perceived as actors, which in turn enables consumers to relate to brand communication in the virtual brand community. Brown et al. (2007, p. 9) report that:

Respondents commonly mentioned themes which appeared to display some kind of social affiliation with Web sites whose content, rather than the characteristics of the individual members, demonstrated a homophily of interests with the user.

It follows that consumers can identify with the brand in the online environment. The brand pages on social networking sites are perceived by consumers to be primary actors and their related brand communities "act as a social proxy for individual

identification” (Brown et al. 2007, p. 2). In addition, virtual brand community identification, which is driven by consumer identification with the brand, will also drive the consumer’s behaviour in the online and offline environment (Bagozzi and Dholakia 2002, Algesheimer et al. 2005, Chiu et al. 2006). Identification with virtual brand communities is beyond the virtual presence with other members in the community. Consumers who identify with virtual brand communities develop a psychological sense of brand community (Carlson et al. 2008). By doing so, they identify with members of the virtual brand community without having to meet them face-to-face or online. When consumers identify with the community they perceive they are part of an ingroup and strive to maintain this perception through behaviours that support the goals of the virtual brand community (Ahearne and Bhattacharya 2005).

Recent empirical research shows that brand identification positively influences identification with the brand community; it also fosters trust among community members (Yeh and Choi 2010). As such, this study argues that identification with the brand is a key driver to identification with a virtual brand community because if consumers do not identify with the brand then they cannot relate to the brand community. Hence, this study’s first hypothesis was developed:

H1: Consumer-brand identification is directly and positively related to brand community identification.

4.4 The Relationship between Identification and Participation

4.4.1 Participation

The view of participation in virtual brand communities as posting and lurking is constricting (de Valck et al. 2009). Consequently, a more detailed and comprehensive view of participation is needed. Previous research argues that participation has more than one aspect (Yoo et al. 2002, Casalo et al. 2007, de Valck et al. 2007, Casalo et al. 2009). For example, many scholars have argued that participation involves different types of interactions with different entities in a

virtual community (Rood and Burckman 2009, Scahu et al. 2009, Ouwersloot and Odekerken-Schroder 2008). Meanwhile, Yoo et al. (2002) suggests that participation can include community operation, a subgroup or event, message boards, and chatting or sending e-mail with other members. De Valck et al. (2007) propose that there are different interactions that may occur between members, organisers and members, and the community as a whole. This perspective is in line with the framework put forward by McAlexander et al. (2002), which suggests that consumers have relationships with various players in the brand communities. Consumers in virtual brand communities are conceptualised to have relationships with the company, product, customers, and brand (McAlexander et al. 2002; Ouwersloot and Odekerken-Schroder 2008). Therefore, it can be plausibly argued that participation in virtual brand community is a rich and multi-faceted concept.

Previous research related to participation suggests that participation in virtual brand communities is a rich continuum (Kozinets 1999). For example, Rood and Bruckman (2009) propose that participation ranges from a number of member activities, including: discovering, lurking, learning, sharing, and socialising. In addition, Schau et al. (2009) propose a useful and broad framework that describes the consumer's behaviour in brand communities. The authors argue that, based on practice theory, consumers can be envisioned engaging in twelve practices in brand communities (see Chapter 3 for more detail). These practices are packaged in four categories, which are: social networking, community engagement, brand use, and impression management.

This study argues that there are two dimensions to participation, which are: the platform level and the virtual brand community level. The first level of participation is based on the consumer's actions in brand pages on Facebook. These actions are centred on actions such as posting, clicking the "like" button, and playing games on the brand page. At this level of participation, consumers are only superficially participating in the brand page. This form of participation is more attuned to the more established view of participation (i.e. posting or lurking behaviour).

The second level of participation proposed by this study is collective and involves the performance of value creating practices (Schau et al. 2009). Consumers are

expected to perform practices, such as: welcoming new users, preaching for the brand, and telling stories about their brand experiences. At this level of participation the consumers are truly engaging the virtual brand community and in the process they define their social identity. An extensive review of the previous research did not identify any adequate propositions or empirical findings regarding the multidimensionality of the participation construct, it has also indicated a lack of focus on what participation specifically involves (see Chapter 3). To the researcher's best knowledge, this study is one of the very few to explore and validate the existence of two levels of participation in virtual brand communities. This study also applies specific practices to describe participation in virtual brand communities based on empirical research (see Schau et al. 2009).

Participation in the virtual brand community is defined as practices that:

Are linked and implicit ways of understanding, saying and doing things. They comprise a temporally unfolding and spatially dispersed nexus of behaviours that include practical activities, performances, and representations or talk. (Schau et al. 2009, p. 31)

These practices are representative of participation at the virtual brand community level because they capture collective value laden participation behaviour for both the consumer and the brand (Schau et al. 2009). This is a far more sophisticated and rich approach to consumer behaviour in brand communities than the posting and lurking perspective. Furthermore, the participation perspective put forward by Schau et al. (2009) is consumer centric where it focuses on practices performed by consumers in virtual brand communities. Although previous research suggests different aspects of participation (e.g. de Valck et al. 2007, Yoo et al. 2002, Casalo et al. 2009, 2007), they are mostly generic. The participation practices framework is more comprehensive and it focuses on value creation in virtual brand communities with better-defined behaviour (Schau et al. 2009).

4.4.2 The Effect of Brand Identification on Participation

Brand identification plays an important role in influencing an individual's behaviour. Bhattacharya and Sen (2003) maintain that identification is the basis for a strong consumer-company relationship and it aids in addressing the consumer's self-

definition needs. Brand identification is a specific form of social identification that occurs when the brand, a social collective, becomes self-referential or self-defining (Donavan et al 2006). Therefore, when consumers identify with a brand they link the brand image and associations to their self-concept (Bhattacharya et al. 2005). Moreover, brand identification has important consequences for the brand, brand community, and consumers (Bhattacharya and Sen 2003, Ahearne et al. 2005, Kuenzel and Halliday 2008). This study argues that brand identification is an important antecedent of participation in virtual brand communities. Consumers are looking to enhance and reinforce their self-identities when they identify with a brand (Bhattacharya and Sen 2003), which allows them to define themselves in a social environment (Ashforth and Mael 1989).

In their study, Bhattacharya and Sen (2003) found that interactions with the brand and the company are necessary for consumers to be embedded in the brand and the company, and to feel like insiders. They add that “*embedded relationships arise when consumers engage in company-related rites, rituals, and routines...that cast them in legitimate memberships roles*” (Bhattacharya and Sen 2003, p. 82). Brand communities (both on- and offline) allow for embeddedness, especially when the consumers’ idiosyncratic interests are met (Bhattacharya and Sen 2003). Moreover, consumers identify with the brand when the brand affirms the consumers sense of identity (Kunzel and Halliday 2008). Virtual brand communities aid consumers in supporting a social brand identity where users of the brand join a community of brand users. This creates the perception of an ingroup of brand users versus an outgroup of nonusers. Therefore, consumers derive meaning through engaging with brands in virtual communities. Consumers also define their identity based on what the brand offers when projecting a social image to those inside and outside a community.

This study subscribes to the view that identification is cognitive in nature (Ashforth and Mael 1989, Dutton et al. 1994, Carlson et al. 2009, Donovan et al. 2006, Hughes and Ahearne 2010). Consumers may develop identification with the brand even before they use it; for example, when they become aware of a brand through marketing communication or word of mouth. Consumers do not need to interact with the brand to initially develop identification to it; however, when they do

interact with the brand they satisfy their self-definition needs and their identification grows stronger (Ahearne et al. 2005, Bhattacharya and Sen 2003, Kuenzel and Halliday 2008). When this occurs, consumers accept the brand as a social collective and as a part of the self, even without interaction (Ashforth and Mael 1989, Ashforth et al. 2008). These propositions support the view that not all of the users of virtual brand communities are active users (Torral et al. 2009, de Valck et al. 2009, Rood, V. and Bruckman, A. 2009)

In virtual brand communities there are “lurkers” who observe the community activities and rarely join the conversation or perform any activity (Nonnecke et al. 2006). Lurkers are considered by some authors to be valid members of the virtual brand community (Nonnecke et al. 2006, Rood and Bruckman 2009) and they identify with the brand, which drives them to show interest in joining the community. Although these members do not interact with the brand and other community members, they still satisfy their self-definition needs by psychologically accepting the brand (i.e. the social collective) into their self and identity (Ashforth and Mael 1989, Ashforth et al. 2008, Mael and Tetrick 1995, Kuenzel and Halliday 2008).

Prior research contends that the outcomes of customer-company identification include: company loyalty, company promotions, customer recruitment, resilience to negative information and stronger claims on a company (Bhattacharya and Sen 2003). Meanwhile, recent research investigating the consequences of brand and company identification finds that this identification leads to word of mouth communication (Ahearne and Bhattacharya 2005, Kuenzel and Halliday 2008). Linking brand identification to participation in virtual brand communities is an important finding because some authors have considered participation to be a form of electronic word of mouth (Brown et al. 2007, Yeh and Choi 2006). Furthermore, Ahearne and Bhattacharya (2005) and Kuenzel and Halliday (2008) report that brand identification and company identification can lead the customers to purchase a brand and also preserve and support a company’s goals. This link is important because it supports the proposition that brand identification encourages consumers to participate in virtual brand communities to support the brand.

Recent research in the context of sales force management shows that brand identification has motivated sales persons to increase their brand effort and performance in the market place (Hughes and Ahearne 2010). For example, in the sports context, empirical research reports that cognitive identification leads to retail spending on sports merchandise and increases the number of games watched (Carlson et al. 2009). In the brand community context, brand identification has been shown to influence customers' satisfaction, loyalty, and advocacy (Stokburger-Sauer 2010). These findings support this study's proposition that brand identification in virtual brand communities may lead customers to participate in these communities. The link between brand identification and participation is evident in the practices that consumers engage in when on brand communities; for example, where consumers justify, evangelise, stake and commoditise their brand usage and experience with other members in the community (Schau et al. 2009).

Consumers are expected to participate in virtual brand communities to define their identities. As consumers assimilate the goals of the brands as their own, they are expected to engage in behaviour that would support the brand (Ahearne and Bhattacharya 2005, Kuenzel and Halliday 2008). Therefore, joining and participating in virtual brand communities is an activity that supports the brand. Consequently, consumers are likely to participate at the platform level (i.e. Facebook.com) and at the virtual brand community level (i.e. a specific, official "brand" page on Facebook that represents a community) as a result of their identification with the brand community. Hence, the following hypotheses are developed:

H2a: Consumer-brand identification is directly and positively related to participation in Facebook.

H2b: Consumer-brand identification is directly and positively related to participation in virtual brand community.

4.4.3 The Effect of Brand Community Identification on Participation

The consequences of identification with virtual brand communities are important to the activities of individuals in these communities. Brand community identification entails positive and negative outcomes (Algesheimer et al. 2005). Furthermore, identification influences brand community behaviour (i.e. participation in brand communities) (Bagozzi and Dholakia 2002, Algesheimer et al. 2005, Chiu et al. 2006, Bagozzi and Dholakia 2006a, Bagozzi and Dholakia 2006b, Woisetschlager et al. 2008). When consumers identify with groups, their behaviour is influenced accordingly because they assume a social identity and attempt to maintain it and nourish it (Dutton et al. 1994, Bhattacharya and Sen 2003, Bagozzi and Dholakia 2006a, Bagozzi and Dholakia 2006b).

This present study expects brand community identification to motivate consumers to sustain their social identity by engaging with the virtual communities that they identify with. Furthermore, this study also argues that participation is comprised of two levels, which are: the platform and virtual brand community level. The first level pertains to participation at the basic social networking level by using the features such as posting and commenting. At a more collective level of participation, consumers perform practices on the social networking sites and this behaviour resembles practices that the consumers perform in virtual brand communities (Schau et al 2009). Therefore, it is likely that brand identification would influence the consumers' participation at the platform and virtual brand community levels.

Brand community identification is important to virtual brand communities because it represents "consciousness of kind" which is an important facet of brand communities (Muniz and O'Guinn 2001, Thompson and Sinha 2008). Moreover, consumers who perceive "consciousness of kind" or "belongingness" to the virtual brand community would tend to strive to improve their self-esteem through participating in the community (Dutton et al. 1994, Bhattacharya and Sen 2003, Bagozzi and Dholakia 2006a, Bagozzi and Dholakia 2006b, Woisetschlager et al. 2008). Furthermore, "consciousness of kind" encourages oppositional loyalty towards other brands (Muniz and O'Guinn 2001, Thompson and Sinha 2008).

Therefore, through participating in virtual brand communities, consumers reinforce their social identities by asserting that they are part of an ingroup of brand users (Thompson and Sinha 2008). Brand community identification and the social identity that consumers gain from participating in a virtual brand community drive their interaction in the community (Bagozzi and Dholakia 2006, Fuller et al. 2008). Accordingly, consumers gain an identity based on the brand community membership and form relationships with its members at a collective level.

Research on brand community identification and its empirical findings lend support to the proposition that brand community identification positively influences participation and engagement in virtual brand communities (e.g. Algesheimer et al. 2005). Czaplewski and Gruen (2004) show that brand community identity leads to positive outcomes, such as word-of-mouth and intentions to purchase products in the future. Carlson et al. (2008) have reported that identification with the group has a direct and positive influence on the psychological sense of brand community. Psychological sense of brand community refers to the notion that individuals perceive “*relational bonds with other brand users*” (Carlson et al. 2008, p. 286). The consumers’ psychological sense of brand community may lead them to support the virtual brand community through passive participation, which is usually described as lurking. With time, many consumers evolve to become more active members. Identification with a virtual community has also been empirically linked to the quantity of knowledge sharing in virtual communities (Chiu et al. 2006). Based on this background, the following hypotheses are proposed:

H3a: Identification with the virtual brand community is directly and positively related to participation in Facebook.

H3b: Identification with the virtual brand community is directly and positively related to participation in virtual brand community.

4.5 The Relationship between Participation and Brand Attachment

Brand relationships, or (more specifically) brand attachment, are a relevant construct to the virtual brand community context. This study argues that participation in the virtual brand communities on Facebook fosters attachment to the brand. For example, Kleine and Baker (2004, p. 21) found that *“brand relations may be formed via perceived collective or shared ownership of the brand.”* One avenue for consumers to develop relationships with brands is participation in brand communities (Casalo et al. 2008, Esch et al. 2006). Therefore, following this participation the consumers engage with the brand at a higher level where different interactions exist in virtual brand communities. Consumers interact with the brand, other consumers, and the community as a whole (McAlexander et al. 2002, De Valck et al. 2007, Ouwersloot and Odekerken-Schroder 2008). Moreover, the nature of the interaction and the practices that consumers engage in on virtual brand communities develop closeness between consumers and the brand. In addition, Fournier (1998) suggests that consumers develop a bond with the brand when they go through the relationship process.

At both levels of participation (i.e. platform and virtual brand community), the consumers' engagement is predicted to positively influence attachment to the brand. Brand attachment develops with time and is a result of consumer experience with the brand (Park et al. 2006, Paulssen and Fournier 2007, Park et al. 2010). In the brand community context, Peters and Hollenbeck (2005) show that participation in group events and activities leads to the development of community sentiments, which in turn leads to the consumers' perception of a relationship with the brand. Specifically, McAlexander et al. (2002, p. 49) found that for consumers who had weak connections with the brand, *“participation led to more positive relationships with the jeep brand”*. Additionally, Casalo et al. (2010) show that an individual may develop emotional ties with a product because of the interaction with community members. Hence, it can be argued that participation has a positive effect on brand attachment where it can promote bonding with the brand.

The ongoing interactions with the brand and other consumers build brand associations and meanings that consumers use to connect to the self. The stronger this brand-self connection is, the stronger the attachment bond to the brand will be (Park et al. 2010). Moreover, increased interactions bring about brand salience, which increases the precision of the brand-self connection and supports the attachment to the brand (Park et al. 2010). The two forms of participation (i.e. platform and virtual brand community) are both expected to influence consumers' attachment to the brand because participation is a spectrum of behaviour and engagement with the brand and other members (Kozinets 1999). This provides the basis for the following hypotheses:

H4a: Participation in Facebook is directly and positively related to brand attachment.

H4b: Participation in virtual brand communities is directly and positively related to brand attachment.

4.6 The Role of Brand Attachment in Generating Brand Equity

Brand attachment has important implications for brand equity (Park et al. 2006b). Previous research has focused more on the broad concept of relationship marketing and less on the effect of consumer-brand relationships on brand equity. In the context of this study, brand attachment is expected to have a direct and positive influence on major brand equity dimensions and outcomes. For example, a recent study reports that brand attachment is stronger at predicting brand equity drivers than brand attitude (Park et al. 2010). Park et al. (2010) investigated various drivers of brand equity, such as willingness to pay more, loyalty, and word of mouth and conclude that brand attachment has important positive influence on such drivers. Meanwhile, this present study explores four such drivers and outcomes of brand equity, which are: brand loyalty, perceived quality of the brand, word of mouth communication, and willingness to pay a premium price for the brand. Brand loyalty

and perceived quality are important dimensions of brand equity (Aaker 1991) and the author has aimed to explore how they are developed in virtual brand communities. Word of mouth communication and willingness to pay a price premium are important manifestations of brand equity (Aaker 1991). Consequently, this study aims to explore these outcomes as an indication of brand equity and its development in the social media context.

4.6.1 The Effect of Brand Attachment on Brand Loyalty

Park et al. (2010) show that consumers who are highly attached to a brand are willing to expend personal resources (e.g. money, time, effort) to maintain their relationship with the brand. Furthermore, consumers who perceive they are in relationships with brands intend to repurchase those brands in the future (Peters and Hollenbeck 2005). In the consumer behaviour context, empirical research on attachment reports a link between brand attachment and brand loyalty (Thomson et al. 2005, Esch et al. 2006, Vlachos et al. 2010). Park et al (2010) show that brand attachment consists of two dimensions, which are: brand-self connection and brand prominence. When both brand-self connection and brand prominence are high the consumers are more likely to engage in relationships sustaining behaviours than when brand self-connections is high and brand prominence is low (Park et al. 2010). Therefore, a higher the attachment to the brand makes it more likely that the consumers would perform relationship sustaining behaviours, which includes continuously buying the brand rather than its competitors.

Attachment theory suggests that there are a number of criteria for the establishment of an attachment bond, one of which is the desire to be close to and communicate with the attachment figure (Cassidy 1999). In the consumer behaviour context, consumers are expected to be loyal to the brand that they are attached to because they want to be close to it. Attachment theory also points to an important criterion of attachment bonds, which is the feeling of distress when involuntary separation occurs (Cassidy 1999). Consequently, if consumers are confronted with an out of stock situation they are likely to experience feelings of distress and they would tend to seek the brand out in other locations, even if it means that they have to expend

more resources to acquire the brand (Park et al. 2010). Hence, the following hypothesis is proposed:

H5: Brand attachment is directly and positively related to brand loyalty.

4.6.2 The Effect of Brand Attachment on Perceived Quality

Perceived quality is defined as the “*customer’s perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternatives*” (Aaker 1991, p. 85). Perceived quality may be linked to brand attachment because it is conceptualised as a brand association, which is given the status of a brand asset due to its important role as a brand equity dimension (Aaker 1991). Perceived quality is based on the cognitive structures about the brand that are held in the consumers mind (Netemeyer et al. 2004). Zeithaml (1988) suggests that consumers infer quality from lower level attributes, such as price and the freshness of products.

In the context of this study, lower level attributes that may be used to develop quality perceptions of the brand include the Facebook brand page presentation and the number of fans that “like” the page. Moreover, marketing communication that stresses intrinsic and extrinsic brand attributes may also influence perceived quality (Netemeyer et al. 2004). It follows that direct experience with the brand may lead consumers to infer quality judgments about the brand (Netemeyer et al. 2004). Moreover, quality judgments that are inferred from direct experiences are stronger than others developed through indirect means because direct experiences are easily accessible from memory (Netemeyer et al. 2004).

Direct experience with the brand and the community may be achieved through participation. Brand attachment develops as brands are connected to the self and brand prominence is high (Park et al 2010). Zeithaml et al. (1988) suggests that consumers infer quality from higher level attributes, such as brand reputation. Perceived quality may become important to consumers when the brand is connected to the self (which is a higher level of abstraction). As consumers seek self-definition

and enhancement, they would tend to become attached to brands that provide for those needs (Escalas and Bettman 2003, Escalas 2004, Park et al. 2010).

Consumers are likely to form bonds with the brands that they perceive as high quality based on their experience and self-definition needs. This may translate into higher perceptions of quality since it is expected that consumers will bond with those brands that they perceive to be of high quality. The experience that the consumers have with brands in the virtual brand community may reinforce the perception of quality since it is expected that the brand should be of high quality if it is to be an extension to the self. Consequently, it is likely that consumers would infer quality from the presentation of the brand page on Facebook and also from the number of friends that the brand has. Hence, the following hypothesis is proposed:

H6: Brand attachment is directly and positively related to perceived quality.

4.6.3 The Effect of Brand Attachment on Willingness to Pay a Price Premium for the Brand

This study argues that attachment to the brand leads to the consumers' willingness to pay a price premium for the brand. Prior research reports that consumers who are attached to a brand are willing to expend more money to acquire that brand (Peters and Hollenbeck 2005, Thomson et al. 2005, Park et al. 2010). These results are similar to propositions and evidence from the service quality literature (e.g. Zeithaml et al. 1995), which suggests that a strong bond between consumers and brands increases the consumers' willingness to pay a price premium for the brand.

Consumers who are attached to a brand are motivated to devote their own resources (including paying more) to sustain relationships with the brand and so define their identity (Park et al. 2010). Furthermore, the more consumers connect the brand to the self, the more attached to the brand they become (Park et al. 2010). This attachment and self-expansion will drive consumers to pay more for the brand because it is an important part of the self (Park et al. 2010). Positive feelings and memories about the brand are more salient when the brand prominence is high (Park

et al. 2010). Consumers who have positive brand memories are expected to focus on brand facets other than price. Therefore, in the context of virtual brand communities, this study argues that consumers pay less attention to the price because they are attached to the brand. This is similar to human attachment patterns where individuals perform behaviour that promotes proximity to the attachment figure (Cassidy 1999). Furthermore, brand-self connection and brand prominence (which represent attachment) are expected to drive the consumer's willingness to pay more for the brand. Hence, the following hypothesis is developed:

H7: Brand attachment is directly and positively related to willingness to pay a price premium for the brand.

4.6.4 The Effect of Brand Attachment on Word of Mouth

This study argues that consumers who are attached to the brand are more likely to engage in word of mouth behaviour. Brand attachment is important to word of mouth behaviour because consumers are more likely to recommend the brand to others and defend it when they are attached to the brand (Dacin et al. 2007, Vlachos et al. 2010, Peters and Hollenbeck 2005). Moreover, loyal customers will be willing to forgive mishaps and promote the brand to others.

Empirical research on attachment in consumer behaviour has also linked brand attachment to word of mouth (Vlachos et al. 2010). Moreover, consumers who are highly attached to the brand commit themselves, and their time and effort to promoting and defending the brand in virtual brand communities and in the real world (Park et al. 2010). When consumers are attached to the brand they have already adopted the brand as an identity base (Park et al. 2010). This study argues that people are more likely to promote other objects that support their identity. In the context of this research, it is expected that consumers would promote brands that support their identity. The favourable and strong cognitive and emotional bonds that the consumers have with the brand encourage them to speak out and share their relationship with other consumers (Park et al. 2010). Hence, consumers may not

only speak more often about the brand but they may also speak more favourably of it. Therefore, the following hypotheses are proposed:

H8: Brand attachment is directly and positively related to word of mouth action.

H9: Brand attachment is directly and positively related to word of mouth valence.

4.7 The Role of Moderators

Although the classic validation model in consumer research is based on determining the degree of association between independent and dependent variables, this had been proved to be lacking (Sharma et al. 1981). Consumer behaviour researchers turned to the concept of moderator variables to better understand and predict buyer behaviour (Sharma et al. 1981). A moderator is defined as:

A qualitative (e.g., sex, race, class) or quantitative (e.g. level of reward) variable that affects the direction and/or strength of the relations between an independent or predictor variable and a dependent or criterion variable. (Baron and Kenny 1986, p. 1173)

In other words, researchers test for moderation to see if the relationships between two variables changes depending on the value of the moderator (Aguinis 2004). The moderator effect is sometimes called the interaction effect (Hair et al. 1998). When the researcher is unable to explain how casual relationships operate, moderators are useful in understating the effect of a predictive variable on a criterion variable (Barons and Kenny 1986, Sharma et al. 1981, Aguinis 2004).

Baron and Kenny (1986) maintain that researchers often confuse moderators for mediators, and vice versa. While a moderator changes the nature of the relationship between an independent variable and dependent variable, mediators explain the relationships between the two variables (Aguinis 2004). A mediator intervenes between a predictive and criterion variable and addresses how and why an effect occurs (Aguinis 2004, Baron and Kenny 1986). On the other hand, a moderating

variable is concerned with when a certain effect will occur (Baron and Kenny 1986). Testing moderating effects requires sound theoretical rationale (Aguinis 2004).

In the context of virtual brand communities, a number of studies have used moderators to better understand the relationships between predictor variables and criterion variables. Previous research in brand communities has examined different moderators, such as: brand specific groups and non brand specific groups (Bagozzi and Dholakia 2006a), identification with the community and product involvement (Nambisan and Baron 2007), member experience (Bagozzi and Dholakia 2006b), membership duration (de Valck et al. 2007), community type (Jang et al. 2008), and brand knowledge and community size (Algesheimer et al. 2005). These moderators were hypothesised to effect different relationships. For example, brand knowledge and community size moderated the effect of brand identification on community engagement (Algesheimer et al. 2005).

This study proposes to test the effect of moderating variables in order to investigate if the predictions made in the research model hold under different conditions (Aguinis 2004). In particular, this study aims to employ the motivational orientation (hedonic and utilitarian) to participate in virtual brand communities as a moderator of the relationships between the construct. This moderating variable is conceptualized to moderate the nine relationships paths (as illustrated in Figure 4.1). In other words, all of the relationships in the model are moderated by the motivational orientation of the community member to participate. However, an extensive review of the literature has not revealed any research that tested this moderator for the relationships between identification, participation, brand attachment, and brand equity.

4.7.1 The Moderating Role of Motivation

Previous research on virtual brand communities has focused on motivation to participate, mainly in the form of a main effect, such as: motivation to participate, perceived benefits for participation, and satisfaction of needs through participation (Wang and Fesenmaier 2004, Fuller 2006, Roberts et al. 2006, Lin 2006, Nambisan

and Baron 2007, Ouwersloot and Odekerken-Schroder 2008, Nov et al. 2010). The literature review has found no studies that have used motivation as a moderator of the relationships between constructs in the virtual brand community domain. In the retailing context, previous studies have suggested that consumers have hedonic or utilitarian motivations to shop (Westbrook and Black 1985, Babin et al. 1994, Arnold and Reynolds 2003, Jamal et al. 2003). In this study, hedonic motivation is defined as “*an inner drive directed at satisfying consumers’ enjoyment and pleasure needs*”; on the other hand, utilitarian motivation is defined as “*an inner drive directed at satisfying consumers’ functional and instrumental needs*” (Arnould et al. 2002). This classification is useful to apply to the social media context because it reflects two important reasons why individuals use the Internet (Katz et al. 1974, Luo 2002, Nambisan and Baron 2007).

In general the retailing literature suggests that consumers with hedonic motivation orientation may be more involved than their counterparts who have a utilitarian motivation orientation (Babin et al. 1994, Jamal et al. 2003, Kaltcheva and Weitz 2006). This can be explained by the nature of hedonic motivation to shop, which is partly based on the experiential aspect of shopping (Kaltcheva and Weitz 2006, Lunardo and Mbengue 2009). Motivation has been used as a moderator in the retailing context, where motivational orientation was conceptualised as a moderator of the effect of arousal on pleasantness in the shopping context (Kaltcheva and Weitz 2006). Meanwhile, Lunardo and Mbengue (2009) investigated the relationships between perceived control and shopping behaviour and they conceptualized motivational orientation as a moderator.

This study argues that by adopting the retailing literature view, and by using motivation orientation (hedonic and utilitarian), this construct can be used to moderate the relationships between identification, participation, attachment, and brand equity. The researcher expects that members whose participation is driven by hedonic motivation are more likely to exhibit a stronger influence of identification on participation, a stronger influence of participation on brand attachment, and a stronger influence of brand attachment on the dimensions of brand equity. Meanwhile, it is expected that consumers who have a hedonic motivation orientation will be more involved in comparison to those with utilitarian motivation orientation.

As such, the effects of the links in the research model would have a different impact for hedonic oriented individual in comparison to utilitarian oriented individuals. Hence, the following hypotheses are proposed:

H10: The influence of brand identification on brand community identification will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H11: The influence of brand identification on participation in Facebook will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H12: The influence of brand identification on participation in virtual brand community will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H13: The influence of brand community identification on participation in Facebook will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H14: The influence of brand community identification on participation in virtual brand community will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H15: The influence of participation in Facebook on brand attachment will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H16: The influence of participation in virtual brand community on brand attachment will be moderated by motivational orientation, such that the

effect will be stronger for members with hedonic motivational orientation to participate.

H17: The influence of brand attachment on brand loyalty will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H18: The influence of brand attachment on perceived quality will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H19: The influence of brand attachment on willingness to pay a price premium will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H20: The influence of brand attachment on word of mouth action will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

H21: The influence of brand attachment on word of mouth valence will be moderated by motivational orientation, such that the effect will be stronger for members with hedonic motivational orientation to participate.

4.8 The Nature of Participation

As stated in Chapter One, the key objectives of this study are to investigate the nature of participation and to understand the types of community members that develop on a social networking website such as Facebook. Previous research has largely focused on the consumers' participation in virtual brand communities on company owned websites or on third party websites (e.g., Kozinets 1999, Rood and Burckman 2009). However, this study aims to explore the consumers' participation

in online communities, as represented in the form of official brand pages on a social networking site such as Facebook.

Recent research shows that the consumers' participation can be viewed as a continuum, where at one end the consumers seek brand information and at the other end they engage in socialising with other brand patrons (Kozinets 1999, Rood and Burckman 2009). For instance, Kozinets (1999) reported that as consumers develop from being tourists to insiders, their participation profile moves from being information seekers to being socially active members. This trend has been shown to exist in an empirical study of virtual brand communities (Rood and Burckman 2009).

In this study, it is expected that a consumer's participation frequency will increase as they migrate from being a tourist to being an insider. This is based on prior research, such as that of Rood and Burckman (2009), who found that on company owned virtual communities the "lurkers" tended to participate with lower frequency and were only involved when they needed information while the "socialisers" participated more frequently. Similarly, De Valck et al. (2009) also report that "core members" of virtual brand community participated more frequently than "opportunists". In both cases, the two groups represented the two extremes on the participation continuum. Hence, the following hypothesis was developed:

H22: There is a positive association between group membership type (tourist, mingler, devotee and insider) and frequency of participation.

Kozinets (1999) also suggested that a consumer who is an insider would have spent the longest time as a member of the virtual community in comparison to the other three member types (i.e. tourist, mingler, and devotee). For a member to become an insider they would need to develop and migrate from being a tourist. In order to develop a social orientation and interaction mode, a consumer has to spend considerable time bonding with members of the brand community. Empirical research has shown that "lurkers" or "opportunists" have the shortest membership duration in virtual brand communities while "socialisers" and "core members" are

the longest membership duration in the brand communities (de Valck et al. 2009, Rood and Burckman 2009). Hence, the following hypothesis was developed:

H23: There is a positive association between group membership type (tourist, mingler, devotee and Insider) and duration of membership.

Kozinets (1999) also proposed that the virtual brand community member would spend more time participating as they migrate from being a tourist to being an insider. In other words, the more that the consumer develops into an active and social member of the community, the more time they will spend participating and engaging in the virtual brand community. Empirical research has shown this trend to exist in company created communities where more mature members (i.e. “core Members” and “socializers”) participated for longer periods of time when they visited the community in comparison to “opportunists” and “lurkers” (Rood and Burckman 2009, de Valck et al. 2009). Therefore, the following hypothesis was developed:

H24: There is a positive association between group membership type (tourist, mingler, devotee and insider) and time spent in the virtual brand community.

4.9 Summary

This chapter has presented the theoretical framework and model that will be used in this study. This chapter has also presented a number of research hypotheses that will be addressed in this study. The discussion of the research hypotheses was presented in six sections, representing the core relationships in the conceptual framework of this study. The first section discussed the relationship between brand identification and brand community identification. The second section elaborated on the relationship between participation in virtual brand communities and identification. The third section explicated the relationship between participation in virtual brand communities and brand attachment. In the fourth section a discussion of the relationship between brand attachment and the dimensions and outcomes of brand

equity was presented. The fifth section presented a comparison of the respondents based on their motivational orientation to participate in a virtual brand community, based on: firstly, the relationship between brand identification and brand community identification; secondly, participation in virtual brand communities and identification; thirdly, the relationship between participation in virtual brand communities and brand attachment; and finally, the relationships between brand attachment and the dimensions and outcomes of brand equity. In the final section the three propositions of the nature of participation based on member type and member behaviour in virtual brand communities was presented. The next chapter will present the research design and methodology for this study.

Chapter 5: Methodology

5.1 Introduction

This chapter aims to establish a bridge between the proposed research model presented in Chapter 4 and the results and findings of this study. The literature review in Chapters 2 and 3 has provided the scope and context of this research. The research model and hypotheses were presented in Chapter 4. In this chapter, the template used to test the proposed model and hypotheses will be outlined.

This chapter is organized around six major topics. Section 5.2 discusses the research paradigm that is adopted by the researcher. The research design of this study will be outlined in Section 5.3. The research methods followed in this study are discussed in Section 5.4. Sampling design procedures and issues will be presented in Section 5.5. Section 5.6 discusses that data analysis techniques employed in this research. A discussion of the validity and reliability of this research project will be presented in Section 5.7. Finally, this chapter will be summarized in Section 5.8.

5.2 Research Paradigm

There are various perspectives and alternative methods to the study of any given phenomenon (May 2001, Bryman 2004). “A methodology is a collection of procedures, techniques, tools and documentation aids...but a methodology is more than merely a collection of these things. It is usually based on some philosophical paradigms; otherwise it is merely a method, like a recipe” (Avison and Fitzgerald 1995, p. 63).

The two main competing paradigms of scientific enquiry are positivism and interpretivism. Although positivism has a dominant position among the research paradigms in marketing, the interpretivist paradigm is also used in the marketing literature (Malhotra and Birks 2007). Table 5-1 lists the various aspects of these two prominent paradigms. At the core of a research paradigm are issues of ontology and epistemology. The next section will describe the researcher’s ontological and epistemological perspectives.

Table 5-1 Paradigm Features in Social Sciences		
Issue	Positivist	Interpretivist
Reality	<i>Objective and singular</i>	<i>Subjective and multiple</i>
Researcher-participant	<i>Independent of each other</i>	<i>Interacting with each other</i>
Values	<i>Value free= unbiased</i>	<i>Value laden = biased</i>
Researcher language	<i>Formal and impersonal</i>	<i>Informal and personal</i>
Theory and research design	<i>Simple determinist</i> <i>Cause and effect</i> <i>Static research design</i> <i>Context free</i> <i>Laboratory</i> <i>Prediction and control</i> <i>Reliability and validity</i> <i>Representative surveys</i> <i>Experimental design</i> <i>Deductive</i>	<i>Freedom of will</i> <i>Multiple influences</i> <i>Evolving design</i> <i>Context bound</i> <i>Field/ethnography</i> <i>Understanding and insight</i> <i>Perceptive decision making</i> <i>Theoretical sampling</i> <i>Case studies</i> <i>Inductive</i>

(Source: Malhotra and Birks 2007)

5.2.1 Ontology and Epistemology

Ontology is concerned with the “nature of reality” (Bryman 2004) or the “theory of what exists” (Sayer 1992). In other words, ontology pertains to the assumptions that the researcher has about how the world works (Saunders et al. 2007). This study subscribes to the ontological view that social phenomena and their meaning exist independently of social actors. This view is described as “objectivism”, which considers that social phenomena or entities exist “in reality external to social actors concerned with their existence.” (Saunders et al 2007, p. 110).

Epistemology, on the other hand, is concerned with questions of what knowledge is acceptable in a particular discipline (Bryman 2004). This research adopts a “positivist” stance towards scientific enquiry, which has steered the investigation of the consumer brand relationships in virtual brand communities in this research. In contrast to researchers adopting the Interpretivist paradigm, positivists embrace “value freedom” (see Table 5-1), which means that the researcher is detached from the subjects of study (Delanty 1997).

The positivist epistemological view of the world holds that what can be observed will lead to the production of credible data. Such an approach develops hypotheses and structured methodology with the goal of future replication of the investigation. Generally, positivists aim to quantify observations so that they can be subjected to statistical analysis (Bryman 2004, Bryman and Bell 2007). Although positivism is viewed as predominately quantitative, which it mostly is, researchers sometimes use qualitative techniques in this paradigm, such as conducting interviews to develop scale items (Denzin and Lincoln 2003, Hunt 2003).

A main criticism of positivism is that it is unrealistic in its approach in studying social reality. It is argued that positivism lacks the understanding of social phenomena because it fails to identify the meaning people attach to such phenomena (Saunders et al. 1997). On the other hand, the quantitative approach and methods are arguably more representative and reliable in producing objective results (Sumner and Tribe 2004). Saunders et al. (1997) argue that the economic collection of large amounts of data, the clear theoretical focus from the beginning of the research, the establishment of causality between variables, and easily comparable data are important advantages of positivism. The positivist paradigm also has the advantage of being able to produce replicable and generalisable results due to its use of quantitative techniques. The following section will elaborate on the research design that fits the positivist stance of this study.

5.3 Research Design

The researcher has adopted a cross-sectional research design to address the objectives of this study. The cross-sectional research design “entails the collection of data on more than one case (usually quite a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association” (Bryman 2004, p. 41). In contrast, the longitudinal research design measures the same sample of the population on multiple occasions for the duration of the research. (Malhotra and Birks 2007). The researcher has preferred to adopt the cross-sectional design over other research designs because this

study's aim is to capture past experiences and preferences of consumers in virtual brand communities.

The cross-sectional design provides representative sampling due to the large population elements included in the research and aids in the reduction of response bias. Bryman (2004) explicates that cross-sectional research provides for reliability and external validity and also enables examining patterns of associations in the data. Moreover, this research design allows for generalizations of the relationships between variables.

There are also disadvantages to the cross-sectional research design (Bryman 2004, Malhotra and Birks 2007). Cross-sectional research is conducted at one point in time and does not capture the change in the variables of interest. In addition, it is not well equipped to collect large amounts of data because it focuses on a point in time, so data will be only collected for one event as opposed to the panel (longitudinal) research (Malhotra and Birks 2007). Since data is collected only once, the accuracy of the data may be lower in cross-sectional data compared to longitudinal data (Malhotra and Birks 2007). Internal validity is typically weak in the cross-sectional research design because it is difficult to establish a causal direction when contrasted with longitudinal research design (Bryman 2004). After weighing up the pros and cons, the researcher has decided that the cross-sectional research design is suitable to address the objectives of this study. The following section will describe the research methods adopted in this study.

5.4 Research Methods

For the purposes of this study, both qualitative and quantitative data collection techniques were adopted. Qualitative research methods were useful at the exploratory phase of this research whereas quantitative methods were used in the main phase of the study. The following section details the qualitative data collection employed in this study. It will be followed by a description of the quantitative data collection phase. Table 5-2 summarizes the methods of data collection used in this study.

Table 5-2 Methods of Data Collection			
Method	Description	Number	Year
Literature Review	Books, academic journals, conference proceedings, and Internet websites.	-	October 2007 to January 2012
Focus Groups And e-mail interviews	Conducted two focus groups in closed groups on Facebook.com. Respondents were all 18 years and older. There were five respondents in each group. Also another group of respondents was interviewed via e-mail. The objective of the focus groups were to explore the relationships between the proposed constructs and to develop items to measure participation in virtual brand communities.	Two Focus Groups One Email Group	November 2010 Three weeks
Sorting Round	Sorting of questionnaire items to establish content validity.	One Round	February 2011
Pilot Study	Web based (Facebook and e-mail) and paper based questionnaire.	79 Usable Responses	March 2011 to May 2011
Main Study Survey Questionnaire	Web-based questionnaire through an online consumer panel in the UK.	436 Usable Responses	July 2011 to August 2011

(Source: This Research)

5.4.1 Qualitative methods

The qualitative phase of this study was useful in filling the gaps in the understanding of the participation construct, as well as providing useful items for the proposed measures (Morgan 1988, Krueger 1994). The qualitative phase also aided understanding of how the consumers view relationships with brands. The literature review showed that there is a gap in the understanding of such relationships. Although research has shown that consumers connect brands to their self-concept (Escalas 2004, Escalas and Bettman 2003), little research has shed light on virtual communities and consumer-brand relationships. It is, therefore, important to understand the consumers' perceptions of the notion of consumer-brand relationships in the context of social networking sites.

The qualitative tool that was used in this research was focus groups, which are useful because they can bridge the social and cultural differences between the research and study subject (Malhotra and Birks 2007). Group interviews or focus groups are an effective and popular technique of gathering qualitative data at the exploratory stage of any research. The idea behind focus groups is that groups interact with each other and they "feed" off each other, which may be more

revealing than individual interviews (Bryman 2004, Malhotra and Birks 2007). The interaction in focus groups can provide insights that the researcher had not anticipated or thought about (Mann and Stewart 2000). A focus group usually has around six to ten members (Malhotra and Birks 2007). It is important to have several groups since the ideas from one group can be used to prompt discussions and insights in other groups (Churchill and Iacobucci 2002).

There are a number of advantages to the use of focus groups as a mode of investigation. Focus groups allow for snowballing of ideas whereas in personal interviews the subject may not be challenged (Bryman 2004, Mann and Stewart 2000). Through the use of focus groups, a large amount of data can be garnered in a short time (Mann and Stewart 2000). In addition, focus groups are cost-effective when compared to personal interviews (Krueger 1988 cited in Mann and Stewart 2000). However, there are some limitations to relying on the focus group technique, including:

- a) The researcher may have less control over the process of the focus group when compared to personal interviews;
- b) The data generated may be difficult to analyse;
- c) The group interview may be difficult to organize;
- d) The transcription of the recording of the interviews is time-consuming;
- e) There are potential group effect problems (e.g. expression of culturally expected views and dominant speakers); and,
- f) There are some contexts in which focus groups may cause discomfort to participants, such as in socially sensitive topics (Bryman 2004, and Mann and Stewart 2000).

In these circumstances, it may be better to use personal interviews as a data collection technique. In this study focus groups were used to generate hypotheses to be quantitatively tested and to generate items for the participation constructs (Churchill and Iacobucci 2002). The results of the focus group analysis will be presented in Chapter 6.

5.4.2 Focus Groups

The qualitative stage of this study comprised of setting up and running focus groups. The focus group discussions aimed at exploring the nature of consumers' participation in virtual brand communities. In this study, the focus group discussions were conducted in closed groups created on Facebook in order to benefit from varied user backgrounds that may not be accessible in a real life setting. Adopting the online platform to conduct the focus groups gave participants the chance to voice their real opinions. The participants might otherwise be intimidated to share their views because of the physical presence of others. The groups were created in November 2010 and lasted for three weeks.

The participants of the group were recruited through snowball sampling and only those invited were able to join the group. Current users of Facebook were approached and requested to join the group discussion. They were then asked to invite their friends and family to the group. Three groups were created; however, one group was inactive regardless of the researcher's encouragement. Therefore, the researcher opted to e-mail its members and conduct interviews based on that medium. The lack of engagement may be because the members of that particular group did not feel comfortable with the online discussion format. The other two focus groups were conducted entirely on the Facebook website. There were five individuals in each online group.

The focus group members consisted of Facebook users from various backgrounds and nationalities. Members who joined the focus group also invited their contacts to join the discussion. This enabled the discussion to capture various perspectives of commercial brands' presence on Facebook pages. The description of the research and purpose of the focus group were posted in the groups beforehand. In addition, participation consent was requested through an explicit post on the group wall. The participants were asked to read both the introductory letter and the consent form, and post their agreement to join the study or leave the group if they do not wish to participate. Members of the group who agreed to participate were also requested to provide their demographics so as to aid other members in breaking the ice. Table 5-3 presents the demographics of the focus group participants.

Table 5-3 Demographics of Focus Group and E-mail Interviews Participants

Age	22 to 51
Nationalities	Australian British Canadian Malaysian Omani
Occupations	Undergraduate students Postgraduate Students Professionals Managers Academics Economist

(Source: This Research)

Since the focus groups members came from different time zones, the researcher sought to post questions and give users the time to read and respond to them in an asynchronous manner or ‘non-real time discussion’ (Mann and Stewart 2000). The nature of Facebook posting allows users to respond directly to each question, which enabled the members to read what others posted and engage in a lively discussion. The researcher intervened and probed where it was necessary to direct and moderate the discussion.

The coding and themes for the focus groups were set based on theory and previous literature. The researcher explored if users of Facebook engaged in any of the practices suggested by Schau et al. (2009). The researcher was also interested in general activities on Facebook, memberships of ‘Brand’ pages on Facebook, identification with brand and brand community, activities consumers’ conducted on the brand pages on Facebook, and the consumers’ thoughts and feelings after participation. The researcher used a word processing program to analyse the data after it had been copied and pasted into the program (Krueger 1994). Based on the analysis conducted, the focus groups generated a number of useful items to measure participation. The detailed results of the focus groups are presented in Appendix B. An elaborate discussion of the participation theme will be presented in Chapter 6.

5.4.3 Quantitative Method

The quantitative phase of this study was broken down into two studies, pilot and main studies. The pilot study involved designing and building the paper and electronic versions of the questionnaire. The pilot study also assessed the reliability and validity of the measurement scales that were developed to capture the latent constructs. The description of the methods employed in the pilot study will be explained in Chapter 6. After purifying the scales in the pilot study, the researcher launched the main study's electronic survey that targeted official 'brand' pages users on Facebook. The main study recruited respondents through the use of an online panel. Section 5.5 will elaborate on the sample of the main study. The following section will present how the study's constructs were operationalised.

5.4.4 Operationalisation of Study Constructs

The researcher has operationalised the proposed constructs by "borrowing" existing scales from the literature. The items used to measure the constructs are presented below. The only exception are the participation scales that were developed for the purpose of this study. All scales were measured on 7-point Likert scale, ranging from (1) 'strongly disagree' to (7) 'strongly agree' (unless otherwise indicated). The development of the participation scales will be presented in Chapter 6.

Screening and Warm-up Questions

A number of questions were used to screen out the respondents who are not of interest to this study. Facebook usage and membership in brand pages are the two criteria that were required for respondents to continue with the remainder of the questionnaire. Two warm-up questions were used to aid respondents in remembering what brand pages they had joined on Facebook. Finally, the respondents were asked to name the company brand page they participate on the most. This question was central because the remainder of the survey focused on the brand respondents named in this question. Table 5-4 presents the screening and

warm-up questions used in this study. In the warm-up, ten pairs of adjectives were used to measure respondents' attitude towards their chosen brand.¹

Table 5-4 Screening and Warm-up Questions

Do you use Facebook?
 Are you a member or a fan of a "Brand" page on Facebook?
 How many official Brand pages on Facebook have you joined?
 Name three official Brand pages on Facebook of which you are a member:
 What is the "company" Brand pages on Facebook that you participate in the most?

(Source: This Research)

Operationalisation of Brand Identification

Brand identification was measured using six items borrowed from Bhattacharya et al. (1995), Kuenzel and Halliday (2008), and Mael and Ashforth (1992). The respondents were presented with six statements that assessed their identification with the brand. Table 5-5 presents the items of the brand identification scale.

Table 5-5 Items of the Brand Identification Scale

1. When someone criticizes [Brand], it feels like a personal insult.
2. I am very interested in what others think about [Brand].
3. When I talk about [Brand], I usually say 'we' rather than 'they'.
4. When [Brand] succeeds, it feels like I have succeeded.
5. When someone praises [Brand], it feels like a personal compliment.
6. If a story in the media criticizes [Brand], I would feel embarrassed.

(Source: Bhattacharya et al. 1995, Kuenzel and Halliday (2008), Mael and Ashforth 1992)

¹ To assess the respondents' attitudes towards the brand, ten pairs of adjectives were used on a 7-point semantic differential scale that was borrowed from Batra and Ahtola (1990) and Spangenberg et al. (1997). The adjectives used for hedonic attitude were: dull/exciting, not fun/fun, unpleasant/pleasant, not thrilling/thrilling, enjoyable/unenjoyable. The adjectives used for utilitarian attitude were: useful/useless, necessary/unnecessary, functional/not functional, helpful/unhelpful, beneficial/harmful.

Operationalisation of Brand Community Identification

To capture the respondents' identification with the brand community, a seven-item scale was adapted from Woisetschlager et al. (2008). Table 5-6 presents the items of the brand community identification scale.

Table 5-6 Items of the Brand Community Identification Scale

1. ...I identify myself as belonging to the [Brand] community.
2. ...I see the community plays a part in my everyday life.
3. ...I see myself as atypical and representative member of the community.
4. ...it confirms in many ways my view of who I am.
5. ...I can identify with the [Brand] community.
6. ...I have strong feelings for the [Brand] community.
7. ...I feel like I belong in the [Brand] community.

(Source: Woisetschlager et al. 2008)

Operationalisation of Brand Attachment

The brand attachment construct was operationalised by using items developed by Park et al. (2010). The brand attachment scale measures brand-self connection (five items) and brand prominence (five items). All of the items were measured on an eleven-point scale, varying from (0) 'not at all' to (10) 'completely'. Table 5-7 presents the items of the brand attachment scale.

Table 5-7 Items of the Brand Attachment Scale

Brand-Self Connection	
1.	To what extent is [Brand] part of you and who you are?
2.	To what extent do you feel personally connected to [Brand]?
3.	To what extent do you feel emotionally bonded to [Brand]?
4.	To what extent is [Brand] part of you?
5.	To what extent does [Brand] say something to other people about who you are?

Brand Prominence	
1.	To what extent are your thoughts and feelings toward [Brand] often automatic, coming to mind seemingly on their own?
2.	To what extent do your thoughts and feelings toward [Brand] come to your mind naturally and instantly?
3.	To what extent do your thoughts and feelings toward [Brand] come to mind so naturally and instantly that you don't have much control over them?
4.	To what extent does the word [Brand] automatically evoke many good thoughts about the past, present, future?
5.	To what extent do you have many thoughts about [Brand]?

(Source: Park et al. 2010)

Operationalisation of Brand Loyalty

Brand loyalty was measured using items adopted from Ellonen et al. (2010), Jamal and Anastasiadou (2009), and Yoo et al. (2000). Table 5-8 presents the items of the brand loyalty scale.

Table 5-8 Items of the Brand Loyalty Scale

1. It is very important to me to buy [Brand] over another brand.
2. I always buy [Brand] because I really like this brand.
3. If [Brand] is not available, I will go to another store.
4. I think I am committed to [Brand].
5. I consider myself to be loyal to [Brand].

(Source: Ellonen et al. 2010, Jamal and Anastasiadou 2009, and Yoo et al. 2000)

Operationalisation of Perceived Quality

Perceived quality was measured using the scale that was developed by Yoo et al. (2000). The scale consists of three positively worded items and one negatively worded item. Table 5-9 presents the perceived quality scale.

Table 5-9 Items of the Perceived Quality Scale

1. [Brand] is of high quality.
2. [Brand] is a reliable brand.
3. [Brand] must be of very good quality.
4. [Brand] appears to be of very poor quality. (negatively worded)

(Source: Yoo et al. 2000)

Operationalisation of Willingness to Pay a Price Premium

To measure the consumer's willingness to pay a price premium, four items were borrowed from Yoo et al. (2000). The second item in the scale is a negatively worded item. The last item was measured on an eight-point scale of: 0%, 5%, 10%, 15%, 20%, 25%, 30%, and more. Table 5-10 presents the willingness to pay a price premium scale.

Table 5-10 Items of the Willingness to Pay a Price Premium Scale

1. I would be willing to pay a higher price for [Brand] over other brands.
2. I would switch to another brand if the price of [Brand] goes up. (negatively worded)
3. I would continue to do business with [Brand] if its prices increase a bit.
4. I am willing to pay ____ % more for [Brand] over other brands.

(Source: Yoo et al. 2000)

Operationalisation of Word of Mouth

Word of mouth was measured using items borrowed from Harrison-Walker (2001) and Zeithaml et al. (1996). The word of mouth scale consisted of two dimensions, action (four items) and valence (three items). Table 5-11 presents the items of the word of mouth scale.

Table 5-11 Items of the Word of Mouth Scale

Word of Mouth Action

1. I mention [Brand] to others quite frequently.
2. I've told more people about [Brand] than I've told about most other brands.
3. I seldom miss an opportunity to tell others about [Brand].
4. When I tell others about [Brand], I tend to talk about the brand in great details.

Word of Mouth Valence

1. I have only good things to say about [Brand].
2. In general, I do not speak favorably about [Brand].
3. I say positive things about [Brand] to other people.

(Source: Harrison-Walker 2001, Zeithaml et al. 1996)

Operationalisation of Motivation to Participate

Motivation to participate on brand pages on Facebook was measured using a combination of items used by Arnold and Reynolds (2003), Childers et al. (2001), Jamal et al. (2006), Nambisan and Baron (2007, 2009), Wasko and Faraj (2000), and Wiertz and Ruyter (2007). Table 5-12 presents the motivation scale items.

Table 5-12 Items of the Motivation to participate Scale	
Hedonic Motivation to Participate	
1.	...it is fun.
2.	...I enjoy being on [Brand] Facebook page.
3.	...it would make me feel good.
4.	...it would be exciting.
5.	...I enjoy socializing with other members.
Utilitarian Motivation to Participate	
1.	...I can find information about [Brand] quickly.
2.	...I want to get answers to [Brand] related questions.
3.	...I want to enhance my knowledge about the [Brand]'s product and its usage.
4.	...I want to obtain solutions to specific product-usage related problems.
5.	...it is convenient to communicate with other consumers online.

(Source: Arnold and Reynolds 2003, Childers et al. 2001, Jamal et al. 2006, Nambisan and Baron 2007, 2009, Wasko and Faraj 2000, and Wiertz and Ruyter 2007)

Operationalisation of Member Type

The types of members of “Brand” pages on Facebook was captured using an ordinal scale borrowed from Wang and Fesenmaier (2004), who adopted the four types of virtual brand communities users proposed by Kozinets (1999), namely: tourist, mingler, devotee, and insider. Table 5-13 presents the question used to operationalisation member type in virtual brand communities on Facebook.

Table 5-13 The Question Used to Classify Member Types in Brand pages

How do you classify yourself as a community member in terms of making contributions to the community?

- **Tourist:** who lacks social ties to the group, and seldom contributes to the community.
- **Mingler:** who maintains somewhat strong social ties with the group, and sometimes contributes to the community.
- **Devotee:** who maintains strong social ties with the group, enthusiastic about community activities and contributes to the community often.
- **Insider:** who maintains very strong social and personal ties with the group, and very actively contributes to the community.

(Source: Wang and Fesenmaier 2004)

A funnel approach was adopted for the question sequence in the questionnaire (Churchill and Iacobucci 2002, Malhotra and Birks 2007). The questionnaire began with general screening questions about Facebook usage and memberships. This was followed by questions at the brand level. Questions about the virtual brand community were introduced in the second half of the questionnaire. Each section began with instructions on how to respond to each question. The pilot study survey had 26 questions in the survey, which were categorised in 11 sections. The survey questions breakdown as follows:

- a) Facebook usage;
- b) Perceived quality;
- c) Brand identification;
- d) Word of mouth;
- e) Willingness to pay price premium;
- f) Brand loyalty;
- g) Brand attachment;
- h) Identification with virtual brand community;
- i) Motivation to participate in virtual brand community;
- j) Consumer practices in Facebook Brand pages; and,
- k) Demographics.

The demographic questions were left to the end because such questions may alienate participants (Churchill and Iacobucci 2002). A copy of the pilot study survey is given in Appendix E.

5.5 Sampling Design

Any research study needs to develop a sampling strategy to increase the validity and the representativeness of the data collected (Bryman 2004). The following sections will focus on key sampling design areas, including the sampling frame, sample method, and sample size as described by Churchill and Iacobucci (2002).

5.5.1 Drawing the Main Study's Sample

The target population of this study is Facebook users who are members of commercial brand pages. This is similar to the population targeted in the pilot study. The major criterion was that respondents were members of "official" commercial brand pages on Facebook. In addition, the researcher is interested in those users who are based in the United Kingdom. This study is interested in capturing the nature of participation of brand patrons in the year 2011. The population elements of interest are males or females aged 18 or above. The target population are those users who possess login credentials to the Facebook website and who have 'liked' or joined official 'brand' pages on the platform. Table 5-14 summarizes the target population of this study.

Table 5-14 Target Population of the Main Study	
Elements	Male or female aged 18 or over who use Facebook
Sampling Units	Individuals (male or female) who possess a Facebook account and who have joined an official commercial 'Brand' page on the social networking website since its inception.
Extent	Facebook Users who are based in the United Kingdom
Time	2011

Although there are a number of brand page ranking websites (e.g. fanpagelist.com) that provide the number of page fans for major consumer brands, celebrities, and organizations, it does not suffice as a sampling frame. For example, the listings of the number of fans for the top brand pages do not provide a mailing list nor do they provide contact information. There is also no way of knowing the authenticity of the numbers since it is difficult to assert which accounts are real and which are used for spamming. This is analogous to the problem of using telephone directories. Moreover, from the experience of the pilot study, it was evident that there are obstacles to sampling Facebook users from the website directly or from virtual brand communities. Due to these challenges, the researcher approached an online consumer panel company and surveyed their members to acquire data for this study. To reduce sampling frame error, screening questions were used to filter out respondents who do not satisfy the criteria for the target population. However, this method cannot account for the elements that have been omitted (Malhotra and Birks 2007).

The lack of an appropriate sampling frame led the researcher to use a convenience non-probability sample. Non-probability sampling relies on the judgment of the researcher as opposed to probability sampling, which relies on chance (Malhotra and Birks 2007). This study employed convenience sampling by using the services of an online panel company, VISION CRITICAL. Vision Critical manages a UK based online panel with around 60,000 members. Table 5-15 lists the characteristics of Vision Critical's UK online panel. However, this sampling approach has a number of limitations. Specifically it does not allow for generalization to the population because it is difficult to determine whom the sample represents (Bryman and Bell 2007, Churchill and Iacobucci 2002, Saunders et al. 2007). This method of sampling

also introduces bias to the selection process (Malhotra and Birks 2007). Convenience sampling was used because the focus of this study is the theoretical relationships of the proposed constructs rather than generalization to the population, which is not uncommon in online research (Best and Kruger 2004, Bryman 2004, Smith 1997, Yun and Trumbo 2000).

Table 5-15 Characteristics of Vision Critical UK Online Panel	
Gender	
	100.0%
Male	39.1%
Female	60.9%
Age	
	100.0%
Under 18	0.2%
18-24	21.1%
25-34	24.1%
35-44	18.3%
45-54	16.4%
55-64	12.7%
65+	7.3%
Working Status	
	100.0%
Working	56.3%
Not Working	43.7%
Marital Status	
	100.0%
Single	40.2%
In Significant Relationship	59.8%

(Source: Vision Critical)

There are no rules with regards to sample size when non-probability sampling is used (Saunders et al. 2007). The sample size in this study is based on generalizations being made to theory, within the limitations of the study, rather than the population (Saunders et al. 2007). The sample size is also driven by the data analysis methodology used in this research, namely structural equation modelling (SEM). A sample size of between 200 to 400 is advisable for conducting SEM analysis (see Hair et al. 2006, Byrne 2010). However, Kline (2005) has noted that there is no perfect sample size number but rather there are three categories of sample size: small ($N < 100$), medium ($100 < N < 200$), and large ($N > 200$).

In SEM analysis, there are a number of issues that need to be addressed when considering sample size; these include the number of latent variables and the

parameters of the structural model. According to Jackson (2003), cited in Kline (2005), the N:q rule applies when using the maximum likelihood (ML) method of estimation. The minimum sample size should be “in terms of a ratio of cases (N) to the number of model parameters that require statistical estimates (q)” (Kline 2005, p. 12). The ideal cases to parameters ratio should be 20:1 but ratios of 10:1 and 5:1 are not uncommon (Kline 2005). However, lower ratios might reduce trust in the SEM results (Kline 2005). Hair et al. (2006) and Garver and Mentzer (1999) have suggested that sample size in SEM should be at least 200 observations to obtain trustworthy estimates. The sample size that was sought for in this study was 500 Facebook users. The actual usable sample size achieved was 436, which meets the basic thresholds of sample size for SEM analysis.

The main study used factor analysis and this was accounted for when deciding on the sample size. Hair et al. (2006) noted that the rule of thumb when it comes to factor analysis design is to have a minimum of five observations per variable. The minimum absolute sample size should be 50 observations (Hair et al. 2006). Given that the main study has 74 variables, the targeted sample size of 500 will exceed the minimum required for the factor analysis, where $500/74=6.76$. The actual admissible sample size obtained in this study was 436 which still yielded a ratio higher than five.

The sampling unit in the main study is the Brand page member. The sampling elements self-selected themselves after receiving email invitations that were sent by VISION CRITICAL, which were based on the members' interests and the number of surveys they had completed during the month before they joined the study. The panel members followed the survey link and answered the questions based on the screen prompts. The online panel members received rewards for completing the surveys forwarded to them by VISION CRITICAL. To avoid questionnaire fatigue, the members were invited based on a low number of invites during the period prior to this study. The sampling units were approached based on their use of the Facebook website and interest in brands. A total of 501 completed electronic surveys were received. The survey sample was screened for the population criteria and 436 cases were deemed permissible for data analysis. The inadmissible cases

were of non-commercial brand page members and, therefore, did not fit the population criteria.

5.6 Data Analysis Methodology

Several data analysis methods were used to address the objectives of this main study. The research used descriptive statistics, factor analysis, analysis of variances, and SEM to analyse the data.

5.6.1 Descriptive Statistics, Factor Analysis, and ANOVA

The descriptive statistics used in this study include estimation of the central tendency (mean), dispersion (standard deviation), and shape of distribution (skewness and kurtosis). In the earlier sections, the constructs' level of measurement has been detailed as being based on seven-point Likert scale. Likert scale is a good representation of an interval measurement scale (Byrne 2010, Kline 1998) and it also allows powerful statistical analysis such as t-tests, correlations, factors analysis, and regression analysis (Malhotra and Birks 2007). Furthermore, interval scales should be used for the multivariate statistical analysis (Hair et al. 2006). There are a number of variables (such as demographics and some Facebook user classifications) that are based on both nominal and ordinal scales. These were analysed based on descriptive statistics (such as frequencies).

Factor analysis was used to test the unidimensionality of the new scales proposed in this study. The researcher examined the data for the applicability of factor analysis by testing the degree of intercorrelations among the variables. The Kaiser-Meyer-Oklin (KMO) and the Bartlett Test of Sphericity provided an indication of the appropriateness of conducting the factor analysis. This means that the data matrix has sufficient correlations in order to apply the factor analysis (Hair et al. 2006). The Varimax rotation method was used with the principle component extraction method. The factor analysis results are presented in Chapter 6.

Analysis of variance (ANOVA) was used to test the difference in the means of different types of brand page members. One-way ANOVA was conducted, which involved sample means of one independent factor, being compared across types of member (Tourist, Mingler, Insider, and Devotee). These member types represent an increase in participation and community engagement on brand pages in Facebook. The one-way ANOVA was used to compare the sample means between these different groups. The criterion to judge if there are significant differences between the groups was to calculate the F ratio. If the F ratio is high, it is an indication that there is more variability between the groups (Churchill and Iacobucci 2002, Hinton 2004, Janssens et al. 2008). The first test conducted was the ANOVA test. The ANOVA 'F' ratio was large and the null hypothesis was rejected. Consequently, the means of the groups are not equal; however, it did not indicate which means were different (Churchill and Iacobucci 2002, Hinton 2004, Malhotra and Birks 2007). The homogeneity of variance assumption was tested as a result of rejecting the null hypothesis. Based on the results of testing the homogeneity of variance assumptions, the researcher choose from among the post-hoc tests to find which groups means differs significantly from the others.

5.6.2 Structural Equation Modeling SEM and Hypotheses Testing

The data analysis in this study aimed at examining the interrelationships of multiple independent and dependent variables that pertain to virtual brand communities and brand equity. SEM has been recommended as a confirmatory (i.e. hypothesis-testing) approach when analysing relationships in such proposed models (Byrne 2010, Hair et al. 2006, Anderson and Gerbing 1988). Another strong suit of SEM is that it can be used to evaluate reliability and validity of measurement (Anderson and Gerbing 1988). In addition, SEM provides a flexible and powerful tool to simultaneously test hypothesized relationships (Byrne 2010, Hair et al. 2006). Consequently, SEM was selected as the primary data analysis technique. The statistical package AMOS 18 was used to conduct the analysis (Byrne 2010).

The SEM techniques employed in this study used the ML estimation method, which is the most the popular approach in theory testing, is efficient, and tolerates departures from normality (Anderson and Gerbing 1988, Kline 2005, Hair et al.

2006). A two stage testing process was followed, which allows for assessment of construct validity of the measurement model before the simultaneous estimation of the measurement and structural submodels (Garver and Mentzer 1999, Byrne 2010). Hair et al. (2006) and Anderson and Gerbing (1988) maintain that the two-step model is a far more beneficial approach to follow in comparison to a one step model of SEM.

In the first stage of SEM analysis, the measurement model provides “a confirmatory assessment of convergent validity and discriminant validity” (Anderson and Gerbing 1988, p. 411). In validating the measurement model, construct validity was tested through assessing construct unidimensionality, reliability, convergent validity, discriminant validity, and predictive validity (Garver and Mentzer 1999). Since the latent variables are unobserved, they are linked to more than one observable variable or indicators. The structural model is developed in the second stage of SEM analysis, which specifies the hypothesized causal relationships among the latent variables or factors (Kline 2005, Hair et al. 2006, Byrne 2010).

Validity was established after first assessing the goodness-of-fit (GOF) and construct validity of the measurement model. GOF is concerned with how well the specified model reproduces the covariance matrix among the indicator items (Hair et al. 2006). In general, the closer the values of the estimated and observed matrices are, the better the fit. This study used two basic groups of GOF measures: absolute measures and incremental measures (Arbuckle and Wothke 1999, Byrne 2001, Hair et al. 2006, Kline 2005).

The first GOF measure used by the researcher to assess the measurement model was the Chi-square statistic. Chi-square χ^2 is a fundamental measure of fit in SEM. The Chi-square test χ^2 provides a statistical test of the difference between the estimated and the observed matrices. Two important issues are critical to consider when using chi-square χ^2 . First, χ^2 is influenced by sample size, when the sample size increases so does the value of χ^2 (Hu and Bentler 1995). The model degrees of freedom also influence the χ^2 GOF test, where the χ^2 value is influenced by the number of parameters in the model (Hair et al. 2006, Kline 2005).

The Chi Square statistic is used to test the null hypotheses that the observed and estimated covariance matrices are equal. The model fit becomes less perfect when the value of χ^2 is high or increases, which indicates a possible need to respecify the model (Hu and Bentler 1995). In addition, the p value is an unimportant indicator of significance but in the case of SEM the researcher is looking for large values as opposed to traditional significance values of $p \leq 0.05$ (Hair et al. 2006). In SEM, p shows the probability that the estimated and observed covariance matrices are equal. Smaller p-values indicate a lower chance that the covariance matrices are equal. If the theory is supported by the chi-square test then we should see a low chi square value and a large p value. Hu and Bentler (1995) concluded that Chi-square may not be a suitable guide to model adequacy. Therefore, the researcher employed other GOF indices to tackle the shortcomings of the χ^2 statistic test.

5.6.3 Absolute fit measures

Absolute fit indices measure how the model specified by the researcher reproduces the observed data. The χ^2 statistic is the most fundamental absolute fit index and it is the only statistically based fit measure (Hair et al. 2006). This absolute fit measure assesses the proposed model to no model at all (Hu and Bentler 1995). This fit measure has been discussed above.

Goodness-of-fit index (GFI) has been used by the researcher to assess the proposed and alternative models in this study. GFI was introduced as an index that is not as susceptible to sample size since it does not incorporate sample size in its calculation. GFI “estimates the proportion of covariance in the sample data matrix explained by the model” (Kline 2005, p. 207). GFI compares the hypothesized model to no model at all (Hu and Bentler 1995). This index is still indirectly influenced by sample size since N influences the sampling distribution. GFI ranges from 0 to 1, where higher values indicate better goodness-of-fit (Hu and Bentler 1995). Traditionally, a value of 0.90 is considered good, although some researchers argue for a value of 0.95 (Hair et al. 2006).

The second GOF index used in this study was the Root Mean Square Error of Approximation (RMSEA). RMSEA is a good index to use when the χ^2 GOF test statistic rejects a model with a large sample or a large number of observed variables (Hair et al. 2006). RMSEA is recommended because it aims at correcting for the complexity of the model and the sample size by including both in the calculation of the index. In addition, RMSEA also has a known distribution and it provides a better representation of how the model fits a population and the sample used for estimation (Hair et al. 2006). This index is also part of what some researchers may call badness-of-fit measures (Kline 2005). Arbuckle and Wothke (1999) suggest that a good fit would be indicated by an RMSEA value under 0.08. A RMSEA value of zero indicates the best fit (Kline 2005). A useful facet of the RMSEA is that it is highly sensitized to model misspecification (Byrne 2001).

5.6.4 Incremental Fit indices

Incremental fit indices differ from absolute fit indices in that “they assess how well a specific model fits relative to some alternative baseline model” (Hair et al. 2006, p. 708). A common baseline model is referred to as a null model. A null model is one that assumes all observed variables to be uncorrelated (Hair et al. 2006). This class of indices is concerned with the “improvement in fit by the specification of related multi-item constructs.” (Hair et al. 2006, p. 749). There are a number of indices that fall into this group, which are sometimes referred to as comparative fit indices. This study used CFI and TLI to assess the fit of the hypothesized model and the alternative models.

CFI is an improved version of the NFI, which also ranges between 0 and 1 (Bentler 1990). CFI is more popular with researchers because it is insensitive to model complexity (among other things). Usually CFI values of 0.90 or above are associated with a good fit. Another useful index that compares a theoretical model and a baseline null model is the TLI. The difference between TLI and CFI is that TLI is not normed and its values can be below 0 and be above 1. Models with good fit usually have values close to 1. TLI is very similar to CFI and would provide similar results. In addition, both are less sensitive to sample size in comparison to other indices. Revised cutoff points for CFI and TLI were recently suggested in the

literature. A model is considered to have good fit if the CFI and TLI values are 0.95 or above (Hair et al. 2006, Byrne 2001). In combination with χ^2 , GFI, CFI, TLI, RMSEA were used to evaluate both the measurement and structural models. Table 5-16 provides a summary of the GOF indices used in this study.

Table 5-16 Summary of Alternative Goodness-of-fit Indices used in this study

Fit Index	Description	Acceptable fit
Measure of Absolute Fit		
Chi-Square (χ^2)	The test of a null hypothesis that the estimated variance-covariance matrix deviates from the sample. Greatly affected by sample size. The larger the sample, the more likely it is that the p-value will imply a significant difference between model and data.	Non significant (χ^2) at least p-value > .05
Normed Fit Chi-Square (χ^2/df) (df=degrees of freedom)	Chi-Square statistics are only meaningful taking into account the degrees of freedom. Also regarded as a measure of absolute fit and parsimony. Values close to 1 indicate good fit but values less than 1 imply over fit.	Values smaller than 2 and as high as 5 are a reasonable fit.
Root Mean Square Error of Approximation (RMSEA)	Representing how well the model fits the population covariance matrix	Value .05 to .08 are adequate fit.
Goodness-Of-Fit Index (GFI)	Representing a comparison of the square residuals for the df.	Value >.95 good fit; .90 to .95 adequate fit.
Incremental Fit Measures		
Tucker-Lewis Index (TLI) as known as Buntler-Bonnet Non-Normed Fit Index (NNFI)	Comparative index between proposed and null models adjusted for degrees of freedom. Can avoid extreme underestimation and overestimation and robust against sample size. Highly recommended – fit index choice.	Value > .95 good fit; .90 to .95 adequate fit.
Comparative Fit Index (CFI) similar to relative Non-Centrality Index (RNI)	Comparative index between proposed and null models, adjusted for degrees of freedom. Interpreted similarly to NFI but may be less affected by sample size. Highly recommended as the index of choice.	Close to 1 very good fit; Value >.95 good fit; .90 to .95 adequate fit.
Source: Adapted from Hu and Bentler (1995), Byrne (2001), Arbuckle (2003), Kline (2005), Hair et al. (2006)		

5.7 Validity and Reliability

5.7.1 Unidimensionality

Unidimensionality must be achieved before reliability because reliability tests assume unidimensionality (Graver and Mentzer 1999). Unidimensionality means that a group of indicators point to the existence of one construct rather than multiple constructs (Steenkamp and van Trijp 1991), which can be tested and assessed using CFA by evaluating the goodness-of-fit indices. This study used CFI, CFI, TLI, and RMSEA fit indices to establish the unidimensionality of the proposed constructs. In addition, an EFA was used to assess the unidimensionality of the two new

participation constructs (Straub 1989). These were supplemented with other diagnostic tools, such as standardized residuals and modification indices.

5.7.2 Reliability of Research Measurement

Reliability is concerned with the consistency of the scale's results if the measurements were repeated (Malhotra and Birks 2007). There are several approaches to assess the reliability of a scale, such as test-retest, Cronbach's alpha, and reliability measures derived from confirmatory factor analysis (Hair et al. 2006, Malhotra and Birks 2007). In this study, the researcher employed Cronbach's alpha, item-to-total correlation and inter-item correlations to test the internal consistency of the scales. Hair et al. (2003) state that the generally agreed lower limit for Cronbach's alpha is 0.70 but it can be lowered to 0.6 in exploratory research. Researchers should note that, due to the positive relationship of Cronbach's alpha and the number of items in the scale, more strict requirements should be in place for scales with a large number of items. In addition, the researcher also used composite reliability or construct reliability (CR), a reliability measure derived from CFA, to test each scale's internal consistency (Fornell and Larcker 1981). The results of the scales reliability are reported in Chapter 7.

5.7.3 Validity of Research Measurement

Whereas reliability is concerned with the consistency of a scale, validity is concerned with whether the variability in the observed scores is caused by the construct of interest rather than systematic or random error (Malhotra and Birks 2007). It is important to establish content validity and construct validity alongside unidimensionality and reliability when developing any scale (Straub 1989). Validating instruments is important because it allows them to be tested across heterogeneous settings and times, it also promotes cooperative research efforts in the quest of scientific rigor (Straub 1989). This study aimed at establishing two types of validity, namely content validity and construct validity.

Content validity (or face validity) is a subjective but systematic assessment of how well the scale adequately and comprehensively measured what it set out to measure

(Bryman 2004, Malhotra and Birks 2007). Usually, this approach involves the researcher or an expert judge applying their knowledge and skill to assess whether the scales' items measure the latent constructs of interest (Straub 1989, Malhotra and Birks 2007, Hair et al. 2006). This study assessed content validity through the use of an expert judge who was a marketing academic with a background in consumer behaviour and who evaluated the items in the instrument and their representativeness in measuring the constructs of interest.

Construct validity is more stringent than content validity. It requires a good understanding of the constructs being measured and the relationships between the constructs in the study. In establishing construct validity, an agreement between the theoretical underpinning of the construct and the measurement scale is sought (Straub 1989). There are two sub-categories of construct validity: convergent validity and discriminant validity. Convergent validity is "the extent to which the scale correlates positively with other measurements of the same construct" (Malhotra and Birks 2007, p. 359, Bryman 2004). Therefore, convergent validity is concerned with the agreement of different rating scales that measure theoretically similar constructs. Construct validity is achieved when an item has a high correlation with another item that measures the same construct (Hair et al. 2006). The researcher used CFA to establish convergent validity of the items in the main study. The average variance extracted (AVE) was calculated to assess the convergent validity of the constructs. AVE measures the percentage of variance captured by a construct by showing the ratio of the sum of the variance captured by the construct and its measurement variance (Gefen et al. 2000 cited in Kamarulzaman 2006). Adequate convergent validity is achieved if the AVE values are 0.5 or above (Fornell and Larcker 1981, Hair et al. 2006). Chapter 7 reports the convergent validity results.

On the other hand, discriminant validity is the extent to which a measure "does not correlate with other constructs from which it is supposed to differ" (Malhotra and Birks 2007, p. 359). Individual items should represent one latent construct only (Hair et al. 2006). This kind of validity involves demonstrating the lack of correlation between different constructs (Malhotra and Birks 2007, Hair et al. 2006). In the main study, discriminant validity was established by comparing the AVE with

the squared correlation between the twelve latent constructs (Fornell and Larcker 1981). Discriminant validity was also established through a pairwise test where each pair of constructs was tested under two models, which are: constrained correlation equal to 1 and unconstrained correlation between the two constructs (Anderson and Gerbing 1988). The researcher then performed a chi-square difference test to establish the discriminant validity of the two constructs. If the unconstrained model has a lower chi-square value, and the difference is significant, then the constructs are discriminant (Anderson and Gerbing 1988). Chapter 7 reports the finding of the discriminant validity for the main constructs in the main study.

5.8 Summary

This chapter presented the methodology that was used to address this study's research questions and objectives. It opened with a description of the research paradigm adopted by the researcher. This was followed with an elaboration of the research design. A discussion of the research methods employed in this study was presented. The study utilized both qualitative and quantitative methods. Sampling design was also discussed in this chapter. The issues of sampling frame and sample size were presented and discussed. The data analysis techniques used in this research were outlined and explicated. This study used SEM to test the proposed research model and hypotheses. Finally, this chapter concluded with a brief discussion of issues of validity and reliability. The next chapter will present the results of the focus groups and pilot study.

Chapter 6: Participation Scale Development

6.1 Introduction

Chapter 5 presented the methodology that was followed in achieving the objectives of this study. This chapter aims to present the rationale and process for developing a new scale to capture the participation construct. Section 6.2 will present the reasons why the researcher deemed it important to introduce a new scale to measure participation in virtual brand communities. The pilot study stage will be discussed in Section 6.3. Section 6.3 will detail the process of developing and purifying the participation scales. It will also briefly present the purification of the other scales used in this research. Finally, Section 6.4 will summarise the chapter.

6.2 Rationale for Developing a New Participation Scale

To understand the consumers' behaviour in a virtual brand community, the researcher developed two sets of items to measure the frequency of consumer participation in such communities. The researcher aimed to expand on the limited posting and lurking view of participation that is prominent in the virtual brand community literature. Consequently, the researcher proposed two scales to measure participation and achieve a comprehensive approach to measure the construct. In contrast, the majority of existing scales measure either very broad activities or frequency of posting activity (see Li and Lain 2007, Nambisan and Baron 2009, Roy et al. 2004, Wu and Fang 2010, Yoo et al. 2002, Shang et al. 2006, Koh and Kim 2004, Nonnecke et al. 2006, and Ellonen et al. 2010). However, they tend to neglect practices such as those empirically identified by Schau et al. (2009). Previous measures have focused on: the number of postings made by customers in a company's online forum (Nambisan and Baron 2007); obtaining or giving information (Li and La 2007); efforts to stimulate the community; the value of comments posted to help others, excitement and motivation of posted messages and responses (Casalo et al. 2008); how often the consumers participate in activities of a particular brand community within a given time period (Algesheimer et al. 2005); level of participation (hours per week) and extent of active contribution (Wang and Fesenmaier 2004); the quantity of knowledge sharing (Chiu et al. 2006); participation and lurking time per week and posting time per month (Shang et al.

2006); and, frequency of member activity with respect to four aspects (i.e. participation in community operations, participation in subgroups or event of the community, regular participation on message boards, and chatting or e-mail with other members) (Yoo et al. 2002).

The conceptualization of participation in prior literature is very generic and there is little focus on specific behaviour that adds value to consumers and the brand. For example, it is not clear what consumers do when they chat or e-mail other members. Do they support them emotionally or do they tell stories about their favourite brand? Furthermore, the nature of obtaining and giving information (i.e. posting and lurking) and effort to stimulate the community is ambiguous in contrast to the practices identified by Schau et al. (2009).

The framework proposed by Schau et al. (2009) is more extensive and enriches the understanding of consumer participation in virtual brand communities rather than the broad aspects of posting and lurking. In this framework, each set of practices support the other sets of practices in creating value. In their study, Schau et al. (2009) did not develop or test a scale for measuring brand community practices. Instead, they conducted a qualitative investigation into the nature of participation that sought the identification and understanding of “the process of collective value creation within brand communities” (Schau et al. 2009, p. 30).

In this study, the researcher conceptualises participation to consist of two levels: the platform level (i.e. social networking site) and the virtual brand community level. The first proposed scale aims at measuring participation at the platform level, which was labelled participation in Facebook for the purpose of this study. The platform level participation is conceptualised to be a superficial engagement activity with brands and other consumers on the official ‘brand’ pages on Facebook. Here, the simple bipolar view of posting and lurking is captured. Items measuring this level of participation pay attention to generic activities that may occur across different social networking sites platforms. The ‘participation in Facebook’ scale aims at capturing the personal actions that represent the consumers’ opinions, tastes, and preferences. These activities can be found on other social networking platforms, such as Google+, LinkedIn and MySpace. Consumers on these platforms choose to ‘like’ or

comment on a brand or other consumers' postings. Consumers also post pictures and videos on official brand pages on these platforms. These activities are considered basic and less complex than the value creating practices that the consumers perform on virtual brand communities (Schau et al. 2009).

The second scale aims at capturing participation at the collective level in virtual brand communities. This scale is based on the work of Schau et al. (2009). This perspective of participation in virtual brand community is a more concrete and complex concept where more meaningful behaviour occurs, such as greeting and welcoming new members, justifying support for the brand, and explaining how consumers use the brand. Such behaviour, according to Schau et al. (2009), adds value to the virtual brand community. Furthermore, consumer engagement at the collective level is directed at the community and the brand, and builds consumers' social capital (Mathwick et al. 2008, Schau et al. 2009). The consumers derive value from each practice because it enables brand use and it motivates the engagement of the brand community (Schau et al. 2009). In particular, practices such as evangelising and empathising create value because they expand the user base of the community and provide a sympathetic social network for members (Schau et al. 2009).

Participation at the virtual brand community level is conceptualised to exist in virtual brand communities regardless of the platform. A key distinction between participation at the platform level and participation in the VBC is the collaborative value creating behaviour rather than individualistic behaviour that focuses on the individual expressing personal taste and opinion. Based on the work of Schau et al. (2009), participation in virtual brand community is conceptualised to contain four dimensions, which are: social networking, impression management, community engagement, and brand use. These sets of practices present a far richer perspective than the basic activities of liking a brand's status update or posting a quick response to other consumers' comments. The virtual brand community practices are important to brand community vitality and create value in the community by building on each set of practices above and beyond the value the firm generates. Moreover, value is manifested in VBCs as a result of the collective enactment of the four sets of practices, which focus on networks rather than brand-consumer dyads (Schau et al.

2009, p.41). Value creation occurs as a result of dynamic customer engagement with other customers and the brand in the community.

In comparison to existing scales, the proposed scales are comprehensive; however, they also delineate important behaviours that are vital to the endurance of virtual brand communities. The proposed scales also cover the basic perspective of participation and the more complex network-based perspective. As such, it is more encompassing than many other previously proposed approaches that have aimed to conceptualize and measure participation. This perspective is similar to the COBRA typology of social media usage that was suggested by Muntinga et al. (2011), who categorise consumer brand involvement with brand-related content into three dimensions, which are: consuming, contributing, and creating. The perspective proposed in this study focuses on the dimensions of participation as a set of basic activities and collective value adding practices. Here, basic activities are shallow interactions with the 'brand' and other consumers on the brand's social networking page that are mainly focused on consumption. The consumers' participation at the platform level produces very little content in the community. In contrast, collective behaviour in the form of practices are value enhancing behaviours that enrich the community and go beyond content creation and consumption, and establish a relationship with the brand and other consumers and develop one's private and social identity.

6.3 Pilot Study

A pilot study was conducted to develop and test a new scale for participation. It also aims to identify factors that encouraged relationships between consumers and brands in a virtual brand community setting. Since Chapter 5 discussed various other scales used in this study, there focus here is only on the new scale development process. The following sections explain the new scale development process in detail.

6.3.1 Participation Scale Development

The new participation scale was developed following the procedures outlined by Churchill (1979) and Churchill and Iacobucci (2002). Firstly, the domain of the participation constructs was specified. Secondly, a pool of items measuring the participation constructs was generated. Thirdly, data was collected in a pilot study. Fourthly, the participation scales were purified. In addition, the other scales used in this research were purified based on the pilot study. Finally, an assessment of the validity of the participation scales was undertaken. This section will present the details of the new participation scales' development process.

6.3.2 Domain of Construct

In the first step of the participation scale development process, the researcher focused on what the scales aimed to measure. An extensive literature review (see Chapter 3) helped in identifying existing conceptualisations and gaps in the existing literature. Subsequently, the new participation scale was designed to measure the frequency of consumer participation in virtual brand communities on social networking sites. More specifically, the new scale aimed at capturing both the platform and the community levels of participation (see Section 6.2 and Chapter 3). This research defines participation in the virtual brand community as practices that “are linked and implicit ways of understanding, saying and doing things. They comprise a temporally unfolding and spatially dispersed nexus of behaviours that include practical activities, performances, and representations or talk” (Schau et al. 2009, p. 31). On the other hand, participation on the platform level (including social networking websites such as Facebook) involves activities that focus on superficial behaviour that is universal to social networks. For example, participation at the platform level involves clicking the ‘like’ button and commenting on a brand or consumers posts. Participation in a virtual brand community is richer because it focuses on collaborative behaviour rather than simple ‘likes’ and browsing.

6.3.3 Generating Sample of Items

Based on an extensive literature review and focus groups the researcher developed a pool of items to utilise in the measurement of the two levels of participation. The

analysis of the focus groups data provided strong evidence in support of the practices that were identified by Schau et al. (2009). While the work of Schau et al. (2009) provided the foundation to developing the new participation in VBC scale for this research, it was still necessary to conduct some focus groups with a view to assess the applicability of practices identified by Schau et al. (2009) to the current context, which is participation in social networking sites (e.g. Facebook and Google+). The nature of ‘brand’ pages on Facebook, or other social media sites, are considerably different to the bulletin boards and online groups that are found on other platforms and websites. The communication tools available to social networking sites users are sophisticated and mobile. Social networking sites allow users to exhibit their social networks to others, which enables unexpected social connections between users (Boyd and Ellison 2008). These platforms also allow users to display their membership of brand pages on the platforms. For example, consumers can ‘check-in’ (i.e. share their location) a brand establishment in real-time and share the information with their contacts on Facebook. Social networking sites allow consumers to directly communicate with the brand and participate in vibrant brand related contests on the platform. Such a tools are not available in bulletin boards and online groups. Hence, it was important to explore the nature of participation in the new context. Furthermore, the aim was to develop further understanding of the nature of participation (i.e. platform and virtual brand community) and contrast that to the generic framework of participation that was found in the literature. The various sets of practices were broken down into distinctive theoretical sets that allowed the researcher to define four dimensions to measure.

6.3.4 Focus Group Results

The focus groups were conducted to understand consumer engagement in the context of social networking sites. The context of social networking sites was not explored in the work of Schau et al. (2009). In this section a brief discussion of the qualitative results will be presented. This section will only focus on discussing the focus group results pertaining to the two participation themes; general activities on Facebook and activities on ‘brand’ pages on Facebook. In the first theme the researcher aimed at explore the general activities that a Facebook user engaged in. In

the second theme (i.e. activities on ‘brand’ pages) the goal was to explore the breadth of consumer behaviour on ‘brand’ pages. The researcher also sought to investigate whether the practices identified by Schau et al. (2009) do in fact exist on such ‘brand’ pages. Appendix B presents the overall focus groups results.

General Activities on Facebook

It is important it understand the general consumer behaviour on the social networking platform before proceeding with detailed activities and practices in specific ‘brand’ pages. Here the research explored what consumers do when they are logged on the website. In general, consumers used Facebook for socializing with family and friends. Consumers performed different activities on the ‘brand’ pages on Facebook, such as posting comments, posting pictures and videos, chatting, using applications, and joining different pages on the website. For example, a working professional describes her daily activities where she regularly engages her contacts and updates her status:

I update status reports quite regularly, write on people’s walls and respond to messages they have written. I sometimes participate in applications – usually word games such as scrabble, or those that catch my interest and curiosity. (PJ, 10/11/2010, VCR1.)

Activities on ‘brand’ pages on Facebook

The consumers performed different activities on ‘brand’ pages, which ranged from reading and commenting on ‘brand’ posts on its respective page, searching for new product information, and posting questions regarding brand information. There was also an inclination to perform social activities when consumers participated on ‘brand’ pages, as in the following example:

I update my status, post messages on my friends walls, post messages on different pages that I like, share videos, photo etc... and as I said previously I sent invitation for the WDD event & for a press conference through facebook.(PU, 13/11/2010, VCR1)

Overall, there was support for the view that the consumers did in fact perform some of the practices described by Schau et al (2009), such social networking, impression management, engagement with the community, and sharing brand usage experience. The consumers' greeted and helped new members on a brand page on Facebook as part of the social networking practices they performed. Some members felt that it is important to show support to other members as it benefits everyone:

Yes sometimes...I think it is important to show support to get support, which therefore creates value to the person, brand, and the brand community. (PI, 21/11/2010, VCRI)

Consumers also provided emotional support, or empathised, for other members who they identify with. Schau et al. (2009) classified this practice as a social networking. For example, a mother and an entrepreneur described how she shared her experience as a working mother to support other working mothers:

I do that in mum groups to share our baby experiences and support us working mums especially those working from home. (PR, 22/11/2010, e-mail)

Members of 'brand' pages on Facebook also share good news about the brand to their friends. This is defined as evangelizing, which is an impression management practice:

Sometimes, when I'm sure that the brand is really good. (PF, 21/11/2010, e-mail)

Yes, I do share the good news on my Facebook wall. (PR, 22/11/2010, e-mail)

On the other hand, consumers do share negative information about a brand on the social networking site. This practice can be considered commoditising, which is a brand use practice. In this case it is a valenced behaviour directed towards the brand while warning other consumers about the brand's negative behaviour. For example, a professional and postgraduate student explained how she shared negative information regarding Nestlé's marketing strategy after reading about it:

I have been party to the negative side of it i.e. when a brand is criticised ... that brand in question is Nestle, and I have read pages that are anti-Nestle because of their policies relating to marketing infant formula milk in third world countries, thus causing the mothers natural breastmilk to dry up, thus leaving situations where mothers cannot afford to continue to buy formula milk or access clean water to mix it, thus increasing the likelihood of disease and starvation for the infant. I have read pages that boycott Nestle products because of these policies, and I have been influenced by them and shared such info with other people. (PJ, 10/11/2010, VCR1)

The members of the official 'brand' pages on Facebook also engaged the brand directly in their commoditizing behaviour, where they criticised or suggested ways in which their favourite brand should be commercialised, as in this example:

I am not much of a complainer :) ,, but instead of complaining i would advice and suggest better methods to certain actions, such as distributing specific products to more countries in order to introduce it, popularise it .. etc. (PI, 21/11/2010, VCR3)

Brand page members also engaged the community by telling stories about their brand relationships or experiences, which is an example of a community engagement practice. For example, an academic explained how he shared stories about how to purchase brands without paying VAT:

I might actually do that. for instance, if it is useful information i would not mind telling a story. in fact, i do know people who would buy new cars from an European country and ship it to Oman, without paying any VAT. an example like this shows us how people can buy cheap new high quality products with lower prices. thus, why not share such information with others. (PI, 21/11/201, VCR3)

The virtual brand community members also described their brand use experience with other consumers:

People have the freedom to whether take care of their brand or not but if they need advise to know how to do so, then why not. (PI, 21/11/2010, VCR3)

With regards to participation, some of the consumers did not realise that they performed some of the practices that Schau et al. (2009) identified. During the focus groups sessions there were occasions when the consumers did not comprehend these practices; however, they tended to be more aware of posting and lurking activities.

In contrast, many of the participants did not perform some of the practices prescribed by Schau et al. (2009) such as governing, staking, and badging. These practices seemed less feasible in the context of social networks because it is not yet feasible to assign a badge to your user profile (badging) within a specific brand page, this practice is more attuned to the nature of bulletin boards. In addition, the consumers did not engage in marking intragroup distinctions (staking) and they did not explain to others what behaviour is expected on the 'brand' pages (governing). Governing is one of the social networking practices, while badging and staking are community engagement practices.

The focus group interviews provided support for the participation constructs proposed in this study. They also provided good evidence to enable the development of a participation scale. Following the generation of the participation items, the researcher conducted a content validity analysis with an expert judge (who is a marketing academic) who differentiated between the two sets of participation items. The author conducted the pilot study based on this analysis and the nature of the items measuring the frequency of participation. The following section explains the operationalisation of the participation scales and data collection phase of the pilot study of this research.

6.3.5 The Operationalisation of Participation

In total, twenty-one items were used to measure the two dimensions of participation. The first set of eleven items was developed to capture the participation on 'brand' pages on Facebook. These items were generated based on the regular activity conducted on Facebook pages created by commercial brands. The second set of ten items was adapted from the qualitative work of Schau et al. (2009) on practices in VBC. All items were measured on a seven-point scale, ranging from (1) 'not frequently' to (7) 'frequently'. Table 6-1 and 6-2 present the items of the participation scales.

Table 6-1 Items Measuring Participation in Facebook

1. ...I post comments on [Brand]'s status updates.
2. ...I comment on what other members post on the [Brand] Facebook wall.
3. ...I post to share what I think or feel about the [Brand] on [Brand]'s Facebook wall.
4. ...I click "like" on status updates posted by [Brand].
5. ...I post in [Brand]'s discussions page.
6. ...I stay logged on [Brand]'s page to read what the brand and other members post.
7. ...I participate in games and contests hosted on [Brand]'s Facebook page.
8. ...I post my thoughts and share my feelings if [Brand] discontinues a product I like.
9. ...I post for what I think is best when [Brand] asks for my opinion on new products.
10. ...I post information against [Brand] if I find that it is acting in a negative way or against my beliefs.
11. ...I post pictures and videos on [Brand]'s Facebook wall.

(Source: This Research)

Table 6-2 Items Measuring Participation in Virtual Brand Community

1. ...I greet and welcome new members to the community.
2. ...I provide emotional support to other members for brand and non-brand issues.
3. ...I share positive news about [Brand] .
4. ...I encourage people to use [Brand].
5. ...I explain to other members why I spend time and money on supporting [Brand].
6. ...I tell other members stories about how I bought and use [Brand].
7. ...I tell other members about important events in my life while using [Brand].
8. ...I share with other members how I take care of [Brand] products that I own.
9. ...I share with other members how I change [Brand] to suit my needs.
10. ...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.

(Source: This Research based on Schau et al. 2009)

6.3.6 Pilot Study Data Collection

The pilot study data collection phase aimed at distributing the full questionnaire to the appropriate respondents to gather data to test the participation scale and explore the other relationships proposed in this study. Three approaches for data collection were used in the pilot study:

1. An e-mail with an embedded link was sent to potential respondents;
2. A survey link was posted on Facebook and other online communities; and,
3. A paper-and-pencil questionnaire was supplied to undergraduate students.

Multiple data collection methods were used to increase the response rate and capture respondents from varied backgrounds.

The pilot study was conducted using Qualtrics.com electronic survey software (Qualtrics Labs Inc., Provo, UT). Qualtrics.com is a comprehensive electronic-survey software solution that provides survey building tools and which also provides tools for data analysis. This is a service offered through Cardiff University, who subscribes to the Qualtrics.com service. The choice of Qualtrics.com is based on its ease of use, support for various platforms, prevention of multiple submissions from one respondent, ability to control the flow of questions based on consumer responses, and the ability to solicit quantitative and qualitative response. These features are essential characteristics of e-surveys (Yun and Trumbo 2000, Smith 1997). The data collection was conducted from March 2011 to May 2011. The target sample for the pilot study was Facebook users from various backgrounds. This approach is true to the nature of participants on ‘brand’ pages on Facebook, especially for global brands.

There are advantages and disadvantages to adopting Internet-based surveys. Among the advantages of Internet data collection is that it allows a variety of instrument designs, facilitates alternative question formats, provides for varied sequencing options, overcomes the distance barrier, allows rapid data collection and collation, and allows for the use of audio-visual stimuli (Best and Kruger 2004). However, there are also a number of disadvantages to using the Internet for the purpose of data

collection, including: Internet access is not universal, invitation to partake in Internet base research can be viewed as nuisance e-mail, there is loss of the personal touch with the respondent, and there are concerns of confidentiality and security (Yun and Trumbo 2000, Best and Kruger 2004, Bryman 2004). These concerns may affect the response rate and the quality of the data collected.

The researcher made a number of invitation posts, spanning a period of two months, on official brand pages on Facebook and Yahoo groups. The posts invited Facebook users to join the study by following a link highlighted in the posts. The link directed respondents to the same questionnaire, which was hosted on the Qualtrics website. The reason that the researcher pursued both Facebook brand pages and Yahoo groups is because of the popularity and high presence of brand pages or groups on both of these platforms. This approach aimed at increasing the response rates since the users tended to join several online services. The study invitation was posted on Yahoo groups because these groups were more active, from the researcher personal experience, than other service providers, such a Google groups.

E-mail invitations containing a link to the electronic survey were sent to 2000 individuals, including students, academics, and professionals in the UK. This group was chosen because it falls in the two biggest ages groups with the highest user penetration of Facebook usage, who are 18 to 24 years and 25 to 34 years old (eMarketer 2013, Socialbakers 2013). This complementary approach also enabled the researcher to recruit respondents who did not happen to see the survey link embedded in social network posts. The e-mail briefly explained the nature of the study and assured the respondents of the confidentiality and anonymity of their responses. In addition, a brief set of instructions explained the questions along with the contact details of the researcher and the supervisory panel.

Finally, to overcome any lack of response on the electronic front, where anti-spamming mechanisms may stop e-mails or posts from reaching potential participants on the Internet, the researcher planned to collect data using a physical questionnaire. Six hundred questionnaires were dropped by the researcher to undergraduate students in a Middle Eastern university, in Oman. The researcher had access to this class of potential Facebook users and it was deemed to be an

appropriate method to increase the response rate. This form of data collection yielded 233 surveys (50% of the total response).

Although a total of 460 questionnaires were returned during the pilot study (both electronic and paper), there were only 79 completed and useable responses. The returned questionnaires were plagued with missing data that was beyond treatment. The very humble number of usable responses may be caused by the large numbers of surveyed users who reported that they did not use official ‘brand’ pages on Facebook due to spam. In the focus group discussions, a number of users explained how they avoided ‘brand’ pages because of the annoyance of being spammed by marketing messages. Another reason could be that many individuals receiving the e-mail invitation simply ignored the e-mail and regarded it as spam. Moreover, fear of confidentiality and security might have discouraged potential respondents from joining the study. With regards to the paper survey, the majority of the respondents claimed that they did not follow ‘brand’ pages on Facebook. Furthermore, Facebook penetration in Oman, where the paper survey was distributed in 2011, was less than 10% of the population (Dubai School of Government 2013). Table 6-3 lists the response rates in the pilot study by mode of questionnaire distribution.

Table 6-3 Response Rates of The Pilot Study			
Questionnaire Type	Number of invitations	Number of surveys returned	Total number of complete and useable responses
E-mail invitation with link to electronic survey	2000	193	79 Usable Responses: 48 Electronic Surveys 31 Paper Surveys
Virtual brand community posts (Facebook and Yahoo Groups)	N/A	34	
Physical questionnaire	600	233	
Total	2600	460	

(Source: This Research)

6.3.7 Purifying The Participation Scales

The purification of items and questions was based on the results of Exploratory Factor Analysis (EFA) and scale reliability, which used Cronbach's alpha. The EFA results indicated that the participation constructs and the measurement scales broadly acted as expected. The EFA findings indicated that overall participation is a multi-dimensional construct. Two meaningful factors were extracted when the EFA was conducted on all of the participation items (i.e. 21 items).

The researcher tested the unidimensionality of the participation constructs by running EFA on each construct individually. The original items generated to capture participation in virtual brand communities were derived from the work of Schau et al. (2009), who proposed that there are four sets of practices that create value in brand communities, which are: social networking, impression management, community engagement, and brand use. However, the EFA revealed only one dimension for participation in VBC. As expected, only one factor was extracted when the unidimensionality of the participation in Facebook was explored using EFA. The factor loadings for the items measuring the participation in VBC scale ranged from 0.528 to 0.829. Moreover, the factor loadings for the items measuring participation in Facebook ranged from 0.655 to 0.882.

6.3.8 Assessing the Reliability and Validity of The Participation Scales

A review of the items measuring participation in Facebook led to the dropping of several items from the questions (17A). Items b, e, f, and i were dropped because they were found to be cross-loaded when the researcher ran an EFA analysis on all participation items. After assessing the reliability of the scale and removing the offending items it was found that the participation scales exhibited high internal consistency. After dropping four items, the participation in Facebook scale had a Cronbach alpha value of 0.903. Meanwhile, the participation in virtual brand community has a Cronbach alpha value of 0.958 with not items dropped. The researcher also conducted a CFA with the purified items from the pilot study, with a sample size of 79, to assess the dimensionality of the participation construct. The CFA results indicated that all of the participation items significantly loaded on the

relevant scale, all of the t-values were significantly greater than ± 2.58 at $p = 0.01$. The factor loadings for the participation in Facebook items ranged from 0.586 to 0.895. Furthermore, the factor loadings of the participation in VBC items ranged from 0.671 to 0.925.

The discriminant validity results show that the two-dimension participation model is more plausible than a one-dimension participation model. Moreover, the correlation of the two participation constructs was 0.772 and the 95% confidence interval did not include 1. The lower limit for the 95% CI for the correlation between participation in Facebook and participation in VBC was 0.665, the upper limit was 0.848. Therefore, this result lends support to the discriminant validity of the two participation constructs. The results are presented in Table 6-4.

Table 6-4 Discriminant Validity Assessment of the Participation Constructs					
One-Factor model for Participation	Two-Factor model for Participation				
Chi-square (χ^2) of estimate model 482.096 (df=119, p= 0.000)	Chi-square (χ^2) of estimate model 368.273 (df=118, p= 0.000)				
Difference in Chi-square ($\Delta\chi^2$) = 482.096 – 368.273 = 113.823 $\Delta\chi^2$ is significant at df = 1 at p = 0.05 where the $\Delta\chi^2 > 3.841$					
95% Confidence Interval of the Correlation Estimate <table style="margin: auto; border: none;"> <tr> <td style="text-align: center;">Lower Limit</td> <td style="text-align: center;">Upper Limit</td> </tr> <tr> <td style="text-align: center;">0.665</td> <td style="text-align: center;">0.848</td> </tr> </table> Where $r = 0.772 \pm 2se < 1$		Lower Limit	Upper Limit	0.665	0.848
Lower Limit	Upper Limit				
0.665	0.848				

(Source: This Research)

The researcher also split the pilot study sample, $N=79$, into two randomly selected samples to compare the AVE and the Construct Reliability of the participation scales. The first sample had 40 cases while the second had 39 cases. The AVE values for participation in Facebook and VBC are close to, or exceed, the

recommended 0.5 cut-off point that is suggested for good convergence (Hair et al. 2006). The N=39 sample falls short where its AVE value for participation in Facebook is 0.420. All the CR values exceed the 0.7 recommended cut-off point in the literature (Hair et al. 2006). Since the pilot study has a humble sample size, these results are encouraging because the participation scales have been shown to be distinct and in most cases they meet the minimum requirement for a good scale. Table 6-5 presents the results of the AVE and CR for the split samples.

Table 6-5 AVE and CR Comparison of the Split Sample of the Pilot Study		
Participation in Facebook	AVE	CR
N = 40	0.540	0.885
N = 39	0.420	0.824
Participation in Virtual Brand Community	AVE	CR
N = 40	0.493	0.905
N = 39	0.541	0.914

(Source: This Research)

The pilot study set out to test the new participation scales and the proposed relationships in this research in the context social networking sites. The results of the pilot study indicated that the participation scales met the minimum requirement for good scales. The participation constructs had high reliability and good validity. In addition, participation was shown to consist of two dimensions: platform and virtual brand community. Although the participation in VBC scale had good reliability and validity, the researcher needed to make some adjustments to the scale before launching the main study.

The pilot study involved two or three items for each of the four sets of practices that were identified by Schau et al. (2009) to adequately cover the participation in VBC conceptual domain. The participation in VBC scale did not provide a balanced number of items to measure each of the four dimensions (i.e. social networking, impression management, community engagement, and brand use). The scale had two items measuring social networking, three items measuring impression management, two items measuring community engagement and three items measuring brand use. To explore the proposed sets of brand community practices and to provide a balanced number of items for each dimension, more items were

needed to be added to participation in VBC scale from the initial pool of generated items. This is important since SEM scales require at least three items for the purpose of identification. In addition, the researcher aimed to have four items to measure each proposed set of practices that were put forward by Schau et al (2009). This strategy allows the researcher one spare item in the SEM analysis. The additional items, as well as the original items, were verified for content validity by employing the services of an expert judge, who was a marketing academic. The original scale had ten items. Six more items were added to participation in VBC scale (See Appendix F).

6.3.9 Other Scale Items Adjustments

The pilot study also gave the researcher a chance to examine the other previously validated scales used in this study and some adjustments were applied as a result. Based on the feedback of many respondents, the questions that were difficult to answer were dropped. For example, Question (3) ‘How many official Brand pages on Facebook have you joined’ was dropped because the respondents indicated that they cannot remember or do not know the answer. Question (6), which measured consumers’ attitude towards the brand had the highest occurrence of missing data and, therefore, it was dropped. Item (3) in Question (12) ‘If [Brand] is not available, I will go to another store’ was dropped to improve the brand loyalty scale’s alpha score because the item-to-total correlation was only 0.031.

The questions measuring hedonic motivation (15) and utilitarian motivation (16) were adjusted. Item (e) in Question (15) was dropped because the respondents confused it with item (e) in Questions 16 because these two items appeared to them to be similar. Item (a) in Questions 16 was dropped because it had low inter-item correlations with the other three items in the utilitarian motivation scale. It was beneficial to the reliability of the scales to drop both items. The EFA analysis indicated that the scales measuring motivation benefited from dropping these items. Repeating the EFA analysis indicated that the variance extracted improved from 65.44% to 72.38% for hedonic motivation and from 61.57% to 66.71% for utilitarian motivation.

The Cronbach's alpha score for the study's constructs in the pilot study are presented in Table 6-6. All the Cronbach Alpha scores for the purified scales were beyond the 0.7 required for good scales with the exception of Word of Mouth Valence (0.444) and Willingness to Pay a Price Premium (0.671). Additionally, none of the correlations between the constructs were excessively high, suggesting good discriminant validity. Table 6-7 presents the correlations of the proposed constructs in the pilot study. The full questionnaire used in the pilot study can be found in Appendix E.

Table 6-6 Cronbach Alpha Scores for the Study's Construct in the Pilot Study	
Construct	Cronbach Alpha
Brand Identification	0.882
Brand Community Identification	0.937
Participation in Facebook	0.903
Participation in Virtual Brand Community	0.958
Brand Attachment	0.953
Hedonic Motivation	0.871
Utilitarian Motivation	0.808
Perceived Quality	0.855
Brand Loyalty	0.923
Word of Mouth Action	0.860
Word of Mouth Valence	0.444
Willingness to Pay A Price Premium	0.671

(Source: This Research)

Table 6-7 Correlations of Proposed Constructs in the Pilot Study

Factor	BI	BCI	PART FB	PART VBC	BA	PQ	BL	WOMA	WOMV	WTPP	HMOTV	UMOTV
BI												
BCI	0.606*											
PARTFB	0.554*	0.528*										
PARTVBC	0.432*	0.455*	0.772*									
BA	0.602*	0.455*	0.482*	0.439*								
PQ	0.174	0.103	0.088	0.053	0.192							
BL	0.576*	0.503*	0.316*	0.343*	0.598*	0.360*						
WOMA	0.754*	0.532*	0.584*	0.649*	0.599*	0.140	0.588*					
WOMV	0.16*	0.269*	0.100	0.139	0.245*	0.483*	0.435*	0.279*				
WTPP	0.409*	0.331*	0.164	0.377*	0.386*	0.604*	0.580*	0.303*	0.462*			
HMOTV	0.428*	0.518*	0.576*	0.439*	0.423*	0.075	0.236*	0.395*	0.187	0.188		
UMOTV	0.469*	0.504*	0.449*	0.400*	0.395*	0.198	0.354*	0.460*	0.129	0.258*	0.463*	

(Source: This Research) *Correlations significant at 0.05

Constructs abbreviations: BI: Brand Identification, BCI: Brand Community Identification, PARTFB: Participation in Facebook, PARTVBC: Participation in Virtual Brand Community, BA: Brand Attachment, PQ: Perceived Quality, BL: Brand Loyalty, WOMA: Word of Mouth Action, and WOMV: Word of Mouth Valence, WTPP: Willingness to pay a price premium, HMOTV: Hedonic Motivation, UMOTV: Utilitarian Motivation. (Source: This Research)

The researcher also added one item measuring word of mouth valence, “I recommend [Brand] to someone who seeks my advice.” This was adapted from Zeithaml et al. (1996) because of the low Alpha score of the scale, which used one negatively worded item. The researcher opted to add a positively worded item measuring word of mouth valence to compensate for any confusion and issue relating to a negatively worded item, and to retain four items to measure the construct for the purpose of SEM analysis. The main study’s survey presents these additions, which can be found in Appendix F. Other minor changes involved adding an item in Question (18A) to adapt to the fact that Facebook in 2011 is more than 6 years old. Finally, Question (18C) was deemed unnecessary as it was redundant and occupied precious space in the questionnaire.

6.4 Summary

This chapter presented the process that the researcher followed in developing a new participation scale to measure the two proposed dimensions for the construct. It explained the rationale behind the development of the scale. It also elaborated on the focus groups that were conducted to generate items to measure participation and explore the theoretical relationships. Finally, it has discussed the pilot study that tested the scales’ development, including the new participation scales. This chapter also presented reliability and validity analysis of the new participation scales, which were satisfactory on the whole.

Chapter 7: Descriptive Statistics

7.1 Introduction

This chapter aims to discuss the descriptive analysis of the main study's results. A summary of the demographic data profile of the main study will be presented in Section 7.2. In Section 7.3, Facebook usage and membership duration statistics will be presented. In Section 7.4, data preparation procedures will be discussed and presented. The results of the reliability assessment of the measurement scales will be presented in Section 7.5. The results of the confirmatory factor analysis conducted on the participation and attachment constructs will be presented in Section 7.6, while the results of the validity assessment of the other measurement scales will be presented in Section 7.7. Finally, a summary of the chapter will be presented in Section 7.8.

7.2 Sample Demographic Profile

In this section, the demographic profile of main study's sample will be presented. Table 7-1 presents the overall demographic profile of the survey respondents. The sample consisted of 53.9% females and 46.1% males. The largest age group of Facebook users was aged between 25 and 34 (26.6%). The other four age groups were of roughly similar sizes: the 35 to 44 group was 18.8%, the over 55 group was 18.8%, the 18 to 24 group was 18.1%, and the 45 to 54 group was 17.7%. Over half the research respondents in the main study were either married or living with a partner (58%) while 32.8% were single and 9.2% were divorced, widowed or separated. These numbers are similar to the UK Facebook population. According to Socialbakers, a social media analytics platform, 48% of the UK Facebook users are males while 52% are females (Socialbakers 2013a). In addition, the largest group of Facebook users in the UK are aged between 25 and 34. Consequently, the study sample resembles the population of interest, which are UK Facebook users.

The level of education of the sample varied from primary degree to postgraduate degree. Just two respondents (0.5%) had only earned their primary degree. The largest group with regards to the level of education was the high school group (29.8%), followed closely by professional qualification or diploma (28.7%). Those

who held an undergraduate degree made up 23.4% of the sample while those who held a postgraduate degree made up 16.3% of the sample. A smaller percentage (1.4%) had other educational levels, such as A-Levels and NVQs.

As for the occupation of the respondents, the largest group were employed in professional/senior management (20.6%). The second largest group were employed as clerical staff (16.5%) followed by students (12.6%), housewife/husband (11.7%), technical staff (8.5%), self-employed (8.3%), and unemployed (6.7%). The 'other' group or option made up 15.1% of the sample. This group included varied occupations such as airline staff, catering, nursing, postmen, and plumbers. Other responses in this group also included retired or disabled. Finally, 89% of the sample was British while 11% were of different nationalities. There were no comparable statistics on the nationality of Facebook users in the UK for the researcher to use to compare with this study's respondents' profile.

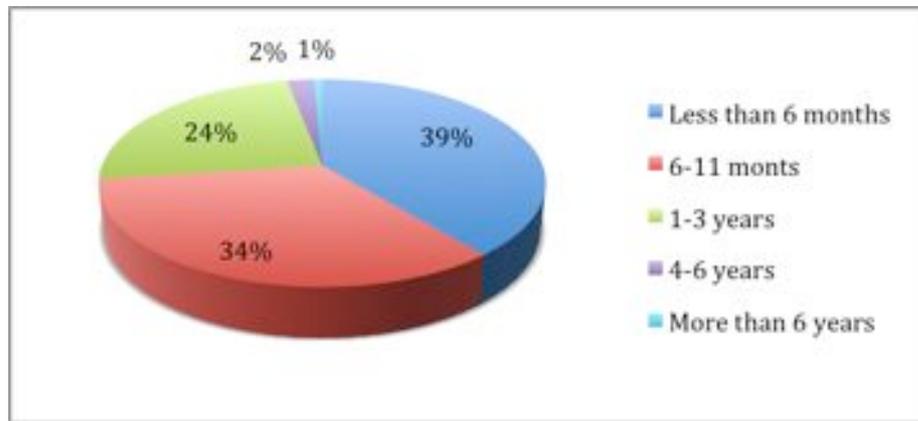
Table 7-1 Overall Demographic Profile of Survey Respondents			
Demographic Variable	Category	Research Sample (N=436)	
		Frequency	Percentage (%)
Gender	Male	201	46.1%
	Female	235	53.9%
Age	18-24	79	18.1%
	25 to 34	116	26.6%
	35 to 44	82	18.8%
	45 to 54	77	17.7%
	Over 55	82	18.8%
Marital Status	Single	143	32.8%
	Married/Living with Partner	253	58.0%
	Divorced/Widowed/Separated	40	9.2%
Education Level	Primary School	2	0.5%
	High School	130	29.8%
	Professional qualification/Diploma	125	28.7%
	Undergraduate degree	102	23.4%
	Other	71	16.3%
	Other	6	1.4%
Occupation	Student	55	12.6%
	Housewife/husband	51	11.7%
	Professional/Senior Management	90	20.6%
	Clerical staff	72	16.5%
	Technical staff	37	8.5%
	Self-employed	36	8.3%
	Unemployed	29	6.7%
	Other	66	15.1%
Nationality	British	392	89%
	Other	44	11%

(Source: This Research)

7.3 Facebook Usage and Membership Duration

The respondents in this study have been members of a brand page on Facebook for: less than 6 months (39%), 6-11 months (33.9%), 1-3 years (24.1%), 4-6 years (2.3%) and more than 6 year (0.9%). Figure 7-1 illustrates the membership duration for brand pages on Facebook.

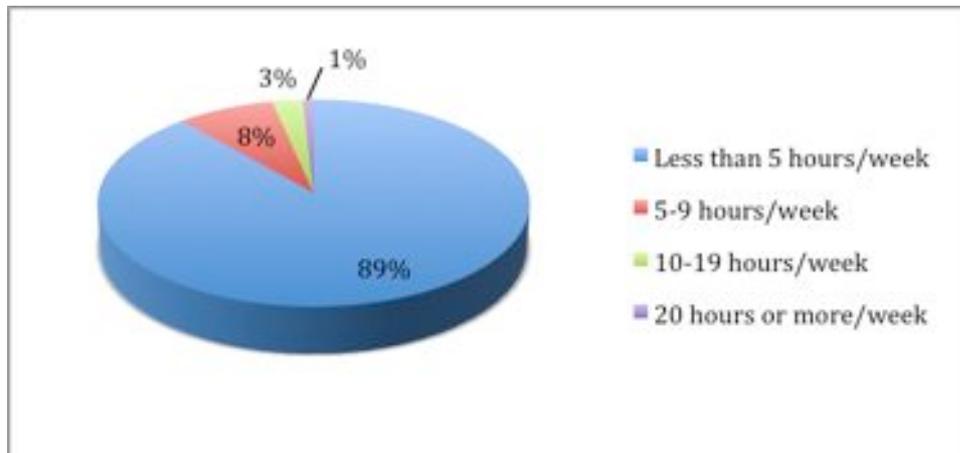
Figure 7-1 Brand Page Membership Duration



(Source: This Research)

The majority of the respondents (88.6 %) have participated for less than 5 hours per week on the brand page on Facebook. This is followed by 5-9 hours/week (8%), 10-19 hours/week (2.5%), and 20 hours or more/week (0.9%). Figure 7-2 illustrates the average time per week consumers spend on brand pages on Facebook.

Figure 7-2 Average Participation Time

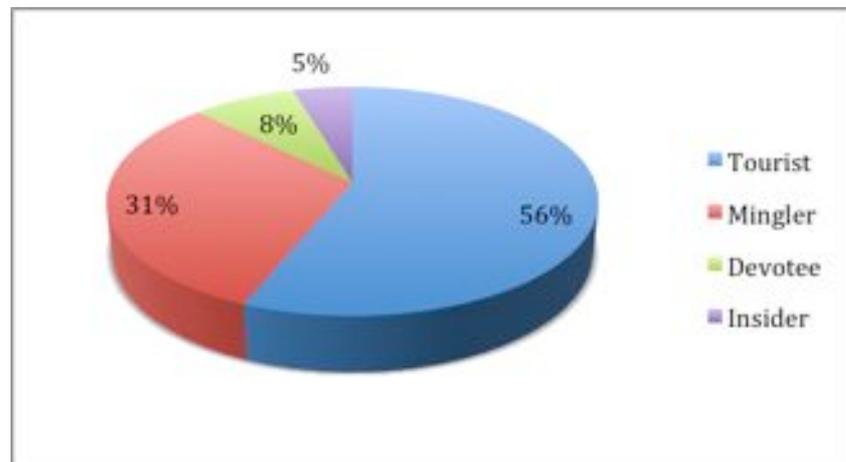


(Source: This Research)

Of the respondents who used brand pages on Facebook, 56.2% classified themselves as a tourists, 31.2% as minglers, 8% as devotees, and 4% as insiders. Tourists are those community members who lack social ties to the group and very rarely contribute to the community. Minglers represent members who maintain somewhat strong social ties with the group and sometimes contribute to the community.

Devotees are community members who maintain strong social ties with the community and are enthusiastic about community activities and contribute often. Finally, insiders are those members who maintain strong social and personal ties with the community and contribute actively to the group. Figure 7-3 illustrates the breakdown of different users based on their social ties and contribution to the brand pages on Facebook.

Figure 7-3 Membership Classifications



(Source: This Research)

7.4 Data Preparation

Data preparation and screening is an important step that should be conducted carefully. Data that is not screened and prepared properly may lead the researcher to think that the estimated model is faulty (Kline 2005). Meanwhile, missing data can influence a study by biasing its findings and reducing its sample size (Hair et al. 2006). This study utilised Structural Equation Modeling (SEM) to test the proposed hypotheses because it is less forgiving when the assumptions of univariate and multivariate normality are violated (West et al. 1995, Kline 2005). Violations of the normality assumptions are even more important when using Maximum Likelihood Estimation (MLE), which was the estimation method used for this study (West et al. 1995). The researcher evaluated the data for any missing values and outliers in order to prepare the data for the SEM analysis. The researcher also assessed whether the

data violated the univariate and multivariate assumption of SEM. The following section discusses and presents the findings of the data preparation stage of this research.

7.4.1 Missing Data

The data collection in the main study was conducted through an online panel. The nature of this type of data collection process insured that only full responses were logged while incomplete responses were disregarded. Respondents were only rewarded for participating in the study when they answered the entire electronic questionnaire. Furthermore, respondents could not move onto the next screen until all answers to the current screen were provided. This procedure eliminated the problem of missing data.

7.4.2 Outliers

Outliers are defined as “*observations with a unique combination of characteristics identifiable as distinctly different from the other observations*” (Hair et al. 2006, p. 73). The researcher examined both the univariate and multivariate outliers in order to address the issue of outliers. The univariate outliers were assessed using box plots in SPSS. Outliers are defined as those observations that extend more than 1.5 IQR away from the box (Pallant 2007). Meanwhile, extreme values are those observations that are greater than 3 IQR away from the end of the box (Pallant 2007). In this study, the only variables that had outliers were the four items that measured perceived quality and one of the items that measured willingness to pay a price premium. The highest number of outliers was 16, which is less than 4% of the entire sample (i.e. 436). Most of the outlier cases were common across the five identified variables; therefore, the researcher did not believe that removing these outliers was necessary for two reasons. Firstly, the number of outliers is small given the sample size. Secondly, the nature of data collection meant that the respondents’ self-selected themselves and they also self-selected the brands that they follow on Facebook. This may have introduced some bias with regard to some extreme values that represent perceived quality of the brand and willingness to pay a price premium.

The Mahalanobis distance test was employed to test for multivariate outliers. Hair et al. (2006) suggest that the researcher should be wary of outliers that exceed a value of 2 for samples less than 200, and 3 or 4 for samples exceeding 200, when (D^2/df) where D^2 is the Mahalanobis measure and df is the number of variables involved. (Kline 2005). In the present study's few cases (5%) exceeded the suggested threshold for samples above 200. Consequently, the researcher decided to keep the potential outliers because they do not constitute a large portion of the sample. Furthermore, according to the Mahalanobis test, the deviations from the centroid are not extreme.

7.4.3 Assessment of Normality Assumptions

Before proceeding with further analysis, the researcher has first assessed the univariate and multivariate normality characteristics of the twelve constructs proposed in this study. The normality assumption dictates that the data should be normally distributed. The problem with the violation of the normality assumption is that *“if the variation from the normal distribution is sufficiently large, all resulting tests are invalid, because normality is required to use the F and t statistics”* (Hair et al. 2006, p. 79). Furthermore, univariate and multivariate data normality are an important assumption behind the maximum likelihood model estimation method used in SEM (Kline 2005). It is important to note that univariate normality is concerned with the distribution of each individual variable while multivariate normality is concerned with the joint distribution of all the variables in the sample (Goa et al. 2008). Furthermore, multivariate normality means that individual variables are univariate normal. However, if two or more variables are univariate normal, that does not necessarily mean they are multivariate normal (DeCarlo 1997, Hair et al. 2006).

There are two issues of concern with regards to normality, the shape of the distribution and the sample size. The shape of the distribution is described by two measures, kurtosis and skewness. Kurtosis describes the peakedness and flatness of the distributions. Skewness describes the balance of the distribution, whether upper values are relatively more higher rather than lower values (or vice versa). Positive

kurtosis denotes a peaked distribution and a negative kurtosis denotes a flat distribution. Large samples reduce the detrimental effects of departure from normality (Hair et al. 2006).

The presence of kurtosis is a concern for researchers because it affects the test for variance and covariance (DeCarlo 1997). On the other hand, skewness impacts the test of means (DeCarlo 1997). SEM analysis is based on the analysis of covariance structures. Therefore, it is important that univariate and multivariate kurtosis be accounted for, and treated if necessary. A departure from normality that is excessive will bias the standard errors in the ML estimation method, where they will be underestimated (DeCarlo 1997, McDonald and Ho 2002, Lei and Lomax 2005). The underestimation of standard errors will give the impression that the regression paths and factor/error covariances are significant where in reality they may not be in the population (Byrne 2001).

Furthermore, violations of multivariate normality inflate the Chi-square value, leading the researcher to either reject the model (type 1 error) or over specify it (Byrne 2001, Kline 2005). Finally, violations of the multivariate normality assumption can lead to an underestimation of some fit indices, such as TLI and CFI (Byrne 2001). Therefore, it is important to assess multivariate normality in detail. In general, the ML estimation method is robust enough to tackle some departure from normality (Byrne 2001, Kline 2005, Lei and Lomax 2005, Hair et al. 2006).

Previous literature on multivariate data analysis offers a range of acceptable values for univariate skewness and kurtosis that help in identifying substantial departures from normality. If the skewness coefficient falls between the -1 to +1 range, then it can be said that there is no substantial departure from normality due to skewness (Hair et al 2006). In the case of kurtosis, a conservative rule of thumb indicates that if the kurtosis value exceeds 10 it would suggest a “problem” and if the kurtosis value exceeds 20 it would indicate “extreme” kurtosis (West et al. 1995, Kline 2005). Previous research notes that if kurtosis values exceed 7 then it is indicative of early departure from normality (West et al. 1995, Curran et al. 1996).

The AMOS SEM package provides one index of multivariate kurtosis based on the work of Mardia (1970) (Arbuckle 2003). Mardia's multivariate normality test is a measure of multivariate kurtosis. It examines whether a set data is derived from a multivariate normal distribution (DeCarlo 1997, Everitt 1998, Byrne 2001). Furthermore, DeCarlo (1997, p. 298) defines Mardia's measure of multivariate kurtosis as "*the average of the sum of the Mahalanobis distances raised to the fourth power gives Mardia's measure.*" The AMOS software package also provides the Critical Ratio (C.R.) of the multivariate kurtosis index. C.R. is basically the normalised estimate for Mardia's multivariate kurtosis (Byrne 2001).

Large positive values of C.R. indicate significant positive kurtosis while large negative values indicate significant negative kurtosis (Byrne 2001, Gao et al. 2008). C.R. values that exceed 5 indicate a departure from multivariate normality (Bentler 2005; cited in Byrne 2001). Mardia (1970) shows that when the C.R. is less than 1.96 this is indicative the coefficient of multivariate kurtosis is not significantly different from zero. This suggests that the joint distribution of the data in the sample is multivariate normal.

The next section presents a summary of the results of assessing univariate and multivariate normality. Appendix G contains the detailed item-by-item results of normality assessment for this study's measurement scales.

7.4.4 Results of Univariate and Multivariate Normality Tests

The results of the univariate normality assessments are presented in Table 7-2. The results indicate that only one construct, perceived quality, showed a noteworthy departure from the acceptable -1 to +1 range of acceptable skewness (Hair et al. 2006). Moreover, none of the constructs suffered substantial kurtosis, where none of the values exceeded the acceptable value of 7 (Curran et al. 1996, Kline 2005). However, the results of the multivariate normality assessment, which are based on Mardia's multivariate kurtosis (Mardia 1970, DeCarlo 1997, Byrne 2001, Lei and Lomax 2005), indicate that all of the constructs suffered from substantial departure from the multivariate normality assumption (i.e. Mardia's coefficient >5) (Bentler

2005). The CR for the multivariate kurtosis index for the twelve constructs ranged from 7.39 to 133.34 (see Table 7-2). The next section will discuss how the violation of the multivariate normality assumption was addressed in this research.

Table 7-2 Univariate and Multivariate Normality Assessment Results				
Constructs	Multivariate Kurtosis Index	C.R.	Skewness Range	Kurtosis Range
Brand Identification	15.24	16.23	-0.33 to 0.72	-1.05 to -0.62
Brand Community Identification	43.54	40.50	-0.21 to 0.33	-1.09 to -0.88
Participation in Facebook	21.51	20.01	-0.22 to 0.95	-1.30 to -0.25
Participation in VBC	306.48	133.32	0.08 to 1.03	-1.29 to -0.10
Brand Attachment	75.09	50.60	0.34 to 0.19	-0.81 to 1.11
Brand Loyalty	5.31	8.00	-0.52 to -0.12	-0.85 to -0.33
Perceived Quality	26.76	40.33	-1.52 to 1.86	2.06 to 3.22
Willingness to Pay Price Premium	6.81	10.26	-0.44 to 0.02	-0.76 to 1.48
Word of Mouth Action	4.90	7.38	-0.25 to 0.05	-0.93 to -0.80
Word of Mouth Valence	8.69	13.10	-1.10 to -0.68	-0.14 to 0.37
Hedonic Motivation	13.68	20.61	-0.39 to -0.05	-0.92 to -0.57
Utilitarian Motivation	13.20	19.89	-0.42 to -0.17	-1.01 to -0.45

(Source: This Research)

7.4.5 Addressing Violation of the Assumptions of Multivariate Normality

In order to tackle the issue of multivariate non-normality, the researcher decided to use the ML estimation method in the SEM analysis because of sample size constrains and the robustness of the ML estimation method in handling departures from normality (Curran et al 1996, Byrne 2001, McDonald and Ho 2002, Kline 2005, Lei and Lomax 2005). Furthermore, the researcher re-estimated the model using the bootstrapping approach (Byrne 2001). The bootstrap is a method for estimating the sampling distribution of parameter estimates where approximate standard errors can be produced (Arbuckle 2003). Bootstrapping is used to analyse continuous but non-normal data because bootstrapping assumes that the population and sample distributions have the same shape (Kline 2005). In simulation studies, bootstrap estimates for a measurement model were shown to have less bias than a

standard ML estimated model under conditions of non-normality (Kline 2005). However, one of the main caveats of using bootstrapping is that bootstrapping requires a large sample (Arbuckle 2003, Byrne 2001). Furthermore, bootstrapping may not always produce accurate and trustworthy results (Byrne 2001). Researchers must exercise their judgment when conducting and assessing the results of the bootstrap estimates.

In this study, the researcher used one thousand bootstrap samples in estimating the bootstrap model. Upon comparing the re-estimated bootstrap model's t-values with the original ML estimated model's t-values, it was evident that the original model is broadly consistent with the bootstrap model. The results confirm that the ML estimation is robust, notwithstanding the violations of the multivariate normality assumption. The results of the ML estimation of the current study's model will be discussed in Chapter 8 while the bootstrap estimation results will be presented in Appendix H.

7.5 Reliability of Measurement Scales

This section will present the analysis of the reliability of the main study's scales. This study used the internal consistency method to assess the reliability of the proposed scales. The researcher used a multitude of diagnostic measures (i.e. inter-item correlations, item-to-total correlations and Cronbach's Alpha correlation coefficient) to assess internal consistency (Churchill 1979, Hair et al. 2006).

The literature suggests that the minimum acceptable inter-item correlation is 0.30 (Hair et al. 2006). With regards to item-to-total correlations, the literature suggests that good reliability is indicated by values above 0.50 (Hair et al. 2006). It is generally agreed that an acceptable Cronbach's alpha is 0.70 or above, although in the case of exploratory research that value can be as low as 0.60 (Hair et al. 2006). Table 7–3 presents the internal consistency results for all the study's constructs.

The analysis revealed that all the constructs exhibited high internal consistency. The Cronbach Alpha for the items measuring these constructs ranged from 0.786 to

0.979. The majority of the constructs' inter-item and item-to-total correlations were well above the suggested cut-off points (Hair et al. 2006). However, the analysis for perceived quality, willingness to pay a price premium, and word of mouth valence required that an item for each of these constructs be deleted to improve internal consistency. The three items were deleted because their inter-item correlations and item-to-total correlations fell below the suggested cut-off points of 0.30 and 0.5, respectively (Hair et al. 2006). The deletion of the three items improved the internal consistency of each respective scale.

Table 7-3 Internal Consistency Results for all the Constructs in the Study

Constructs	Cronbach alpha	Number of items
Brand identification	0.918	6
Brand Community Identification	0.965	7
Participation in Facebook Page	0.912	7
Participation in Virtual Brand Community	0.979	16
Brand Attachment	0.976	10
Brand Loyalty	0.934	4
Perceived Quality	0.896	3
Willingness to Pay a Price Premium	0.786	3
Word of Mouth Action	0.916	4
Word of Mouth Valence	0.848	3
Hedonic Motivation	0.926	4
Utilitarian Motivation	0.886	4

(Source: This Research)

7.6 CFA for Participation in Virtual brand Community and Brand Attachment

The researcher conducted a CFA to test the unidimensionality of the participation in virtual brand community and brand attachment. Due to the importance of these constructs to this study the CFA results of these constructs will be presented in more details in this section. Section 7.7 will present the CFA analysis and validity assessment for the remaining constructs.

7.6.1 Assessment of the Uni-dimensionality of Participation in VBC and Brand Attachment

A discriminate validity test was conducted to investigate the theoretical dimensionality of participation in virtual brand community (Schau et al. 2009) and brand attachment (Park et al. 2010). The researcher computed the AVE and correlations for the dimensions of the two constructs based on the CFA analysis with all of the items measuring the constructs. Thereafter the researcher evaluated the discriminant validity of the theoretical dimensions for both constructs by comparing the square root of AVE for each dimension and compared it with the correlations between the dimensions. This analysis was done separately for each construct (i.e. participation in VBC and brand attachment). Table 7-4 and Table 7-5 present the results of the discriminant validity tests for the dimensions of participation in VBC and brand attachment.

The analysis indicated that the correlations between the theoretical dimensions were extremely high for both constructs (i.e. participation in VBC and brand attachment). Hence, all of the dimensions failed the discriminant validity test and, therefore, participation in VBC and brand attachment will be treated as unidimensional constructs for the rest of the analysis. The researcher expected that participation in VBC to have four dimensions and brand attachment to have two dimensions. The findings of the discriminant validity analysis indicated otherwise. Based on the results of the assessment of the unidimensionality of the participation in VBC and brand attachment the researcher proceeded with evaluating the CFA for both constructs.

Table 7-4 Discriminant Validity test for the Dimensions of Participation in VBC

Factor	SN	IM	CE	BU
SN	0.883**			
IM	0.933*	0.865**		
CE	0.995*	0.957*	0.906**	
BU	0.989*	0.958*	0.984*	0.860**

* Correlation between the four theoretical dimensions of Schau et al. (2009)

** Square Root of AVE for each dimension

Construct Abbreviations SN: Social Networking, IM: Impression Management, CE: Community engagement, BU: Brand Use (Source: This Research)

Table 7-5 Discriminant Validity test for the Dimensions of Brand Attachment

Factor	BSC	BP
BSC	0.915**	
BP	0.962*	0.898**

* Correlation between Brand-Self Connection and Brand Prominence

** Square Root of AVE for each dimension

Construct Abbreviations BSC: Brand-Self Connection, BP: Brand Prominence

(Source: This Research)

7.6.2 CFA for Participation in Virtual Brand Community

Participation in virtual brand communities was operationalised based on the work of Schau et al. (2009). Sixteen items were generated to capture four dimensions (i.e. social networking, impression management, community engagement and brand use) of participation in virtual brand communities. However, the correlations between the four dimensions of participation in virtual brand communities were too high and the sub-dimensions did not pass the discriminant validity test (see Section 7.6.1). The CFA of Participation in Virtual Brand Community yielded a model with Chi-square value of 663.652, $df=104$, $p=0.000$. The initial model had some issues with the goodness-of-fit (GFI=0.805, CFI=0.937, TLI=0.927, RMSEA=0.111). All of the standardised loadings for the sixteen items were above 0.7.

Upon inspection of the modification indices, it was evident that some of the error covariances were very high. Eight items were dropped as a result of the examination of the modification indices. Specifically, PRAC4, PRAC5, PRAC6, PRAC8, PRAC9, PRAC13, PRAC14, and PRAC16 were dropped because their error terms were highly correlated with multiple error terms of other variables. After dropping these items the Chi-square improved to 38.569, $df=2$, $p=0.366$. The re-specified model showed very good fit (GFI=0.978, CFI=0.996, TLI=0.994, RMSEA=0.046). Table 7-6 presents the CFA results for Participation in Virtual Brand Community.

Table 7-6 CFA Results for Participation in Virtual Brand Community

Items		Standardised Loadings	t-values
PRAC1	...I greet and welcome new members to the community.*	0.909	n/a
PRAC2	...I provide emotional support to other members for brand and non-brand issues.	0.888	29.574
PRAC3	...I assist new members in learning about [Brand].	0.906	31.243
PRAC7	...I explain to other members why I spend time and money on supporting [Brand].	0.875	28.454
PRAC10	...I tell other members about important events in my life while using [Brand].	0.929	33.588
PRAC11	...I distinguish between different members of [Brand] page.	0.911	31.745
PRAC12	...I show other members examples of important events with [Brand].	0.900	30.689
PRAC15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.	0.852	26.730
Goodness-of-fit Statistics		Initial	Re-specified
Chi-square (χ^2) of estimate model		663.652 (df=104, p=.000)	38.569 (df=2, p= 0.366)
Goodness-of-fit (GFI)		0.805	0.978
Comparative Fit Index (CFI)		0.937	0.996
Tucker-Lewis Index (TLI)		0.927	0.994
Root Mean Square Error of Approximation (RMSEA)		0.111	0.046

(Source: This Research)

7.6.3 CFA for Brand Attachment

Brand Attachment was operationalised using ten items, five measuring brand-self connection and the other five measuring brand prominence. The two-dimension model failed the discriminant validity test and brand attachment was treated as unidimensional (see Section 7.6.1). The two dimensions proposed by Park et al. (2010) correlated very highly at 0.962. The initial CFA model had a Chi-square value of 280.261, $df=35$, $p=0.000$. All of the standardised loadings were above 0.8. These results indicate the convergent validity of the indicators. The initial model showed adequate fit (GFI=0.877, CFI=0.958, TLI=0.946), although the model required some re-specification (RMSEA=0.127).

Based on the modification indices, BA1, BA4, BA6, BA7, and BA10 were all dropped because their errors variances were highly correlated. The model dramatically improved as a result of re-specification (GFI=0.987, CFI=0.995, TLI=0.991, RMSEA= 0.067). The re-specified model had a Chi-square value of 14.805, $df=5$, $p=0.011$. Table 7-7 presents the CFA result for brand attachment. After establishing the convergent validity and unidimensionality of the participation in VBC and brand attachment constructs, the next section will present the results of the validity assessment of the other constructs in this study.

Table 7-7 CFA Results for Brand Attachment			
Items		Standardised Loadings	t-values
BA1	To what extent is [Brand] part of you and who you are?*	0.925	n/a
BA2	To what extent do you feel personally connected to [Brand]?	0.933	35.073
BA5	To what extent does [Brand] say something to other people about who you are?	0.881	29.696
BA8	To what extent do your thoughts and feelings toward [Brand] come to mind so naturally and instantly that you don't have much control over them?	0.876	29.215
BA9	To what extent does the word [Brand] automatically evoke many good thoughts about the past, present, and future?	0.810	24.276
Goodness-of-fit Statistics		Initial	Re-specified
Chi-square (χ^2) of estimate model		280.261 (df=35, p=.000)	14.805 (df=5, p= 0.011)
Goodness-of-fit (GFI)		0.877	0.987
Comparative Fit Index (CFI)		0.958	0.995
Tucker-Lewis Index (TLI)		0.946	0.991
Root Mean Square Error of Approximation (RMSEA)		0.127	0.067

(Source: This Research)

7.7 Validity of Measurement Scales

The evaluation of the measurement model was conducted in two stages to assess convergent and discriminant validity of the study's constructs. Firstly, CFA was conducted on each individual construct with the items retained from the internal consistency analysis (see Section 7.5). In this stage, the unidimensionality, parameter estimates and significance, and overall fit were assessed (Anderson and Gerbing 1988, Byrne 2001). Moreover, the researcher deleted problematic indicators based on the examination of the squared multiple correlations, modifications indices,

and standardised loading. Those indicators (scale items) that fell below the suggested cut-off points or that posed a problem were dropped and the CFA model for each construct were re-specified. The results of the individual CFA served to purify the scales and build the overall measurement model of this study. Chapter 8 will discuss the overall measurement model in details.

Based on the individual construct CFA the researcher deleted three items from brand identification, two items from brand community identification, three items from participation in Facebook, eight items from participation in VBC, five items from brand attachment, one item from brand loyalty, one item from word of mouth valence, one item from hedonic motivation, and one item from utilitarian motivation. The remaining items were subsequently used in the overall CFA to assess convergent and discriminant validity. Table 7-8 presents the number of items retained from the CFA analysis.

In the overall CFA there were twelve latent constructs; brand identification, brand community identification, hedonic motivation, utilitarian motivation, participation in Facebook, participation in virtual brand communities, brand attachment, perceived quality, word of mouth (action), word of mouth (valence), brand loyalty, and willingness to pay a price premium. The proposed construct's dimensionality was also examined using CFA after the items were purified. Model goodness-of-fit indices (i.e. GFI, CFI, TLI and RMSEA) were used as a diagnostic tool to assess unidimensionality. These indices have been presented in Chapter 5 and as such they will not be further explained in this chapter.

Convergent validity was established by examining the AVE, composite reliability, and factor loadings (Hair et al. 2006). To establish convergent validity, the AVE of the constructs has to be 0.50 or greater (Hair et al. 2006). Composite reliability values of 0.70 or above indicate good internal consistency (Hair et al. 2006). Moreover, the parameters estimates need to have a high value and the t-value should be statistically significant for convergent validity to be established (Anderson and Gerbing 1988). Specifically, at 0.05 significance level, the t-value cut-off value is positive or negative 1.96 whereas at 0.01 significance the value should be greater than positive or negative 2.58 (Anderson and Gerbing 1988). Standardised loading

should ideally be 0.50 or above but preferably 0.70 or above, which suggests good convergent validity (Hair et al. 2006).

Moreover, discriminant validity was established using two methods. Firstly, the square root of the AVE for each contrast was compared to the correlation estimate between every pair of contrasts (Fornell and Larcker 1981). If the square root of the construct's AVE is greater than the correlation between two constructs then it can be said that they are discriminant (Fornell and Larcker 1981, Hair et al. 2006). Secondly, in a CFA a two-factor model is compared to a restricted one-factor model (where the correlation is fixed to one) and a Chi-Square difference test is then conducted (Anderson and Gerbing 1988).

7.7.2 Results of Convergent Validity

Table 7-8 presents the results of the AVE and the composite reliability for all of the purified constructs. All the constructs retained in the CFA met the cut-off values of AVE and CR; therefore, exhibited good convergent validity. The constructs AVE ranged from 0.579 to 0.830. Moreover, the composite reliability values for the constructs ranged from 0.801 to 0.970. Finally all of the standardised loadings were above 0.5. These results indicate that the study's constructs have high convergent validity and internal consistency (Fornell and Larcker 1981, Hair et al. 2006).

Table 7-8 CFA Evaluation for of the Proposed Constructs

Construct	Standardized loadings	Items Deleted	Remaining Items	AVE	CR
Brand Identification	0.726 to 0.919	3	3	0.731	0.890
Brand Community Identification	0.847 to 0.925	2	5	0.813	0.956
Participation in Facebook	0.737 to 0.923	3	4	0.739	0.918
Participation in VBC	0.859 to 0.925	8	8	0.804	0.970
Brand Attachment	0.814 to 0.933	5	5	0.786	0.948
Brand Loyalty	0.878 to 0.941	1	3	0.830	0.936
Perceived Quality	0.815 to 0.901	0	3	0.753	0.901
Willingness to pay a price premium	0.600 to 0.885	0	3	0.579	0.801
Word of Mouth Action	0.845 to 0.875	0	4	0.730	0.915
Word of Mouth Valence	0.723 to 0.860	1	3	0.653	0.849
Hedonic Motivation	0.856 to 0.921	1	3	0.792	0.920
Utilitarian Motivation	0.777 to 0.839	1	3	0.651	0.848

(Source: This Research)

7.7.5 Results of Discriminant Validity

In order to evaluate discriminant validity, the square root of the AVE for each construct was compared to the correlations of all pairs of constructs (Fornall and Larcker 1981, Hair et al. 2006). Table 7-9 illustrates the discriminant validity analysis for this study. The diagonal line in the table indicates the square root of the AVE for the twelve constructs in this study. The rows and columns represent the correlations of each pair of constructs.

The results of the discriminant validity analysis show that all of the constructs are distinct from each other, except for hedonic and utilitarian motivation. Furthermore, utilitarian motivation failed the discriminant validity test with brand community identification. The high correlations between these constructs exceeded the square root of their AVE (Fornell and Larcker 1981). All of the other correlations had values that are less than the square root of the AVE for each individual construct. With the exception of hedonic motivation and utilitarian motivation, these results provide strong support for the discriminant validity of the proposed constructs.

This study has also conducted another discriminant validity assessment using CFA (Anderson and Gerbing 1988). In this method, the researcher specified each pair of constructs as a two-factor CFA model and the Chi-square value and degree of freedom were noted. A single factor CFA model was then specified where all the indicators of the pair of constructs were loaded on one factor. Finally, the researcher conducted a Chi-square difference test to assess whether the difference between the unconstrained and the constrained models are significant. If the Chi-square difference is significant then discriminant validity is established (Anderson and Gerbing 1988). The results of all the pairwise comparisons showed that all of the twelve constructs are in fact discriminant. Appendix I includes the detailed results of the pairwise comparison discriminant validity test.

The results of the two approaches to discriminant validity assessment seem to contradict each other with regard to the motivation construct. In the AVE approach, hedonic and utilitarian motivation both fail the discriminant validity test while in the

CFA pairwise comparison they pass the test. Consumer behaviour theory recognises utilitarian motivation and hedonic motivation as two distinct (dichotomous) constructs (Hirschman and Holbrook 1982, Childers et al. 2001). Babin et al. (1994) suggests that the relationship direction and strength between hedonic and utilitarian value is influenced by many considerations. Specifically, in one context both motivations may exist while in another context one motivation type might inhibit the other. Batra and Ahtola (1990) suggested that consumers could derive value from consumption in a bi-dimensional manner. In other words, consumption behaviour may be driven by both utilitarian and hedonic motivation (Voss et al. 2003).

The very high correlation between the dimensions does not fit well with the theoretical foundation of consumption motivation where these constructs are only expected to correlate modestly because they are usually not mutually exclusive (Batra and Ahtola 1990, Babin et al. 1994). As the literature points to two distinct dimensions of motivation, it was expected in this study that hedonic motivation and utilitarian motivation would correlate moderately and that one dimension would present itself more than the others when the consumers participate in virtual brand communities. However, based on the theoretical background and the unexpected results of the motivation construct, the researcher decided not to include motivation in any further analysis or hypothesis testing.

TABLE 7-9 Discriminant Validity Analysis for the Proposed Constructs

Factor	BI	BCI	PARTFB	PARTVBC	BA	PQ	BL	WOMA	WOMV	WTTP	HMOTV	UMOTV
BI	0.855											
BCI	0.763	0.902										
PARTFB	0.598	0.742	0.860									
PARTVBC	0.65	0.733	0.841	0.897								
BA	0.784	0.858	0.689	0.7	0.887							
PQ	0.159	0.204	0.08	-0.02	0.213	0.868						
BL	0.625	0.724	0.534	0.488	0.738	0.405	0.911					
WOMA	0.842	0.786	0.71	0.696	0.821	0.208	0.739	0.854				
WOMV	0.548	0.565	0.473	0.331	0.603	0.487	0.767	0.764	0.808			
WTTP	0.484	0.533	0.449	0.377	0.562	0.429	0.719	0.593	0.706	0.761		
HMOTV	0.706	0.863	0.752	0.696	0.801	0.245	0.68	0.751	0.6	0.518	0.890	
UMOTV	0.657	0.879	0.756	0.643	0.771	0.245	0.656	0.766	0.701	0.546	0.902	0.807

The black diagonal cells present the square root of the AVE for each construct. The columns and rows present the correlations between the constructs.

Constructs abbreviations: BI: Brand Identification, BCI: Brand Community Identification, PARTFB: Participation in Facebook, PARTVBC: Participation in Virtual Brand Community, BA: Brand Attachment, PQ: Perceived Quality, BL: Brand Loyalty, WOMA: Word of Mouth Action, and WOMV: Word of Mouth Valence, WTTP: Willingness to pay a price premium, HMOTV: Hedonic Motivation, UMOTV: Utilitarian Motivation. (Source: This Research)

7.8 Summary

This chapter has presented the profile and descriptive statistics of the study's respondents. It also presented the Facebook usage patterns of the sample. There were 436 usable responses obtained for the purpose of testing the proposed relationships. In the sample, over 50% of the brand page members were females, the largest age group were aged between 25 to 34 (26.6%), over 50% were married or living with a partner, and more than half had an education level beyond high school. The respondents had various professions and jobs. Almost 90% of the sample were British.

The construct measures have met the minimum required level for univariate normality. On the other hand, a number of the study's construct suffered from joint multivariate non-normality. This issue was addressed with the bootstrapping approach. After the offending items were dropped, all of the measurement scales had good internal consistency. An assessment of convergent and discriminant validity has also been presented. On the whole, the proposed constructs demonstrated good convergent and discriminant validity. Chapter 8 will present the structural equation modeling analysis. Meanwhile, Chapter 9 will present the data analysis of the nature of participation.

Chapter 8: Structural Equation Modelling

8.1 Introduction

The aim of this chapter is to present the data analysis of the proposed model using Structural Equation Modeling (SEM) in the AMOS software package. The researcher followed a two-step approach to SEM analysis (Anderson and Gerbing 1988). In the first step the measurement model was assessed while in the second step the structural model was evaluated and tested. Section 8.2 discusses the Confirmatory Factor Analysis (CFA) measurement model that is used in this study. In addition, Section 8.2 will present the measurement model respecification. Section 8.3 will present the structural model of this study and it will describe the hypotheses testing of the research model. In addition, Section 8.3 will also present the post hoc analysis of the structural model. The study's final model will be presented in Section 8.4. A brief summary of the findings will be presented in Section 8.5. Finally, Section 8.6 will summarise the chapter as a whole.

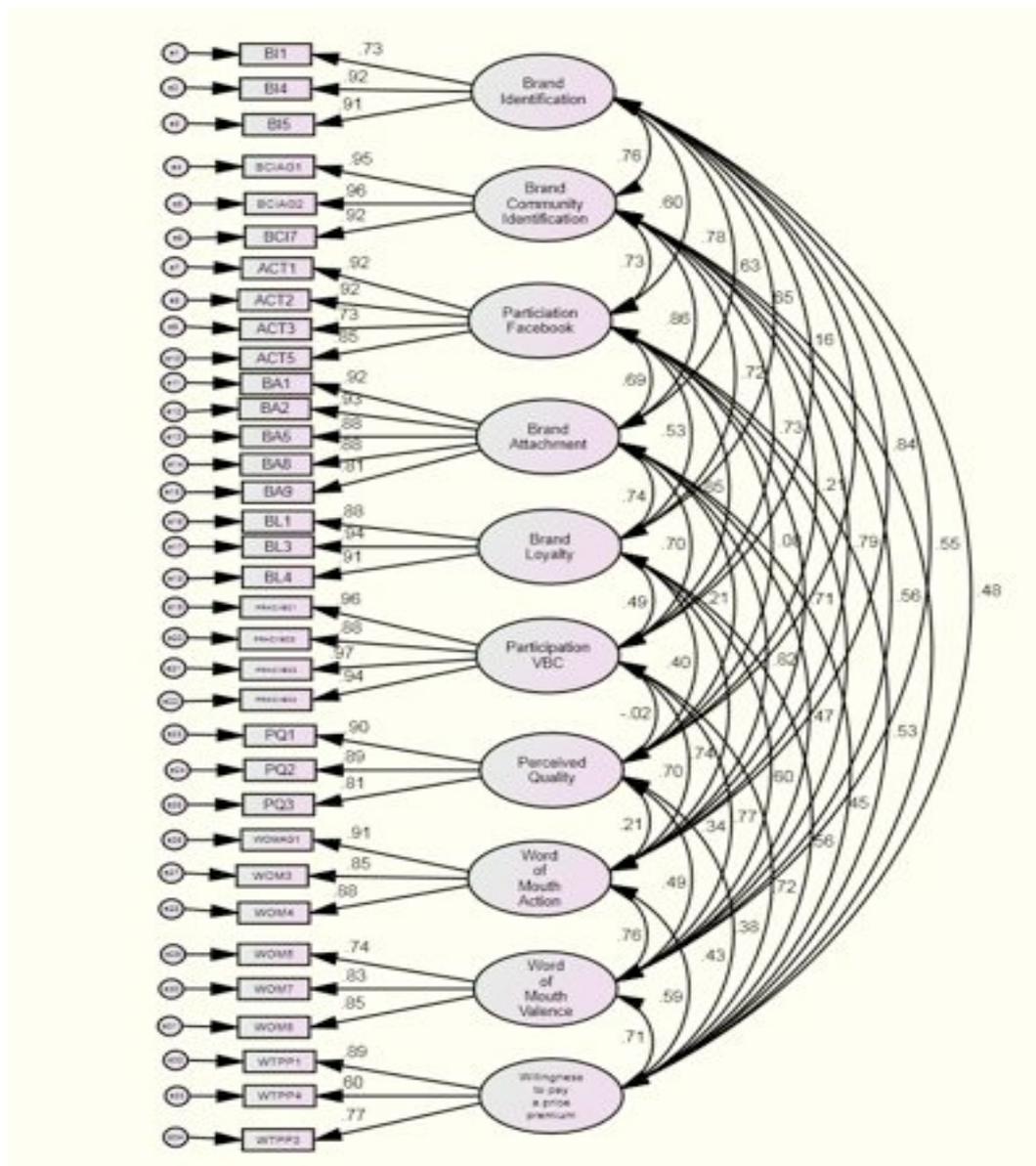
8.2 Measurement Model

A measurement model is concerned with how well the observed indicators are able to measure the latent constructs. The measurement model specifies how observable variables capture the hypothetical constructs proposed by the researcher. There are three important aspects of evaluating a measurement model, which are: dimensionality, validity, and reliability. Data preparation and screening (which included handling missing data, outliers, and normality assumptions) was conducted and the results have been presented in Chapter 7. The measurement model was estimated using the ML Estimation Method because of its robustness in providing reliable estimates even when the data is not multivariate normal (Byrne 2001, Hair et al. 2006).

In Chapter 7, the researcher conducted a CFA on each construct individually in order to assess the unidimensionality, reliability, and construct validity of the proposed constructs. In this chapter, the overall measurement model will be assessed. Figure 8-1 presents the overall measurement model. The measurement model consists of ten latent constructs, which are: Brand Identification (BI); Brand Community Identification (BCI); Participation in Facebook (PARTFB); Participation in Virtual

Brand Community (PARTVBC); Brand Attachment (BA); Perceived Quality (PQ); Brand Loyalty (BL); Willingness to Pay a Price Premium (WTPP); Word of Mouth Action (WOMA); and Word of Mouth Valence (WOMA). The researcher opted to parcel some items to form composite indicators due to the complexity of the model. The following section will discuss the rationale for this approach.

Figure 8-1 Overall Measurement Model



(Source: This Research)

8.2.1 Item Parcelling

The measurement model for this study was complex due to the large number of indicators that were used to measure some latent constructs and the large number of

structural links. Therefore, the model lacked parsimony (Baumgartner and Homburg 1996). To tackle the issue of model complexity and adequacy of sample size, the researcher parcelled some of the items into individual constructs. Parcelling is a measurement practice that is often used to improve the psychometrics of a SEM model. A parcel is an “*aggregate-level indicator comprised of the sum (or average) of two or more items, responses, or behaviours*” (Little et al. 2002, p. 152). This practice is not without its opponents, who equate the practice with cheating (Littler et al. 2002). This school of thought believes that modelling reality should not be manufactured by introducing practices such as parcelling. In contrast, some researchers condone the use of parcelling as a tool to help clarify the picture of reality (Little et al. 2002). This latter school of thought supports the use of parcelling because it believes that research should focus on building replicable models based on meaningful indicators of the main constructs (Little et al. 2002).

The major advantages of parcels fall into two main areas: psychometric characteristics and model fit (Little et al. 2002). Aggregate-level data is advantageous over item-level data because item-level data suffers from lower reliability, lower communality, a smaller ratio of common-to-unique factor variance, and a greater likelihood of distributional violations (Kishton and Widman 1994, Hall et al. 1999, Little et al. 2002). Parcels also have smaller and more equal intervals between scale points than items (Bagozzi and Heatherton 1994). The second advantage of using parcels over items is the improvement in model fit (Meade and Kroustalis 2006). Using parcels reduces model complexity because it reduces the number of parameters needed to define a construct (Bagozzi and Heatherton 1994, Hall et al. 1999, Little et al. 2002). This means that the item to subject ratio is improved, especially when the psychometrics of the items are poor (Little et al. 2002).

There are also disadvantages to using parcels. Parcelling may be problematic when constructs are not unidimensional (Bagozzi and Heatherton 1994, Little et al. 2002). Creating parcels for constructs that are not unidimensional creates difficulty in interpreting the sub-dimensions of the constructs (Bagozzi and Heatherton 1994). Consequently, the unidimensionality of the construct is an important condition for parcelling items (Meade and Kroustalis 2006). The other disadvantage of parcelling is

that it has the potential to increase Type II errors by improving model fit for all models, whether they are correctly specified or not (Little et al. 2002). In other words, parcelling may hide any misspecification that would usually be found at the item-level data (Bandalos and Finney 2001, Little et al. 2002). Finally, parcelling items may take away important information that is included in the measurement scale (Bandalos and Finney 2001, Little et al. 2002).

In this study, the researcher used parcelling to reduce model complexity and improve model fit. The objectives of this study did not involve scale development, refinement, and testing, but focused instead on testing structural aspects of the proposed model. Therefore, under such circumstances it may be beneficial to use parcelling to achieve the set objective. Furthermore, the constructs that underwent parcelling are all unidimensional constructs.

8.2.2 Parcel Building Techniques

There are three techniques for building parcels, which are: random assignment (Hall et al. 1999, Bandalos and Finney 2001, Little et al. 2002); item-to-construct balance (Hall et al. 1999, Little et al. 2002); and theoretical or empirical rationale, or prior questionnaire construction (Little et al. 2002, Hall et al. 1999). In the random assignment technique, item parcelling is done on a random or quasi-random basis. In this method, two, three, or four parcels or groups of items can be created. In the item-to-construct balance, the items are parcelled based on their loadings. The highest loaded items are matched with the lowest loaded items. The number of items need not be the same in all parcels. In the third approach of prior questionnaire construction, the researcher builds parcels based on combining negatively worded items with positively worded items in order to reduce acquiescence bias. Another approach in prior questionnaire construction is to parcel items based on difficulty, so that items of various difficulties are distributed across the parcel.

Bagozzi and Heatherton (1994) suggest four approaches to (or models of) parcelling, which are: total aggregation, partial aggregation, partial disaggregation, and total disaggregation. In the total aggregation model, a theoretical construct is operationalised as a single composite of all indicators in the scale. For the partial

aggregation, “*each dimension is operationalized as the sum of items hypothesized to measure that dimension*” (Bagozzi and Heatherton 1994, p. 47). The dimensions in the partial aggregation model are not treated as latent constructs; rather, they are organised hierarchically as indicators of an abstract latent construct.

In the case of the partial disaggregation model, pairs or triplets of items in each construct are computed into a composite. In the partial disaggregation model each dimension is represented as a distinct latent variable “*indicated by a composite of subscales*” (Bagozzi and Heatherton 1994, p. 41). The difference between the partial aggregation and the partial disaggregation models is that in the partial disaggregation model the latent variables or dimensions are allowed to correlate, which allows for the assessment of discriminant validity. When the number of items per dimension is small (i.e. from five to seven items), two composites of items for each dimension can be created; however, if the number of items per dimension is large (i.e. nine or more), then three or more composites can serve as indicators for each dimension (Bagozzi and Heatherton 1994). Thereafter, the newly created composites act as multiple indicators for the latent variables. Finally, in the total disaggregation model, each single item is treated as a measure of its respective latent construct. In the total disaggregation model no composites are created to measure the latent constructs.

The researcher in this study chose to adopt the partial disaggregation approach with some items aggregated into composite indicators. The researcher used the prior questionnaire construction approach where items were parcelled based on how the questionnaire was developed, the question wording, and theoretical dimensions. All of the constructs that underwent parcelling were unidimensional. Not all of the items in the constructs were parcelled. Care was taken to keep the number of composite and original items to a minimum of three items per construct for the purpose of identification of the model and measurement reliability (Anderson and Gerbing 1988, Bollen 1989, Baumgartner and Homburg 1996). The scales were aggregated based on a pairing approach (Bagozzi and Heatherton 1994). Every two items were computed as a composite where the number of indicators were four or above.

Parcelling was performed on two items for word of mouth action: WOM1 and WOM2. These two indicators were chosen because the word of mouth action

construct had four indicators. Parcelling WOM1 and WOM2 allowed the researcher to have three items measuring word of mouth action. The wording and meaning of items WOM1 (*I mention [Brand] to others quite frequently*) and WOM2 (*I've told more people about [Brand] than I've told about most other brands*) are closer than items WOM3 (*I seldom miss an opportunity to tell others about [Brand]*) and WOM4 (*When I tell others about [Brand], I tend to talk about the brand in great detail*) (Bagozzi and Heatherton 1994).

Two parcels were created for four items measuring brand community identification, which were BCI1, BCI3, BCI5, and BCI6. These items were parcelled together because the items measured similar things with regards to brand community identification. BCI1 (*I identify myself as belonging to the [Brand] community*) and BCI3 (*I see myself as a typical and representative member of the community*) formed the first parcel, while BCI5 (*I can identify with the [Brand] community*) and BCI6 (*I have strong feelings for the [Brand] community*) formed the second parcel. In the case of participation in virtual brand community, parcelling was done to reflect the wording of the questions and how closely the questions were related to each other (Bagozzi and Heatherton 1994, Baumgartner and Homburg 1996, Hall et al. 1999, Little et al. 2002). PRAC1, PRAC2 and PRAC3 were parcelled as a composite indicator PRACVBC1, while PRAC10, PRAC11 and PRAC12 were parcelled into another composite indicator, PRACVBC3. PRAC7 has been renamed as PRACVBC2 and PRAC15 has been renamed as PRACVBC4 to avoid confusion. Table 8-1 lists those variables that were parcelled in the overall CFA model.

Table 8-1 Parcelled Items for CFA and Structural Model	
Participation in Virtual Brand Community	
PRACVBC1	PRAC1, PRAC2, PRAC3
PRACVBC2	PRAC7
PRACVBC3	PRAC10, PRAC11, PRAC12
PRACVBC4	PRAC15
Word of Mouth Action	
WOMAG1	WOM1, WOM2
Brand Community Identification	
BCIAG1	BCI1, BCI3
BCIAG2	BCI5, BCI6

(Source: This Research)

8.2.3 Results of the Measurement Model Assessment

Table 8-2 presents the results for the overall model assessment. It can be seen that all the standardised loadings were above 0.7, with the exception of WTPP4, which indicates convergence of the items on the constructs (Hair et al. 2006). All t-values were high and significantly greater than ± 2.58 at $p = 0.01$. This result also supports convergent validity since it is important for the standardised loadings to be significant. Composite reliability for the constructs ranged from 0.801 to 0.968, indicating high internal consistency (Hair et al. 2006, Fornell and Larcker 1981). Furthermore, AVE for the latent constructs ranged from 0.578 to 0.888. These values support the convergent validity of the constructs (Hair et al. 2006, Fornell and Larcker 1981). In addition, all ten constructs passed the discriminant validity tests. Table 8-3 presents the results of the AVE discriminant validity test, while Table 8-4 presents the pairwise comparison for the constructs with parcelled items. Chapter 7 covered validity tests in detail so only comparisons between constructs with parcels are presented here.

Table 8-2 CFA Results for Overall Measurement Model

Constructs and Items	Standardised Loadings	t-values	Composite Reliability	Squared Multiple Correlations	AVE
Brand Identification			0.890		0.731
BI1	0.726	18.802		0.527	
BI4	0.918	29.388		0.843	
BI5*	0.908	n/a		0.825	
Brand Community Identification			0.960		0.888
BCIAG1	0.948	37.099		0.899	
BCIAG2	0.960	38.695		0.922	
BCI7*	0.919	n/a		0.844	
Participation in Facebook			0.918		0.739
ACT1	0.919	19.753		0.845	
ACT2	0.925	19.870		0.855	
ACT3*§	0.734	n/a		0.539	
ACT5	0.847	18.066		0.717	
Participation in VBC			0.968		0.883
PARTVBC1	0.964	44.336		0.930	
PARTVBC2	0.885	31.967		0.783	
PARTVBC3	0.970	45.737		0.942	
PARTVBC4*	0.938	n/a		0.880	
Brand Attachment			0.948		0.786
BA1	0.922	29.584		0.850	
BA2	0.933	30.471		0.871	
BA5*	0.88	n/a		0.774	
BA8	0.879	26.531		0.773	
BA9	0.813	22.707		0.662	
Perceived Quality			0.901		0.752
PQ1	0.900	21.694		0.811	
PQ2	0.886	21.397		0.785	

Table 8-2 CFA Results for Overall Measurement Model

Constructs and Items	Standardised Loadings	t-values	Composite Reliability	Squared Multiple Correlations	AVE
PQ3*	0.813	n/a		0.661	
Brand Loyalty			0.936		0.831
BL1	0.878	28.342		0.771	
BL3	0.941	33.796		0.885	
BL4*	0.914	n/a		0.835	
Word of Mouth Action			0.909		0.769
WOMAG1	0.907	27.495		0.823	
WOM3	0.846	23.886		0.716	
WOM4*	0.877	n/a		0.768	
Word of Mouth Valence			0.850		0.655
WOM5	0.739	17.445		0.546	
WOM7	0.834	20.753		0.695	
WOM8*	0.851	n/a		0.724	
Willingness to Pay a Price Premium			0.801		0.578
WTTP1	0.885	17.306		0.783	
WTTP3	0.771	12.139		0.595	
WTTP4*§	0.598	n/a		0.358	

Note: * Fixed parameter, § item deleted after CFA (Source: This Research)

Table 8-3 Results of Discriminant Validity of Constructs in Overall CFA with Parcels based on Correlations and AVE

Factor	BI	BCI	PARTFB	PARTVBC	BA	PQ	BL	WOMA	WOMV	WTPP
BI	0.855									
BCI	0.762	0.942								
PARTFB	0.598	0.729	0.860							
PARTVBC	0.650	0.730	0.848	0.940						
BA	0.784	0.856	0.689	0.703	0.887					
PQ	0.158	0.209	0.080	-0.018	0.213	0.867				
BL	0.625	0.721	0.534	0.491	0.737	0.405	0.912			
WOMA	0.845	0.787	0.712	0.705	0.823	0.205	0.738	0.877		
WOMV	0.548	0.564	0.472	0.338	0.603	0.491	0.768	0.762	0.809	
WTPP	0.485	0.534	0.449	0.377	0.562	0.429	0.719	0.593	0.707	0.760

The black diagonal cells present the square root of the AVE for each construct. The columns and rows present the correlations between the constructs. Construct abbreviations: BI: Brand Identification, BCI: Brand Community Identification, PARTFB: Participation in Facebook, PARTVBC: Participation in Virtual Brand Community, BA: Brand Attachment, PQ: Perceived Quality, BL: Brand Loyalty, WOMA: Word of Mouth Action, and WOMV: Word of Mouth Valence, WTPP: Willingness to pay a price premium, HMOTV: Hedonic Motivation, UMOTV: Utilitarian Motivation. (Source: This Research)

Table 8-4 Results of Discriminant Validity Testing for Constructs with Parcels

Correlations	Chi-Square constrained	df Constrained	P Constrained	Chi-Square	df	P	Chi square Difference	Significance (0.05)
BI \leftrightarrow WOMA	189.762	9	0.000	19.125	8	0.014	170.637	Significant
BCI \leftrightarrow BI	558.001	20	0.000	44.43	19	0.001	513.571	Significant
PARTVBC \leftrightarrow PARTFB	473.001	20	0.000	43.874	19	0.001	429.127	Significant

(Source: This Research)

8.2.4 Respecifying the Measurement Model

The initial CFA model had a Chi-square value of 952.244, $df=482$, $p=0.000$ and the model had adequate fit (GFI=0.881, CFI=0.970, TLI=0.965, and RMSEA=0.047). These indices and significant Chi-square suggested the possibility of respecifying the CFA model. Upon examining the modification indices and the results in Table 8-5 two items were dropped from the mode: ACT3 and WTPP4. These items were dropped because they had high cross-loadings on several constructs and their squared multiple correlations were low. In the case of WTPP4 the squared multiple correlation was below the recommended 0.5 (Steenkamp and van Trijp 1991).

The respecified model did show improvements with regards to goodness-of-fit. Chi-square dropped to 790.067, with 419 degrees of freedom, $p=0.000$. The Chi-square difference test shows that the respecification of the measurement model is substantial and significant where $\Delta\chi^2_{(63)}=162.177$, $p=0.05$. The respecified model had improved GOF indices, GFI=0.895, CFI=0.976, TLI=0.971, and RMSEA=0.045. Although the GFI is below 0.90, the model seems to have adequate fit where the CFI and the TLI are both above 0.95 and RMSEA is below the recommended 0.05 (Hu and Bentler 1995, Hair et al. 2006, Byrne 2001). On the whole, the model had benefited from the respecification as the fit indices improved. This suggested that the model fitted the data adequately. Table 8-5 presents the results of the CFA of this study's measurement model.

Goodness-of-fit Statistics	Initial	Respecified
Chi-square (χ^2) of estimate model	952.244 ($df=482$, $p=0.000$)	790.067 ($df=419$, $p=0.000$)
Goodness-of-fit (GFI)	0.881	0.895
Comparative Fit Index (CFI)	0.970	0.976
Tucker-Lewis Index (TLI)	0.965	0.971
Root Mean Square Error of Approximation (RMSEA)	0.047	0.045

(Source: This Research)

8.2.5 Summary of Measurement Model

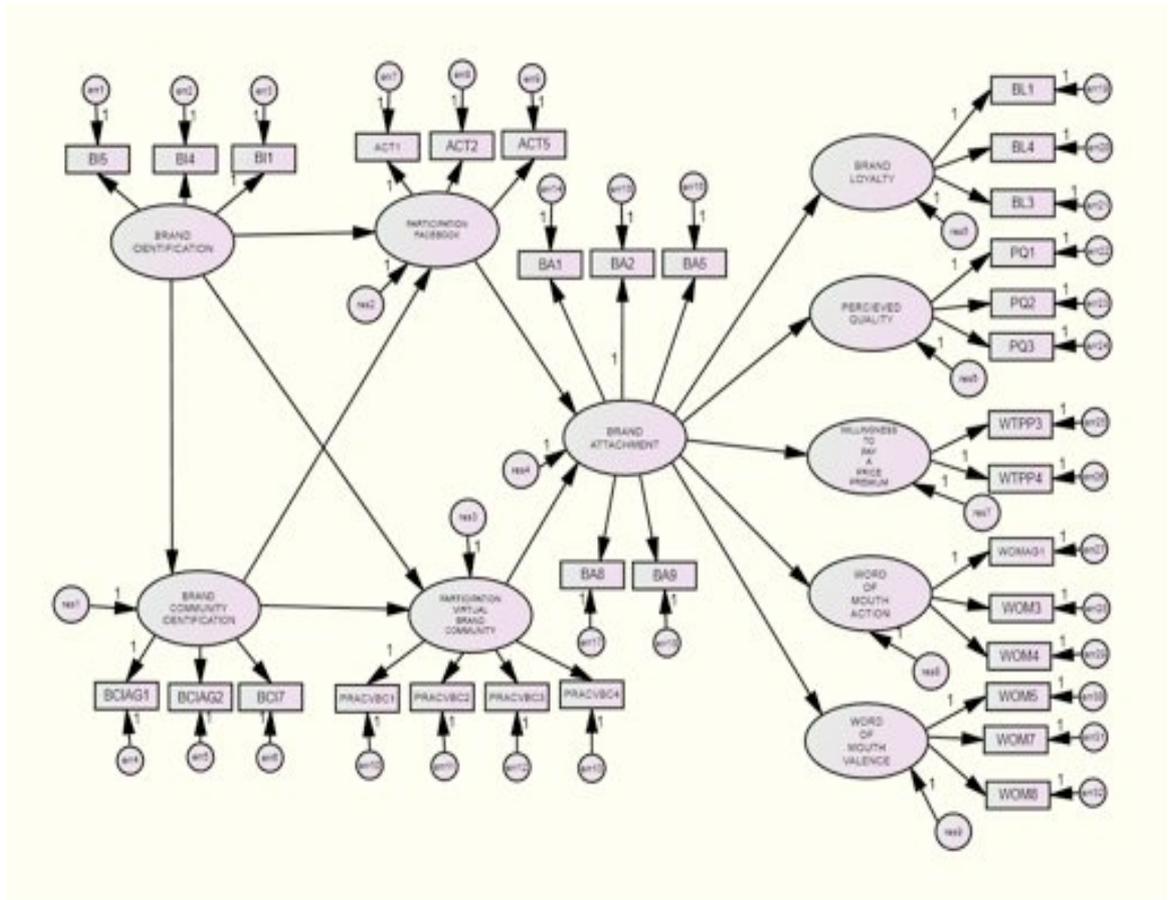
This section has evaluated the CFA measurement model and has revealed that the respecified model has an adequate fit with the data. Evidence of unidimensionality, convergent validity, and reliability of the constructs was also provided. These results conclude that the measurement model is ready to be tested in the structural format.

8.3 Structural Model

A structural model is the component of the general model that prescribes the relations between a proposed set of latent (unobserved) variables (Bollen 1989, Hoyle 1995, Byrne 2001). In contrast to the measurement model, the structural model is not concerned with how the indicators load on each factor, but rather with how the latent constructs influence each other, directly and indirectly, based on theory (Byrne 2001, Hair et al. 2006). In this section the theoretical model proposed in Chapter 4 will be tested and the results reported.

The structural model is composed of one exogenous and nine endogenous constructs. The sole exogenous construct is Brand Identification. The nine endogenous constructs are Brand Community Identification, Participation in Facebook, Participation in Virtual Brand Community, Brand Attachment, Perceived Quality, Brand Loyalty, Word of Mouth Action, Word of Mouth Valence, and Willingness to Pay a Price Premium. The graphical depiction of the structural model followed the conventions of presenting SEM models (Byrne 2001, Kline 2005). Figure 8-2 presents the structural model and the relationships among the proposed constructs.

Figure 8-2 Proposed Structural Model and Components



(Source: This Research)

8.3.1 Goodness-of-Fit Assessment of Proposed Model

The first step towards testing the hypotheses proposed by this study is to assess the goodness-of-fit of the theoretical model. At this stage, the SEM analysis, the GOF, and significance, direction, and size of structural parameter estimates were assessed (Hair et al. 2006). In other words, the validity of the structural model was assessed.

All constructs demonstrated reasonable and good estimates, with the exception of the path between Brand Identification and Participation in Facebook. The path estimate between brand identification and participation in Facebook was insignificant at $p=0.05$ ($\beta=0.113$, $t=1.866$, $p=0.062$) (Arbuckle and Wothke 1999). The default in AMOS is to provide t-values based on a two-tail test. The path between Brand Identification and Participation in Facebook is significant in a one-tail test where the

critical value, with 452 degrees of freedom, at $p=0.05$, is 1.64. All the error and residual variance estimates had good t-values (all above ± 1.96 , $p=0.05$).

In order to assess the GOF of the structural model, four indices were chosen: absolute fit index (GFI), incremental fit index (TLI), goodness of fit index (CFI), and badness-of-fit index (RMSEA) (Hu and Bentler 1995, Arbuckle and Wothke 1999, Byrne 2001, Hair et al. 2006). The Chi-square value and the associated degrees of freedom will also be reported.

The initial structural model had a Chi-square value of 1869.661 with 452 degrees of freedom ($p < 0.0001$). Given that this study utilises a reasonably large sample of 436, the high and significant Chi-Square value is not surprising (Bollen 1989, Byrne 2001, Kline 2005). One approach to tackle the issue of inflated Chi-square values is to obtain the minimum discrepancy, which is the ratio obtained by dividing Chi-square by the model's degrees of freedom (Bollen 1989, Byrne 2001). Carmines and McIver (1981), cited in Arbuckle and Wothke (1999), suggested that a ratio in the range of 2 to 1 or 3 to 1 indicates an acceptable fit. In the initial structural model the minimum discrepancy was 4.136. This indicated problems with model fit. The researcher focused on the other four GOF indices to assess the fit of the structural model.

The initial estimation of the structural model yielded a GFI value of 0.765, which indicated a poor fitting model. The CFI value for the model was 0.905 and the TLI value was 0.896. These values are not too low given that there is a large number of observed variables and a large sample size. Hair et al. (2006) suggested that when the sample size exceeds 250, and the number of observed variables is at least 30, CFI and TLI should be above 0.90. This suggestion has been fulfilled in the case of CFI but not TLI. Finally, RMSEA for the model was 0.085, which is slightly above the recommended cut point of 0.08 (Hu and Bentler 1995, Arbuckle and Wothke 1999). These values indicated that the model required respecification. The GOF indices should be at least adequate to support the results and findings of the hypothesis testing.

8.3.2 Structural Model Respecification

A number of problems were evident upon inspection of the modification indices and the standardised residuals covariances. There were several high MI values for a number of residual variances between latent constructs. Residual variance, also called residual or latent error, is the error in predicting the unobserved variable (Byrne 2001). This is not to be confused with measurement error, which is associated with an observed variable and is concerned with the degree to which an indicator does not perfectly describe a latent construct (Hair et al. 2006). The respecification of the structural model focused on the residual variances between the latent constructs and not the measurement error.

The MI value for the covariance of res2 and res3 (the residual variances of Participation in Facebook and Participation in virtual brand community respectively) was 161.822. In addition the correlation between res2 and res3 was 0.679. Consequently, it is obvious that the high covariance MI value is a source of misfit. The researcher decided to relax the assumption that res2 and res3 are not correlated and specified that the two participation residual variances be correlated. The relaxing of the zero correlation between the residual variances is not uncommon in consumer research. For example, in their investigation of market orientation, creativity, and new product performance, Im and Workman (2004) resorted to relaxing some assumptions regarding the measurement and latent error correlations, and noticed an improvement in the model fit. It is theoretically plausible to correlate the residual variances of the two participation constructs. The two constructs represent two dimensions of participation. Participation in Facebook is focused on activities, such as posting on the brand pages on Facebook. On the other hand, participation in virtual brand communities describes the more collective sets of practices that consumers perform in online brand communities. Therefore, it is not surprising that the residual variances of these two constructs correlate since the two dimensions may overlap.

Another area where evidence of a source of misfit was found was in the modification indices of the covariance for res5 (BL), res6 (PQ), res7 (WTPP), res8 (WOMA), and res9 (WOMV), which were found to be high. For example, the MI value for the

covariance of res9 and res5 was 86.152, with res6 it was 62.55, with res7 it was 53.82, and with res8 it was 69.4. These residual variances belong to the brand equity dimensions and outcomes proposed in this study. These residual variances also correlated with each other where the correlation ranged from 0.075 to 0.636. Table 8-6 presents the correlations between the residual variances of the brand equity constructs.

Table 8-6 The Correlations Between the Residual Variances of the Brand Equity Outcomes and Dimensions

Residual Variances	res5	res6	res7	res8	res9
res5					
res6	0.385				
res7	0.570	0.472			
res8	0.339	0.075	0.195		
res9	0.602	0.471	0.636	0.599	

Residual variance abbreviations: res5: residual variance of brand loyalty, res6: residual variance of perceived quality; res7: residual variance of willingness to pay a price premium; res8: residual variance of word of mouth action; and res9: residual variance of word of mouth valence. (Source: This Research)

In Chapter 4 the theoretical model proposed that there are a number of brand equity dimensions and outcomes (including; brand loyalty, perceived quality, willingness to pay a price premium, and word of mouth) that manifest as a result of consumers' attachment to the brand. These dimensions and brand performance measures are well established in the literature and have been examined in various contexts (see Aaker 1991, Cobb-Walgren et al. 1995, Yoo et al. 2000, Krishnan and Hartline 2001, Yoo and Donthu 2001, Netemeyer et al. 2004, Washburn and Plank 2002, Pappu et al. 2005, Christodoulides and de Chernatony 2010). Although many competing frameworks have been proposed in the literature, this study adopted the most common manifestations of brand equity. These dimensions seem to be positively associated with each other where their correlations are medium to high. Many authors have shown that the dimensions of brand equity do in fact move in the same direction together to indicate brand performance (Cobb-Walgren et al. 1995, Yoo et al. 2000, Netemeyer et al. 2004).

The researcher correlated the residual variances of the brand equity variables in order to address the high MI of the correlations between them. In doing so, the

researcher is suggesting that the five proposed dimensions represent brand equity and their residual variances are expected to be related. Therefore, the assumptions that the brand equity dimension residual variances do not correlate has been relaxed. Yoo et al. (2000) had relaxed their assumption that the residual variances of brand equity dimensions are uncorrelated and allowed the residual variances of brand loyalty, perceived quality, and brand awareness/association to correlate in order to improve their model. Furthermore, Im and Workman (2004) have also shown that residual variances can be relaxed when the theory supports relaxing the assumptions.

Although there were other residual variances that correlated, there was no theoretical justification to relax those particular assumptions as in the case of participation and the brand equity dimensions. Therefore, the researcher respecified the structural model to reflect the correlations of res2 and res3. Moreover, the research specified the correlation between res5, res6, res7, res8, and res9. All the brand equity's residual variances were allowed to correlate except for res6 (Perceived Quality) and res8 (WOM Action) because the covariance estimate was insignificant (t-value was 1.253 and $p=0.210$).

Upon inspecting the respecified model, there was evidence of a dramatic improvement to the model's fit. The respecified model had a Chi-square value of 1268.391, $df=442$, $p=0.000$. The Chi-square difference test was conducted and the result indicated that there was a significant difference. Therefore, the change in Chi-square is substantial and indicates that the respecified model is superior to the baseline structural model. The minimum discrepancy in the respecified model fell to a ratio of 2.870. Moreover, the model had better GOF, where $GFI=0.852$, $CFI=0.945$, $TLI=0.938$, and $RMSEA=0.066$. Although the GFI fell short of 0.90, the rest of the fit indices indicated that the model has an adequate fit. Hair et al. (2006) have suggested that researchers should adjust the index cut-off values based on model characteristics. The more complex the model (i.e. a large number of observed variables and latent constructs) and the larger the sample size, the less strict the cut-off values for fit indices will be in comparison to simpler models and the smaller the sample sizes will be (Hair et al. 2006). With confidence in the respecified model's GOF, the researcher commenced the hypothesis testing.

8.3.3 Hypothesis Testing of the Proposed Model

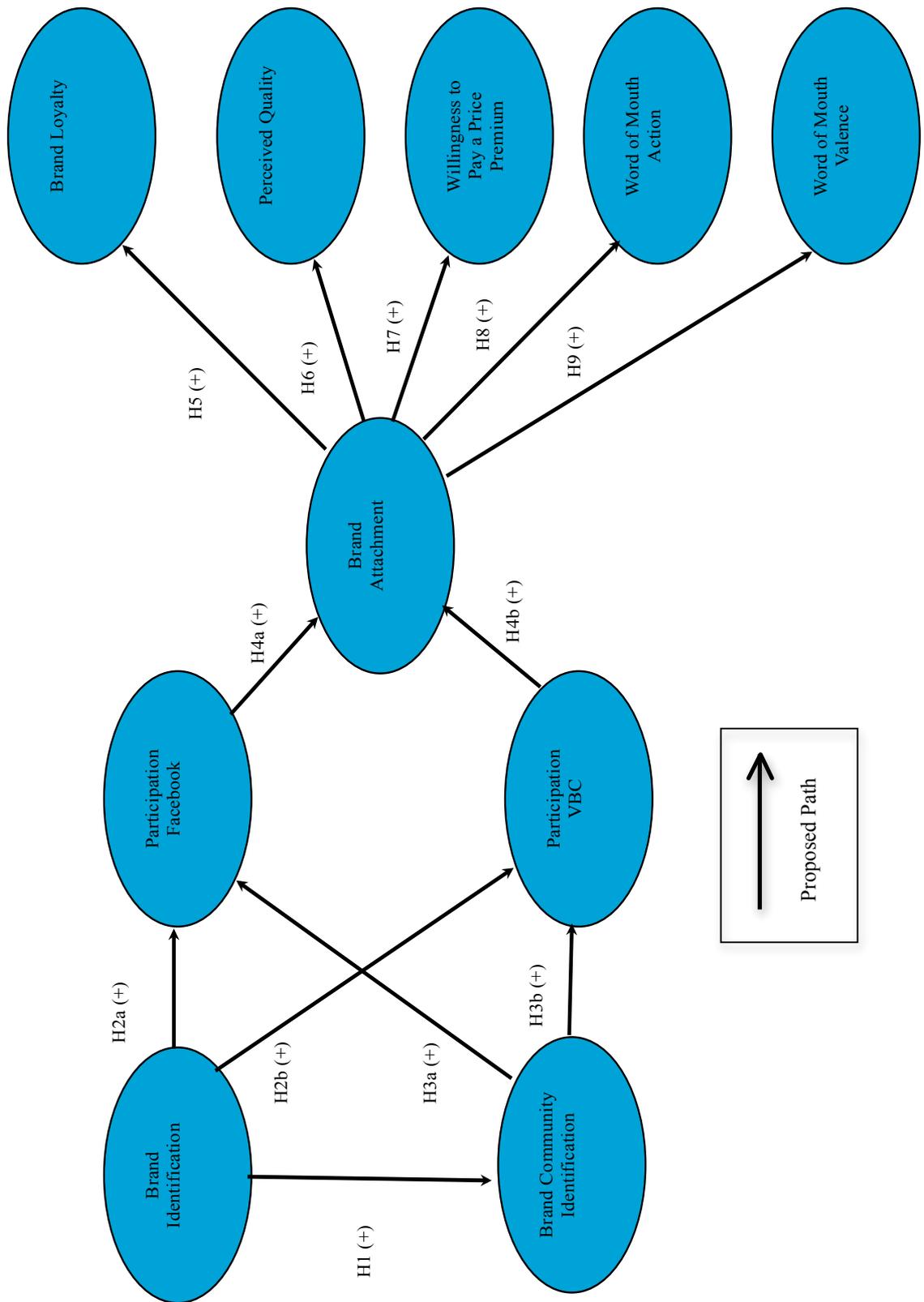
The previous sections have established the validity of the structural model. This section will verify whether the empirical results obtained in this study support the hypotheses proposed by the researcher. The criterion for testing the hypotheses is the t-values of the regression estimates, where the t-value should exceed 1.96 at $p < 0.05$ (Hair et al. 2006). Figure 8-3 illustrates the hypotheses paths of the structural model. Table 8-7 presents the hypotheses test results and also includes the standardised coefficients, t-values, and the corresponding significance levels.

Table 8-7 Hypotheses Test Results for the Proposed Structural Model				
	Hypotheses and Hypothesised Path	Standardised Coefficient	t-value	Results
H1:	Brand Identification --> Brand community Identification	0.761	14.900***	Supported
H2a:	Brand Identification --> Participation in Facebook	0.112	1.809§	Supported (one-tail)
H2b:	Brand Identification --> Participation in Virtual Brand Communities	0.229	3.916***	Supported
H3a:	Brand Community Identification --> Participation in Facebook	0.647	10.422***	Supported
H3b:	Brand community identification --> Participation in Virtual Brand Community	0.562	9.828***	Supported
H4a:	Participation in Facebook --> Brand Attachment	0.341	4.500***	Supported
H4b:	Participation in Virtual Brand Community --> Brand Attachment	0.432	5.810***	Supported
H5:	Brand Attachment --> Brand Loyalty	0.739	17.465***	Supported
H6:	Brand Attachment --> Perceived Quality	0.206	4.070***	Supported
H7:	Brand Attachment --> Willingness to Pay a Price Premium	0.579	7.749***	Supported
H8:	Brand Attachment --> Word of Mouth Action	0.831	22.094***	Supported
H9:	Brand Attachment --> Word of Mouth Valence	0.606	11.572***	Supported

Note: *** $p < 0.001$, § significant at $p=0.035$ (one-tail)

(Source: This Research)

Figure 8-3 Proposed Structural Model and Hypotheses Paths



The hypothesis testing revealed that all the hypothesized links were significant. The next section will present the proposed hypothesis testing. The hypothesis testing will be presented in the following structure: antecedents of participation (Brand Identification and Brand Community Identification); mediators (Participation and Brand Attachment); and consequences (Brand Loyalty, Perceived Quality, Willingness to Pay a Premium Price, and Word of Mouth).

8.3.3.1 Brand Identification

H1: Consumer-brand identification is directly and positively related to brand community identification.

The result of testing H1 shows that the relationship between brand identification and brand community identification is a direct and positive one (t-value=14.900. $p < 0.001$). It can be inferred from this that the identification of consumers with the brand influences their identification with the brand community.

H2a: Consumer-brand identification is directly and positively related to participation in Facebook.

H2b: Consumer-brand identification is directly and positively related to participation in virtual brand community.

Brand identification was also hypothesised to have a direct and positive relationship with participation in Facebook (H2a) and virtual brand communities (H2b). H2a was marginally supported (t-value=1.809, $p=0.035$, one-tail), which means that there is weak relationship between brand identification and participation activities in Facebook. H2a was also supported (t-value= 3.916, $p < 0.001$). This finding means that brand identification directly and positively influences consumer practices in virtual brand communities.

8.3.3.2 Brand Community Identification

H3a: Identification with the virtual brand community is directly and positively related to participation in Facebook.

H3b: Identification with the virtual brand community is directly and positively related to participation in virtual brand community.

The theoretical model presented in this study proposed that identification with the brand community also directly and positively influences participation. Specifically, it is hypothesized that identification with the brand community positively influences both levels of participation, in Facebook and virtual brand community. H3a was supported (t-value=10.422, $p < 0.001$) which means that when consumers identify with the brand community, they engage in brand pages on Facebook by posting comments and sharing their thoughts with the brand and others. H3b was also supported (t-value=9.828, $p < 0.001$); thus, when consumers identify with the brand community, it drives their participation at the virtual brand community level. In other words, when consumers identify with the virtual brand community, they engage in social networking, impression management, community engagement, and brand use practices.

8.3.3.3 Participation

H4a: Participation in Facebook is directly and positively related to brand attachment.

H4b: Participation in virtual brand communities is directly and positively related to brand attachment.

At Facebook and the virtual brand community level, participation was hypothesised to have a direct and positive influence on consumers' attachment to the brand. H4a was supported (t-value=4.500, $p < 0.001$), which means that consumers who participate and perform posting activities on brand pages on Facebook develop attachment to the brand. Moreover, H4b was supported (t-value=5.810, $p < 0.001$),

which indicated that when consumers perform practices such as social networking, impression management, community engagement, and brand use they develop attachment to the brand.

8.3.3.4 Brand Attachment and Brand Equity Dimensions and Outcomes

H5: Brand attachment is directly and positively related to brand loyalty.

H6: Brand attachment is directly and positively related to perceived quality.

H7: Brand attachment is directly and positively related to willingness to pay a price premium for the brand.

H8: Brand attachment is directly and positively related to word of mouth action.

H9: Brand attachment is directly and positively related to word of mouth valence.

This study has proposed that there are a number of brand equity outcomes that materialise as a result of the consumers' attachment to the brand. The researcher predicted that the more consumers are attached to the brand, the more loyal they are to the brand, the higher their perception is of the brand's quality, the more they are willing to pay a price premium for the brand, and the more frequently they would positively talk about the brand. H5 was supported (t-value=17.465, $p < 0.001$) which indicates that when brand attachment increases, this positively influences loyalty to the brand. H6 was also supported (t-value=4.070, $p < 0.001$) indicating that consumers' attachment to the brand positively influences their perceptions of the brand's quality. H7 was supported (t-value=7.749, $p < 0.001$) which indicates that when consumers are attached to the brand, they are willing to pay a price premium for the brand and other brands. Finally, H8 (t-value=0.831, $p < 0.001$) and H9 (t-value=0.606, $p < 0.001$) were supported. These results show that when consumers are attached to the brand, they speak favourably about the brand more often than not.

8.3.4 Post Hoc Analysis of Structural Model

The proposed model in this study is a fully mediated model. The relationships between identification and brand attachment are conceptualized to be fully mediated through participation. This means that there is no direct link between identification and brand attachment. After testing the proposed hypotheses of this study, the researcher conducted a number of post hoc analyses (Hair et al. 2006). Post hoc analysis is used to explore theoretically plausible paths that were not hypothesized, especially when model fit may indicate model misspecification (Byrne 2001, Hair et al. 2006). Post hoc analysis should be guided by theory rather than by statistical consideration alone, as often theory would limit the number of options to explore (Anderson and Gerbing 1988). The researcher focused on possible, theory-supported model improvements rather than theory testing in this stage (Hair et al. 2006). Upon inspecting the hypothesised model and its proposed relations, the researcher found evidence of plausible model respecification. The next section will present alternative models to the proposed model in this study.

8.3.5 Alternative Model (Partial Mediation Model)

As an alternative to the proposed model, the researcher sought to explore whether the relationship between brand identification and brand community identification and brand attachment is partially mediated. This means that the effect of brand identification and brand community identification on brand attachment is partially mediated through participation. Therefore, identification can be considered another antecedent of brand attachment with a direct link between the two constructs. From a theoretical perspective, allowing for the direct effect of brand identification and brand community identification on brand attachment is warranted.

Organisational researchers have shown that identification with the organisation has favourable consequences such as a sense of connectedness to an organisation and defining oneself in terms of the organisation (Mael and Ashforth 1992). Furthermore, Bhattacharya and Sen (2003) suggested that when consumers identify with a company they become psychologically attached to the company and care

about it. Empirical research has also shown that psychological attachment is based on identification among other constructs (O'Reilly and Chatman 1986).

As for brand community identification, Carlson et al. (2008) showed that identification had a positive influence on psychological sense of brand community, which in turn positively influenced brand commitment. They also showed that brand identification was directly linked to brand commitment in the brand community context (Carlson et al. 2008). However, brand attachment is a broader construct than brand commitment and it is plausible to expect that the same links hold in the case of brand attachment. Moreover, brand community identification is motivated by the social process of oppositional loyalty (Muniz and O'Guinn 2001, Thompson and Sinha 2008). It is not unreasonable to expect those consumers who possess social identification with other brand users to be attached to the brand (Thompson and Sinha 2008). The oppositional loyalty that consumers exhibit may produce bias towards the brand and, therefore, lead to attachment to the brand.

A review of the modification indices of this study's proposed model revealed evidence that supports the proposition that brand identification and community identification have a direct link to brand attachment. Large modification indices values have linked the two identification constructs to attachment. The first path was the link between Brand Identification and Brand Attachment (BI ---> BA), which had a MI value of (80.681). The second path was a direct link between Brand Community Identification and Brand Attachment (BCI--->BA), which had a MI value of 73.543. Specifying these two new links would improve the model fit and reduces the Chi-square value.

The estimation of the partial mediation model generated an overall Chi-Square value 973.941, with 439 degrees of freedom ($p < 0.001$). This is substantial and a significant improvement from the proposed model where $\Delta\chi^2_{(2)} = 293.527$, $p=0.05$. The fit indices of the partial mediation model indicated an adequate fitting model: GFI=0.871, CFI=0.964, TLI=0.960, and RMSEA=0.053. The two new paths, (BI--->BA) and (BCI--->BA), both had significant t-values (6.948) and (10.524) at $p < 0.001$, respectively. With the addition of the two new paths in the model, the paths

linking participation in Facebook and Virtual Brand Community to brand attachment no longer had significant t-values. These unexpected results will be discussed in the next Chapter 10.

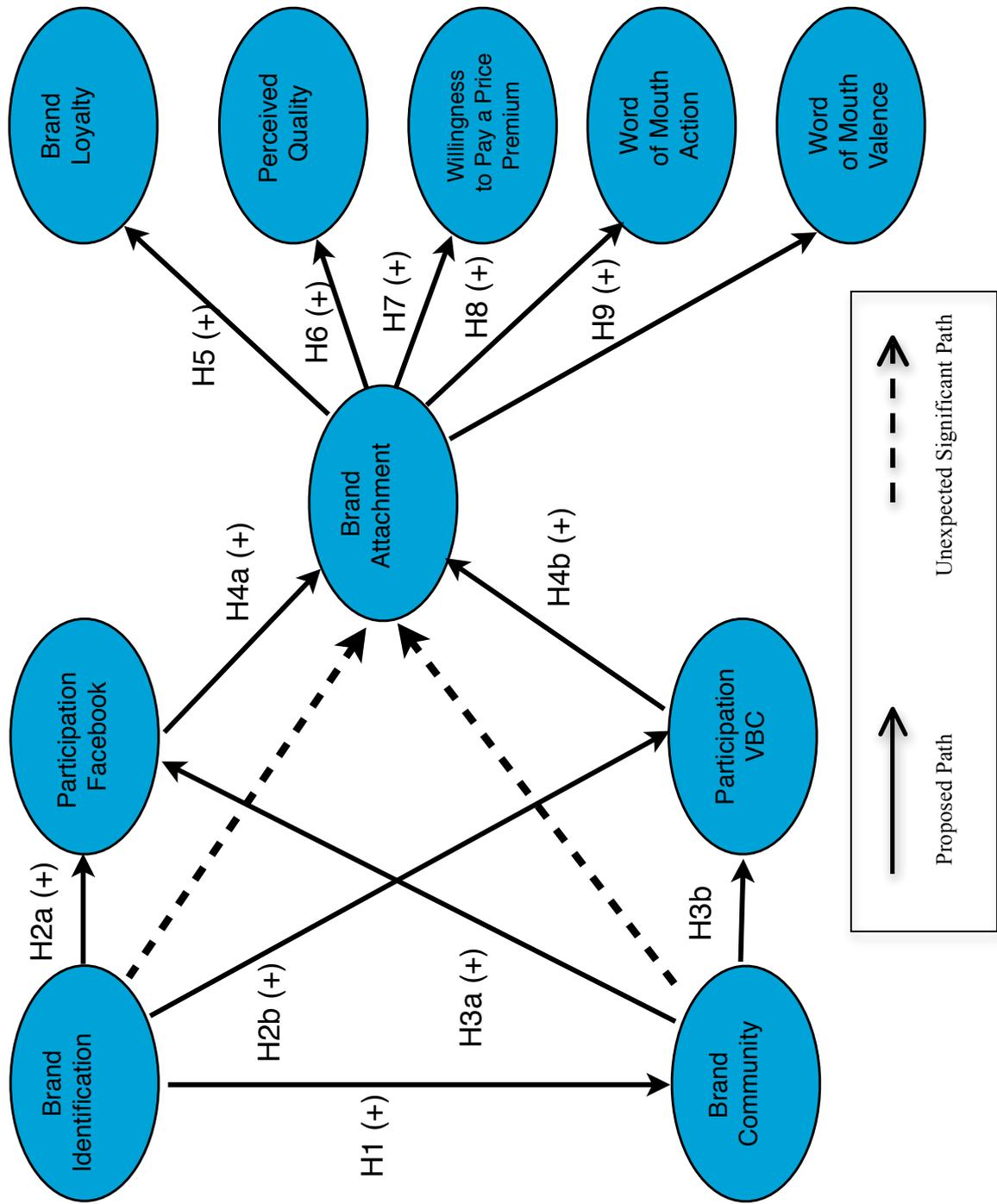
8.4 The Final Model

The final structural model of this study is presented in Figure 8-4. The partial mediation model, where direct links between identification and brand attachment were specified, was chosen as the final model. Table 8-8 presents the GOF comparison of the proposed and alternative models for this study. The partial mediation model has been chosen because the aim of this study is to test the theory proposed by the researcher. In comparing the original proposed model and the partial mediation model it can be seen that the latter has the best fit. The first model is also theoretically plausible. The findings of the final model indicate that there is support for the majority of proposed relationships. The two new specified paths were shown to be significant. The final model shows that the two participation paths to brand attachment were insignificant; therefore, the hypothesised positive influence of participation on brand attachment was not supported. The next section will present the results of the hypothesis testing for the final model for this study.

Table 8-8 Goodness-of-fit Measure for Competing Structural Models										
Model	Model Modifications	χ^2	$\Delta\chi^2$	df	P	χ^2/df	GFI	CFI	TLI	RMSEA
Proposed Model (Full Mediation)	-	1268.391	-	442	0.000	2.870	0.852	0.945	0.938	0.066
Alternative Model (Partial Mediation)	BI -->BA BCI-->BA	973.941	294.45	439	0.000	2.219	0.871	0.964	0.960	0.053

(Source: This Research)

Figure 8-4 Final Model (Partial Mediation Model)



8.4.1 Antecedents of Brand Attachment

The results of the final model have shown that H1 was supported and that brand identification positively and directly influenced brand community identification (t-value=14.989, $p < 0.001$). H2a was rejected, which meant that there was no significant evidence to support the positive and direct relationship of brand identification to participation in Facebook (t-value=1.563, $p = 0.118$). On the other hand, H2b was supported, which indicated that brand identification positively and directly influenced participation in virtual brand community (t-value=3.764, $p < 0.001$). H3a and H3b were both supported, which indicated that brand community identification directly and positively influenced participation in Facebook (t-value=10.132, $p < 0.001$) and participation in virtual brand community (t-value=9.693, $p < 0.001$). H4 proposed that the first set of mediators (i.e. participation in Facebook (H4a) and in virtual brand community (H4b)) mediated the effect of identification on brand attachment; however, H4a and H4b were not supported in the final model. There was no significant evidence to support the direct and positive influence of participation in Facebook (t-value=1.507, $p = 0.132$) and participation in virtual brand community (t-value=0.924, $p = 0.356$) on brand attachment.

In the final partial mediation model, identification was respecified to include direct paths to brand attachment. Brand identification and brand community identification were both linked via a direct path to brand attachment. When the researcher estimated the structural model, the path from brand identification to brand attachment was significant (t-value=6.948, $p < 0.001$), and the path from brand community identification and brand attachment was also significant (t-value=10.524, $p < 0.001$). These findings suggest that identification with the brand and the brand communities may influence consumers' attachment to the brand directly rather than indirectly through participation. This result and the lack of support for H4a and H4b were unexpected. These results will be discussed further in Chapter 10.

8.4.2 The Mediating Role of Brand Attachment

In the final model, brand attachment is the sole mediator of the relationship between participation and identification, and the brand performance measures. Brand attachment was hypothesised to positively and directly influence brand loyalty (H5), perceived quality of the brand (H6), willingness to pay a price premium for the brand (H7), word of mouth action (H8), and word of mouth valence (H9). H5 was supported in the final model (t-value=17.828, $p<0.001$), which indicates that consumers' attachment to the brand influences their loyalty to the brand. H6 was also supported (t-value=4.165, $p<0.001$), which implied that consumers' attachment to the brand positively influences consumers' perceptions of the brand's quality. H7 was supported (t-value=7.790, $p<0.001$), which provided evidence of a positive and direct influence of brand attachment on consumers' willingness to pay a price premium for the brand over other brands. H8 was also supported (t-value=22.837, $p<0.001$). These results indicate that brand attachment positively and directly influenced consumers' engagement in word of mouth behaviour. Finally, H9 was supported (t-value=11.728, $p<0.001$), which provided evidence of a positive and direct relationship between brand attachment and the nature of consumers' word of mouth behaviour. Table 8-9 presents the hypothesis testing results for the final structural model.

Table 8-9 Hypotheses Test Results for Final Structural Model

Hypotheses and Hypothesised Path		Standardised Coefficient	t-value	Results
H1:	Brand Identification --> Brand community Identification	0.762	14.989***	Supported
H2a:	Brand Identification --> Participation in Facebook	0.099	1.563§	Rejected
H2b:	Brand Identification --> Participation in Virtual Brand Communities	0.222	3.764***	Supported
H3a:	Brand Community Identification --> Participation in Facebook	0.642	10.132***	Supported
H3b:	Brand community identification --> Participation in Virtual Brand Community	0.561	9.693***	Supported
H4a:	Participation in Facebook --> Brand Attachment	0.084	1.507§	Rejected
H4b:	Participation in Virtual Brand Community --> Brand Attachment	0.052	0.924§	Rejected
H5:	Brand Attachment --> Brand Loyalty	0.739	17.828***	Supported
H6:	Brand Attachment --> Perceived Quality	0.211	4.165***	Supported
H7:	Brand Attachment --> Willingness to Pay a Price Premium	0.582	7.790***	Supported
H8:	Brand Attachment --> Word of Mouth Action	0.845	22.837***	Supported
H9:	Brand Attachment --> Word of Mouth Valence	0.611	11.728***	Supported

(Source: This Research)

8.5 Summary of Findings

The data from this study's proposed model was analysed using a two-step SEM model. The first step was to analyse the model using CFA to establish the unidimensionality, reliability, and convergent and discriminant validity of the proposed constructs. The proposed model satisfactorily met the suggested measurement model thresholds. In the second step, the structural model was estimated based on the results of the CFA. The initial structural model had fit problems and had to be respecified based on the modification indices and the estimation of the structural model. Consequently, the researcher has taken care to only respecify paths based on theoretical grounds rather than be guided by empirical results. The proposed model's fit improved (i.e. $\chi^2=1268.391$, $df=442$, $p=0.000$, $GFI=0.852$, $CFI=0.945$, $TLI=0.938$, and $RMSEA=0.066$) and was deemed to be adequate for hypotheses testing.

One alternative model (i.e. the partial mediation model) was tested where it showed improvement in model fit. The partial mediation model was chosen as the final model for this study because it had the best fit in comparison to the originally proposed model (i.e. $\chi^2=973.941$, $df=439$, $p=0.000$, $GFI=0.871$, $CFI=0.964$, $TLI=0.960$, and $RMSEA=0.053$). The model proved insightful in explaining possible drivers of brand attachment.

The final model was tested and the results indicated that out of the fourteen paths presented, only eleven paths were found to be statistically significant. The eleven significant paths are: Brand identification to Brand Community Identification; Brand Identification to Participation in Virtual Brand Community; Brand Community Identification to Participation in Facebook; Brand Community Identification to Participation in Virtual Brand Community; Brand Attachment to Brand Loyalty; Brand Attachment to Perceived Quality; Brand Attachment to Willingness to Pay a Price Premium; Brand Attachment to Word of Mouth Action; Brand Attachment to Word of Mouth Valence; Brand Identification to Brand Attachment; and Brand Community Identification to Brand Attachment.

8.6 Summary

This chapter has presented the SEM analysis of the study's model. The first step towards hypothesis testing was to assess the measurement model. The analysis showed that the measurement model satisfied the criteria of unidimensionality, reliability, convergent validity, and discriminant validity. The measurement model set the stage for the hypothesis testing in the structural model. SEM was used to test the proposed hypotheses and the results were presented. Chapter 10 will present the discussion of the results of the hypothesis testing and the nature of participation. In Chapter 11, the conclusions and implications of this study will be presented, along with a number of suggestions for future research. The next chapter will present the analysis on the nature of participation.

Chapter 9: Nature of Participation

9.1 Introduction

This chapter aims to present the analysis of the nature of participation on ‘brand’ pages on Facebook. In Chapter 1, the researcher outlined the objective of exploring the nature of consumer’s participation on ‘brand’ pages on social networking websites. The researcher aimed to identify what types of virtual brand community users exist and ascertain their participation profiles on ‘brand’ pages on Facebook. This chapter will address the two research questions that were presented in Chapter 1:

- (1) What types of brand page members exist, as based on their participation on brand pages on Facebook?*
- (2) What is the difference between brand page member types, as based on their relationships with the brand and the brand community?*

In this study, participation has been conceptualised to be the sole mediator between identification and brand attachment. Therefore, understanding the nature of this important construct is essential. Consequently, this chapter is a stepping-stone to the understanding of the nature of participation and member types on Facebook “brand” pages.

To address the research questions and objectives, this chapter will be split into three sections. Section 9.2 will compare the study’s respondents based their average frequency of participation using One-way ANOVA and post-hoc tests. Section 9.3 will test the propositions put forward by Kozinets (1999) on how consumers progress and migrate from their early stages to their more mature stages in a virtual brand community. Section 9.4 will present the profiling of the study’s respondents based on their performance of activities and the practices that they engage in on Facebook ‘brand’ pages. Finally, Section 9.5 will summarise this chapter.

9.2 Comparing Respondents on the Basis of the Average Frequency of Participation

The objective of comparing respondents on the basis of the average frequency of their participation behaviour is to discern the type of members who join and use 'brand' pages. The following subsections present the analysis that has been used to explore the different types of users in the virtual brand communities.

9.2.1 One-Way ANOVA

The purpose of the one-way ANOVA is to investigate the types of virtual brand community users that exist on 'brand' pages based on the average frequency of their participation. The use of one-way ANOVA is intended to explore the difference, if any, between the types of users per each activity and practice. The respondents were examined on the basis of their self-classification as tourist, mingler, devotee, and insider. The difference in means of the frequency of the participation items, based on the purified scales in Chapter 7, were examined using between groups one-way ANOVA.

The initial one-way between groups ANOVA revealed that there is a significant difference between the participation frequency means for the four groups (i.e. tourist, minglers, devotees, and insiders) on the two dimensions of participation on Facebook and participation in a virtual brand community. Table 9-1 lists the F values for the one-way ANOVA test. The initial ANOVA shows that the F-test values were high and significant ($p < 0.05$). It can be seen from Table 9-1 that tourists have the lowest means compared to the other groups, followed by minglers. The devotees are the third highest group with regards to participation. Although insiders did not have the highest average frequency of participation in the participation in Facebook, their average frequency of participation was still higher than tourists and minglers. Insiders had the highest average frequency of participation at the virtual brand community level.

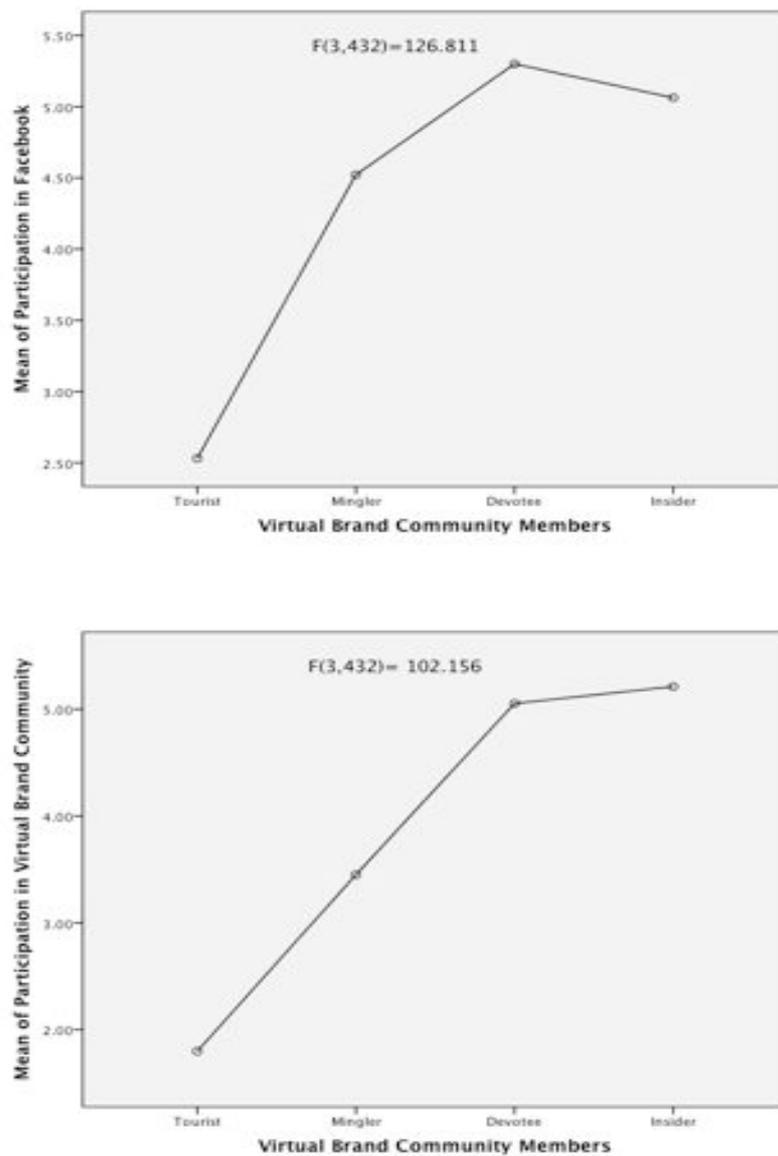
Table 9-1 Results of the one-way between groups ANOVA

Dimension	Tourists	Minglers	Devotees	Insiders	F	Sig
Participation in Facebook	2.53	4.52	5.30	5.06	126.811	0.000
Participation in VBC	1.80	3.45	5.05	5.21	102.156	0.000

(Source: This Research)

Figure 9-1 presents the mean plots of the participation frequencies for the four groups of virtual brand community participants. The plots clearly show a rising trend from tourist to devotees but beyond that the picture is less clear between devotees and insiders. The results of the one-way between groups ANOVA indicated that the means of the participation frequencies per dimension are different but it does not provide details into which group means are different. Thus, post-hoc analysis was conducted to determine which group means are significantly different.

Figure 9-1: Means of the participation frequencies for each member type for the two participation dimensions



(Source: This Research)

9.2.2 Post-hoc Analysis

The post-hoc analysis of the ANOVA was followed with a test of the homogeneity of variance. The test of the homogeneity of variance tests the null hypothesis which states that the error variance of the dependent variable is equal across the different groups

(Hinton 2004, Janssens et al. 2008). It is important to conduct this test because there are two sets of post-hoc tests: those that assume equal variance and those that do not. Table 9-2 lists the results of the test of homogeneity of variance.

Table 9-2 The Test of Homogeneity of Variance			
Dimension	Levene's Statistic	Significance	Homogeneity of Variance
Participation in FB	2.312	0.001	Not Equal
Participation in VBC	5.287	0.076	Equal

(Source: This Research)

The test of homogeneity of variance indicated that the null hypothesis cannot be rejected for participation in virtual brand community. This meant that one of the post-hoc tests that assume equal variance should be used in this case (Hinton 2004, Janssens et al. 2008). On the other hand, the Levene's test of the participation in Facebook indicated that the error variance of the dimension is not equal. By rejecting the null hypothesis, the post-hoc tests that are available to the researcher are those that do not assume equal variance (Hinton 2004, Janssens et al. 2008). Consequently, the researcher opted to use the Tamhane's T2 post-hoc test that does not assume equal variance. Tamhane's T2 was chosen because it is a conservative pairwise comparative post-hoc test that can be used when the group sizes are unequal and the variances are not assumed to be equal. The conservative nature of this test reduces the chance of Type I error occurring due to the large number of comparisons. A Type I error represents the probability that the researcher will reject the null hypothesis that the population means are equal and conclude that the means are significantly different when in fact the means are the same (Hair et al. 1998). The chances of Type I error occurring increases when numerous comparative post-hoc tests are conducted. The increasing number of comparisons increases the risk of finding differences between the population means by chance (Hinton 2004). Therefore, the choice of the Tamhane's T2 post-hoc test was made to control this risk.

9.2.3 Post-hoc Analysis Results

The following section presents the results of the post-hoc analysis for the two dimensions of participation: Facebook and virtual brand community.

9.2.3.1 Participation in Facebook

Although the ANOVA analysis (Table 9-1) revealed that the mean scores of participation frequency in Facebook differed across the four groups, it did not indicate which mean scores differed significantly. The post-hoc analysis showed that tourists had significantly different mean scores of participation on Facebook than minglers, devotees, and insiders. Although the mean scores of minglers' participation were significantly different from the devotees' average frequency of participation, it was not different from the insiders' average frequency of participation. The participation mean scores for devotees and insiders were not significantly different from each other. Table 9-3 presents the results of the post-hoc test for participation on Facebook.

Table 9-3 Post-hoc Test Result for The Participation in Facebook Dimension	
Group	Significantly different from*
Tourist	Mingler, Devotee, and Insider
Mingler	Tourist and Devotee
Devotee	Tourist and Mingler
Insider	Tourist
ANOVA Test $F(3,432)= 102.156 (p < 0.001)$	
*Significantly different at $p < 0.05$	

(Source: This Research)

9.2.3.2 Participation in a Virtual Brand Community

The ANOVA results in Table 9-1 indicate that there were significant differences between the mean scores of the frequency of participation in the virtual brand

community for the four groups. The post-hoc analysis conducted on the average frequency of participation in virtual brand community indicated that there is a significant difference between the mean scores of tourists and those scores of minglers, devotees, and insiders. The mean score of participation for minglers was also significantly different from the means scores of devotees and insiders. Furthermore, the mean scores of participation in virtual brand communities for devotees and insiders did not significantly differ from each other. Table 9-4 presents the post-hoc test results for the participation in virtual brand community dimension.

Table 9-4 Post-hoc Test Results for the Participation in VBC Dimension	
Group	Significantly different from*
Tourist	Mingler, Devotee, and Insider
Mingler	Tourist, Devotee, and Insider
Devotee	Tourist and Mingler
Insider	Tourist and Mingler
ANOVA Test $F(3,432)= 126.811 (p < 0.001)$	
*Significantly different at $p < 0.05$	

(Source: This Research)

9.2.4 Summary of ANOVA and Post-hoc Analysis

The ANOVA analysis indicated that there are significant differences in the frequency mean scores of participation for the four groups (i.e. tourists, minglers, devotees, and insiders). Post-hoc pairwise comparisons tests were conducted using Tamhane's T2 to elaborate and explore which means are different. It was evident from the results that there are no significant differences between the mean scores of devotees and insiders. Figure 9-1 shows that the mean plots plateaus or declines after the average frequency scores of devotees. These results demonstrate there are more than two categories of users in virtual brand communities. Specifically, this study found that there are three groups of virtual brand community users as opposed to the dominant poster and lurker perspective that is dominant in the literature.

These results also give support to the aggregation of the last two groups (i.e. devotees and insiders). Combining these two groups serves two purposes. First, since there is no evidence in this study that the two groups perform virtual brand community activities and practices at significantly higher frequencies than each other, they are practically the same. Second, by combining these two groups the number of cases in the new group will be larger than each of original groups, therefore it will be more beneficial for further analysis. Based on these arguments, the researcher formed a new group by combining devotees and insiders. The new group was called 'fans' which represents the characteristics of 'devotees' and 'insiders'.

9.3 Progression of Individual Members Participation in Virtual Brand Communities

Another important aspect of the nature of participation in this study is to explore the nature of the progression of the members' participation in the virtual brand community. According to Kozinets (1999) there is a pattern of relationship development in virtual brand communities. Consumers develop their consumption knowledge while at the same time they develop social relations. Kozinets (1999, p. 254) asserts that "*what began primarily as a search for information transforms into a source of community and understanding*".

The researcher aimed at testing the progress of the virtual brand community members from being visitors (i.e. tourists) to becoming active contributors (i.e. fans). Specifically, the researcher tested the hypothesis that there is a positive association between group membership (i.e. tourist, mingler, and fan) and the frequency of participation, duration of membership, and time spent participating in the virtual community. The researcher proposed that users develop in the virtual brand community and that they upgrade from being tourists to minglers to fans. When consumers migrate in the community their new role influences the frequency and nature participation as well as the duration of time spent participating in the community. With the passage of time in the virtual brand communities, users upgrade their membership with regards to

these aspects of the virtual brand communities. These associations were tested using Spearman's correlation because all of the scales are ordinal or assumed to be ordinal. The formal hypotheses are:

H22: There is a positive association between group membership type (tourists, mingler, and fans) and frequency of participation.

H23: There is a positive association between group membership type (tourists, mingler, and fans) and duration of membership.

H24: There is a positive association between group membership type (tourists, mingler, and fans) and time spent in the virtual brand community.

9.3.1 Correlation of Group Membership Type and Frequency of Participation

H22 proposed that there is a positive association between group membership (tourist, mingler, and fan) and frequency of participation. The Spearman correlation supports this hypothesis where both dimensions of participation (i.e. Facebook and virtual brand community) are positively correlated with membership types. The participation dimensions were tested and purified where participation in Facebook had four items and the participation in virtual brand community had eight (see Chapter 7). The rank correlations were 0.642 for participation on Facebook and 0.668 for participation in a virtual brand community. The correlations among the participation dimensions and membership types were significant at $p=0.01$ (1-tailed). The results indicate that the member's participation in the virtual brand community increases as they move from being tourist to minglers and then to fans. This finding lends support to the proposition put forward by Kozinets (1999). Table 9-5 presents the results of the Spearman correlation between membership type and the frequency of participation.

Table 9-5 Spearman Correlation Results of Membership Type and Frequency of Participation in Facebook and VBC		
Dimension	Spearman's rho	Sig
Participation in Facebook	0.642	0.000
Participation in VBC	0.668	0.000

(Source: This Research)

9.3.2 Correlation of Group Membership Type and Duration of Membership

The second hypothesis regarding the association of group members and duration of membership of Facebook was also assessed using Spearman rank-order correlation. The Spearman's correlation coefficient for the correlation between group membership type and duration of membership was 0.241. The positive correlation was significant at $p=0.01$ (1-tailed). This result supports H23 that proposed that there is a positive association between the type of membership (i.e. tourist, mingler, and fan) and the duration of membership on Facebook. The results suggest that consumers migrate from being tourists to minglers and then to fans as the length of their membership in the virtual brand community increases. In other words, fans have been the longest members of the community followed by minglers and tourists. Table 9-6 presents the result of the Spearman correlation between group membership type and duration of membership.

Table 9-6 Spearman Correlation Results of Membership Type and Membership Duration		
Item	Spearman's rho	Sig
I have been a member of [Brand] Facebook page for:	0.241	0.000
1. Less than 6 months		
2. 6-11 months		
3. 1-3 years		
4. 4-6 years		
5. More than 6 years		

(Source: This Research)

9.3.3 Correlation of Group Membership Type and Length of Time Spent Participating in a Virtual Brand Community

H24 proposed that the consumers will spend more time in the community as they develop strong social ties to the virtual brand community and as their consumption activity increases in self-centrality. To test H24, a correlation analysis was conducted between group membership type and time spent on ‘brand’ pages on Facebook. The Spearman correlation coefficient was 0.342, significant at $p=0.01$ (1-tailed). This positive correlation supports H24 that proposed that there is a positive association between membership type (tourist, mingler, and fans) and length of time spent on ‘brand’ Facebook pages. Therefore, as consumers migrate from being tourists to minglers to fans, they tend to spend more time in the virtual brand community. Table 9-7 presents the results of the correlation between membership type and length of time spent in the VBC.

Table 9-7 Spearman Correlation Results of Membership Type and Length of Time Spent in the Virtual Brand Community

Item	Spearman’s rho	Sig
I have been a member of [Brand] Facebook page for:	0.342	0.000
1. Less than 5 hours/week		
2. 5 - 9 hours/week		
3. 10 - 19 hours/week		
4. 20 hours or more/week		

(Source: This Research)

9.3.4 Summary of Testing Correlations

The results of the Spearman correlations lend support to the hypothesis that there is a positive association between the type of virtual brand community membership and frequency of participation, membership duration and length of time spent in the VBC. These findings support the proposition that when consumers migrate from tourists (i.e. weak social ties/low self-centrality of consumption activity) to minglers (i.e. strong social ties/low self-centrality of consumption activity) and then to fans (i.e. strong social ties/high self-centrality of consumption activity) they tend to participate more

frequently, have been members for longer, and spend more time in the virtual brand community.

9.4 Profiling Members based on their Performance of Activities and Practices

Kozinets (1999) has suggested that marketers can benefit from a strategy of *interaction-based segmentation*. Consequently, it would be useful to profile the members types based on which activities they perform relative to other activities. The members' relative frequencies for each item in the purified participation scales were calculated to profile the members of the virtual brand communities in this study.

The members' relative frequency for each participation item means that each member's activity and practice is compared with the other activities and practices that the member performs. The comparison of the activities and practices was conducted to see which participation behaviour the individual performed more than, the same as, or less than other behaviour. The data was first mean centered by calculating the average frequency by summing across rows and dividing by (n). This calculated mean was then subtracted from the actual frequency of participation reported by the respondents for each respective item. This analysis produced three levels of activities and practices as performed by the respondents, which are: above average, average, and below average. The newly created variables were then recoded into binary codes, which are: (+1) above average, (0) average, and (-1) below average. These binary codes reflect whether an individual respondent performed each activity above, at the average level, or below the average relative to their frequency of participation of other items. This step produced a 3 X 3 contingency table where there were three member types (i.e. tourist, minglers, and fans) and three participation levels (i.e. above average, average, and below average) for each activity and practice.

The newly created binary variables (i.e. above average, average, and below average) were then cross-tabulated with the three types of members (i.e. tourist, minglers, and fans) of brand pages on Facebook. A Chi-Square test of independence was conducted to

test if there is an association between member type and the relative frequency of participation. The result of the Chi-square test indicated that for all the twelve items capturing the activities and practices there is a significant association between member type and relative frequency of participation at $p < 0.01$. The Chi-square test in the crosstab analysis revealed that the proportions of the individual groups are significantly different. All of the items had significant Pearson Chi-square values ranging from 19.517 to 98.562, at $p < 0.05$. These results mean that there is an association between the member type and relative frequency of associations. Table 9-8 presents the Chi-square results for the twelve participation items used in this analysis.

The profiling of the various activities and practices will be broken down based on the type of membership (i.e. tourist, minglers, and fans). The results present the proportions of the member types based on the frequency of participation relative to other activities and practices that they perform on the brand page. A higher proportion in one category (for example above average) means that a member type performs that particular activity relatively more than they perform other activities. All of the proportions for the activities and practices for each member types are presented in percentages to highlight how each class of users participate. The following section will present the discussion on the results of the participation profiling procedure.

Table 9-8 Pearson Chi-Square Test of Independence Results for Participation Items

Item Label	Item	χ^2	df	Sig
Participation in Facebook				
ACT1	...I post comments on [Brand]'s status updates.	47.753	4	0.000
ACT2	...I post to share what I think or feel about [Brand] on [Brand]'s Facebook wall.	56.812	4	0.000
ACT3	...I click 'like' on status updates posted by [Brand].	23.568	4	0.000
ACT5	...I post my thoughts and share my feelings if [Brand] discontinues a product I like.	37.187	4	0.000
Participation in Virtual Brand Community				
PRAC1	...I greet and welcome new members to the community.	65.796	4	0.000
PRAC2	...I provide emotional support to other members for brand and non-brand issues.	62.824	4	0.000
PRAC3	...I assist new members in learning about [Brand].	57.913	4	0.000
PRAC7	...I explain to other members why I spend time and money on supporting [Brand].	69.675	4	0.000
PRAC10	...I tell other members about important events in my life while using [Brand].	66.369	4	0.000
PRAC11	...I distinguish between different members of [Brand] page.	37.674	4	0.000
PRAC12	...I show other members examples of important events with [Brand].	42.400	4	0.000
PRAC15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.	62.711	4	0.000

(Source: This Research)

9.4.1 Participation in Facebook

Participation in Facebook captures the activities that consumers perform on ‘brand’ pages on Facebook. These activities are simple acts of posting as described by the literature. These activities are defined mainly as postings because they pertain to a lower level of participation on the social networking platform as opposed to the brand community practices proposed by Schau et al. (2009). The next section profiles the activities that the three types of brand page members perform relative to other activities they perform on Facebook.

9.4.1.1 Tourists

Table 9-9 presents the proportions of tourists who perform activities either below average, at the average level, or above average relative to other activities they perform on ‘brand’ pages on Facebook. In this study there were 245 respondents who classified themselves as ‘tourist’. The cross-tabulation of Facebook activities and membership type has indicated that the proportions are significantly different for the three groups.

The cross-tabulation results indicate that tourists perform one out of the four activities above average relative to other activities on ‘brand’ pages on Facebook. Relative to other activities, tourists on average post less comments on the brand’s status updates (ACT1), post less to share about what they think or feel about the brand on its wall (ACT2), and post less thoughts and feelings about a discontinued product (ACT5). On the other hand, tourists click the ‘like’ button on the brand’s status updates more relative to other activities (ACT3).

Label	Items	Below Average	Average	Above Average	Activity is performed
ACT1	...I post comments on [Brand]'s status updates.	45.7%	18%	36.3%	Below average
ACT2	...I post to share what I think or feel about [Brand] on [Brand]'s Facebook wall.	50.6%	18%	31.40%	Below average
ACT3	...I click 'like' on status updates posted by [Brand].	20.8%	18%	61.2%	Above average

Table 9-9 Profile of Activities Performed by Tourists					
Label	Items	Below Average	Average	Above Average	Activity is performed
ACT5	...I post my thoughts and share my feelings if [Brand] discontinues a product I like.	46.9%	17.9%	35.5%	Below average

(Source: This Research)

9.4.1.2 Minglers

The minglers made up 31.2% (136) of the sample. Minglers, relative to the frequency of other activities, posted more than average on the brands status updates (ACT1), posted above average to share what they think and feel about the brand on its Facebook wall (ACT2), and clicked the ‘like’ button more than average (ACT3). Moreover, minglers posted their thoughts and feelings less than average if the brand discontinues a product they like (ACT5). Table 9-10 presents that activities that minglers tend to perform, above, below and the same as other activities they perform on brand pages on Facebook.

Table 9-10 Profile of Activities Performed by Minglers					
Label	Items	Below Average	Average	Above Average	Activity is performed
ACT1	...I post comments on [Brand]'s status updates.	22.80%	5.10%	72.10%	Above Average
ACT2	...I post to share what I think or feel about [Brand] on [Brand]'s Facebook wall.	24.30%	5.10%	70.60%	Above average
ACT3	...I click 'like' on status updates posted by [Brand].	12.50%	4.40%	83.10%	Above average
ACT5	...I post my thoughts and share my feelings if [Brand] discontinues a product I like.	30.10%	3.70%	66.20%	Below average

(Source: This Research)

9.4.1.3 Fans

Table 9-11 presents the proportions of Fans who perform activities either below, average, and above average relative to other activities they perform on ‘brand’ pages on Facebook. Fans on ‘brand’ pages on Facebook tend to post comments on the brand status updates (ACT1),

post what they think or feel about the brand on its wall (ACT2), click ‘like’ on status updates by the brand (ACT3), and post their thoughts if the brand discontinues a product they liked (ACT5) more than they would perform other activities.

Table 9-11 Profile of Activities Performed by Fans					
Label	Items	Below Average	Average	Above Average	Activity is performed
ACT1	...I post comments on [Brand]'s status updates.	27.30%	14.50%	58.20%	Above Average
ACT2	...I post to share what I think or feel about [Brand] on [Brand]'s Facebook wall.	30.90%	14.50%	54.50%	Above average
ACT3	...I click 'like' on status updates posted by [Brand].	25.50%	14.50%	60.00%	Above average
ACT5	...I post my thoughts and share my feelings if [Brand] discontinues a product I like.	41.80%	14.50%	43.60%	Above average

(Source: This Research)

9.4.2 Participation in Virtual Brand Community

The other level of participation that this study proposed is at the level of virtual brand community (Schau et al. 2009). The empirical results did in fact suggest that there are two levels of participation in the context of this study. The consumers reported that they performed the practices suggested by Schau et al. (2009). These practices are more abstract than the activities performed at the Facebook platform level. The following section will present how the different community users perform these practices relative to their performance of other practices.

9.4.2.1 Tourists

The members of the tourists group performed all eight virtual brand community practices below their average of performing other practices by a large margin. A large proportion of tourists did not often greet and welcome new members (69.80%), provide emotional support to other members (73.90%), assist other members in learning about the brand (69%), or explain to other members why they dedicate time and money in support the brand (60.40%). Tourist did not often tell other members about important events in their lives while using the

brand (70.60%), did not often distinguish between different members in the community (68.20%), did not usually show other members examples of important events with the brand (65.70%), and they did not often share their opinion about how the brand is distributed, priced and marketed (62.40%). Table 9-12 presents the profile of participation in virtual brand community of tourists.

Table 9-12 Profile of Social Networking Practices Performed by Tourists					
Label	Items	Below Average	Average	Above Average	Activity is performed
PRAC 1	...I greet and welcome new members to the community.	69.80%	18.00%	12.20%	below average
PRAC 2	...I provide emotional support to other members for brand and non-brand issues.	73.90%	17.10%	9.00%	below average
PRAC 3	...I assist new members in learning about [Brand].	69.00%	17.60%	13.50%	below average
PRAC 7	...I explain to other members why I spend time and money on supporting [Brand].	60.40%	17.60%	13.10%	below average
PRAC 10	...I tell other members about important events in my life while using [Brand].	70.60%	17.60%	11.80%	below average
PRAC 11	...I distinguish between different members of [Brand] page.	68.20%	17.60%	14.30%	below average
PRAC 12	...I show other members examples of important events with [Brand].	65.70%	17.60%	16.70%	below average
PRAC 15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.	62.40%	18.40%	19.20%	below average

(Source: This Research)

9.4.2.2 Minglers

The minglers performed only one practice above average among the practices that they performed on ‘brand’ pages on Facebook. Minglers shared their opinion more often with other members about how the brand is distributed, priced and marketed (53.70%). However, the minglers did not often greet and welcome new members (56.60%), did not often provide emotional support to other members (68.40%), and did not often assist new members in

learning about the brand (54.40%). Moreover, Minglers do not often explain to others why they spend time and money on supporting their favorite brand (52.20%).

There was a larger proportion of minglers who did not often tell other members about important events in their life while using the brand (58.80%), did not distinguish between different members of the brand page (61%), and did not often show other members examples of important events with the brand (58.8%). Table 9-13 presents the profile of the practices performed by minglers in virtual brand communities on Facebook.

Table 9-13 Profile of Virtual Brand Community Practices Performed by Minglers					
Label	Items	Below Average	Average	Above Average	Activity is performed
PRAC 1	...I greet and welcome new members to the community.	56.60%	5.10%	38.20%	below average
PRAC 2	...I provide emotional support to other members for brand and non-brand issues.	68.40%	4.40%	27.20%	below average
PRAC 3	...I assist new members in learning about [Brand].	54.40%	10.50%	41.20%	below average
PRAC 7	...I explain to other members why I spend time and money on supporting [Brand].	52.20%	3.70%	44.10%	below average
PRAC 10	...I tell other members about important events in my life while using [Brand].	58.80%	3.70%	37.50%	below average
PRAC 11	...I distinguish between different members of [Brand] page.	61.00%	6.60%	32.40%	below average
PRAC 12	...I show other members examples of important events with [Brand].	58.80%	4.40%	36.80%	below average
PRAC 15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.	40.40%	5.90%	53.70%	above average

(Source: This Research)

9.4.2.3 Fans

The fans performed virtual brand community practices more often than they did other practices in contrast to tourist and minglers. A higher proportion of fans would meet and great new members (54.50%), provide emotional support to other members (49.10%), and

assist new members in learning about the brand (49.10%). Additionally, fans justified their support (time and money) for the brand more often (52.70%), told other members about important events in their life while using the brand (52.70%), distinguished between different members in the community (45.50%), and showed other members examples of important events with the brand (49.10%). Finally, fans more often than not shared their opinion about how the brand was distributed, priced and marketed (56.40%) relative to other practices they performed. Table 9-14 presents the profile of virtual brand community practices performed by fans on ‘brand’ pages on Facebook.

Table 9-14 Profile of Virtual Brand Community Practices Performed by Fans					
Label	Items	Below Average	Average	Above Average	Activity is performed
PRAC 1	...I greet and welcome new members to the community.	30.90%	14.50%	54.50%	above average
PRAC 2	...I provide emotional support to other members for brand and non-brand issues.	36.40%	14.50%	49.10%	above average
PRAC 3	...I assist new members in learning about [Brand].	36.40%	14.50%	49.10%	above average
PRAC 7	...I explain to other members why I spend time and money on supporting [Brand].	32.70%	14.50%	52.70%	above average
PRAC 10	...I tell other members about important events in my life while using [Brand].	32.70%	14.50%	52.70%	above average
PRAC 11	...I distinguish between different members of [Brand] page.	40.00%	14.50%	45.50%	above average
PRAC 12	...I show other members examples of important events with [Brand].	36.40%	14.50%	49.10%	above average
PRAC 15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.	29.10%	14.50%	56.40%	above average

(Source: This Research)

9.4.3 Summary of Profiling Membership Types and Participation

The profiling of tourists, minglers, and fans and their participation behaviour provided clear segments of consumers in virtual brand communities. First, tourist mainly performed passive activities (such as clicking ‘like’ on the brand’s status updates) more actively over all other activities and practices. It can be seen that this group mainly favours receiving information that do not require direct interaction with the brand or with the other consumers. On the other hand, minglers engaged the brand by commenting on brand posts, sharing what they think or feel about the brand, and clicking the ‘like’ button. Although the minglers were not interested in engaging in banter with the brand on its page, they did share their opinion with other members regarding the marketing of the brand. The minglers engaged the virtual brand community more than the tourists. Fans are more likely to participate more across most of the activities and practices than the other two groups. Fans are more likely to engage the brand by posting comments and sharing with the brand and other consumers. In addition, fans perform greeting and supporting practices more than they would their average practice in comparison to tourists and minglers. More fans would explain to other members why they spend time and money supporting the brand to sway other members to their group. Finally, fans performed practices such as telling other members about important events with the brand, distinguishing between community members, and sharing their opinion on the marketing of the brand more often than tourists and minglers.

9.5 Summary

This chapter presented the analysis of the nature of participation. Central to this study’s proposed theoretical model in Chapter 4 is that participation is a main mediator. The researcher aimed at understanding the nature of participating and the virtual brand community members through exploring the construct. The results of the analysis of means indicated that there are three types of brand community members on ‘Brand’ pages on Facebook. Tourists, minglers, and fans (i.e. devotees and insiders) performed activities and practices in two dimensions (i.e. Facebook and virtual brand community) in varying degrees.

The results also indicated that the virtual brand community members begin as tourists who lack social ties and commitment to the community but with time they migrate to being minglers and then fans who have strong ties to the community and the brand. As consumers migrate in the brand community, their level of participation increases, they become veterans of the community, and they spend more time in the community.

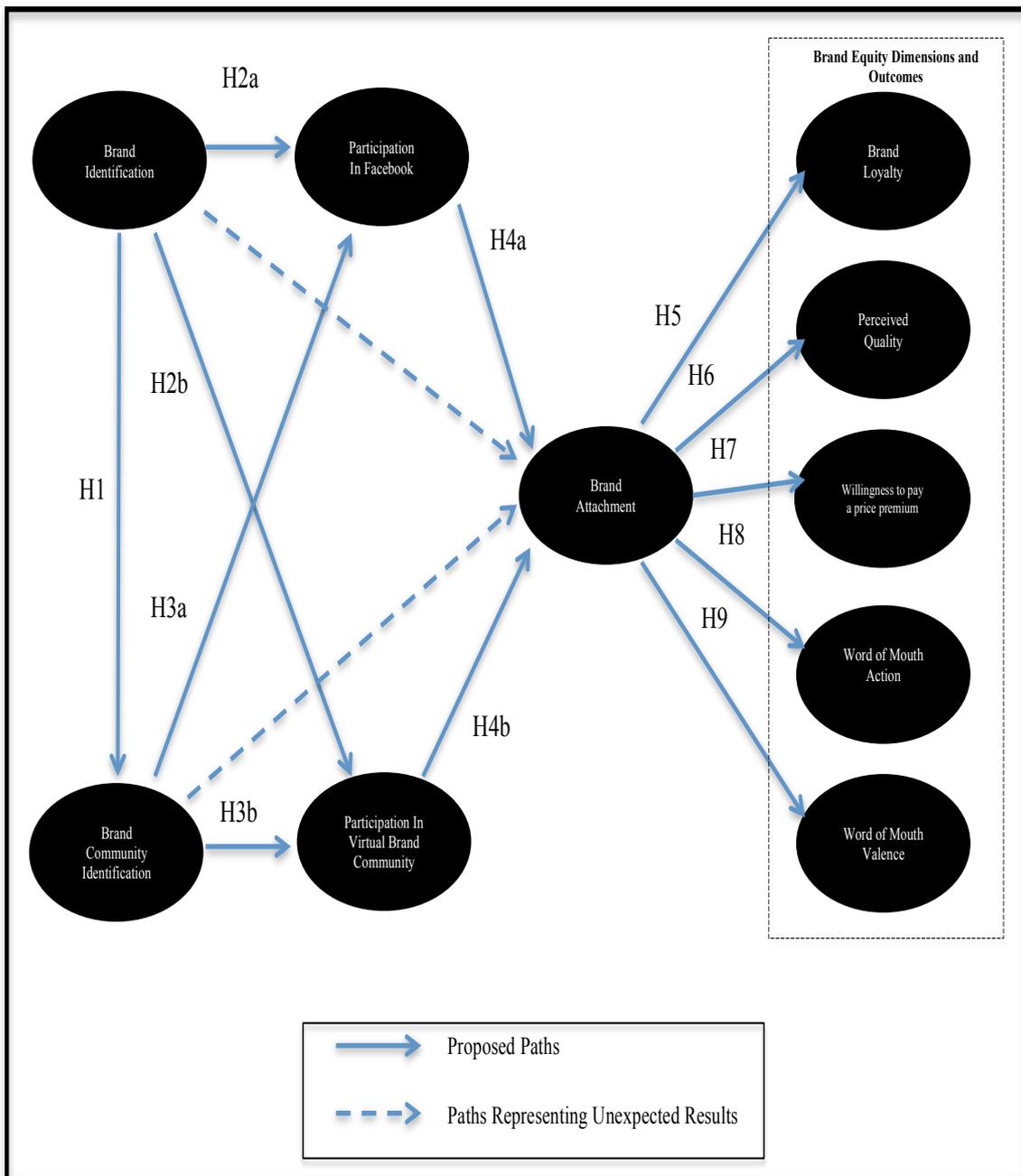
The three group types in virtual brand communities did not perform all the activities and practices equally. Tourists perform most activities and practices below average. Minglers perform some activities and practices above average in comparison to tourists. Fans perform the most activities and practices above average in comparison to their participation levels. The next chapter will present a discussion of this study's results.

Chapter 10: Research Discussion

10.1 Introduction

This chapter discusses the findings of the nature of participation in Chapter 8 and the hypothesis testing in Chapter 9. Section 10.2, which opens the chapter, presents a discussion of the findings of this study and will focus on: the relationship between identification and participation, the relationship between participation and brand attachment, and the relationships between brand attachment and the brand equity dimensions and outcomes. Section 10.3 will present a discussion on the nature of participation, including: the types of virtual brand community members, the migration of brand community users during their time in the virtual brand community, and their activities and practices profiles. Finally, Section 10.4 will present a summary of this chapter. Figure 9.1 presents the conceptual framework of this study and the research hypotheses.

Figure 10-1 Conceptual Framework and Research Hypotheses



10.2 A Discussion of the Findings for the Proposed Relationships

10.2.1 The Overall Results of Hypothesis Testing

Three sets of relationships were examined in this study: the first set of relationships are between identification and participation; the second set of relationships are between participation and brand attachment; and, the third set of relationships are between brand attachment and brand equity dimensions and outcomes. A summary of the results of testing the research hypothesis is presented in Table 10-1.

Table 10-1 Summary of the Result of the Relationships Proposed in this Research		
	Hypothesized Path	Results
H1:	Brand Identification --> Brand community Identification	Supported
H2a:	Brand Identification --> Participation in Facebook	Rejected
H2b:	Brand Identification --> Participation in Virtual Brand Communities	Supported
H3a:	Brand Community Identification --> Participation in Facebook	Supported
H3b:	Brand Community identification --> Participation in Virtual Brand Community	Supported
H4a:	Participation in Facebook --> Brand Attachment	Rejected
H4b:	Participation in Virtual Brand Community --> Brand Attachment	Rejected
H5:	Brand Attachment --> Brand Loyalty	Supported
H6:	Brand Attachment --> Perceived Quality	Supported
H7:	Brand Attachment --> Willingness to Pay a Price Premium	Supported
H8:	Brand Attachment --> Word of Mouth Action	Supported
H9:	Brand Attachment --> Word of Mouth Valence	Supported

(Source: This Research)

The results of the hypothesis testing in Chapter 9 suggest that brand community identification is predicted by brand identification, thus supporting H1. The results also suggest that participation in Facebook is predicted by brand community identification while participation in the virtual brand community is significantly predicted by brand identification and brand community identification. These results support H2b, H3a, H3b but not H2a. Surprisingly, in contrast to the researcher's expectations, the partial mediation model indicated that participation in Facebook and a virtual brand community does not significantly influence brand attachment. This means that H4a and H4b were not supported. In addition, the results suggest that brand loyalty, perceived quality, willingness to pay a price premium, WOM

action, and WOM valence are significantly predicted by brand attachment. These results support H5, H6, H7, H8, and H9. The next section will present a discussion of each of these findings.

10.2.2 The Relationship between Identification and Participation

H1: Consumer-brand identification is directly and positively related to Brand Community Identification. (Supported)

As expected, the consumers' identification with the brand drives their identification with the brand community. This means that individuals who identify with the brand are likely to identify with the brand community as an extension to their identification with the brand.

The positive link between the consumers' identification with the brand and the brand community can be explained by using the Social Identity Theory (Tajfel and Turner 1986), which proposes that an individual's self-concept consists of a personal identity and a social identity. Personal identity pertains to characteristics that are particular to the individual (Myers 2005). Social identity concerns the individuals' perceptions of belonging to a group such that he or she identifies with the group (Bhattacharya and Glynn 1995). Therefore, individuals derive their self-concept from characteristics such as interests or competencies. Individuals also derive their self-concept from the perception and knowledge of membership to a particular group. In this study, the brand is one such element that defines the respondent's personal identity (Donavan et al. 2006, Kuenzel and Halliday 2008). The consumers who identify with the brand incorporate the brand associations and characteristics into their self-concept. Consumers have to first identify with the brand as a focal point of consumption interest before they can identify with the community of brand users, socially or psychologically (Stokburger-Sauer 2010). Bhattacharya and Sen (2003) suggest that when consumers identify with the brand, they look for ways to enhance and reinforce their self-identities. Identifying with the brand community is one channel for consumers to enhance and reinforce their self-identities as they define themselves through the community identification. This finding is in line with the work of Yeh and Choi (2010), who show that brand identification positively influences identification with the brand community. In other

words, consumers' identification with the communities on the brand pages on Facebook seems to be a result of their identification with the brand.

H2a: Consumers-brand identification is directly and positively related to participation in Facebook. (Rejected)

H2b: Consumers-brand identification is directly and positively related to participation in virtual brand community. (Supported)

The result of H2a does not support the link between consumer-brand identification and participation in Facebook. On the other hand, the result of H2b does support the link between consumer-brand identification and participation in virtual brand community. This means that the consumer's participation in brand pages on Facebook (platform level) is not predicted by brand identification but participation in virtual brand community is predicted by identification with the brand.

The unexpected lack of support for the relationships between consumer-brand identification and participation in Facebook can be explained by understanding the nature of identification. There are two perspectives to identification, which are: self-referential and the self-defining (Ashforth et al. 2008). Self-referential is defined as identification through affinity to the category or collective where the individual can feel that a brand is similar to his or herself. Self-definition is defined as the perceptiveness of identification where the individual changes to become more similar to the collective through a process of emulation (Ashforth et al. 2008). This study adopts the self-definitional perspective of identification. It may be that the respondents in this study did not find that participation at the basic platform level aids their self-definition need. In contrast, participation at the virtual brand community level supports the self-definition needs because it is a more involving behaviour than participation at the platform level. Participation at the platform level is very basic and is manifested in posting and lurking behaviour. Meanwhile, participation at the virtual brand community level is comprised of highly involving practices such as justifying and story-telling (Schau et al. 2009).

When consumers engage in such practices, they are addressing their self-definition need because their participation is based on identification with the community and the brand. The

identification and participation cater for defining the personal and social identity because of the richness of the brand community practices. These practices link the consumer more to the brand and the community, and the associations attached to them. This link allows the consumer to subsume the brand and community identity into their personal and social identity, thus achieving self-definition.

Another possible explanation is that the majority of the consumers surveyed in this study are low on self-centrality of the consumption activity (Kozinets 1999). The identification with the brand did not drive consumers, especially tourists (i.e. lurkers) to participate in brand pages at the basic platform level, such as posting comments on the brand's status updates. Although lurkers are known to feel a psychological sense of brand community (Nonnecke et al. 2006, Carlson et al. 2008), their identification with the brand would not necessarily translate into participation activity at the platform-level versus the brand community level.

The result of H2b is in line with expectations. The findings show that consumer-brand identification is positively related to participation in a virtual brand community. This may suggest that consumers look to enhance and reinforce their self-identities by participating in the virtual communities of the brand that they identify with (Bhattacharya and Sen 2003). Moreover, the result suggests that consumers define themselves through the social environment in the virtual brand community (Ashforth and Mael 1989). Consumers interact with brands and other consumers in brand pages because they want to satisfy their self-definition needs (Bhattacharya and Sen 2003, Ahearne et al. 2005, Kuenzel and Halliday 2008). Practices that consumers perform in virtual brand communities create value for the brands and the consumers (Schau et al. 2009).

Previous studies suggest that when consumers identify with the brand they assimilate its goals as their own and engage in behaviour that will support the brand (Ahearne and Bhattacharya 2005, Kuenzel and Halliday 2008). The consumers' identification with the brand has been shown to influence their advocacy of the brand, which is one of the brand community practices performed by consumers (Schau et al. 2009, Stokburger-Sauer 2010). It can be said that one manner of supporting the brand is participating in its virtual brand community. Therefore, the findings of H2b are in line with previous research on consumer brand identification.

H3a: Identification with the virtual brand community is directly and positively related to participation in Facebook. (Supported)

H3b: Identification with the virtual brand community is directly and positively related to participation in virtual brand community. (Supported)

The results of H3a and H3b are in line with expectations. The findings show that participation in Facebook and virtual brand community are significantly and positively influenced by the consumers' identification with the virtual brand community. These results suggest that when consumers identify with the virtual brand community they are likely to engage in participation behaviour at the platform level and the virtual brand community level. Consumers who identify with a brand would join the brand's pages on Facebook and interact with the brand's posts through posting and commenting. Consumers who identify with the brand community will also engage in brand community practices such as social networking with other brand community members, managing the impression of the brand on others, engaging the community with the brand experience, and sharing their brand use experience with others.

The positive link between identification with the brand community and participation can be explained by revisiting the social identity theory. In order to confirm their social identity consumers participate in virtual brand communities as they perceive 'consciousness of kind' and 'belongingness' to the community (Dutton et al. 1994, Bhattacharya and Sen 2003, Bagozzi and Dholakia 2006a, Bagozzi and Dholakia 2006b, Thompson and Sinha 2008, Woisetschlager et al. 2008). Consumers will strive to maintain and nourish that identity through engaging the community (Dutton et al. 1994, Bhattacharya and Sen 2003, Bagozzi and Dholakia 2006a, Bagozzi and Dholakia 2006b). Furthermore, identifying with the community influences consumers' psychological sense of brand community which is described as the relational bonds consumers have with other brand users (Carlson et al. 2008). These bonds are reinforced through participation in brand pages.

The results of H3a and H3b are also in line with previous research on brand community identification. Previous studies show that brand community identification influences brand community behaviour (Bagozzi and Dholakia 2002, Algesheimer et al. 2005, Bagozzi and Dholakia 2006a, Bagozzi and Dholakia 2006b, Chiu et al. 2006, Woisetschlager et al. 2008).

Moreover, previous research shows that identification influences the quantity and type of participation (Muniz and O'Guinn 2001, Thompson and Sinha 2008) Thus, the findings of H3a and H3b support previous research findings.

10.2.3 The Relationship between Participation and Brand Attachment

H4a: Participation in Facebook is directly and positively related to brand attachment. (Rejected)

H4b: Participation in a virtual brand community is directly and positively related to brand attachment. (Rejected)

The results of H4a and H4b, which were tested under the partial mediation model, were against the researcher's expectation. The findings revealed that participation in Facebook and a virtual brand community are not significantly related to brand attachment. In the proposed fully mediated research model both participation in Facebook and a virtual brand community mediated the effect of identification (i.e. brand and community) on brand attachment. When the partial mediation model was introduced (i.e. where identification with the brand and the brand community were directly linked to brand attachment) the influence of participation on brand attachment was rendered insignificant. This means that identification influenced attachment directly rather than indirectly influencing it through participation. These unexpected results will be discussed further in Section 10.2.5.

10.2.4 Relationships between Brand Attachment and Brand Equity Outcomes

Hypothesis 5: Brand attachment is directly and positively related to brand loyalty. (Supported)

The result of H5 supports the positive link between brand attachment and brand loyalty. This means that the more consumers are attached to the brand, the more loyal they are to the brand.

The result of H5 is consistent with attachment theory, which postulates that there are two important aspects to attachment, which are: bond and behaviour (Cassidy 1999). Bowlby (1979) explicates that the attachment bond represents the attraction that one individual has for another. An important criterion for attachment bonds is they are driven by the desire to be close to and communicate with the other individuals (Cassidy 1999). In addition, an individual who is attracted to other individuals should find them non-exchangeable for another person for an attachment bond to exist. An individual who is attached to another individual would feel distress when separated from the object of attachment (Bowlby 1969).

Therefore, the positive relationship between attachment to the brand and loyalty to the brand is an expression of consumers' desire to be close to the brand and reduce the alternatives to the brand. This may suggest that when consumers are attached to the brand, they would be loyal to the brand because they do not find the brand exchangeable and they wish to be close to the brand. Hence, the attachment behaviour that consumers exhibit as a result of the attachment bond materializes in loyalty to the brand.

Another possible explanation that supports the positive link between brand attachment and brand loyalty can be found in the definition of the self-concept (Belk 1988). Prior research suggests that when consumers are attached to their possession, the possession becomes part of the extended self (Belk 1988, Schultz et al. 1989, Ball and Tasaki 1992, Sivadas and Ventakesh 1995, Kleine and Baker 2004). Therefore, it can be said that when consumers define the brand as part of their extended self that they would maintain the connection with the brand so as to support their self-concept.

Finally, the finding of H5 is in line with empirical research that suggests that consumers who are highly attached to the brand are willing to support the brand with money, time and effort to maintain their relationships with the brand (Peters and Hollenbeck 2005, Park et al. 2010). Attachment to the brand was also linked to brand loyalty in the consumer-brand relationship context (Thomson et al. 2005, Esch et al. 2006). Hence, attachment to the brand seems to drive consumers' loyalty to the brand.

H6: Brand attachment is directly and positively related to perceived quality. (Supported)

The finding of H6 supports the positive link between attachment to the brand and the consumer's perceptions of the brand's quality. This means that the more consumers are attached to the brand, the more they would perceive that the brand is of high quality.

A plausible explanation for this result can be found from the definition of perceived quality. Aaker (1991) defines perceived quality as a brand association that pertains to consumer perception of the overall quality of the brand compared to alternatives. The direct experience with the brand may lead consumers to infer quality judgments about the brand (Netemeyer et al. 2004). This connection is even more prominent since when individuals are attached to an object they will encompass that object into their self-concept (Belk 1988, Kleine and Baker 2004).

Previous research maintains that the bond consumers have with the brand fosters feelings of uniqueness and dependency of the relationship (Fournier 1998). Therefore, it can be said the consumer's attachment to the brand will positively influence the association of quality related to the brand because the consumers would be attached to brands that improve their self-concept (Ashforth et al. 2008, Park et al. 2010). Therefore, the brand should possess quality associations that the consumers wish to identify with. This means that consumers' attachment to the brand generates positive perceptions of high quality for the brand.

H7: Brand Attachment is directly and positively related to Willingness to Pay a Price Premium for the brand. (Supported)

The findings of H7 are in line with expectations. This means that the more consumers are attached to the brand, the more they are willing to pay a price premium for the brand.

A plausible explanation for this result can be found in the attachment literature. The attachment bond that an individual has with another individual encourages attachment behaviour that maintains proximity to the attachment figure (Bowlby 1979, Cassidy 1999, Thomson et al. 2005). The attachment bond and behaviour aim to minimise distress that can occur when the individual is separated from the attachment figure (Bowlby 1979, Cassidy 1999). Individuals seek security and comfort in the relationship with the attachment figure (Cassidy 1999). It can be said that consumers will pay more for the brand they are attached to

over other brands in order to maintain proximity and minimise the distress of separation from the brand.

Support for the positive relationship between brand attachment and willingness to pay a price premium for the brand is also found in the attachment concept in the marketing literature. Previous researchers argue that consumers who are attached to the brand regard the brand's resources as their own and to support their self-expansion they are more willing to pay a price premium for the brand (Park et al. 2006, Park et al. 2010). In other words, consumers invest in the brand because they perceive that the brand is part of their self-concept, therefore, they are willing to expend financial resources on the brand (Thomson et al. 2005, Park et al. 2010). Finally the results of H7 are consistent with empirical evidence in the consumer behaviour literature. Previous empirical research reports that individuals attached to the brand are willing to expend more money on the brand over other brands (Peters and Hollenbeck 2005, Thomson et al. 2005, Park et al. 2010). Similarly, in this study, it can be seen that consumers attached to the brand are willing to invest their financial resources to maintain proximity to the brand, support the brand, and promote the relationship with the brand.

***H8: Brand attachment is directly and positively related to word of mouth action.
(Supported)***

***H9: Brand attachment is directly and positively related to word of mouth valence.
(Supported)***

The results of H8 and H9 are in line with the researcher's expectations. This means that the more attached the consumers are to the brand, the more likely they are to speak about the brand and do so in a favourable manner.

Support for the findings in H8 and H9 can be found in the interpersonal love as applied to brands. Many argue that consumers can develop emotional bonds with brands and that such a bond is called brand love (Ahuvia 2005, Carroll and Ahuvia 2006, Paulssen and Fournier 2007, Albert et al. 2008, Ahuvia et al. 2011). Previous research report that when consumers love a brand they tend to talk about the brand to others (Ahuvia 2005, Carroll and Ahuvia 2006, Bergkvist and Bech-Larsen 2010, Ahuvia et al 2011).

Consumers can develop an emotional bond with brands (Fournier 1998, Thomson et al. 2005, Paulssen and Fournier 2007). They use brands to define their self-concept (Belk 1977). In addition, they also talk about the brand to other individuals in the pursuit of identity construction (Holt 1997, Ahuvia et al. 2011). It appears that the emotional bond that individuals have with the brand drives their brand supporting behaviour because it plays an important self-definitional role. Therefore, it is plausible to suggest that brand attachment, which is a broader construct than brand love (Hazan and Shaver 1997, Park et al. 2010), would drive consumers to speak favourably about the brand to other consumers and that they would do so more often.

The result of H8 and H9 are also in line with empirical findings in consumer behaviour research with regard to the consequences of brand attachment. WOM behaviour has been linked to brand attachment (Dacin et al. 2007, Park et al 2010, Vlachos et al. 2010). Attached consumers perceive the brand to be a part of themselves and have salient thoughts and feelings about the brand, so they will be willing to invest in maintain the relationship (Park et al. 2010). In this study it can be seen that consumers who become attached to the brand are motivated to support the brand through promoting and defending the brand.

10.2.5 Unexpected Findings

The researcher anticipated that the effect of brand identification and brand community identification on brand attachment would be fully mediated by participation. When the partial mediation model was investigated, the findings of this study showed that brand identification and brand community identification may in fact influence brand attachment directly. Through the SEM analysis and model re-specification (see Chapter 9) plausible evidence was found that there is a direct link between identification (i.e. identification with the brand and the community) and brand attachment. This link seems to explain the antecedents of attachment in virtual brand communities more adequately in comparison to the fully mediated model.

A possible explanation of why brand identification and brand community identification may be directly linked to brand attachment can be found in the way that identification develops. Previous research contends that identification is the basis for attachment (Kagan 1958, Sheldon 1971, Hall and Schneider 1972, O'Reilly and Chatman 1986). Identification is “a self-referential description that provides contextually appropriate answers to the question

‘Who am I?’ or ‘Who are we?’” (Ashforth et al. 2008, p. 327). The social identity theory proposes that the self-concept consists of two parts, personal and social identity (Tajfel and Turner 1986). Brand identification pertains to the personal element of the self-concept where the consumers aim to define themselves by associating with the brand associations. Consumers derive their social identity by categorising themselves as belonging to a brand user group (i.e. an ‘in group’) to define themselves (Tajfel and Turner 1986). This classification creates the individual’s social identity and may be evident through brand community identification. So, consumers support their social identity when they compare and categorise themselves relative to ‘out groups’ (Tajfel and Turner 1986). It follows that the brand is central to the personal and social identification of the individual. The brand, a social collective, becomes the self-definitional tool for the consumer.

Attachment to the brand then may be the result of the consumer’s identification with the attitudes, values, or goals of the brand (Kagan 1958). In other words, consumers accept the attributes and characteristic of the brand and incorporate them into their cognitive response set (Kagan 1958). Attachment to the brand is developed as a result of the consumer’s incorporating the brand’s attributes and characteristics as their own. Furthermore, O’Reilly and Chatman (1986) show that psychological attachment may be predicted by identification, compliance, and internalisation. In the organisational identification context, Bhattacharya and Sen (2003) suggested that identification causes individuals to be more psychologically attached and care about an organisation. Therefore, it is not implausible to suggest that consumers who identify highly with the brand and the brand community will develop a high attachment to the brand in the context of Facebook brand pages. It seems that attachment to the brand of choice for members of brand pages on Facebook is driven by the members’ identification with the brand and the community.

H10 to H21 (which pertain to the moderating effect hedonic and utilitarian motivation) will not be discussed because the motivation construct in this study was unidimensional. It was expected that motivation will consist of two dimensions but since this was not the case it was not feasible to pursue the testing of the moderation effect hypothesis. Having discussed all of the main hypotheses, the next section will discuss the findings of the analysis of the nature of participation activities and practices performed by consumers in brand pages on Facebook.

10.3 The Nature of Participation

The researcher has attempted to elaborate on the nature of participation behaviour in virtual brand communities on Facebook by focusing on the type of community members and on their participation profiles. This study adopted the classification of virtual community members put forward by Kozinets (1999), which classifies members into four types, which are: tourists, minglers, devotees, and insiders (see Chapter 8). The researcher analysed the member types by analysing their mean frequencies on each activity and on the practice that they performed in brand pages on Facebook. The findings indicate that there are in fact at least three member types in virtual communities on Facebook, which are: tourists, minglers and “fans”. The fans member type is comprised of two groups: devotees and insider. These two groups had to be combined because the results did not show a significant difference between the two groups. This result may be due to the small number of respondents in each group. Nevertheless, this study has shown that there are more types of community users than lurkers and posters, although these categories are perhaps not as refined as Kozinets’ (1999) categorisation. This study has also investigated the nature of consumer progression in the virtual brand communities.

Kozinets (1999) maintains that consumers migrate over time, progressing from a tourist to a fan as they gain experience and discover groups of consumers who are more attuned to their needs. Kozinets (1999) also proposes that the nature of interaction in the virtual community changes from being information driven to being relationally driven as the consumer’s progress in the virtual community. In this study the propositions put forward by Kozinets (1999) were tested through three hypotheses using Spearman correlations. H22 proposed that when members progress from being tourists to fans their frequency of participation also increases. H23 proposed that the length of membership is positively related to the type of membership. Meanwhile, H24 proposed that when members progress from tourists to fans, the amount of time that they spend in the virtual community increases accordingly.

H22: There is a positive association between group membership type (tourists, minglers, and fans) and frequency of participation.

The result of H22 is in line with expectations. The researcher expected that as consumers progress from being tourists to fans their level and frequency of participation would increase.

This finding supports the proposition put forward by Kozinets (1999) that consumer progress in the community and that they develop from tourists to fans, which is accompanied by an increase in their levels of communication and participation. The finding of H22 can also be explained by revisiting the polar (i.e. posters and lurkers) conceptualisation of virtual community users. Virtual community users who are new to a community are considered “lurkers” who may not participate much but they do perceive themselves as legitimate members of the community (Nonnecke et al. 2006, Carlson et al. 2008, Rood and Bruckman 2009). These members are usually categorised as exhibiting passive behaviour, such as reading only (Rood and Bruckman 2009).

Tourists are more like lurkers who join communities to gather instrumental information regarding the brand. As they migrate to being more active members they develop social ties in the community and tend to participate more frequently (Kozinets 1999, Rood and Bruckman 2009). This is evident from the higher means of fans in comparison to tourists.

The finding of H22 is also in line with research findings concerning behaviour and participation in virtual communities. In their qualitative exploration of participation in virtual brand communities, Rood and Bruckman (2009) have shown that participation is in fact a continuum beginning with discovering, lurking, learning, sharing, and socialising. Consumers first join a community in the quest for information and they will then tend to develop social ties within the community. Therefore, participation level increases as the consumer’s progress through the different stages.

H23: There is a positive association between group membership type (tourists, minglers, and fans) and duration of membership.

The result of H23 is in line with the researcher’s expectations. It was expected that fans would have been members of the virtual brand community for a longer period of time in comparison to tourists and minglers. The positive association between group member type and duration can be explained and attributed to the participation continuum. Tourists, by definition, resemble members of a virtual brand community who are in the discovery and lurking stage of the participation continuum (Kozinets 1999, Rood and Bruckman 2009). Furthermore, tourists are new members in the community who have a shorter membership span in comparison to community veterans. This “tourist” stage is categorised by an

instrumental orientation. This means that consumers are seeking information and will not linger in the community to build social connections.

As consumers become fans they will have spent an extensive amount of time in the virtual brand community and will have established strong ties within the community (Kozinets 1999, Rood and Burckamn 2009). The finding of this study also supports recent empirical research that showed that core members (i.e. fans) had the longest membership duration in contrast to opportunists (i.e. tourists) (de Valck et al. 2009). For members to be socially oriented and well versed in the community ways, they need to invest time and effort into building their presence in the community. This is typical of fans who are in the relational model of community interaction. Therefore, the finding of this study supports the participation continuum with regards to duration of membership.

H24: There is a positive association between group membership type (tourists, minglers, and fans) and time spent in the virtual brand community.

The result of H24 is in line with expectation. The researcher expected that as members migrate from tourists to fans they would spend more time participating in the virtual brand community. The positive link between membership type and the length of time spent participating in the virtual brand community can be explained and attributed to the developmental progression of members in the virtual brand community (Kozinets 1999, Rood and Burckman 2009). Any relationships would require time to cement. Therefore, for consumers to develop strong social ties and connection in the community they need to spend more time participating.

It follows that as consumers move from instrumental communication to social communication (Kozinets 1999) they will be spending more time to satisfy their social needs in the community. Recent empirical research shows this trend to be true in virtual communities. For example, de Valck et al. (2009) report that core members (i.e. fans) do spend more time in the virtual community in contrast to opportunists (i.e. tourists). Therefore, the finding of H24 supports the proposition that fans (who are more involved and active members) are the members who spend the most time in the virtual brand community.

10.3.1 The Participation Profiles of Virtual Brand Community Members

Having shown that there are different types of virtual community members, the researcher aimed at exploring the activities and practices that each class of user performed in a virtual brand community on Facebook. To achieve this objective the researcher has mean centred each subject's frequency of performing each participation in Facebook activity and participation in VBC practice by their corresponding overall mean. After mean centring the frequency responses for each subject, the researcher recoded the mean centred data into three binary codes (i.e. average, above average, and below average) relative to the mean centred frequency responses. The new recoded binary variables related to each individual rather than across the sample. This allowed the researcher to look at how the participants (i.e. member types) performed each activity and practice relative to the other behaviour that they performed in the virtual brand community. This analysis also allowed the researcher to test Kozinets's (1999) proposition that virtual community members' participation profiles develop from being informational to relational.

The researcher expanded the traditional dichotomous categorization of participation (i.e. lurker/participation) because it is a limited perspective of participation (de Valck et al. 2009). This study showed that participation is in fact a rich phenomenon (see Chapter 8). The participation profile for community members is based on two levels of participation. The first level of participation pertains to the participation in Facebook pages. In this level the members post comments, click 'like' on the status updates of the brand, play games, and upload pictures among other activities. This level of participation is described as 'platform-level' participation because it is basic and less involving. The second level of participation is more involving and is comprised of value creating collective practices such as greeting and helping new members, justifying investment of time and effort in the brand, and sharing brand experiences with other members (Schau et al. 2009). This level of participation is described as 'community-level' participation because it represents highly involving behaviour on brand pages. The 'community-level' of participation captures the true essence of participation in virtual brand communities. The results of the relative frequency of participation analysis have revealed that members performed activities and practices based on a developing status in the virtual brand community (Kozinets 1999, de Valck et al. 2009, Rood and Bruckman 2009).

10.3.1.1 Tourists

The participation profile findings showed that the tourists who participated on Facebook (platform-level) performed one activity above average when compared to their other activities on the platform. Tourists clicked the “Like” button more than they posted comments on the brand’s status update, share what they think or fell about the brand, or post thoughts and feelings if their favourite products is discontinued. This finding can be explained by reflecting on the classification of tourists as having weak social ties to the community and low self-centrality of consumption activity (Kozinets 1999). This means that tourists perform passive behaviours when they are on the brand pages on Facebook (Rood and Bruckman 2009); such as, clicking the “Like” button on the brand’s comments. Tourists seem disinterested in engaging with the brand or other consumers and mainly wish to remain in the background. This behaviour can be explained by the desire to learn the ropes of the brand community and gain confidence in the community (Nonnecke et al. 2006, Rood and Bruckman 2009).

The participation profile findings for tourists at the community-level showed a similar profile to their platform-level of activities. On all four virtual brand community sets of practices (i.e. social networking, impression management, community engagement, and brand use (Schau et al. 2009)), the tourists consistently performed these practices below average in comparison to the other activities and practices they performed in the virtual brand communities on Facebook. This means that, relative to the other activities that the tourists perform, they do not frequently perform the four sets of practices as proposed by Schau et al. (2009).

A possible explanation of the low frequency of the tourists performance of brand community practices can be explained by the orientation of this group of users. Tourists are mainly lurkers who are learning how to integrate and engage in the virtual brand community (Kozinets 1999, Nonnecke et al. 2006, Rood and Bruckman 2009). As such, they have not yet established social ties and so they do not frequently engage in practices such social networking and community engagement. The tourists’ passive behaviour means that they do not perform brand community practices that much. This finding is in line with recent literature where de Valck et al (2009) has shown that opportunist and functionalist users (who

make up the majority of the members in a virtual brand community) are not socially involved and seek mainly to retrieve information. Such behaviour can only be considered passive behaviour and is very similar to that conducted by the tourists in the virtual communities.

10.3.1.2 Minglers

At the platform-level, the participation profile findings revealed that minglers performed a number of activities above average relative to how frequently they performed other activities. The minglers posted comments on the brand's status update, clicked 'like' on the status updates on the brand and shared what they thought and felt about the brand more often than not. However, the minglers posted their thought and feeling about a discontinued product less than average. This finding can be explained by Kozinets's (1999) classification of minglers as those members who have strong social ties to the community and low self-centrality of the consumption activities.

When consumers identify with the brand it is expected that they would interact with it at a certain level. This kind of activity is prevalent in the Facebook platform. Minglers interact with the brand through posting comments, and sharing their thoughts and feelings (among other activities) more than their average participation. This indicates that the brand is important to these consumers and they wish to interact with it. Specifically, although the importance of their consumption activities may not be important for this group of consumers, the brand identity is. This finding is also in agreement with recent research that suggests that hobbyists and informationlists, who are similar to minglers, are socially involved in the community, and share and retrieve information (de Valck et al. 2009). Therefore, it can be said that minglers would share information with the brand and engage in some social interaction in the community.

When profiling minglers for the brand community practices that they performed, the results showed that minglers perform all sets of practices identified in Chapter 8 below average, with the exception of sharing their opinion on the commoditization of the brand (i.e. brand use). In their social networking, the minglers did not perform this set of practices more frequently in comparison to other practices, which also applies to impression management and community

engagement. In the case of brand use the minglers did engage in sharing their opinion and information regarding the brand with the community.

These results can be explained by reflecting on the nature of minglers. Minglers are strong on social ties but low on the self-centrality of the consumption activity (Kozinets 1999). By performing participation activities at the platform level more frequently than practices at the collective level minglers are engaging in some social interaction. This is in keeping with the minglers classification as possessing strong social ties to the community. De Valck et al. (2009) have shown that informationalists, who resemble the minglers, were socially involved in the brand community and engaged in supplying information. Therefore, this study confirms the proposition of Kozinets (1999) that consumers move from being information oriented to relationally and social oriented. Although the minglers do not perform the collective set of practices extensively they seem to be reaching out to other members at the basic level of engagement by providing information. Furthermore, the results of the participation profile for minglers' activities and practices show that being a mingler may in fact be a progression from the tourist stage.

10.3.1.3 Fans

The results of profiling the fan's (i.e. devotees and insiders) participation in Facebook revealed that this group performed all of the activities identified in Chapter 8 above average, relative to other activities they perform. Fans engaged the brand through posting comments on its status updates, clicked the "like" button on the brand status updates, posted what they thought and how they felt about the brand and shared their thoughts about the brand discontinuing their favourite products. This means that the fans engaged in more activities than tourists and minglers, relative to other activities they would perform in the community. This result can be explained by going back to the classification of fans (i.e. devotees and insiders). Fans are classified as high in the self-centrality of consumption activity (Kozinets 1999). Hence, it is not surprising to see fans engage the brand at the platform-level. Fans have a stronger connection with the consumption activity and it can be said that they interact more frequently with the brand because of this connection.

The fans have been shown to spend more time on the brand pages and they are also long term members of the community. These characteristics were evident in a recent study on virtual brand community members types, De Valck et al. (2009) showed that conversationalists and core members (i.e. fans) spend more time in the community and have been members in the community for some time. These two groups are also the smallest in size, which mirrors the case of the fans. Meanwhile, De Valck et al. (2009) have shown that core members are heavy users of the Internet and tend to not only collect and disseminate information but also discuss it. Therefore, it can be said that fans (relative to the other activities that they conduct) engage the brand more when compared to tourist and fans.

This study has shown that the fans have consistently performed brand community practices above average, relative to the other practices they perform. The fans performed social networking, impression management, community engagement, and brand use practices more than their average frequency levels. Again, the results of profiling the practices of fans in virtual brand communities can be explained by reflecting on the definition of fans (i.e. devotee and insiders). Devotees and insiders are both high in the self-centrality of the consumption activity, which means that they identify highly with the brand community. This identification in turn leads to community engagement and participation (Algesheimer et al. 2005). Furthermore, fans are high in the frequency of participation in general and, therefore, it should be expected that they perform the majority of the practices higher than average, relative to the other activities and practices they perform in the community.

These findings are also in agreement with recent research that suggests that core members score high in the frequency of participation and the duration of visit in the community (de Valck et al. 2009). In addition, core members also frequently supply the community with information and engage other members through different channels, such as chat session and discussion forums. Therefore, it is evident from the participation profile of fans that they participate more in comparison to other members, especially when the means are compared (see Chapter 8).

Finally, this profiling provides support for Kozinets's (1999) proposition that consumers develop and progress during their time in the virtual brand community. This progression has also been described as membership life cycle (de Valck et al. 2009). This present study has shown that as consumers become fans they perform activities and practices more than the

other member types. The study also shows that fans engage in a variety of brand community practices that create value in the community (Schau et al. 2009).

10.4 Summary

This chapter has discussed this study's findings, which were presented in Chapter 8 and Chapter 9. The overall results of this study were presented at the start of this chapter. It also discussed the proposed relationships and hypotheses in the conceptual model and examined the relationships between brand identification, brand community identification, participation in Facebook, participation in virtual brand community, brand attachment, brand loyalty, perceived quality, willingness to pay a price premium, WOM action and WOM valence. Furthermore, this section presented a discussion of the unexpected results that were encountered in this study. Contrary to the researcher's expectation, this study's findings suggest that identification (brand and community) may influence brand attachment directly in the context of brand pages on Facebook. The chapter also presented a discussion of the development of brand community members from information seekers to social networkers. In addition, this chapter discussed the participation profile for each member type (i.e. tourists, minglers, and fans), based on two participation levels: the platform and the virtual brand community. The next chapter, Chapter 11, discusses the contributions, limitations, and implications of this research. It will also suggest some directions for future research.

Chapter 11: Contributions, Implications, Limitations, and Directions for Future Research

11.1 Introduction

This chapter aims to present the contributions and implications of this study. It will also make a number of recommendations for future research. Section 11.2 will provide a summary of the thesis. In Section 11.3 the key contributions and theoretical implications will be discussed. Section 11.4 presents a discussion of the practical and managerial implications of this research to marketers. The limitations of this research project and directions for future research will be presented in Section 11.5. Finally, Section 11.6 will provide the conclusion of this thesis.

11.2 A Summary of this Thesis

This study had four major objectives. The first objective was to investigate the nature and role of social networking sites in representing virtual brand communities. This study investigated consumer behaviour and perceptions in brand pages on Facebook to assess whether such pages represent virtual brand communities. The second objective was to investigate the role of participation in virtual brand communities in fostering attachment to the brand in the social media context. This study investigated the antecedents of participation as well as the relationship between participation in brand pages on Facebook and brand attachment.

The third objective of this study was to investigate the role of the consumer-brand relationship (i.e. brand attachment) that was established in the virtual brand communities in building and supporting brand equity. This study investigated the relationship of brand attachment to brand loyalty, the perceived quality of the brand, the willingness of consumers to pay a price premium for the brand, and WOM behaviour.

The fourth objective of this study was to investigate the nature of participation. In particular, it examined what types of members exist in brand pages and what behaviour they performed in these pages. This study investigated the nature of participation based on the different user types found in the brand pages.

The researcher conducted an extensive literature review in order to attain the objectives of this study. Chapter Two presented an elaborate discussion of brand equity, its dimensions,

and drivers. Chapter Three explored the central topics of brand communities and brand attachment. It also covered the various manifestations of brand communities and their antecedents and outcomes. The topic of brand attachment was discussed extensively in Chapter Three.

Chapter Four presented this study's conceptual model based on the research questions and the objectives of the study. It also put forward a set of hypothesized relationships among the constructs in this study. Chapter Five presented the methodology employed by the researcher to achieve the objectives of this study. The methodology chapter detailed the research paradigm adopted by the researcher and the consequential research design. Chapter Five also detailed that research strategy, data collection and analysis methods, and approaches used to establish reliability and validity of the construct measures used in this study. Chapter Six presented a detailed discussion on the development of the new participation scales. The chapter outlined the pilot study undertaken to test the new scales.

This thesis has three data analysis chapters. Chapter Seven presented the descriptive statistics, which included a breakdown of the respondents by demographic variables and the responses to the questionnaire items. Chapter Eight reported the findings of the nature of participation and its levels based on member types of virtual brand communities. Chapter nine reported the findings of the hypothesis testing based on the use of SEM. Chapter Ten presented a discussion of the results of this study. Chapter Eleven, the present chapter, will explicate the theoretical contributions and implications of this research to the field of consumer behaviour. It will also detail the practical implications of the findings, the limitations of this research, and it will provide some directions for future research.

11.3 Key Contributions and Theoretical Implications

This research has made a number of theoretical contributions in the areas of virtual brand community, brand attachment, and brand equity. The contributions of this study include:

1. Establishing that brand pages on social networking websites are representative of virtual brand communities.

2. Demonstrating the role of identification in predicting participation in virtual brand communities in social networking sites.
3. Revealing that there is a lack of significant influence of participation on attachment to the brand in the context of social media. This is an unexpected result since participation is an important construct in the virtual brand community context.
4. Establishing the positive effect of identification with the brand and the brand community on brand attachment.
5. Establishing the effect of brand attachment on brand equity outcomes. This includes:
 - a. Confirming the positive effect of brand attachment on brand loyalty;
 - b. Demonstrating the positive effect of brand attachment on perceived quality;
 - c. Supporting the positive effect of brand attachment on willingness to pay a price premium; and,
 - d. Substantiating a positive effect of brand attachment on word of mouth action and valence.
6. Establishing that there are different types of users, beyond posters and lurkers, who perform participation practices in varying degrees.
7. Establishing the multidimensionality of participation in virtual brand communities and the richness of this behaviour. Specifically, that participation has two levels, the platform-level and the virtual brand community level.

11.3.1 Social Networking Sites as Brand Communities

A principal theoretical contribution of this study relates to the establishment of brand pages on social networking sites as viable virtual brand communities. The traditional research on brand community was mainly based on physical or psychological brand communities in the real world (e.g. Muniz and O’Guinn 2001, Algesheimer et al. 2005, Bagozzi and Dholakia 2006, Carlson et al. 2008). Meanwhile, those studies that have focused on virtual brand communities investigated dedicated communities on brand websites or on online bulletin boards (e.g. Evans et al. 2001, Shang et al. 2006, Casalo et al. 2008). Consequently, there is a scarcity of research conducted on virtual brand communities in the context of social networking websites.

The current study has examined virtual brand communities in the context of Facebook, which is a prominent social networking site. This empirical study has shown evidence that the

practices performed in online and offline brand communities are also performed on the brand pages on Facebook. No prior research has examined actual brand community practices or the nature of participation in the context of social networking sites. Hence, *this study's theoretical contributions lies in its being the first to support the existence of virtual brand communities in the context of social networking websites, based on specific practices constituting participation in brand communities.*

11.3.2 Participation, Identification, and Brand Attachment

Prior research has found that participation is either a mediator or an outcome of the various brand communities' contexts (see Yoo et al. 2002, Algesheimer et al. 2005, Bagozzi and Dholakia 2006, Scarpi 2010,). It has been shown that participation can mediate relationships between outcomes such as loyalty (Shang et al. 2006, Jang et al. 2008, Casalo et al. 2010). It has also been shown that participation is an outcome of identification (Chiu et al. 2006). In addition, participation is an outcome of benefits and incentives (Wang and Fesenmaier 2004, Nambisan and Baron 2009). However, the majority of the previous research in virtual brand communities has focused on participation as an outcome (e.g. Bagozzi and Dholakia 2004, Algesheimer et al. 2005).

This study has shown the important role of identification in driving participation in virtual brand communities. This study has also shown that participation in fact does not influence attachment to the brand in the context of virtual brand communities. Although participation is a major behaviour that creates value in virtual brand communities (Schau et al. 2009), this research has shown that participation does not necessarily translate to attachment to the brand. Hence, *this study's theoretical contribution lies in supporting the role that identification plays as an antecedent of participation in the social media context. Furthermore, this study has shown that participation does not influence brand attachment in the context of brand pages on social networking sites.*

11.3.3. Identification with the Brand, and Community and Brand Attachment

Previous research involving brand identification shows that it is linked to commitment (Carlson et al. 2008), spending on brand (Carlson et al. 2009), WOM (Bhattacharya and Sen 2003, Kuenzel and Halliday 2008), and loyalty (Bhattacharya and Sen 2003, Kuenzel and

Halliday 2008, Yeh and Choi 2010). In addition, previous research shows that brand community identification is linked to community engagement (Algesheimer et al. 2005), and brand purchase and WOM intentions (Czaplewski and Gruen 2004). However, very few researchers have linked brand identification and brand community identification with brand attachment (e.g. Zhou et al. 2011). In this study, specifically in the context of virtual brand communities, it was found that identification with the brand and the brand communities has a direct effect on the consumers' attachment to the brand. Therefore, *this study makes a theoretical contribution by providing empirical evidence of the possible positive influence of identification with the brand and of the positive influence of identification with the community on brand attachment.*

11.3.4 Brand Attachment and Brand Equity Outcomes

Previous research indicates that commitment and brand love is influenced by some brand equity dimensions, such as loyalty and willingness to invest in the brand (e.g. Carroll and Ahuvia 2006, Jang et al. 2008, Bergkvist and Bech-Larsen 2010, Vlachos 2011, Batra et al. 2012). These findings were mainly related to the emotional aspect of consumer closeness to the brand. There are very few studies that have investigated the role of the broader concept of brand attachment (i.e. one beyond emotional attachment or love) with brand equity outcomes. Empirical research reports that brand attachment, brand-self connection and brand prominence, has an influence on brand equity outcomes (Park et al. 2010).

This study has shown that brand attachment has a positive influence on important brand performance measures, brand loyalty, perceived quality, willingness to pay a price premium, and word of mouth. Hence, *this study's theoretical contribution lies in its support for the relationships between brand attachment and brand equity dimensions and outcomes.*

11.3.5 Participation

Prior research has generally characterised virtual brand community participation at one level (e.g. Koh and Kim 2004, Madupp 2006, Nonnecke et al. 2006, Shang et al. 2006, Casalo et al. 2009, Ellonen et al. 2010). This study has shown that there are two levels of participation involved in virtual brand communities. The first level of participation concerns the platform that is hosting the virtual brand community, which pertains to the superficial platform

specific participation actions. The second level of participation involves participation at the virtual brand community level, which pertains to the rich collective value creating practices. This finding shows that participation may be different between different platforms.

This finding helps to explain consumer behaviour in social networking sites as opposed to electronic forums that also act as virtual brand communities. The focus of prior research has mainly been on participation in the shape of consumers' posting and lurking behaviour. Very little research has explored the difference between participating at the platform-level and the community-level. Hence, *this study's theoretical contribution lies in supporting the existence of multiple levels of participation in virtual brand communities.*

11.3.6 Member Type and Participation

Traditionally, virtual brand community participation has been conceptualised as posting and lurking (e.g. Koh and Kim 2004, Madupp 2006, Nonnecke et al. 2006, Shang et al. 2006, Koh et al. 2007, Ellonen et al. 2010). Previous literature involving participation has tried to provide a broader view of participation (see Kozinets 1999, Schau et al. 2009, Rood and Bruckman 2009, Wu and Fang 2010, de Valck et al. 2009). In this study, the classification of the types of virtual brand community users was adopted from Kozinets (1999), whose four groups of users were used to profile consumers' on brand pages on Facebook. The majority of the studies on participation have aimed to create a profile on users based on general frequency of visit, durations of visits, giving information, receiving information, or discussing information.

This study took the novel approach of investigating the actual specific behaviours and practices that consumers perform on brand pages on Facebook as opposed to the generic giving and receiving of information. This study adopted the qualitative work of Schau et al. (2009) to quantify practices and to capture what each member type actually does on a brand page. These sets of practices provided clear sets of profiles for member types. The findings confirm that the members' participation profile changes as they progress in the virtual brand community. In addition, the frequency by which they perform activities and practices increases. Consequently, this present study might help to understand why consumers join virtual brand communities and how they spend their time in such virtual spaces. It should also help to understand which groups are most valuable to the marketer. Hence, *this study*

validates the existence of more than two sets of users (i.e. lurkers and posters) in virtual brand communities, each of which has their own participation profile.

11.3.7 Contribution of the Methodological Approach

This study has generated and tested a more elaborate set of items than the previous research of the virtual brand community domain, and it has used this set to capture participation behaviours. Prior literature has focused mainly on measuring participation on ordinal or nominal scales, while this study measures participation on an interval scale across a larger number of items than simply posting and lurking. Therefore, *this study's methodological contribution lies in it being the first to provide a new and extensive measure for participation that goes beyond the simple categorical measure of the construct.*

11.4 Managerial Implications

The social networking environment has witnessed an increased interest from marketing managers. A large number of brands have set up 'brand pages' on websites such as Facebook, Twitter and Google+. This has enabled many of the top brands to garner a following of millions of consumers. This research provides some insight into how marketing managers can better understand their customers on these massive virtual brand communities. The potential of brand pages as social networks is huge. Consequently, it is important for companies to capitalise on their large customer following and upgrade their followers to loyal patrons of the brand.

11.4.1 Social Networking Sites as Virtual Brand Communities

This study has shown that brand pages on Facebook represent virtual brand communities. Marketing practitioners would benefit from embracing the finding that their brand pages are a destination for their brand followers. Understanding that a brand page is a virtual community for brand patrons presents the company with opportunities to connect with the customer at an intimate level. Virtual brand communities on the Internet are a well-suited medium for building a consumer-brand relationship (Throbjornsen et al. 2002). Relationships forged with

consumers in the virtual brand communities have an effect on their sense of brand attachment and, hence, has favourable brand equity outcomes. Marketing managers can use brand pages as a tool to build a connection with the consumers that will reflect on their behaviour inside and outside the community.

Consequently, marketing practitioners should not treat brand pages as a mere social presence but they would benefit from engaging consumers at a personal and intimate level. The brand manager should enable the brand to interact with the consumer as if they were the only consumer. The traditional brand messages are usually less personal and broad. Personalising a brand message would enable the brand to make a personal connection with the consumer. The current practice of simply posting marketing slogans and news is not enough. Marketers should focus their efforts on meaningful engagement with consumers to meet their needs and interests. This would encourage identification with the brand and the brand community as the consumers would feel the brand is more related to their self-concept.

11.4.2 Participation and Member Type

The results indicate that participation is a two-level activity. Consumers participate superficially on brand pages, by ‘liking’ a post or replying on to the brands status updates with a comment. Consumers also participate in brand pages at a higher collective level, the virtual brand community level. When consumers participate at the latter level they perform practices that involve connecting with other members through helping them out with brand issues, defending the brand, justifying investment in the brand, and sharing brand stories. Among other practices, they create value for themselves and the brand (Schau et al 2009). Brand managers should engage consumer participation that goes beyond the superficial and passive behaviour that occurs at the platform level. Although it is important for consumers to post and read what is on a brand page, it is far more beneficial for the brand to support higher-level practices that create value for the consumer and brand.

This study’s findings also show that there are different classes of member on the brand pages on Facebook. This study identified three groups of users: tourists, minglers, and fans (i.e. devotee and insiders). The tourists are the beginners in the community, minglers have progressed from being tourist to more active members, and fans are the loyal customer base who are active participants of the community. Understanding that a membership type is a

stage along a continuum and that consumers' progress along this continuum to become more loyal customers is an important development for a marketing manager. A possible strategy for a brand manager is to recruit members to the page so as to keep a healthy flow of tourists who may not participate much in the beginning but who are necessary new blood for future interactions in the community.

Minglers should be encouraged to participating more as they perform brand use practices more often than other VBC practices. Minglers also perform activities at the platform level more often than not in comparison to tourists. A manager can identify a mingler by their usage profile, which is captured by web analytics. These tools are widely available on social media websites and from third party data aggregators. This means that the marketer can identify and influence minglers into performing more practices, like social networking and community engagement. This can be done by opening discussion topics and encouraging members to help each other on brand issues. In addition, asking members to share their brand stories and following up with their stories would encourage minglers to participate more. Members who submit their e-mails or other contact methods can be encouraged via personalized reminder messages.

Fans are the more involved members of the community. They frequently perform the majority of the brand community practices. Managers of brand pages should connect with fans and encourage them to network with minglers and tourists to encourage migration of the latter two groups. A possible way to do this is use an 'friend of the week' promotion to recognise active members who are able to positively impact the participation of other members. Sending direct messages to fans, with their permission, would allow the brand to form a personal connection with less of the clutter that is found on the main page.

Marketing practitioners should be aware that type of membership is encouraged by different needs to participate in the community. Tourists are generally in the informational mode of interaction; therefore, this group requires information about the brand that is readily available in the brand page. Although minglers are more socially oriented than tourists, they may also seek information on the brand and its use. To cater for these groups, marketers may also offer information, such as brand support and product manual links. The brand manager can also provide an avenue for like-minded Minglers to socialise.

The Fans on the other hand are in the relational mode of consumption interaction. This group is high on brand consumption activity and social ties to the community. A marketing manager should favour the fans with rewards for their loyalty to the community. The high participation frequency of this group should be acknowledged and encouraged to promote positive outcomes, both inside and outside the community. It is the fans that will be more attached to the brand and pay more for it.

Consequently, brand managers should focus on long term membership, and plan to build loyalty and participation encouraging programs that develop and progress the members of its brand page to build its brand's equity. One way to bring tourists into the brand community's fold is to provide them with a welcome message that caters for their informational model. The marketer could then encourage tourists to interact with the brand and other members. The benefits of interaction may also be outlined to entice the new members.

11.4.3 Participation, Identification and Brand Attachment

This study's findings show that participation is positively influenced by identification with the brand and the community. The findings also show that participation has no significant effect on brand attachment. On the other hand, brand identification and brand community identification may have a positive influence on attachment to the brand. Marketing managers who maintain a brand page on Facebook would benefit from encouraging participation in their brand pages but they should focus on fostering identification for their brands and the brand community. Marketers can let their customers know about their brand pages by actively marketing the page in personal communication to the customers. Marketers should also aim at communicating the brand identity and association to enable consumers to build their personal and social-self. When the brand message is coherent and relevant consumers will relate the brand and the community and this will encourage participation.

Allowing the brand pages to provide an official portal for brand solutions should also encourage customers to go and join the brand page. Many consumers join the brand page to acquire information about the brand (Kozinets 1999). Creating information rich environments on the brand pages will motivate consumers to engage in more than just information collection and slowly evolve into active participation. This strategy would encourage consumers to connect with other consumers because interaction with the community is an

important aspect of participation. Marketers should realise that when consumers feel that they are part of a social group of brand patrons, they will identify with the brand community and will engage the community.

Identification with the brand and the brand community are important antecedents to fostering attachment to the brand. Consequently, brand managers should consider developing a rich and appealing brand image that will draw customers. Moreover, managers may want to focus on personalising the brand message to strike a chord with the consumer's self-definition needs. In their messages and posts on the brand page, managers could motivate identification with the brand and the brand community by focusing on a pure brand experience. Although promotions on the brand page are important, managers should use those sparingly. Overloading consumers with advertising might turn them away from brand pages. Consumers might also terminate their membership in brand pages due to heavy advertising. Marketers should focus on meaningful interactions with consumers. The more consumers align themselves to the brand image and identity, the more likely they are to develop a bond with the brand. This bond would encourage consumers to be attached to the brand because the brand provides for their personal and social needs. Hence, the consumers' attachment to the brand has favourable consequences for the brands and consumers alike.

11.4.4 Brand Attachment and Brand Equity Outcomes

The study's findings show that loyalty, perceived quality, WOM, and willingness to pay more for the brand are influenced by attachment to the brand. Knowing that brand pages can foster brand attachment offers the marketers evidence to focus their brand management efforts on attachment building programs. In other words, marketers would benefit from managing the consumer-brand interaction that steers consumer towards developing an attachment to the brand. The marketers would also benefit from influencing the interaction between members of the community to achieve attachment the brand. For example, when a brand makes a post on its 'wall' it can direct consumers to engage in practices such as helping new comers to the community. The brand can also encourage members to tell stories about how they bought and used the brand. Such activities and practices would encourage members to be attached with the brand as consumers' participation influences brand attachment indirectly.

When the brand is prominent in consumers' minds, attachment will be reinforced. This would solidify consumers' perceptions of the brand and it is important to their self-concept. Brand managers should strive to facilitate interactions to increase the brand salience in consumers' minds, and aid identification and attachment to the brand. Marketing communication, both on and off the virtual community, should focus on presenting the brand as a self-defining tool. For example, advertising for the brand could focus on those attributes that appeal to consumers, specifically social connections. This strategy would be in line with the consumers' use of social networking sites. By focusing on developing consumers' attachment to the brand marketers would be able to positively influence brand equity and its outcomes.

11.5 Limitation and Directions for Future Research

The findings of the current study should be taken with care since there are some limitations to this study. Due to the exploratory nature of this research and the nature of the context, a number of limitations to this research arose. Consequently, the following section summarizes the limitations of this study.

11.5.1 Limitations

1. This study's data was collected from an online panel based in the United Kingdom. The sample consisted of 89% British citizens. Therefore, this study's results may not be generalisable to other nationalities of members of brand pages on Facebook. The generalisability of the sample may be limited to brand page users who are in the UK.
2. The main study used convenience-sampling method to recruit respondents from an online consumer panel. This sampling method may lead to bias since the respondents selected themselves to join the study. A self-selected sample may not necessarily represent the population of interest and may introduce bias into the study, especially when panel members are paid or rewarded for their participation in surveys.
3. The convenience sampling approach employed by this study did not provide an equal number of respondents in each member type category. The stark discrepancy between the number of tourists, minglers, devotees, and insiders may have influenced the results of this study.

4. In this study data collection was conducted through the use of a web based questionnaire. Although this type of questionnaire enabled the researcher to reduce error in data entry and avoid double entries by the same respondents, it may suffer from some issues. The respondents may not fill the questionnaire's items in the same time. They can respond to some parts while they are browsing other websites, which may cause distractions and lead arbitrary completion of the questionnaire. Largely, the findings of this study should be taken with this limitation in mind.
5. In this study, two focus groups were conducted on Facebook closed groups. Although the focus groups session were enriching, a larger number of groups and members would increase the confidence in the results of this study. The use of multiple (i.e. more than two) focus groups would have enabled more ideas to be generated and formed.
6. In this study, a cross-sectional design was used to investigate the relationships of interest. This limits this study's ability to infer causality of the variables in the study. Developing a longitudinal research design will aid in establishing causality between the variables proposed in this study.

Regardless of these limitations, this study contributes to the understanding of the dynamics of virtual brand communities and yields useful insights into the importance of numerous marketing issues in this context.

11.5.2 Directions for Future Research

The results of this study are limited to a largely United Kingdom based group of brand page members. It is recommended that this study should be replicated for consumers from other countries. Replication of this study in different countries would ensure that the findings of this study are not limited to just UK nationals but apply to brand page members in general. Furthermore, this study can be replicated to compare different nationalities (e.g. American and Chinese or British and Indians) to explore the applicability of the findings across different cultures.

This study utilised an online panel to collect data. Future studies may benefit from collecting data directly from brand pages on Facebook. A possible way to collect data is to develop an application that could entice respondents to download and use it. This app would be able to

present the questionnaire in an involving manner to reduce distraction. The application can also collect data, with the respondents' consent, on the connection that the consumer has with other brands. This would provide a profile of brand connection for different consumer groups, such as tourist and fans.

Future research may want to sample brand community members so that they can better discern the effect of member type on relationships between important marketing constructs. A quota sampling method may allow for an equal number of members in each group. This will support multi-group analysis in future research. Furthermore, researchers may want to explore other possible moderators for the relationships in virtual brand communities. For example, further research can use the nature of the brand (i.e. hedonic or utilitarian) as a moderator of the relationships between participation, identification, and attachment.

The emphasis of this study was on investigating the impact of participation in virtual brand communities on brand attachment. There are, however, more antecedents to brand attachment than those proposed in this study. Possible precursors to brand attachment could be identification with the brand and the brand community, the use of the brand in one's family, previous brand experience in the real world, and marketing communication and promotion. Thus, more research is required to unearth other antecedents to brand attachment.

The present study focused on the consumers' membership and participation in brand pages on Facebook. Further research can focus on different contexts. Virtual brand communities have many manifestations and this study can be replicated in different social networking sites with brand pages and also dedicated virtual brand communities developed on companies' websites. The social web is a rapidly evolving environment. Many of this study's findings are applicable but the greater integration of the social web with the brand's official websites and other related online outlets should be explored. For example, how would the Facebook 'like' button that is found in news articles about the brand influence the participation of different types of members.

An interesting research direction is to study the relationship between participation, identification, and brand attachment in virtual brand communities in a longitudinal study. A longitudinal study of virtual brand communities would enable researchers to infer causality relationships in the context of interest. A longitudinal study would also help researchers track

how the different member types evolve from their early days to their veteran phase of their membership. Such a study could focus on how identification, participation, and attachment develop and how this development influences brand equity.

In this study, the respondents were asked to provide a variety of brands they follow on Facebook. Future research could focus on a particular number of brands, for example hedonic versus utilitarian brands, or product versus service brands. In addition, further research can compare two to four brands to investigate the usefulness of brand pages in promoting brand equity across the chosen brands. Further investigation in this area will aid marketers and researchers in understanding how brand attachment would develop differently based on particular brand types and classifications.

11.6 Conclusion

This study had four objectives. Firstly, the present study investigated the potential of participation on brand pages on Facebook to represent virtual brand communities. Secondly, it examined the role of participation in virtual brand communities in fostering attachment to the brand. Thirdly, this study investigated how brand attachment developed in the virtual brand community and its role in building brand equity. Finally, the current study investigated the relationship between nature of participation and community member classification.

This study has shown that brand pages in Facebook represent virtual brand communities. Furthermore, participation is influenced by identification with the brand and the community. An important but unexpected finding of this study is that participation did not influence brand attachment. Instead, empirical evidence indicated that brand and community identification may actually have a positive effect on brand attachment. This study has also indicated that brand attachment has an important role in building loyalty, perceptions of quality, generating WOM, and consumers' intention to pay more for the brand. Finally, this study has shown that participation is a two level behaviour that is based on three member types: tourists, minglers, and fans (i.e. devotees and insiders). These member types are evolutionary milestones on a participation continuum in a virtual brand community.

In conclusion, this study has shown that participation and identification are important to consumer-brand relationships but only identification has a significant impact on attachment to the brand. Virtual brand communities are relationship-enriching environments where different consumers develop and establish strong bonds with the brand that influences their behaviour. This study has satisfied all of the objectives and has addressed all of the research questions. The findings of this study are considered to be constructive for marketing scholars and practitioners alike.

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Appendix A: SPSS Labels for Scale Items

Label	Item
PQ1	[Brand] is of high quality
PQ2	[Brand] is a reliable brand
PQ3	[Brand] must be of very good quality
PQ4RVRSD	[Brand] appears to be of very poor quality (REVERSED).
BI1	When someone criticizes [Brand], it feels like a personal insult
BI2	I am very interested in what others think about [Brand]
BI3	When I talk about [Brand], I usually say 'we' rather than 'they'
BI4	When [Brand] succeeds, it feels like I have succeeded
BI5	When someone praises [Brand], it feels like a personal compliment
BI6	If a story in the media criticizes [Brand], I would feel embarrassed
WOM1	I mention [Brand] to others quite frequently
WOM2	I've told more people about [Brand] than I've told about most other brands
WOM3	I seldom miss an opportunity to tell others about [Brand]
WOM4	When I tell others about [Brand], I tend to talk about the brand in great detail
WOM5	I have only good things to say about [Brand]
WOM6QRV RSD	In general, I do not speak favorably about [Brand](REVERSED).
WOM7	I say positive things about [Brand] to other people
WOM8	I recommend [Brand] to someone who seeks my advice
WTPP1	I would be willing to pay a higher price for [Brand] over other brands
WTPP2RVR SD	I would switch to another brand if the price of [Brand] goes up (REVERSED).
WTPP3	I would continue to do business with [Brand] if its prices increase a bit
WTPP4	Please indicate your response by choosing only one response item. I am willing to pay _____% more for [Brand] over other brands
BL1	It is very important to me to buy [Brand] over another brand
BL2	I always buy [Brand] because I really like this brand
BL3	I think I am committed to [Brand]
BL4	I consider myself to be loyal to [Brand]
BA1	To what extent is [Brand] part of you and who you are?
BA2	To what extent do you feel personally connected to [Brand]?
BA3	To what extent do you feel emotionally bonded to [Brand]?
BA4	To what extent is [Brand] part of you?
BA5	To what extent does [Brand] say something to other people about who you are?
BA6	To what extent are your thoughts and feelings toward [Brand] often automatic, coming to mind seemingly on their own?
BA7	To what extent do your thoughts and feelings toward [Brand] come to your mind naturally and instantly?
BA8	To what extent do your thoughts and feelings toward [Brand] come to mind so naturally and instantly that you don't have much control over them?
BA9	To what extent does the word [Brand] automatically evoke many good thoughts about the past, present, and future?
BA10	To what extent do you have many thoughts about [Brand]?
BC11	I identify myself as belonging to the [Brand] community

Label	Item
BCI2	I see the community plays a part in my everyday life
BCI3	I see myself as a typical and representative member of the community
BCI4	it confirms in many ways my view of who I am
BCI5	I can identify with the [Brand] community
BCI6	I have strong feelings for the [Brand] community
BCI7	I feel like I belong in the [Brand] community
MOTV1	...it is fun
MOTV2	...I enjoy being on the [Brand] Facebook page
MOTV3	...it would make me feel good
MOTV4	...it would be exciting
MOTV5	...I want to get answers to [Brand] related questions
MOTV6	...I want to enhance my knowledge about the [Brand]'s products and its usage
MOTV7	...I want to obtain solutions to specific product-usage related problems
MOTV8	...it is convenient to communicate with other consumers online
ACT1	...I post comments on [Brand]'s status updates
ACT2	...I post to share what I think or feel about [Brand] on [Brand]'s Facebook wall
ACT3	...I click 'like' on status updates posted by [Brand]
ACT4	...I participate in games and contests hosted on [Brand]'s Facebook page
ACT5	...I post my thoughts and share my feelings if [Brand] discontinues a product I like
ACT6	...I post information against [Brand] if I find that it is acting in a negative way or against my beliefs
ACT7	...I post pictures and videos on [Brand]'s Facebook wall
PRAC1	...I greet and welcome new members to the community
PRAC2	...I provide emotional support to other members for brand and non-brand issues
PRAC3	...I assist new members in learning about [Brand]
PRAC4	...I discourage members who I don't feel represent [Brand] from participating on the page
PRAC5	...I share positive news about [Brand]
PRAC6	...I encourage people to use [Brand]
PRAC7	...I explain to other members why I spend time and money on supporting [Brand]
PRAC8	...I tell other members how [Brand] is better than other competing brands
PRAC9	...I tell other members stories about how I bought and use [Brand]
PRAC10	...I tell other members about important events in my life while using [Brand]
PRAC11	...I distinguish between different members of [Brand] page
PRAC12	...I show other members examples of important events with [Brand]
PRAC13	...I share with other members how I take care of [Brand] products that I own
PRAC14	...I share with other members how I change [Brand] to suit my needs
PRAC15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed
PRAC16	...I criticize how [Brand] is merchandised and commercialized
PQ4RVRSD	[Brand] appears to be of very poor quality (REVERSED).
WOM6QRV	
RSD	In general, I do not speak favourably about [Brand](REVERSED).

(Source: This Research)

Appendix B: Summary of Focus Group Findings

Discussion Theme	Responses/Findings
General activities on Facebook	<ul style="list-style-type: none"> • Consumers mainly use the Facebook website for socializing with family and friends. • There are several other motivations for using the website such as curiosity, peer pressure, entertainment, and business functionality of the platform. • There are three types of Facebook users: <ul style="list-style-type: none"> ○ Heavy users who visit the website several times a day. ○ Medium users who visit the website daily. ○ Light users who visit the website once a week or there of. • Consumers use Facebook to share news, photos, promote a cause, place events, self-expression, and networking, and learn about business opportunities. • Consumers' Facebook activity is represented in status updates, comments on friends' posts, sending messages or chatting, participating in apps, post videos and pictures, building pages or creating groups, visit and joining pages and groups, passively browse multimedia posts by others, and shop for products offered on the platform.
Membership of "Brand" pages on Facebook and Motives for joining	<ul style="list-style-type: none"> • There are four types of individuals with regards to membership in "Brand" pages on Facebook: <ul style="list-style-type: none"> ○ Members of official commercial "Brand" pages. ○ Members of non-commercial "Brand" pages. ○ Members of consumer initiated "Brand" pages. ○ Non-members of any "Brand" pages. • Consumers join "Brand" pages on Facebook because they love brands, are friends of the brand owners, want to show solidarity with other brand users, to stay updated with the brand and its offerings, and to satisfy business needs such as information on specific business opportunities. • Consumers do not join "Brand" pages on Facebook because they are indifferent towards the brand, prefer the original brand website, or do not identify with the brand nor its users. • On "Brand" pages, consumer predominately read post by the brand, posts by consumers, and any media (pictures and video) posted by the brand. • Some consumers rarely post and interact with the brand and other

Discussion Theme	Responses/Findings
	<p>consumers on the “Brand” pages.</p> <ul style="list-style-type: none"> • Consumers do not interact in “Brand” pages they joined on Facebook because they are not motivated to do, have nothing to add. Prefer interacting with friends on personal pages, and dislike being spammed by notification from “Brands”. • Consumers who interact in “Brand” Pages on Facebook do so because these pages are related to their work, they support the brand and want to show it, they identify with the brand users, they want to gain information about the brand, they have strong feelings about a brand topic, and they want to learn how other consumers are using the brand.
<p>Identification with Brand and Brand Community</p>	<ul style="list-style-type: none"> • Not all consumers who use Facebook identify with brands. When consumers identify with brand, they would join and participate on “Brand” pages on Facebook as a consequence of their identification with the brand. • Those consumers who do identify do not all necessarily join and participate in “Brand” pages. In some cases community and brand owners’ relationships is what encourages users to join these pages. • Consumers who use Facebook can be classified into two groups: <ul style="list-style-type: none"> ○ Those who identify with brand users and those who do not identify with brand users. Those consumers who do not identify with other brands join brand pages based on non-brand affiliations or may not join a brand page at all. ○ Those who identify with brand users identify with consumer groups of “Brand” pages on Facebook and would join and participate in these pages as a result.
<p>Activities in “Brand” pages on Facebook</p>	<ul style="list-style-type: none"> • On “Brand” pages on Facebook, consumers read post, comment on “Brand” posts, search for new product information, and post questions to the “Brand” regarding product information. • Participation in Facebook Brand pages can be described more than posting and lurking. • Facebook users perform several practices in the “Brand” pages on website which include social networking, impression management, engagement with community, and share brand usage. • There is a heavy bias toward social activities and connections in users’ participation in Brand pages.
<p>Consumer thoughts and feelings after participating in “Brand” pages in Facebook</p>	<ul style="list-style-type: none"> • After participation in “brand” pages in Facebook consumers feel motivated to continue participation, a sense of belonging and loyalty to the brand, and like using the platform to search for more information. • After participation in “Brand” pages consumers may think of the brand, persons connected to the brand, increasing participation in “Brand” pages, acquiring more information about products, and form personal ideas. • Consumers have positive and negative emotions as a result of participation in “Brand” pages. Consumers experience more positive emotions than negatives emotions. • Consumers develop stronger relationships with the brand as a result of participation in “Brand” pages. They feel an increased connection and belonging to the brand, know more about the brand,

Discussion Theme	Responses/Findings
	<p>and become more attached to it by knowing that they became part of the community.</p> <ul style="list-style-type: none"> • Loyalty to the brand may increase due to the positive emotions that consumers develop for the brand as a result of participation. This is not the case for all consumers. • Some consumers may pay more for the brand, as a result of the positive emotions they develop, when they participate in “Brand” pages on Facebook. • Consumer would most probably engage in word-of-mouth behaviour as a result of the positive emotions they developed from participation in “Brand” pages on Facebook. • Brand quality perceptions are not readily influenced by the positive emotions consumers develop as a result of participation in “Brand” pages. The relationships here is weaker in the consumers’ mind when compared to the links between emotions and brand loyalty, word of mouth, and willingness to pay price premiums.

Appendix C: Focus Group Checklist

To Do:

1. Set-up closed group in Facebook to conduct the focus group.
2. Participation requests to be sent to potential respondents.

What to prepare for the focus group

1. Discussion procedure
2. Discussion guide
3. Informed consent forms (for all participants) which will be emailed to participants or presented to participants in the welcome message.
4. Note taking form

Focus Group - Order of the online group discussion

No.	Activities	In charge
1	Welcoming the participants <i>- Thank the volunteers for participating.</i> <i>- Facilitators introduce themselves and their roles.</i>	Moderator
2	Ask the participants to review consent form.	Moderator
3	Present the discussion procedures.	Moderator
4	Ice breaking <i>- Participants to introduce themselves (name, age, occupation and country of origin)</i>	Participants
5	Topic discussion <i>- Topic 1 to Topic 5</i>	Moderator
6	Conclusion and Summarization	Moderator

Discussion Procedures

Welcome and thank you for your support in this group discussion. Here are the guidelines for the effective implementation of this discussion.

1. Before the discussion starts I need your formal consent by agreeing to participate in this discussion. Please read the consent form first. Your consent is assumed by your participation but I also require you to post a comment stating, *"I agree to participate in this discussion"* if you choose to participate.
2. If you do not agree to participate and do not wish to give your consent I would urge you to leave this groups discussion and post a comment stating, *"I do not agree to participate in this discussion"*.
3. You are encouraged to give as much feedback on questions that are relevant to your experience.
4. This discussion requires everyone to participate and speak freely.
5. When responding to the moderator's questions please use the "comment" button as the helps everyone involved follow the discussion on any particular question.
6. Please avoid using "like" when you respond to other participants' comments. When you are in agreement with other participants, your expressed opinion is more important to the discussion.
7. If you would like to write a number of paragraphs, then you should use the shift and return or enter buttons (together) to move to a new line.
8. There are no right or wrong answers to the questions as answers are totally based on participants' opinion, feel and experiences.
9. What the moderator knows or thinks is not important, the most important is what the participants think and feel.
10. Different views among participants are acceptable as the moderator does not expect everyone to anonymously agree on something unless they really do. However, it is interesting to know the different views.
11. The discussion session will be saved as the moderator would like to follow up on the conversation, as this session will run for three days to allow people from different time zones to participate.

Enjoy the discussion!

Discussion Topics

INTRODUCTION
TOPIC 1: General activities on Facebook
<ol style="list-style-type: none"> 1. Why did you join Facebook? 2. How often do you use Facebook? 3. What do you use Facebook for? <ol style="list-style-type: none"> i. To keep in touch with family? ii. To find old friends? iii. To make new friends? iv. Other? 4. What activities do you perform in Facebook? (<i>There are many activities these are just examples</i>) <ol style="list-style-type: none"> i. Do you: Post comments? Post pictures? “Like” others’ comments and pictures? Join Facebook groups? Join Facebook pages of celebrities, Brands, or causes? Other?
TOPIC 2: Membership of “Brand” pages on Facebook and Motives for joining
<ol style="list-style-type: none"> 1. Have you joined “Brand” pages on Facebook? (e.g. Coca Cola or Disney) <ol style="list-style-type: none"> a. Are these pages official “Brand” pages created by the parent company or by consumers? b. If you joined a “Brand” page on Facebook, give an example and explain why you decided to join that “brand” page? c. If you did not join a “Brand” page on Facebook, explain why you decided not to join? 2. What do you do in these “Brand” pages on Facebook? Do you just read “Brand” posts? Do you read what other consumers post? Or do you actively post and interact with the “Brand” and other consumers? 3. Why do you only read comments passively without joining in the interaction? 4. Why do you participate in “Brand” pages on Facebook? What motivates you to participate actively in “Brand” pages on Facebook?
TOPIC 3: Identification with Brand and Brand Community
<ol style="list-style-type: none"> 1. Do you relate to or identify with brands in your everyday use? (<i>e.g. I find Coca Cola Brand just like me young and happy. I like Coca Cola because it is for people like me.</i>). Does that identification drive you to join and participate in “Brand” pages on Facebook? 2. Do you relate to or identify with other consumers or consumer groups on Facebook who form “Brand” groups? Does this identification drive you to join and participate in “Brand” pages on Facebook?
TOPIC 4: Activities in “Brand” pages on Facebook
<ul style="list-style-type: none"> • What sort of activities do you perform in “Brand” pages on Facebook? (Give examples of brands) • Do you perform the following behaviours when you participate in “Brand” page on Facebook? Please explain why you perform any of these behaviours? <ul style="list-style-type: none"> ○ Welcoming: Greeting new members and assisting in their brand leaning and community socialization. ○ Empathizing: Lending emotional and/or physical support to other members, including support for brand-related trials. ○ Governing: Explaining the behavioural expectation within the brand community. ○ Evangelizing: Sharing the brand “good news,” inspiring others to use, and preaching from the mountain top. ○ Justifying: Deploying rationales generally for devoting time and effort to the brand and

collectively to outsiders and marginal members in the boundary.

- **Staking:** Recognizing variance within the brand community membership and marking your area of community interaction.
 - **Milestoning:** Refers to the practice of noting important events in brand ownership and consumption.
 - **Badging:** Is the practice of translating milestones into symbols such as badges or stars based on brand usage and community interaction.
 - **Documenting:** Detailing the brand relationship journey in a narrative way through telling stories about brand experiences to others.
 - **Grooming:** Caring for the brand or developing your own system of optimal brand use patterns.
 - **Customizing:** Modifying the brand to suit group-level or individual needs such as changing brand features to suit specific needs (e.g. customer installing custom software and hardware to their favorite brand of computers).
 - **Commoditizing:** When consumer complain about a company market strategy or they control community brand outputs so that everyone in the community benefits. (e.g. customers would speak passionately about a Brand's distribution they don't like.)
- Do you feel that any of these behaviours that you perform creates value to you, the brand, and the brand community as whole?

TOPIC 5: Consumer thoughts and feelings after participating in “Brand” pages in Facebook

What do you feel after participation in “Brand” pages on Facebook?

What thoughts come to your mind after participating in “Brand” pages on Facebook? Do these thought come more often as a result of participation?

What emotions do you feel after participating in “Brand” pages on Facebook? Are they negative or positive emotions?

How would you describe your relationship with the brand after participating in “Brand” pages on Facebook?

6. Does your loyalty to the brand increase because of your emotions to the brand?
7. Would you pay more for the brand because of the emotions you developed through participation?
8. Would you tell other consumers who are not on Facebook about the brand because of these emotions?
9. Would your perception of the brand's quality change as a result of the emotions you developed for the brand through because of your participation

SUMMARIZING AND CLOSING

Appendix D: Consent Form- Confidential Data

CARDIFF BUSINESS SCHOOL
RESEARCH ETHICS

I, _____, agree to participate in this research project on Consumer participation in "Brand" pages on Facebook that is being conducted by Faris Al Said from Cardiff Business School, Cardiff University.

I understand that the purpose of this study is to hold a focus group to find out about Consumer participation in "Brand" pages on Facebook and I will discuss my view points about Consumer participation in "Brand" pages on Facebook.

I understand that the study involves a focus group conducted in a Facebook group that will take three days and that the discussions will be saved.

I understand that my participation in this study is entirely voluntary and I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Dr. Ahmad Jamal.

I understand that all the information I give will kept confidential to the extent permitted by law.

I understand that I may not receive any direct benefit from participating in this study, but that my participation may help others in the future.

I have read and understood this information and I agree to take part in the study.

Signed:

Date:

Appendix E: Survey Used in the Pilot Study



RELATIONAL BASED BRAND EQUITY: THE ROLE OF VIRTUAL BRAND COMMUNITIES IN BUILDING BRAND ATTACHMENT AND EQUITY

INTRODUCTION

This survey has been designed to study **VIRTUAL BRAND COMMUNITIES IN THE FORM OF SOCIAL NETWORKING SITES**. A virtual brand community is a gathering of consumers on an Internet website that focuses on a company brand. In this survey, I would like to know your views and experiences on certain issues with regards to **BRAND FAN PAGES** on **FACEBOOK**. This study aims to contribute towards a better understanding of consumers experience with brands on the Internet.

Your valuable participation in this questionnaire will assist the academic analysis and study of brands on the Internet. The completion of the questionnaire should not take you more than **15 MINUTES** of your time. Your participation in this questionnaire is totally voluntary and you can withdraw from this research at any stage without telling me any reason. Also, you have the option of omitting a question or a statement if you do not wish to answer it.

Your survey responses will be strictly **CONFIDENTIAL** and **REMAIN ANONYMOUS**. Data from this study will be reported for **ACADEMIC PURPOSE** only. You can, if you wish, get a copy of findings of this research by emailing me at alsaidf@cardiff.ac.uk after September 2011.

This questionnaire consists of different sections, each having a set of statements or options. For each statement, please choose a number that best describes your feelings and opinions. For example, if you **AGREE STRONGLY** with a statement, you may choose a **SEVEN (7)** or **SIX (6)**. If you **DISAGREE STRONGLY**, you may choose a **ONE (1)** or **TWO (2)**. You can choose any number from one to seven to tell me how you feel. **ANSWER ALL** of the information truthfully and as fully as possible. There is **NO RIGHT** or **WRONG** answer. All I am interested in is your views and opinions. For each question, please make a separate and independent judgment.

For legal reasons if you are under 18 years of age please **DO NOT** proceed with this survey.

Thank you very much for your time and support.

FARIS AL SAID

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The following statements relate to your perception of the quality of [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q7.		Strongly Agree						Strongly Disagree
		←	→					
a.	[Brand] is of high quality.	7	6	5	4	3	2	1
b.	[Brand] is a reliable brand.	7	6	5	4	3	2	1
c.	[Brand] must be of very good quality.	7	6	5	4	3	2	1
d.	[Brand] appears to be of very poor quality.	7	6	5	4	3	2	1

The following statements assess your identification with [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q8.		Strongly Agree						Strongly Disagree
		←	→					
a.	When someone criticizes [Brand], it feels like a personal insult.	7	6	5	4	3	2	1
b.	I am very interested in what others think about [Brand].	7	6	5	4	3	2	1
c.	When I talk about [Brand], I usually say 'we' rather than 'they'.	7	6	5	4	3	2	1
d.	When [Brand] succeeds, it feels like I have succeeded.	7	6	5	4	3	2	1
e.	When someone praises [Brand], it feels like a personal compliment.	7	6	5	4	3	2	1
f.	If a story in the media criticizes [brand], I would feel embarrassed.	7	6	5	4	3	2	1

The following statements relate to your communication with other consumers about [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q9.		Strongly Agree						Strongly Disagree
		←	→					
a.	I mention [Brand] to others quite frequently.	7	6	5	4	3	2	1
b.	I've told more people about [Brand] than I've told about most other brands.	7	6	5	4	3	2	1
c.	I seldom miss an opportunity to tell others about [Brand].	7	6	5	4	3	2	1
d.	When I tell others about [Brand], I tend to talk about the brand in great detail.	7	6	5	4	3	2	1
e.	I have only good things to say about [Brand].	7	6	5	4	3	2	1
f.	In general, I do not speak favorably about [Brand].	7	6	5	4	3	2	1
g.	I say positive things about [Brand] to other people.	7	6	5	4	3	2	1

The following statements relate to your willingness to pay a price premium for [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q10.		Strongly Agree						Strongly Disagree
		←	→					
a.	I would be willing to pay a higher price for [Brand] over other brands.	7	6	5	4	3	2	1
b.	I would switch to another brand if the price of [Brand] goes up.	7	6	5	4	3	2	1
c.	I would continue to do business with [Brand] if its prices increase a bit.	7	6	5	4	3	2	1

The following question relates to the extra amount you are willing to pay for [Brand] over other brands. Please indicate your response by choosing only one response item.

Q11.		0%	5%	10%	15%	20%	25%	30%	More
a.	I am willing to pay _____% more for [Brand] over other brands								

Thinking of [Brand], please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q12.		Strongly Agree ← Strongly Disagree →						
1.	It is very important to me to buy [brand] over another brand.	7	6	5	4	3	2	1
2.	I always buy [Brand] because I really like this brand.	7	6	5	4	3	2	1
3.	If [Brand] is not available, I will go to another store.	7	6	5	4	3	2	1
4.	I think I am committed to [Brand].	7	6	5	4	3	2	1
5.	I consider myself to be loyal to [Brand].	7	6	5	4	3	2	1

The following statements assess your thoughts and feelings toward [Brand]. Please choose the appropriate number to indicate the extent that each statement applies to you.

Q13.		Not at all ← Completely →										
a.	To what extent is [Brand] part of you and who you are?	0	1	2	3	4	5	6	7	8	9	10
b.	To what extent do you feel personally connected to [Brand]?	0	1	2	3	4	5	6	7	8	9	10
c.	To what extent do you feel emotionally bonded to [Brand]?	0	1	2	3	4	5	6	7	8	9	10
d.	To what extent is [Brand] part of you?	0	1	2	3	4	5	6	7	8	9	10
e.	To what extent does [Brand] say something to other people about who you are?	0	1	2	3	4	5	6	7	8	9	10
f.	To what extent are your thoughts and feelings toward [Brand] often automatic, coming to mind seemingly on their own?	0	1	2	3	4	5	6	7	8	9	10
g.	To what extent do your thoughts and feelings toward [Brand] come to your mind naturally and instantly?	0	1	2	3	4	5	6	7	8	9	10
h.	To what extent do your thoughts and feelings toward [Brand] come to mind so naturally and instantly that you don't have much control over them?	0	1	2	3	4	5	6	7	8	9	10
i.	To what extent does the word [Brand] automatically evoke many good thoughts about the past, present, and future?	0	1	2	3	4	5	6	7	8	9	10
j.	To what extent do you have many thoughts about [Brand]?	0	1	2	3	4	5	6	7	8	9	10

Consumers create or join company-sponsored groups that focus on a brand. These groups are usually referred to as brand communities. Consumers share their interest in the brand with other consumers in such communities. The Internet has allowed consumers and companies to create brand communities on websites such as Facebook. Brand communities on the Internet are called Virtual Brand Communities. A virtual brand community is a gathering of consumers on an Internet website that focuses on a company's brand. The following questions assess how you relate to [Brand]'s official brand page on Facebook.

Thinking of yourself as a member of [Brand]'s virtual brand community on Facebook please choose the appropriate number to indicate YOUR level of agreement with each of the following statements.

Q14.	When I think of the [Brand] community on Facebook...	Strongly Agree ← Strongly Disagree →						
		7	6	5	4	3	2	1
a.	...I identify myself as belonging to the [Brand] community.	7	6	5	4	3	2	1
b.	...I see the community plays a part in my everyday life.	7	6	5	4	3	2	1
c.	...I see myself as a typical and representative member of the community.	7	6	5	4	3	2	1
d.	...it confirms in many ways my view of who I am.	7	6	5	4	3	2	1
e.	...I can identify with the [Brand] community.	7	6	5	4	3	2	1
f.	...I have strong feelings for the [Brand] community.	7	6	5	4	3	2	1
g.	...I feel like I belong in the [Brand] community.	7	6	5	4	3	2	1

Thinking of yourself as a member of [Brand]'s virtual brand community on Facebook please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q15.	I participate in [Brand]'s Facebook page because...	Strongly Agree ← Strongly Disagree →						
		7	6	5	4	3	2	1
a.	...it is fun.	7	6	5	4	3	2	1
b.	...I enjoy being on [Brand] Facebook page.	7	6	5	4	3	2	1
c.	...it would make me feel good.	7	6	5	4	3	2	1
d.	...it would be exciting.	7	6	5	4	3	2	1
e.	...I enjoy socializing with other members.	7	6	5	4	3	2	1

Q16.	I participate in [Brand]'s Facebook page because...	Strongly Agree ← Strongly Disagree →						
		7	6	5	4	3	2	1
a.	...I can find information about [Brand] quickly.	7	6	5	4	3	2	1
b.	...I want to get answers to [Brand] related questions.	7	6	5	4	3	2	1
c.	...I want to enhance my knowledge about the [Brand]'s products and its usage.	7	6	5	4	3	2	1
d.	...I want to obtain solutions to specific product-usage related problems.	7	6	5	4	3	2	1
e.	...it is convenient to communicate with other consumers online.	7	6	5	4	3	2	1

The following questions relate to the activities you perform in [Brand]'s Facebook page. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements.

Q17A.	On the [Brand] Facebook page...	Frequently ← Not Frequently →						
		7	6	5	4	3	2	1
a.	...I post comments on [Brand]'s status updates.	7	6	5	4	3	2	1
b.	...I comment on what other members post on the [Brand] Facebook wall.	7	6	5	4	3	2	1
c.	...I post to share what I think or feel about the [Brand] on [Brand]'s Facebook wall.	7	6	5	4	3	2	1
d.	...I click "like" on status updates posted by [Brand].	7	6	5	4	3	2	1
e.	...I post in [Brand]'s discussions page.	7	6	5	4	3	2	1
f.	...I stay logged on [Brand]'s page to read what the brand and other members post.	7	6	5	4	3	2	1

This section is intended to obtain your perception about why [Brand]'s page members (Fans) actively contribute to the community (e.g. posting messages, answering questions, "liking" updates, posting pictures...etc.). Thinking of yourself as a member of [Brand]'s virtual brand community on Facebook please answer the following question accordingly. Please choose one response only.

Q19.	While participating in [Brand] Facebook page I classify myself as:
<input type="checkbox"/>	Tourist: who lacks social ties to the group, and seldom contributes to the community.
<input type="checkbox"/>	Mingler: who maintains somewhat strong social ties with the group, and sometimes contributes to the community.
<input type="checkbox"/>	Devotee: who maintains strong social ties with the group, enthusiastic about community activities and contributes to the community often.
<input type="checkbox"/>	Insider: who maintains very strong social and personal ties with the group, and very actively contributes to the community.

Please choose the appropriate response for the following questions.

Q20. Gender

- a. Male
- b. Female

Q21. Age

- a. 18 to 24
- b. 25 to 34
- c. 35 to 44
- d. 45 to 54
- e. Over 55

Q22. Marital status

- a. Single
- b. Married/Living with partner
- c. Divorced/Widowed/Separated

Q22. Nationality: _____

Q24. Level of education

- a. Primary School
- b. High School
- c. Professional Qualification/Diploma
- d. Undergraduate degree
- e. Postgraduate degree
- f. Other (Please specify): _____

Q25. Occupation

- a. Student
- b. Housewife/husband
- c. Professional/senior management
- d. Clerical staff
- e. Technical staff
- f. Self employed
- g. Unemployed
- h. Other (Please specify) _____

Q26. If you have any other thoughts about Facebook brand pages not covered in this study, please use the space below.

THANK YOU FOR COMPLETING THIS SURVEY!

Appendix F: Survey Used in the Main Study



**RELATIONAL BASED BRAND EQUITY:
THE ROLE OF VIRTUAL BRAND COMMUNITIES IN BUILDING BRAND ATTACHMENT
AND EQUITY**

INTRODUCTION

This survey has been designed to study **VIRTUAL BRAND COMMUNITIES IN THE FORM OF SOCIAL NETWORKING SITES**. A virtual brand community is a gathering of consumers on an Internet website that focuses on a company brand. In this survey, we would like to know your views and experiences on certain issues with regards to **BRAND FAN PAGES** on **FACEBOOK**. This study aims to contribute towards a better understanding of consumers experience with brands on the Internet.

Your valuable participation in this questionnaire will assist the academic analysis and study of brands on the Internet. The completion of the questionnaire should not take you more than **15 MINUTES** of your time. Your participation in this questionnaire is totally voluntary and you can withdraw from this research at any stage without telling me any reason. Also, you have the option of omitting a question or a statement if you do not wish to answer it.

Your survey responses will be strictly **CONFIDENTIAL** and **REMAIN ANONYMOUS**. Data from this study will be reported for **ACADEMIC PURPOSE** only. You can, if you wish, get a copy of findings of this research by emailing me at alsaidf@cardiff.ac.uk after September 2011.

This questionnaire consists of different sections, each having a set of statements or options. For each statement, please choose a number that best describes your feelings and opinions. For example, if you **AGREE STRONGLY** with a statement, you may choose a **SEVEN (7)** or **SIX (6)**. If you **DISAGREE STRONGLY**, you may choose a **ONE (1)** or **TWO (2)**. You can choose any number from one to seven to tell us how you feel. **ANSWER ALL** of the information truthfully and as fully as possible. There is **NO RIGHT** or **WRONG** answer. All we are interested in is a number that shows your views and opinions. For each question, please make a separate and independent judgment.

Thank you very much for your time and support.

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Are you 18 year of age or over? () YES () NO
[If you are under 18 years of age PLEASE DO NOT proceed with this survey]

The following questions explore the nature of your Facebook usage. Please indicate your response by choosing the appropriate category.

1. Do you use Facebook? () Yes () No

If your response is "No", please proceed to question 18.

2. Are you a member or a fan of a "Brand" page on Facebook (e.g. Coca Cola's official page on Facebook)?

() Yes () No

If your response is "No", please proceed to question 18.

In responding to the remainder of the questions please think of the brands that you are a fan of on Facebook. An official Brand page on Facebook refers to the page that is created and maintained by the company that owns the brand.

3. Name three official Brand pages on Facebook of which you are a member:

a. _____
b. _____
c. _____

4. What is the "Company" Brand page on Facebook that you participate in the most?

While keeping in mind the answer you provided in QUESTION 4, please respond to the following statements that assess your perceptions and opinions on your experience with the [Brand] you like on Facebook. Please read the each statement carefully before responding. While you may agree with the first statement, you might disagree with next statement.

The following statements relate to your perception of the quality of [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q5.		Strongly Agree						Strongly Disagree
		←	→					
a.	[Brand] is of high quality.	7	6	5	4	3	2	1
b.	[Brand] is a reliable brand.	7	6	5	4	3	2	1
c.	[Brand] must be of very good quality.	7	6	5	4	3	2	1
d.	[Brand] appears to be of very poor quality.	7	6	5	4	3	2	1

The following statements assess how you associate with [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q6.		Strongly Agree						Strongly Disagree
		←	→					
a.	When someone criticizes [Brand], it feels like a personal insult.	7	6	5	4	3	2	1
b.	I am very interested in what others think about [Brand].	7	6	5	4	3	2	1
c.	When I talk about [Brand], I usually say 'we' rather than 'they'.	7	6	5	4	3	2	1
d.	When [Brand] succeeds, it feels like I have succeeded.	7	6	5	4	3	2	1
e.	When someone praises [Brand], it feels like a personal compliment.	7	6	5	4	3	2	1
f.	If a story in the media criticizes [brand], I would feel embarrassed.	7	6	5	4	3	2	1

The following statements relate to how you talk to other consumers about [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q7.		Strongly Agree						Strongly Disagree
		←	→					
a.	I mention [Brand] to others quite frequently.	7	6	5	4	3	2	1
b.	I've told more people about [Brand] than I've told about most other brands.	7	6	5	4	3	2	1
c.	I seldom miss an opportunity to tell others about [Brand].	7	6	5	4	3	2	1
d.	When I tell others about [Brand], I tend to talk about the brand in great detail.	7	6	5	4	3	2	1
e.	I have only good things to say about [Brand].	7	6	5	4	3	2	1
f.	In general, I do not speak favorably about [Brand].	7	6	5	4	3	2	1
g.	I say positive things about [Brand] to other people.	7	6	5	4	3	2	1
h.	I recommend [Brand] to someone who seeks my advice.	7	6	5	4	3	2	1

The following statements relate to your willingness to pay a price premium for [Brand]. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q8.		Strongly Agree						Strongly Disagree
		←	→					
a.	I would be willing to pay a higher price for [Brand] over other brands.	7	6	5	4	3	2	1
b.	I would switch to another brand if the price of [Brand] goes up.	7	6	5	4	3	2	1
c.	I would continue to do business with [Brand] if its prices increase a bit.	7	6	5	4	3	2	1

The following question relates to the extra amount you are willing to pay for [Brand] over other brands. Please indicate your response by choosing only one response item.

Q9.		0%	5%	10%	15%	20%	25%	30%	More
a.	I am willing to pay _____ % more for [Brand] over other brands								

The following statements assess how faithful you are to [Brand]. Thinking of [Brand], please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q10.		Strongly Agree ← → Strongly Disagree						
1.	It is very important to me to buy [brand] over another brand.	7	6	5	4	3	2	1
2.	I always buy [Brand] because I really like this brand.	7	6	5	4	3	2	1
3.	I think I am committed to [Brand].	7	6	5	4	3	2	1
4.	I consider myself to be loyal to [Brand].	7	6	5	4	3	2	1

The following statements assess your thoughts and feelings toward [Brand]. Please choose the appropriate number to indicate the extent that each statement applies to you.

Q11.	Brand Attachment	Not at all ← → Extremely										
a.	To what extent is [Brand] part of you and who you are?	0	1	2	3	4	5	6	7	8	9	10
b.	To what extent do you feel personally connected to [Brand]?	0	1	2	3	4	5	6	7	8	9	10
c.	To what extent do you feel emotionally bonded to [Brand]?	0	1	2	3	4	5	6	7	8	9	10
d.	To what extent is [Brand] part of you?	0	1	2	3	4	5	6	7	8	9	10
e.	To what extent does [Brand] say something to other people about who you are?	0	1	2	3	4	5	6	7	8	9	10
f.	To what extent are your thoughts and feelings toward [Brand] often automatic, coming to mind seemingly on their own?	0	1	2	3	4	5	6	7	8	9	10
g.	To what extent do your thoughts and feelings toward [Brand] come to your mind naturally and instantly?	0	1	2	3	4	5	6	7	8	9	10
h.	To what extent do your thoughts and feelings toward [Brand] come to mind so naturally and instantly that you don't have much control over them?	0	1	2	3	4	5	6	7	8	9	10
i.	To what extent does the word [Brand] automatically evoke many good thoughts about the past, present, and future?	0	1	2	3	4	5	6	7	8	9	10
j.	To what extent do you have many thoughts about [Brand]?	0	1	2	3	4	5	6	7	8	9	10

Consumers create or join company-sponsored groups that focus on a brand. These groups are usually referred to as brand communities. Consumers share their interest in the brand with other consumers in such communities. The Internet has allowed consumers and companies to create brand communities on websites such as Facebook. Brand communities on the Internet are called Virtual Brand Communities. A virtual brand community is a gathering of consumers on an Internet website that focuses on a company's brand. The following questions assess how you relate to [Brand]'s official brand page on Facebook.

Thinking of yourself as a member of [Brand]'s virtual brand community on Facebook please choose the appropriate number to indicate YOUR level of agreement with each of the following statements.

Q12.	When I think of the [Brand] community on Facebook...	Strongly Agree ←	Strongly Disagree →
a.	...I identify myself as belonging to the [Brand] community.	7	6 5 4 3 2 1
b.	...I see the community plays a part in my everyday life.	7	6 5 4 3 2 1
c.	...I see myself as a typical and representative member of the community.	7	6 5 4 3 2 1
d.	...it confirms in many ways my view of who I am.	7	6 5 4 3 2 1
e.	...I can identify with the [Brand] community.	7	6 5 4 3 2 1
f.	...I have strong feelings for the [Brand] community.	7	6 5 4 3 2 1
g.	...I feel like I belong in the [Brand] community.	7	6 5 4 3 2 1

Thinking of yourself as a member of [Brand]'s virtual brand community on Facebook please choose the appropriate number to indicate YOUR level of agreement with each of the following statements:

Q13.	I participate in [Brand]'s Facebook page because...	Strongly Agree ←	Strongly Disagree →
a.	...it is fun.	7	6 5 4 3 2 1
b.	...I enjoy being on [Brand] Facebook page.	7	6 5 4 3 2 1
c.	...it would make me feel good.	7	6 5 4 3 2 1
d.	...it would be exciting.	7	6 5 4 3 2 1
e.	...I want to get answers to [Brand] related questions.	7	6 5 4 3 2 1
f.	...I want to enhance my knowledge about the [Brand]'s products and its usage.	7	6 5 4 3 2 1
g.	...I want to obtain solutions to specific product-usage related problems.	7	6 5 4 3 2 1
h.	...it is convenient to communicate with other consumers online.	7	6 5 4 3 2 1

Consumers perform a range of activities and practices in a virtual brand community. Activities are specific actions that virtual brand community members perform on the [Brand] page. Practices are more general behaviors that consumers perform on [Brand]'s page. First, a set of statements will assess the extent to which you perform activities in the virtual brand community on Facebook. Second, another set of statements will assess the extent to which you perform practices on the [Brand] page on Facebook.

The following questions relate to the ACTIVITIES you perform in [Brand]'s Facebook page. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements.

Q14A.	On the [Brand] Facebook page...	Frequency						
		7	6	5	4	3	2	1
a.	...I post comments on [Brand]'s status updates.	7	6	5	4	3	2	1
b.	...I post to share what I think or feel about the [Brand] on [Brand]'s Facebook wall.	7	6	5	4	3	2	1
c.	...I click "like" on status updates posted by [Brand].	7	6	5	4	3	2	1
d.	...I participate in games and contests hosted on [Brand]'s Facebook page.	7	6	5	4	3	2	1
e.	...I post my thoughts and share my feelings if [Brand] discontinues a product I like.	7	6	5	4	3	2	1
f.	...I post information against [Brand] if I find that it is acting in a negative way or against my beliefs.	7	6	5	4	3	2	1
g.	...I post pictures and videos on [Brand]'s Facebook wall.	7	6	5	4	3	2	1

The following questions relate to the PRACTICES you perform in [Brand]'s Facebook page. Please choose the appropriate number to indicate YOUR level of agreement with each of the following statements.

Q14B.	On the [Brand] Facebook page...	Frequency						
		7	6	5	4	3	2	1
a.	...I greet and welcome new members to the community.	7	6	5	4	3	2	1
b.	...I provide emotional support to other members for brand and non-brand issues.	7	6	5	4	3	2	1
c.	...I assist new members in learning about [Brand].	7	6	5	4	3	2	1
d.	...I discourage members who I don't feel represent [Brand] from participating on the page.	7	6	5	4	3	2	1
e.	...I share positive news about [Brand].	7	6	5	4	3	2	1
f.	...I encourage people to use [Brand].	7	6	5	4	3	2	1
g.	...I explain to other members why I spend time and money on supporting [Brand].	7	6	5	4	3	2	1
h.	...I tell other members how [Brand] is better than other competing brands.	7	6	5	4	3	2	1
i.	...I tell other members stories about how I bought and use [Brand].	7	6	5	4	3	2	1
j.	...I tell other members about important events in my life while using [Brand].	7	6	5	4	3	2	1
k.	...I distinguish between different members of [Brand] page.	7	6	5	4	3	2	1
l.	...I show other members examples of important events with [Brand].	7	6	5	4	3	2	1
m.	...I share with other members how I take care of [Brand] products that I own.	7	6	5	4	3	2	1
n.	...I share with other members how I change [Brand] to suit my needs.	7	6	5	4	3	2	1
o.	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed.	7	6	5	4	3	2	1
p.	...I criticize how [Brand] is merchandised and commercialized.	7	6	5	4	3	2	1

The following questions intend to obtain information on your overall Facebook activity. Please choose the best answer for each question.

Q15.	
a.	I have been a member of [Brand] Facebook page for:
<input type="checkbox"/>	Less than 6 months
<input type="checkbox"/>	6 - 11 months
<input type="checkbox"/>	1 - 3 years
<input type="checkbox"/>	4 - 6 Years
<input type="checkbox"/>	More than 6 years
b.	On average, I participate in [Brand] Facebook page for:
<input type="checkbox"/>	Less than 5hours/week
<input type="checkbox"/>	5 - 9 hours/week
<input type="checkbox"/>	10 - 19 hours/week
<input type="checkbox"/>	20 hours or more/week

This section intends to obtain your perception about why [Brand]'s page members (Fans) actively participate to the community. Thinking of yourself as a member of [Brand]'s virtual brand community on Facebook please answer the following question accordingly. Please choose one response only.

Q16.	While participating in [Brand] Facebook page I classify myself as:
<input type="checkbox"/>	Tourist: who lacks social ties to the group, and seldom contributes to the community.
<input type="checkbox"/>	Mingler: who maintains somewhat strong social ties with the group, and sometimes contributes to the community.
<input type="checkbox"/>	Devotee: who maintains strong social ties with the group, enthusiastic about community activities and contributes to the community often.
<input type="checkbox"/>	Insider: who maintains very strong social and personal ties with the group, and very actively contributes to the community.

Please choose the appropriate response for the following questions.

Q17. Gender		Q21. Level of education	
a. Male	<input type="checkbox"/>	a. Primary School	<input type="checkbox"/>
b. Female	<input type="checkbox"/>	b. High School	<input type="checkbox"/>
Q18. Age		c. Professional Qualification/Diploma	<input type="checkbox"/>
a. 18 to 24	<input type="checkbox"/>	d. Undergraduate degree	<input type="checkbox"/>
b. 25 to 34	<input type="checkbox"/>	e. Postgraduate degree	<input type="checkbox"/>
c. 35 to 44	<input type="checkbox"/>	f. Other (Please specify): _____	<input type="checkbox"/>
d. 45 to 54	<input type="checkbox"/>	Q22. Occupation	
e. Over 55	<input type="checkbox"/>	a. Student	<input type="checkbox"/>
Q19. Marital status		b. Housewife/husband	<input type="checkbox"/>
a. Single	<input type="checkbox"/>	c. Professional/senior management	<input type="checkbox"/>
b. Married/Living with partner	<input type="checkbox"/>	d. Clerical staff	<input type="checkbox"/>
c. Divorced/Widowed/Separated	<input type="checkbox"/>	e. Technical staff	<input type="checkbox"/>
Q20. Nationality: _____		f. Self employed	<input type="checkbox"/>
		g. Unemployed	<input type="checkbox"/>
		h. Other (Please specify) _____	<input type="checkbox"/>

Q23. If you have any other thoughts about Facebook brand pages not covered in this study, please use the space below.

THANK YOU FOR COMPLETING THIS SURVEY!

Appendix G: Descriptive Statistics for Constructs

Descriptive Statistics and Univariate Normality Results

Label		Mean	SD	Skewness	Kurtosis
Perceived Quality					
PQ1	[Brand] is of high quality	6.01	1.06	-1.386	2.947
PQ2	[Brand] is a reliable brand	6.06	1.06	-1.518	3.216
PQ3	[Brand] must be of very good quality	5.76	1.24	-1.267	2.063
PQ4RVRSD	[Brand] appears to be of very poor quality (REVERSED).	1.91	1.54	1.863	2.503
Brand Identification					
BI1	When someone criticizes [Brand], it feels like a personal insult	3.12	1.80	0.424	-0.895
BI2	I am very interested in what others think about [Brand]	4.27	1.75	-0.334	-0.749
BI3	When I talk about [Brand], I usually say 'we' rather than 'they'	2.87	1.89	0.724	-0.623
BI4	When [Brand] succeeds, it feels like I have succeeded	3.65	1.91	0.112	-1.079
BI5	When someone praises [Brand], it feels like a personal compliment	3.67	1.90	0.103	-1.052
BI6	If a story in the media criticizes [Brand], I would feel embarrassed	3.04	1.79	0.563	-0.680
Word of Mouth Action					
WOM1	I mention [Brand] to others quite frequently	4.02	1.80	-0.125	-0.891
WOM2	I've told more people about [Brand] than I've told about most other brands	4.17	1.83	-0.246	-0.919
WOM3	I seldom miss an opportunity to tell others about [Brand]	3.36	1.74	0.268	-0.794
WOM4	When I tell others about [Brand], I tend to talk about the brand in great detail	3.79	1.78	0.050	-0.923
Word of Mouth Valence					
WOM5	I have only good things to say about [Brand]	5.08	1.45	-0.730	0.258
WOM6RVRSD	In general, I do not speak favorably about [Brand](REVERSED).	2.50	1.80	1.099	0.052

Descriptive Statistics and Univariate Normality Results					
Label					
WOM7	I say positive things about [Brand] to other people	5.15	1.51	-0.839	0.388
WOM8	I recommend [Brand] to someone who seeks my advice	4.92	1.62	-0.679	0.233
Willingness to Pay a Price Premium		Mean	SD	Skewness	Kurtosis
WTPP1	I would be willing to pay a higher price for [Brand] over other brands	4.29	1.70	-0.251	-0.636
WTPP2RVRSD	I would switch to another brand of the price of [Brand] goes up (REVERSED).	3.75	1.71	0.024	-0.762
WTPP3	I would continue to do business with [Brand] if its prices increase a bit	4.67	1.45	-0.435	0.084
WTPP4	Please indicate your response by choosing only one response item. I am willing to pay _____% more for [Brand] over other brands	2.80	1.58	1.214	1.483
Brand Loyalty		Mean	SD	Skewness	Kurtosis
BL1	It is very important to me to buy [Brand] over another brand	4.14	1.78	-0.108	-0.853
BL2	I always buy [Brand] because I really like this brand	4.86	1.62	-0.523	-0.328
BL3	I think I am committed to [Brand]	4.40	1.75	-0.278	-0.747
BL4	I consider myself to be loyal to [Brand]	4.62	1.72	-0.403	-0.598
Brand Attachment		Mean	SD	Skewness	Kurtosis
BA1	To what extent is [Brand] part of you and who you are?	4.31	3.02	0.070	-1.032
BA2	To what extent do you feel personally connected to [Brand]?	4.56	3.04	0.009	-1.062
BA3	To what extent do you feel emotionally bonded to [Brand]?	4.08	3.15	0.184	-1.108
BA4	To what extent is [Brand] part of you?	4.31	3.04	0.091	-1.074
BA5	To what extent does [Brand] say something to other people about who you are?	4.62	2.98	-0.121	-0.948
BA6	To what extent are your thoughts and feelings toward [Brand] often automatic, coming to mind seemingly on their own?	4.28	2.96	0.020	-1.015
BA7	To what extent do your thoughts and feelings toward [Brand] come to your mind naturally and instantly?	4.60	2.90	-0.085	-0.953
BA8	To what extent do your thoughts and feelings toward [Brand] come to mind so naturally and instantly that you don't have much control over them?	3.85	3.01	0.194	-1.070
BA9	To what extent does the word [Brand] automatically evoke many good thoughts about the past, present,	5.27	2.90	-0.336	-0.814

Descriptive Statistics and Univariate Normality Results					
Label					
	and future?				
BA10	To what extent do you have many thoughts about [Brand]?	4.13	2.81	0.105	-0.927
Brand Community Identification		Mean	SD	Skewness	Kurtosis
BCI1	I identify myself as belonging to the [Brand] community	3.76	1.88	-0.029	-1.087
BCI2	I see the community plays a part in my everyday life	3.25	1.86	0.331	-0.975
BCI3	I see myself as a typical and representative member of the community	3.87	1.77	-0.211	-0.926
BCI4	it confirms in many ways my view of who I am	3.50	1.87	0.138	-1.044
BCI5	I can identify with the [Brand] community	4.03	1.80	-0.203	-0.886
BCI6	I have strong feelings for the [Brand] community	3.5	1.88	0.169	-1.053
BCI7	I feel like I belong in the [Brand] community	3.88	1.79	-0.083	-0.876
Hedonic Motivation		Mean	SD	Skewness	Kurtosis
MOTV1	...it is fun	4.39	1.72	-0.395	-0.571
MOTV2	...I enjoy being on the [Brand] Facebook page	4.25	1.67	-0.265	-0.558
MOTV3	...it would make me feel good	3.79	1.74	-0.069	-0.879
MOTV4	...it would be exciting	3.73	1.77	-0.052	-0.920
Utilitarian Motivation		Mean	SD	Skewness	Kurtosis
MOTV5	...I want to get answers to [Brand] related questions	4.29	1.75	-0.410	-0.660
MOTV6	...I want to enhance my knowledge about the [Brand]'s products and its usage	4.43	1.67	-0.421	-0.441
MOTV7	...I want to obtain solutions to specific product-usage related problems	4.06	1.84	-0.266	-0.910
MOTV8	...it is convenient to communicate with other consumers online	3.98	1.87	-0.165	-1.009
Participation in Facebook		Mean	SD	Skewness	Kurtosis
ACT1	...I post comments on [Brand]'s status updates	3.33	1.93	0.200	-1.204
ACT2	...I post to share what I think or feel about [Brand] on [Brand]'s Facebook wall	3.25	1.95	0.271	-1.228
ACT3	...I click 'like' on status updates posted by [Brand]	4.08	1.84	-0.215	-0.900
ACT4	...I participate in games and contests hosted on [Brand]'s Facebook page	3.79	2.03	-0.060	-1.272

Descriptive Statistics and Univariate Normality Results					
Label					
ACT5	...I post my thoughts and share my feelings if [Brand] discontinues a product I like	3.29	1.97	0.179	-1.295
ACT6	...I post information against [Brand] if I find that it is acting in a negative way or against my beliefs	2.80	1.86	0.574	-0.956
ACT7	...I post pictures and videos on [Brand]'s Facebook wall	2.45	1.76	0.954	-0.252
Participation in Virtual Brand Community		Mean	SD	Skewness	Kurtosis
PRAC1	...I greet and welcome new members to the community	2.74	1.88	.655	-0.836
PRAC2	...I provide emotional support to other members for brand and non-brand issues	2.51	1.82	0.845	-0.594
PRAC3	...I assist new members in learning about [Brand]	2.74	1.91	0.624	-0.961
PRAC4	...I discourage members who I don't feel represent [Brand] from participating on the page	2.35	1.72	1.030	-0.082
PRAC5	...I share positive news about [Brand]	3.38	2.00	0.160	-1.294
PRAC6	...I encourage people to use [Brand]	3.51	1.99	0.076	-1.285
PRAC7	...I explain to other members why I spend time and money on supporting [Brand]	2.77	1.89	0.645	-0.837
PRAC8	...I tell other members how [Brand] is better than other competing brands	3.21	2.02	0.291	-1.284
PRAC9	...I tell other members stories about how I bought and use [Brand]	2.94	1.96	0.504	-1.085
PRAC10	...I tell other members about important events in my life while using [Brand]	2.70	1.92	0.711	-0.851
PRAC11	...I distinguish between different members of [Brand] page	2.66	1.79	0.673	-0.784
PRAC12	...I show other members examples of important events with [Brand]	2.76	1.88	0.625	-0.895
PRAC13	...I share with other members how I take care of [Brand] products that I own	2.80	1.90	0.567	-1.010
PRAC14	...I share with other members how I change [Brand] to suit my needs	2.82	1.89	0.602	-0.888
PRAC15	...I share my opinion with other members about how [Brand] is distributed, priced, and marketed	2.98	1.94	0.454	-1.109
PRAC16	...I criticize how [Brand] is merchandised and commercialized	2.33	1.69	1.018	-0.100

(Source: This Research)

Appendix H: Normality and Bootstrapping

The t-values of the research model and the bootstrap model were compared to assess effect of departure from multivariate normality in the data set.

Results of Bootstrapping to Address Multivariate Nonnormality					
Parameters	Bootstrapped Model			ML Model	
	Beta	SE	t	Beta	t
BI-->BCI	0.957	0.069	13.870	0.959	14.9
BCI-->PFB	0.704	0.089	7.910	0.702	10.422
BI-->PVBC	0.299	0.083	3.602	0.296	3.916
BI-->PFB	0.15	0.107	1.402	0.153	1.809
BCI-->PVBC	0.573	0.061	9.393	0.577	9.828
PVBC-->BA	0.673	0.431	1.561	0.73	5.81
PFB-->BA	0.604	0.454	1.330	0.544	4.5
BA-->PQ	0.069	0.017	4.059	0.069	4.07
BA-->WTPP	0.167	0.028	5.964	0.168	7.749
BA-->WOMA	0.455	0.022	20.682	0.455	22.094
BA-->WOMV	0.227	0.021	10.810	0.227	11.572
BA-->BL	0.404	0.024	16.833	0.406	17.465
BL1	1	0		1	
BL3	1.061	0.033	32.152	10.58	29.779
WOM5	1	0		1	
WOM7	1.179	0.081	14.556	1.174	16.828
WOM8	1.298	0.091	14.264	1,293	17.175
WTPP3	1.414	0.193	7.326	1.386	9.141
WTPP4	1	0		1	
PQ1	1	0		1	
PQ2	0.989	0.048	20.604	0.989	24.495
PQ3	1.065	0.056	19.018	1.062	21.717
WOMAG1	1	0		1	
WOM3	0.944	0.038	24.842	0.943	24.974
WOM4	1.001	0.034	29.441	1.001	27.154
PRACVBC1	1	0		1	
ACT1	1	0		1	
BCIAG2	1.024	0.022	46.545	1.023	44.166
BI5	1.344	0.08	16.800	1.343	18.482
BI4	1.356	0.087	15.586	1.353	18.554
BI1	1	0		1	
BCIAG1	1	0		1	
BCI7	1.009	0.023	43.870	1.008	37.498
ACT2	1.021	0.028	36.464	1.02	32.125
ACT5	0.945	0.034	27.794	0.945	25.968
PRACVBC4	1.013	0.019	53.316	1.012	43.662
PRACVBC3	1.018	0.016	63.625	1.018	53.985

Results of Bootstrapping to Address Multivariate Nonnormality					
Parameters	Bootstrapped Model			ML Model	
	Beta	SE	t	Beta	t
PRACVBC2	1	0.026	38.462	0.997	34.498
BA5	0.925	0.027	34.259	0.925	30.227
BA2	1	0		1	
BA1	0.983	0.022	44.682	0.983	34.84
BA9	0.832	0.031	26.839	0.832	24.744
BA8	0.934	0.024	38.917	0.935	30.208
BL4	1.015	0.037	27.432	1.013	28.119

(Source: this Research)

Appendix I: Pairwise Discriminant Validity Test for all of the Constructs

Discriminant Validity Test by Comparing all Pairs of Constructs

CONSTRUCTS	Chi-Sq. Constrained	df constrained	p constrained	Chi-Sq.	df	p	Chi-Sq. Diff	Significant 0.05
Brand Identification <--> Willingness to pay a price premium	350.542	9	0.000	21.547	8	0.006	328.995	Significant
Brand Community Identification <--> Brand Identification	419.034	20	0.000	54.931	19	0.000	364.103	Significant
Brand Community Identification <--> Willingness to pay a price premium	338.906	20	0.000	29.005	19	0.066	309.901	Significant
Participation in Facebook <--> Brand Identification	587.701	14	0.000	38.192	13	0.000	549.509	Significant
Participation in Facebook <--> Brand Community Identification	712.105	27	0.000	72.642	26	0.000	639.463	Significant
Participation in Facebook <--> Willingness to pay a price premium	371.729	14	0.000	24.864	13	0.024	346.865	Significant
Brand Attachment <--> Brand Identification	373.851	20	0.000	51.815	19	0.000	322.036	Significant
Brand Attachment <--> Brand Community Identification	605.553	35	0.000	71.427	34	0.000	534.126	Significant
Brand Attachment <--> Participation in Facebook	795.6	27	0.000	58.778	26	0.000	736.822	Significant
Brand Attachment <--> Willingness to pay a price premium	358.458	20	0.000	78.694	19	0.000	279.764	Significant
Brand Loyalty <--> Brand Identification	545.297	9	0.000	23.891	8	0.002	521.406	Significant
Brand Loyalty <--> Brand Community Identification	676.368	20	0.000	43.689	19	0.001	632.679	Significant
Brand Loyalty <--> Brand Attachment	662.235	20	0.000	56.342	19	0.000	605.893	Significant
Brand Loyalty <--> Participation in Facebook	939.289	14	0.000	70.22	13	0.000	869.069	Significant
Brand Loyalty <--> Willingness to pay a price premium	231.172	9	0.000	43.936	8	0.000	187.236	Significant
Participation in VBC <--> Brand Identification	597.803	44	0.000	91.098	43	0.000	506.705	Significant
Participation in VBC <--> Brand Community Identification	1430.314	65	0.000	146.961	64	0.000	1283.353	Significant
Participation in VBC <--> Brand Loyalty	1008.55	44	0.000	71.17	43	0.004	937.38	Significant
Participation in VBC <--> Participation in Facebook	577.579	54	0.000	130.553	53	0.000	447.026	Significant
Participation in VBC <--> Brand Attachment	1386.392	65	0.000	145.339	64	0.000	1241.053	Significant
Participation in VBC <--> Brand Loyalty	1008.55	44	0.000	71.17	43	0.004	937.38	Significant
Participation in VBC <--> Willingness to pay a price premium	445.137	44	0.000	74.191	43	0.002	370.946	Significant
Perceived Quality <--> Brand Identification	808.576	9	0.000	15.761	8	0.046	792.815	Significant

Discriminant Validity Test by Comparing all Pairs of Constructs

CONSTRUCTS	Chi-Sq. Constrained	df constrained	p constrained	Chi-Sq.	df	p	Chi-Sq. Diff	Significant 0.05
Perceived Quality <--> Brand Community Identification	835.302	20	0.000	40.198	19	0.003	795.104	Significant
Perceived Quality <--> Brand Loyalty	998.125	9	0.000	12.33	8	0.137	985.795	Significant
Perceived Quality <--> Brand Attachment	850.041	20	0.000	55.569	19	0.000	794.472	Significant
Perceived Quality <--> Participation in Facebook	853.103	14	0.000	32.085	13	0.002	821.018	Significant
Perceived Quality <--> Participation in VBC	896.172	44	0.000	71.64	43	0.004	824.532	Significant
Perceived Quality <--> Willingness to pay a price premium	362.243	9	0.000	24.718	8	0.002	337.525	Significant
Word of Mouth Action <--> Word of Mouth Valence	234.251	14	0.000	30.874	13	0.004	203.377	Significant
Word of Mouth Action <--> Willingness to pay a price premium	296.071	14	0.000	18.207	13	0.150	277.864	Significant
Word of Mouth Action <--> Brand Identification	224.874	14	0.000	29.273	13	0.006	195.601	Significant
Word of Mouth Action <--> Brand Community Identification	515.868	27	0.000	52.446	26	0.002	463.422	Significant
Word of Mouth Action <--> Brand Loyalty	517.85	14	0.000	32.204	13	0.002	485.646	Significant
Word of Mouth Action <--> Brand Attachment	419.307	27	0.000	50.095	26	0.003	369.212	Significant
Word of Mouth Action <--> Participation in Facebook	622.133	20	0.000	64.531	19	0.000	557.602	Significant
Word of Mouth Action <--> Participation in VBC	759.536	54	0.000	90.539	53	0.001	668.997	Significant
Word of Mouth Action <--> Perceived Quality	810.469	14	0.000	16.608	13	0.218	793.861	Significant
Hedonic Motivation <--> Utilitarian Motivation	118.707	9	0.000	63.804	8	0.000	54.903	Significant
Hedonic Motivation <--> Brand Community Identification	248.808	20	0.000	27.509	17	0.000	221.299	Significant
Hedonic Motivation <--> Participation in Facebook	495.66	14	0.000	58.286	13	0.000	437.374	Significant
Hedonic Motivation <--> Brand Attachment	428.108	20	0.000	38.63	19	0.005	389.478	Significant
Hedonic Motivation <--> Brand Loyalty	576.526	9	0.000	40.069	8	0.000	536.457	Significant
Hedonic Motivation <--> Participation in VBC	650.802	44	0.000	72.239	43	0.003	578.563	Significant
Hedonic Motivation <--> Perceived Quality	811.831	9	0.000	33.213	8	0.000	778.618	Significant
Hedonic Motivation <--> Word of Mouth Action	415.59	14	0.000	9.953	13	0.777	405.637	Significant

Discriminant Validity Test by Comparing all Pairs of Constructs

CONSTRUCTS	Chi-Sq. Constrained	df constrained	p constrained	Chi-Sq.	df	p	Chi-Sq. Diff	Significant 0.05
Hedonic Motivation <--> Word of Mouth Valence	385.976	9	0.000	30.598	8	0.000	355.378	Significant
Hedonic Motivation <--> Willingness to pay a price premium	324.126	9	0.000	14.707	8	0.065	309.419	Significant
Hedonic Motivation <--> Brand Identification	442.846	9	0.000	15.29	8	0.054	427.556	Significant
Utilitarian Motivation <--> Brand Community Identification	194.365	20	0.000	81.662	19	0.000	112.703	Significant
Utilitarian Motivation <--> Participation in Facebook	297.951	14	0.000	90.499	13	0.000	207.452	Significant
Utilitarian Motivation <--> Brand Attachment	275.668	20	0.000	59.873	19	0.000	215.795	Significant
Utilitarian Motivation <--> Brand Loyalty	351.238	9	0.000	31.286	8	0.000	319.952	Significant
Utilitarian Motivation <--> Participation in VBC	486.683	44	0.000	158.332	43	0.000	328.351	Significant
Utilitarian Motivation <--> Perceived Quality	553.482	9	0.000	9.016	8	0.341	544.466	Significant
Utilitarian Motivation <--> Word of Mouth Action	238.089	14	0.000	34.958	13	0.001	203.131	Significant
Utilitarian Motivation <--> Word of Mouth Valence	385.976	9	0.000	30.598	8	0.000	355.378	Significant
Utilitarian Motivation <--> Willingness to pay a price premium	298.74	9	0.000	25.256	8	0.001	273.484	Significant
Utilitarian Motivation <--> Brand Identification	358.165	9	0.000	49.387	8	0.000	308.778	Significant
Word of Mouth Valence <--> Willingness to pay a price premium	183.348	9	0.000	24.65	8	0.002	158.698	Significant
Word of Mouth Valence <--> Brand Identification	398.96	9	0.000	7.137	8	0.522	391.823	Significant
Word of Mouth Valence <--> Brand Community Identification	432.442	20	0.000	36.287	19	0.010	396.155	Significant
Word of Mouth Valence <--> Brand Loyalty	232.141	9	0.000	24.818	8	0.002	207.323	Significant
Word of Mouth Valence <--> Brand Attachment	453.363	20	0.000	85.551	19	0.000	367.812	Significant
Word of Mouth Valence <--> Participation in Facebook	507.615	14	0.000	60.046	13	0.000	447.569	Significant
Word of Mouth Valence <--> Participation in VBC	580.811	44	0.000	65.375	43	0.150	515.436	Significant
Word of Mouth Valence <--> Perceived Quality	426.746	9	0.000	19.337	8	0.013	407.409	Significant

Two CFAs were run for each pair of constructs. Model (1): a 2-factor CFA where the correlation is freely estimated. Model (2): a 1-factor CFA where items from both constructs are specified to load on one factor (Constricted model).

(Source: This Research)