A model for commitment and online community citizenship behaviour intention on Facebook

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"At the end of the day, the most overwhelming key to a child's success is the positive involvement of parents" – Jane D. Hull

ABSTRACT

Online community citizenship behaviours refer to the voluntary behaviours of online community members which are helpful to the online community, the administrators and members but are not required for the online community to exist. Grounded in the social exchange theory, it is presumed that when members of an online community receive benefits, such as the development of social and emotional bonds with the community, they may want to reciprocate by performing citizenship behaviours that would be advantageous to the community and its members. Examples of online community citizenship behaviours include feedback provided to the administrator of the online community to improve the overall service delivery and assistance to fellow members.

While a vast number of studies has been conducted on citizenship behaviours in the commercial environment, little, however, is known about the factors driving online community citizenship behaviours as directed towards administrators and members of residential online activity communities on Facebook. A residential online activity community consists of members who are residents of a city and who share a common interest in a specific topic. Knowledge of these matters is important, as, from a practical perspective, administrators are faced with various difficulties when managing online communities, such as building a strong membership base and facilitating active participation. Online community citizenship behaviours, involving members engaging in voluntary helpful acts towards administrators and fellow members to improve the online community value offering may then be of great assistance in retaining members and to stimulate active participation in the online residential activity community. As such this study was interested in uncovering the factors that may contribute to online community citizenship behaviours directed towards fellow members and administrators of residential online activity communities on Facebook.

In identifying the proposed model, it was noted that commitment, as a key element of relationship marketing, is well recognised as a facilitator of citizenship behaviour. This study was then specifically interested in examining the impact of affective and normative commitment on online community citizenship behaviour towards administrators and fellow members of residential online activity communities on Facebook (Continuous commitment, as the third dimension of commitment, was not included the model, as research has established a negative relationship between continuous commitment and citizenship behaviour). Emotional support among online community members, social switching costs and position involvement was investigated as potential antecedents of affective commitment. Emotional support has previously been established to positively and significantly impact affective commitment in an online community environment, while the latter two factors have been tested in other research contexts, but their

roles have not yet been confirmed in the online community environment. Subjective norm and critical mass was examined as antecedents of normative commitment. Subjective norm has been established to positively and significantly impact the normative commitment of social network site users, while limited studies have tested the impact of perceive critical mass on the normative commitment of online community members.

Following the identification of the proposed model, the aim of this study was accordingly recorded as to examine the impact of selected factors on normative- and affective commitment towards residential online activity communities and to assess the extent to which members' commitment may ultimately contribute to online community citizenship behaviours directed towards administrators and fellow members of the online communities.

This study followed a descriptive and quantitative research design. The target population was defined as males and females, older than the age of 18 who is currently an active member of a residential online activity community on Facebook in South Africa. Non-probability sampling, consisting of quota and convenience sampling, was employed to determine the number of members of each residential online activity community and to reach the determined quotas. Computer-assisted, online questionnaires were used, where the link to the questionnaire was posted on the various residential online activity Facebook groups in the nine provinces of South Africa. Respondent participation was completely voluntary and anonymous. Screening questions ensured that the respondents were older than 18 years and are current and active members of the residential online activity community on Facebook. Valid and reliable measures were adapted for the questionnaire, and the items were measured on a five-point continuous and unlabelled Likert-type scale. A total of 545 usable questionnaires were obtained and included in the analysis.

The empirical analysis included an exploratory factor analysis and it was concluded that when applied to the context of this study, online community citizenship behaviour consists of five factors, namely 1) feedback intention relating to general improvement; 2) feedback intention relating to operational problems; 3) policing intention; 4) helping intention relating to the use of service and 5) helping intention relating to personal problems experienced. The measurement model analysis offered confirmation of the validity and reliability of the research findings. The structural equation model results evidenced acceptable model fit. Affective and normative commitment have a positive and significant effect on all forms of online community citizenship behaviours directed towards administrators and members. Emotional support, social switching costs and position involvement have a positive and significant effect on affective commitment. Subjective norm and perceive critical mass have a positive and significant effect on normative commitment. All research hypotheses formulated were subsequently accepted.

Consequently, the research findings make valuable contributions to theory and practice. From a theoretical perspective, the research findings provide a better understanding of the effect of different forms of commitment (affective and normative) on online community citizenship behaviours directed towards administrators and members of residential online activity communities on Facebook. Also, the study contributes to relationship marketing theory by identifying a novel group of factors that contribute to the different forms of commitment of residential online activity community members on Facebook. This study also extends existing literature by establishing that feedback towards administrators of an online community can relate to making suggestions for general improvement and solving operational problems, while helping may involve assisting fellow members in using the service and to solve their personal problems experienced. Furthermore, this study contributes to the field of online communities and citizenship behaviour as it shed more light on the types of citizenship behaviours directed towards administrators and members of online communities. Lastly, the study provides more insight into the extent to which relationship marketing theory contribute towards online community citizenship behaviour as explained by the social exchange theory.

From a managerial perspective, the research findings offer valuable, strategic direction to administrators of online communities who are struggling to improve the participation levels. Administrators should focus on affective and normative commitment and their antecedents investigated in this study and must ensure that the interaction taking place on the online community is well managed and will increase the level of commitment of the members, as it may lead to members performing online community citizenship behaviours directed towards administrators and towards fellow members. From a social perspective, the research findings may equip city marketers to develop and utilise residential online activity communities to build relationships with residents, share knowledge with them, and increase social interactions amongst residents, which might improve the social welfare of the city's residents.

Ultimately, the research findings serve as a foundation for understanding the interrelationship among commitment and online community citizenship behaviour intention on Facebook. It is suggested that future research extend these findings by re-testing the model in other types of online communities to verify the extent to which the model can be applied to the broader online community environment. It is further recommended that future research investigate other forms of online community citizenship behaviours relevant to online community environments to obtain a more comprehensive account of the constructs within an online community environment. Future research could also make use of longitudinal data to investigate the interrelationships of the constructs under different circumstances and within different time periods.

LIST OF KEY TERMS

This section presents brief descriptions of the key terms used in this study:

- **Affective commitment.** Affective commitment is viewed as the force that binds the customer to the organisation and refers to the affective or emotional attachment to, identification with and involvement in the customer and organisations (Bansal *et al*., 2004:238; Allen & Meyer, 1990:2). Affective commitment of online community members refers to the emotional connection between the members and the online community where the online community member identifies with the community and are involved and emotionally attached towards the online community (Cheung & Lee, 2009:283).

- **Emotional support.** Emotional support is provided when individuals listen, care, sympathise and offer assurance to fellow individuals by making them feel valued, loved and cared for (Helgeson, 2003:25). Emotional support provided between online community members are viewed as the key reason why the members visit the online community and are one of the most cited psychological benefits gained from participation in an online community (Johnson & Lowe, 2015:8; Preece & Ghozati, 2011:245).

- **Facebook.** Facebook is an electronic platform, which provides a social service that enables individuals to share information and communicate with their family, friends and co-workers (Facebook, 2017a; Kallas, 2017). The essential aim of Facebook is to provide individuals with the power to share and connect with other individuals (Facebook, 2016).

- **Feedback intention.** Feedback intention is viewed as an extra-role behaviour where customers provide feedback and suggestions to the organisation (Groth, 2005:16; Yi & Gong, 2013:120). Feedback of online community members refers to members providing feedback or suggesting additional information to administrators of the online community (Chou *et al*., 2016:62) and can relate to operational problems experienced by them as well as feedback regarding the general improvement of the online community.

- **Helping intention.** Helping intention is viewed as a dimension of citizenship behaviour and refers to helping behaviours of customers with the intent to assist fellow customers (Yi & Gong, 2013:1281). The helping behaviour of online community members refers to members assisting fellow members who need help with the use of the online community (Yi & Gong, 2013:1281) or when they experience personal problems (Yi & Gong, 2013:1281; Yong *et al*., 2011:690).

- **Normative commitment.** Normative commitment refers to the binding of the customer to the organisation out of perceived obligation towards the organisation (Bansal *et al*., 2004:236) and include the individual's responsibility towards the organisation (Allen & Meyer, 1990:3). Normative commitment of online community members is defined as the member's sense of obligation towards the online community based on the connection between the member and the specific online community (Bateman *et al.*, 2011:844; Zhang *et al.*, 2013:837) and the perception by the member to repay for the benefits received from the community by continuing supporting the community (Liu *et al.*, 2016:695).

- **Online community citizenship behaviour.** Online community citizenship behaviour refers to the beneficial behaviours by members that promote the effective functioning of the community (Chiu *et al*., 2009:1). Online community citizenship behaviour is spontaneous and voluntary behaviours that are not required behaviours of the members but do have a positive influence on the effective functioning of the online community (Chou *et al*., 2016:62; Yong *et al*., 2011:684).

- **Perceive critical mass.** Perceive critical mass takes place at the point where enough individuals have participated or adopted the innovation or product so that the rate of adoption or participation becomes self-sustainable (Lou *et al*., 2000:94; Rodgers, 1995:313; Zou & Wang, 2012:293). When the perceive critical mass of the online community has been received, non-members will be more motivated to join the online community.

- **Policing intention.** The policing intention of customers refers to the steps taken to prevent customers from causing problems by informing the organisation when they become aware of inappropriate behaviour by other customers (Bove *et al*., 2003:335; Tung *et al*., 2017:24). The policing behaviour of online community members also includes suggesting solutions, answers and remedies to issues of inappropriate behaviour which may make other members of the online community unhappy (Bove *et al*., 2009:704; Mpinganjira, 2016:6).

- **Position involvement.** Position involvement is an evaluation process whereby the individual decides the extent to which a specific brand is consistent with the individual's internal values and self-image (Chang & Gibson, 2015: 41). Position involvement is part of the identification process (Prichard *et al*., 1999; 366) and refers to online community members being able to identify themselves with the features and image of the online group (Bagozzi & Dholakia, 2002:11).

- **Residential online activity community.** A residential online activity community is a type of online community which consists of members who are residents of a city and who share a common interest in a specific topic (Kozinets, 1999:254).

- **Social switching costs.** Social switching costs are viewed as a type of switching cost that refers to the potential loss of a personal connection or friendship with the organisation should the customer switch (Jones *et al*., 2007:336). When members decide to leave the community, they may lose friendships formed in the community or it might be very difficult to tell the other members that they are leaving (Chen 2012:5668), which results in the members experiencing social switching costs.

- **Subjective norm.** Subjective norm is defined as the perception of the individual that most of the people important to them believe that they should perform the behaviour in question thus the social pressure to perform or not to perform (Ajzen, 1991:188; Rhodes & Courneya, 2003: 130). Within an online community, the subjective norm of the member indicates the effect of others' opinion on a member's behaviour (Zhou, 2011:70) and when a member believes that other members who are important to them approve of the behaviour to participate in the online community, they will do so.

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CHAPTER 1

INTRODUCTION AND CONTEXTUALISATION OF THE STUDY

1.1 INTRODUCTION

This study involves the development of a commitment and online community citizenship behaviour model for residential online activity communities on Facebook. A residential online activity community consists of members who are residents of a city and who share a common interest in a specific topic (Kozinets, 1999:254) on an electronic platform, such as Facebook. Currently, no research measures the impact of commitment on online community citizenship behaviour, as directed towards administrators and members of residential online activity communities on Facebook. Additionally, there seems to be limited knowledge on a set of factors that may contribute towards affective and normative commitment of members of a residential online activity community.

Knowledge of these matters is important, as, from a practical perspective, administrators are faced with various difficulties when managing online communities. Some of the challenges include the task of maintaining the rules of the community, facilitating active participation, building a strong membership base, dealing with technical difficulties and enhancing sociability on the online community. Insight into the factors contributing to the different forms of commitment may offer valuable assistance to administrators of online communities, as they will have a better understanding of the factors which might result in more committed members and high-quality participation. Also, member commitment may result in further voluntary behaviours which could benefit the residential online activity communities. Based on the premises of the social exchange theory (Blau, 1964), committed members who believe that they are receiving benefits from the online community, may respond by performing voluntary behaviours such as online community citizenship behaviours (Bettencourt, 1997:398; Patterson *et al.*, 2003:2081; Shamin *et al.*, 2015:202), involving the provision of assistance to administrators and members of the online community and that may improve the overall service delivery of the online community.

Consequently, to address the stated research gap and contribute to theory and practice, selected antecedents that may impact on the different forms of commitment (affective and normative) towards residential online activity communities on Facebook are examined. The proposed study also explores the extent to which the two forms of commitment may further contribute towards online community citizenship behaviour, as directed towards administrators and members of residential online activity communities on Facebook.

Ultimately, the findings of this study conducted within an online environment may advance knowledge on the relationship marketing theory (grounding commitment), customer citizenship behaviour and the extent to which these two main theories are connected through the social exchange theory. Furthermore, the research findings may also assist in distinguishing between administrator directed and member directed extra-role behaviour that has not been empirically tested before in studies related to online community citizenship behaviour. Insight may further be gained into a novel set of factors that may be important in the fostering of commitment within an online community environment.

To commence the investigation, the next section focuses on a discussion of the background of the study that includes an explanation of citizenship behaviour, e-customer citizenship behaviour, online community citizenship behaviour, online communities, residential online activity communities and Facebook. The research problem is also identified in this section. The subsequent section provides more insight into the relevant literature that contributed to the development of the research hypotheses. Next, the conceptual model and the purpose of this study are explained. The final part of the chapter is devoted to an outline of the theoretical and managerial contributions of the study, the research objectives, planned research methodology as well as a brief explanation of the proposed chapters of the thesis.

1.2 BACKGROUND AND RESEARCH PROBLEM

Customer citizenship behaviour is defined as the helpful, beneficial actions by customers that is valuable and appreciated by the organisations but is not directly enforceable or required from the customer (Gruen, 1995:461). The behaviour is voluntary and optional and is not required for the production or delivery of a product or service, but when performed can enhance the service experience of the organisation (Groth, 2001:11; Tat Keh & Wei Teo, 2001:373). For this reason, customer citizenship behaviour has also been referred to as “extra role behaviour” that is performed in addition to the “in-role behaviours” that are normally expected of customers within a service transaction. In-role behaviour by customers entails co-productive behaviours, which are required to ensure the successful production or delivery of a service (Lin *et al.*, 2016:26). Examples of in-role behaviour include arriving on time for an appointment, providing a description of needs, following prescribed rules and paying for the service (Hansong *et al.*, 2012:393). Compared to in-role behaviours, the extra-role behaviour of customers relates to voluntary behaviour which provides added value to the organisation and includes for example feedback and suggestions to the organisation and helping other customers with the service, to name but a few examples (Ahearne *et al*., 2005; Bettencourt, 1997; Gruen, 1995; Yi & Gong, 2013). Based on the voluntary nature of both extra-role behaviours and customer citizenship behaviours, these

concepts have been used interchangeably by several researchers (Ahearne *et al.*, 2005; Groth, 2005; Lin *et al.*, 2016; Tung *et al.*, 2017).

It further appears that with the introduction of the Internet and the development of the e-commerce market, customer citizenship behaviour has also become important within the online domain. Customers buying, selling and interacting with each other through the internet has become an everyday occurrence (Anaza & Zhao, 2013:130; Groth, 2001:12). Similar to the offline interaction, the teamwork between e-retailers and e-shoppers (online environment) can also be categorised into in-role and extra-role behaviours. In-role behaviours in an online service delivery environment can include providing credit card information when making the purchase and providing delivery information (Groth, 2005:10; Yen *et al*., 2011:90). In contrast, extra-role behaviours relate to the recommendation of the online service to friends and family, completion of an online customer feedback form and providing online suggestions to provide a better service (Groth, 2001:13; Groth, 2005:10, Yen *et al*., 2011:90). These extra-role behaviours are seen as a critical element for continued success and survival of online interactions due to the economic and social benefits these behaviours can provide (Bettencourt *et al.*, 2002; Chevalier & Mayzlin, 2006; Yi & Gong, 2013). Social benefits include the joy of helping others and giving something back, as well as the building of a positive reputation, whereas economic benefit refers to the payment received from participation in an e-commerce site (Markus & Agres, 2000:15,19). Extra-role behaviour is also referred to as e-customer citizenship behaviours within an internet service environment (e-commerce), and is formally defined as the voluntary and optional behaviours of e-shoppers in an online service environment that may assist with the delivery, purchase and use of e-services and that accordingly contributes to the success of the organisation (Anaza & Zhao, 2013:131; Groth, 2005:20). It was further noted, that due to the limited personal interaction taking place within online settings, e-customer citizenship behaviour is even more important in online settings than offline settings as e-customer citizenship behaviours in an online environment can add value and enhance the online interaction (Anaza & Zhao, 2013:130).

Within the customer citizenship and online domain, another school of researchers have also embarked on studies exploring the citizenship behaviour of members of online communities. Online communities were first defined in 1993 by Howard Rheingold, who referred to the concept as a social collection, arising from the internet when enough people continue with public discussions and adequate human feeling, which forms a web of personal relationships in cyberspace (Rheingold, 1993:7). This definition was further advanced by Bagozzi and Dholakia (2002:3) who stated that the interaction process of online communities facilitate social spaces in the digital environment, allowing groups to form and are maintained by on-going communication. Furthermore, online communities are also defined as web-based online services which include

attributes that enable members to communicate with each other, hence involving people socially (Malinen, 2015:228; Preece, 2000:10). From these definitions, it is evident that online communities take place on the internet when groups of people communicate with each other and personal relationships are formed which are social in nature. Studies have also established that online communities can be seen as the most popular form of online services and members join these online groups for various reasons, such as their desire for social action, to reach group and individual goals, obtain knowledge, and for recreational purposes (Bagozzi & Dholakia, 2002:7; Dholakia *et al.*, 2004:343; Malinen, 2015:228).

As to citizenship behaviour within online communities, Chiu *et al.* (2009:1) studied an online professional community and defined online community citizenship as the beneficial behaviours of members that promote the effective functioning of a virtual community. This definition was further extended by Yong *et al.* (2011:684), who drew upon the concept of organisational citizenship behaviour and defined online community citizenship behaviour as the spontaneous, voluntary behaviours which positively influence the effective function of a virtual/online community.

Chou *et al.* (2016:62) and Joe and Lin (2008:367) made further reference to "*online community citizenship behaviour*", which refers to the extra-role behaviours of online community members, and can be seen as the moral, not required behaviours of the members. Members of online communities themselves decide if they want to perform these behaviours and include behaviours such as feedback to the organisation, advocacy to other members, offering help and tolerance towards fellow members of an online community (Chou *et al.*, 2016:62; Joe & Lin, 2008:368). Therefore, as partial employees of online communities, community members contribute towards the community by performing both in-role and extra-role behaviours (Chou *et al.*, 2016:61). In-role behaviours of online community members can be viewed as the knowledge sharing behaviour, which forms the basis of the online community and is therefore required by members, whereas extra-role behaviours include advocacy, providing feedback, helping behaviour, tolerance, compliance, personal initiative, courtesy, civic virtue, conscientiousness, sportsmanship, community identification, social control, social encouragement and willingness to moderate (Bateman *et al*., 2006; Chiu *et al*, 2015a; Chou *et al*., 2016; Hsu & Yen, 2016; Kwok, 2016; Mpinganjira, 2016; Yong, 2011; Yong *et al*., 2011).

Taking the abovementioned into consideration, it can then be concluded that customer citizenship behaviours refer to the voluntary behaviours of customers within an offline setting like at a retail store. Additionally, e-customer citizenship behaviours refer to the same voluntary behaviours but within an online retail environment. Thirdly, online community citizenship behaviour refers to the voluntary behaviour of members of an online community. Online communities include both

members and administrators where administrators, can accept members, send messages to the group members, can select more admins, delete members and change the settings of a group (Freeman & Chapman, 2010:6). Turner and Fisher (2006:7) state that a member of an online community is any person who has participated in the online community, either actively or passively, during the last twelve months.

1.2.1 Dimensions of citizenship behaviour and research gap

Several studies have further been conducted over the years to obtain more insight into the various dimensions relating to each form of citizenship behaviour. Table 1-1 below provides a summary of the dimensions as identified from the literature investigation.

Table 1-1: Dimensions of citizenship behaviour in offline-, online retail- and online community environments

Offline- & Online retail environment		Online community environment	
Factor & description	**Author(s)**	**Factor & description**	**Author(s)**
Advocacy - Customers recommending the organisation and their products to other customers.	Groth (2005), Yi and Gong (2013)	Advocacy - Online community members recommending the online community to individuals.	Chou *et al*. (2016), Hsu and Yen (2016)
Providing feedback - Customers providing positive or negative feedback regarding the service encounter to the organisation or other customers.	Groth (2005), Shamin *et al*. (2015)	Providing feedback - Online community members provide feedback to the administrators of the community.	Chou *et al*. (2016), Hsu and Yen (2016)
Helping behaviour - Customers assisting other customers to find products, how to use the product and service or with any enquiries regarding the organisation and their products.	Groth (2005), Shamin *et al*. (2015)	Helping behaviour - Members of the online community perform helping behaviours towards fellow members of the community.	Chiu *et al.* (2015b), Chou *et al.* (2016), Kwok (2016), Mpinganjira (2016), Yong (2011), Yong *et al.* (2011)
Positive WOM - Customers say positive things about the organisation to other customers.	Bove (2009), Gruen (1995), Groth (2005), Keh and Teo (2001), Shamin *et al*. (2015), Yi and Gong (2013)	Tolerance - Members have patience towards the administrator, should the posted knowledge not meet their expectation or are not useful.	Chou *et al.* (2016)
Relationship affiliation - Customers are willing to wear branded clothing of the organisation or display branded accessories of the organisation, in public.	Bettencourt (1997), Bove (2009), Gruen (1995), Robertson *et al.* (2003)	Compliance - Members obey and comply with the rules and procedures of the online community.	Mpinganjira (2016)
Suggestions - Suggestions are made to the organisation of how the product or service can be improved.	Bettencourt (1997), Bove (2009), Groth (2005), Keh and Teo (2001), Robertson *et al*. (2003)	Personal initiative - Members make suggestions towards the administrator and are driven to make a difference in the community.	Mpinganjira (2016)
Policing of other customers - Customers take steps to prevent problems caused by customers.	Bove (2009), Gruen (1995), Robertson *et al.* (2003)	Courtesy – Online community members act courteously towards other members.	Chiu *et al.* (2015b), Hsu and Yen (2016), Yong (2011), Yong *et al.* (2011)

Table 1-1: Dimensions of citizenship behaviour in offline-, online retail- and online community environments (cont.)

Offline- & Online retail environment		Online community environment	
Factor & description	**Author(s)**	**Factor & description**	**Author(s)**
Voice behaviours - Customers, refer their complaints to the organisation as to give the organisation the opportunity to rectify the problem.	Gruen (1995), Keh and Teo (2001), Lin *et al.* (2016), Robertson *et al.* (2003)	Civic virtue - Online community members show active involvement in community building activities.	Chiu *et al.* (2015b), Yong (2011), Yong *et al.* (2011)
Flexibility - Willingness of the customer to adapt to situations which are out of their control.	Bove (2009), Gruen (1995), Robertson *et al.* (2003)	Conscientiousness - Online community members act beyond the minimum requirements of the community (administrator).	Chiu *et al.* (2015b), Yong (2011)
Participation - Customers participate in events organised by the organisation.	Bove (2009), Gruen (1995), Robertson *et al.* (2003)	Sportsmanship - Willingness of the online community members to tolerate less than ideal circumstances without complaining about it.	Chiu *et al.* (2015b)
Benevolent acts of service - Kind and charitable events performed by the customer towards the organisation.	Gruen (1995), Keh and Teo (2001), Robertson *et al.* (2003)	Community identification - Online community member's knowledge of belonging to an online community.	Chiu *et al.* (2015b)
		Social control - Administrators settling disputes and keeping the discussions focussed.	Bateman *et al.* (2006)
		Social encouragement - Administrators praise and encourage other members when they post.	Bateman *et al.* (2006)
		Willingness to moderate - Administrators explain to members how to use the community and promote good quality interactions.	Kwok (2016)

From Table 1-1, it can be observed that within the offline and online retail environment, customer citizenship behaviours can either be directed towards the organisation (the benefactor of the service) or towards the customer (fellow beneficiaries of the service), based on who is receiving the behaviour. Similar to the offline- and online retail environment, it also appears from Table 1-1, that the same types of customer citizenship behaviours may be present within the online community environment. Online customer citizenship behaviour may be directed towards the administrator (the benefactor of the service) or other members of the online community (fellow beneficiaries of the service).

Ultimately, knowledge of these matters is then important, as it points towards another important facet of citizenship behaviour that requires further exploration. Specifically, customer citizenship behaviour directed towards *organisations* and *customers* within the online and offline retail environment has been well researched (Bove *et al.*, 2009; Curth *et al*., 2014; Yi *et al.*, 2013). On the contrary, a greater understanding is needed of online community citizenship behaviour, as directed towards *administrators* and *members* of an online community and its antecedents. This matter has not received much attention in academic research.

Extant research on commitment provides valuable guidance in this regard. Specifically, there appears to be a general agreement among marketing scholars on the importance of commitment in facilitating citizenship behaviour (Hashim & Tan, 2015; Kim *et al.*, 2004; Yong *et al.*, 2011). This relationship has been confirmed by several scholars who examined the impact of commitment on customer citizenship behaviour in the offline and online retail environment (Bettencourt, 1997:383; Bove *et al*., 2009:700; Curth *et al*., 2014:153; Fullerton, 2011:98). Some attention has also been given to the relationship between commitment and online community citizenship behaviour. Bateman *et al.* (2006:983) found that affective and normative commitment significantly influence online community citizenship behaviour. This study however only included the responses of a single online community, and members were self-selected which can, therefore, influence the representativeness and generalisability of the study. Chiu *et al.* (2015a:962), Mpinganjira (2016:7) and Yong *et al.* (2011:692), examined affective commitment in their conceptual models and determined that it positively influence online community citizenship behaviours. Limitations of these studies include a selection bias of the sample, a limited generalisation of the data to other types of online communities and only taking into account certain elements of both citizenship behaviour and commitment.

From a broader perspective, however, the impact of both affective and normative commitment, as dimensions of the commitment construct, on online community citizenship behaviour, *as directed towards administrators and members*, have not been examined before and appear to

have been overlooked in marketing research. There also seems to be limited knowledge of the set of factors that may contribute towards the affective, and normative commitment of members of an online community and that may further add value to the research model.

Ultimately, knowledge of these matters may contribute to a greater understanding of the different forms of commitment to online community citizenship behaviour as directed towards administrators and members of an online community. Examining the different types of commitment in a study of online citizenship behaviour may provide a more robust and comprehensive framework for understanding why members stay committed to an online community (Bateman *et al.*, 2006:994). The research findings may also offer more insight into the extent to which relationship marketing theory may impact online community citizenship behaviour directed towards administrators and members of the community and the antecedent factors that may precede affective and normative commitment within an online community context. Additionally, from a managerial perspective, while all types of online communities may benefit from this investigation, the research findings may be particularly beneficial to administrators of residential online activity communities on Facebook (the context of the study), as motivated in the next section.

1.2.2 Online communities and the benefits of a proposed model to residential online activity communities on Facebook

To obtain insight into the benefits of the proposed model for residential online activity communities on Facebook specifically, it is necessary first to understand the characteristics, benefits and challenges within online communities, as well as the various forms of online communities that are functioning through Facebook.

1.2.2.1 Characteristics of online communities

- **Discussion thread structure**

  A discussion thread structure normally applies to online communities, which involves members posting a topic or question and other members replying by either participating in the discussion or answering the question (Zhang *et al*., 2007:222). This type of structure results in a post-reply network which is not a social relationship between members but rather a reflection of the members' shared interest. This shared interest by the members are due to the reply or participation being performed based on interest in the topic and not because of the member who has started the thread (Zhang *et al*., 2007:222). Member participation is, therefore, a key element of online communities, as participation in the online community retains members from leaving the community (Malinen, 2015:234).

- **Active versus passive member roles**

  Within an online community, members can also play an active role, by posting content, or a passive role, by taking advantage of the content without contribution. Active participating members are known as "posters" and the passive members as "lurkers" (Malinen, 2015:229; Turner & Fisher, 2006:7). Posters of online communities can further be defined as the key producer of content and are actively involved in the online community (Ridings *et al*., 2006:330). Although research has shown that both types of activity are required and serves as an indication of members' commitment towards the community, this study will only focus on active members of an online community (Koh & Kim, 2004:163; Malinen, 2015:229). The rationale for this choice is that this study aims to investigate online citizenship behaviours that require the active and voluntary involvement of members of online communities.

- **Function of the administrator**

  Another player within online communities is that of administrators who are responsible for governing the community by enforcing rules and regulations, which does not refer to the policing of members but rather to the facilitation of the online community (Turner & Fisher, 2006:7). Administrators of online communities normally create the online community, set the privacy settings of the online community and also facilitate the group (Hess *et al*., 2013). Moderating or facilitating an online community is one of the key functions of administrators, as they need to keep the community active, membership current and importantly curb spam and offensive content (Hess *et al*., 2013:576; Wu & Chang, 2005:949). Administrators of online communities are also able to delete discussions, comments and can even delete members from the community (Hess *et al*., 2013:576). Since participation is viewed as essential for the survival of online communities, administrators of online communities usually want to improve the user interaction as the success of online communities is measured by evaluating the volume of contributions and the quality of the relationship between members (Iriberri & Leroy, 2009:10; Malinen, 2015:229). Therefore, the more contributions take place, and the closer members feel to each other the more successful the online community is deemed to be.

1.2.2.2 Generic benefits of online communities

Generally, being a member of an online community has various benefits for individuals, namely extensive information exchange, beneficial social support and social interaction as well as flexible time and location opportunities (Johnson & Ambrose, 2006:109; Maloney-Krichmar & Preece, 2005:203; Preece, 1998:37; Preece, 1999a:73). According to Armstrong and Hagel (2000:87), online communities bring together members who interact extensively with each other on specific

topics or interests. Members further gain social benefits from online communities, which refer to the perceived value that a member gains from socialising and networking with an online community (Dholakia *et al.*, 2004:244). Social benefits include the general social aspects of the community, the possibility of getting to know people on the online community, informal interactions and communication with members of the online community (Dholakia *et al.*, 2009:214). Furthermore, it was established that when members receive social benefits from the online community, they are more likely to post content and participate in the community (Ren *et al*. 2007). Archer-Brown *et al.* (2013:421) suggest that an online community can also provide functional benefits to members, which is referred to beneficial information or information value. Information value, seen as beneficial information is achieved when members agree that the information supplied by the online community is useful, might be useful in the future, the posts are good suggestions and contain valuable ideas (Archer-Brown *et al.*, 2013:427). Additionally, information exchange and social support are seen as the two most prominent benefits of online communities (Mesch, 2008:232; Ridings & Gefen, 2004). Members' information exchange include the offering of information to other members and sharing of skills and abilities with other members whereas social support is viewed as the extent to which members listen to problems, show concern to problems, give advice for problems and offering suggestions of how to deal with difficult times (Ridings *et al.*, 2006:351). Although the purpose of an online community is to bring people with similar needs and interests together, online communities can also assist members to extract value and information from organisations (Hagel, 1999:57).

Online communities can further assist organisations to build relationships between member and organisation, as the interaction with customers through the online community can assist with the identification of any problems or queries. Members can, therefore communicate with other members who have purchased or used the products before making the purchase themselves, thus enabling organisations to obtain more information about the customers, understanding their problems, discovering which products they are interested in and the general problems experienced by them (Hagel, 1999:62). When members contribute and participate in online communities, the community is furthermore seen as the platform for members to act as co-innovators when they post new ideas or suggestions to be implemented by organisations (Bugshan, 2015:182).

1.2.2.3 Commitment challenges within online communities

Ultimately, it is imperative for administrators of online communities to understand how to get members committed towards the online community as the participation levels of committed members are higher than uncommitted members (Gupta *et al.*, 2010:514; Malinen, 2015:228).

Despite the significant growth of online communities, however, administrators of online communities seem to have difficulty to obtain vital member commitment (Gupta & Hee-Woong, 2007:39; Gupta *et al.*, 2010:514). More guidance is therefore needed to assist administrators of online activity communities in facilitating the commitment of their members. Since commitment, is seen as a complex and multi-facet construct and each dimension of commitment is developed independently, an investigation is specifically needed to established the individual set of antecedents that may contribute towards each form of commitment (Jin *et al*., 2010:589; Meyer & Allen, 1991). Furthermore, as member commitment may also contribute towards online community citizenship behaviour, additional benefits can be gained by understanding the extent to which affective and normative commitment may contribute towards online community citizenship behaviours directed towards both administrators and members of residential online activity communities on Facebook.

1.2.2.4 Facebook as a popular platform for online communities

Facebook is an electronic, social service which helps people to share information and communicate more efficiently with their family, friends and co-workers (Facebook, 2017a; Kallas, 2017). It has also been stated that Facebook group is a medium for small group communications where people share a common interest and express their opinions thus allowing individuals to get together around a common cause, issue or activity (Hicks, 2010). Founded in 2004, Facebook had the aim to give individuals the power to share and connect with each other. As at December 2016, Facebook had 1.23 billion daily active users and although Facebook is an American corporation, 85.2% of the daily users are from outside the US and Canada (Facebook, 2016). South African Facebook users have grown by 8% from 2015 to 2016, with 13-million South Africans using Facebook (Goldstuck & Wronski, 2016). Smock *et al.* (2011:2324) identified status updates, comments, wall posts, private messages, chats and groups, as the main features of Facebook.

Online communities on Facebook has further become important as members use this type of communities as a source of information and knowledge (De Valeck *et al.*, 2009:187). Table 1-2 below indicates that online communities have the option to choose between three types of Facebook forums, namely public-, closed- and secret groups. Normally the administrators of a group will decide the type of group.

Table 1-2: Types of Facebook groups

	Public	Closed	Secret
Membership	Anyone can join or be added to the page	Anyone can ask to join or be added to the page (need permission)	Anyone can join the page but have to be added or invited by a member (need permission)
Ability to view group name	Anyone	Anyone	Current and former members
Ability to see what members post on the group	Anyone	Only current members	Only current members
Ability to find the group in search	Anyone	Anyone	Current and former members

Source: Adapted from Colaiacovo (2015).

1.2.2.5 Forms of online communities available on the internet

In literature, two types of online communities are mentioned namely online marketplace communities (Ling *et al.*, 2014; Steinbrecher, 2006; Sweeney, 2000) and online consumption communities (Stokburger-Sauer & Wiertz, 2015). *Online marketplace communities* involve mostly the selling and buying of random items within a community environment (Steinbrecher, 2006:124). The most well-known online marketplace community is eBay (Steinbrecher, 2006:124). However, the term online marketplace is more often used, which refers to an online environment where buyers and sellers can conduct electronic transactions, host online auctions and reverse auctions by only using a computer and internet connection (Sweeney, 2000:10). Online marketplaces are furthermore defined as the mediators that offer the procedures, practices and information systems needed for buyers and sellers to exchange information, products and services and also includes financial transactions (Kim & Koo, 2016:1021; Verhagen *et al.*, 2006:543). The second type of online communities is known as *online consumption communities.* Online consumption communities can be defined as related and affiliated groups of people who engage in online interactions which are based upon the mutual enthusiasm for- and knowledge of a specific consumption activity or group of activities (Kozinets, 1999:254). This definition was further expanded by Preece and Maloney-Krichmar (2003) who stated that an online consumption community is internet-based and include a group of members whose interactions are concerned around a shared consumption purpose, interest or need. Furthermore, it was noted that there exist different types of online consumption communities, although research on this topic is limited (Breitsohl *et al.*, 2015). The different types of online consumption communities are classified based on the content focus of the communities and include *online brand communities* and *online activity communities* (Breitsohl *et al.*, 2015:1041). An online brand community refers to an

internet-based group of members who are united by their shared interest in a single brand (McAlexander *et al.*, 2002:39) whereas an online activity community refers to share an interest for a single consumption activity (Kozinets, 1999:254). A single consumption activity can, for instance, include posting and comments about a specific topic, for example, the posting about babies which include baby product recommendations and advice (Breitsohl *et al.*, 2015:1049).

1.2.2.6 Selection of residential online activity communities of Facebook and model benefits

For this study, online activity communities formed by residents of South African cities are further explored. Due to the members being residents of a city, the term *residential online activity community* will be used in this study. This type of online community comprising residents was classified as an online activity community based on the following reasons. This type of community can firstly be classified as an online consumption community and not a marketplace community as the main emphasis of this type of online community is to socially interact and share knowledge amongst the members instead of performing mainly e-commerce behaviours. Secondly, regarding the type of online consumption community, this type of online community consisting of residents can be viewed as an online activity community as the focus of the content is related to a consumption activity and not on a single brand. In the case of the online community for residents, the online activities include general questions about information needed for example contact details of medical practitioners, questions regarding events taking place in the city, advertisements of products and services offered, to name but a few. By being part of the online community of a city, residents will, therefore, become more aware of the activities and services offered in the city; they can advertise businesses and services offered and also get assistance when they needed information, for example, the contact numbers of a doctor or electrician (Facebook, 2017b). Local government are also able to communicate with the residents, solve problems and give general guidance when problems arise.

These communities are furthermore also functioning through the Facebook platform. Although the phenomenon to use Facebook groups to connect residents of a single urban development is relatively new, research has suggested that the internet is useful for improving information exchange between people in the same neighbourhood (Barborska-Narozny *et al.*, 2016:1). Using a Facebook group as platform between residents is seen as useful with more advantages than traditional face-to-face meetings. As local communities like residents need communication methods to distribute knowledge, it has been found in a study done by Barborska-Narozny *et al.* (2016:1) that using a Facebook group, residents can get quick responses, can make use of visual tools to gain information and are able to facilitate collective action amongst residents.

Moreover, informal qualitative research indicated that the major problems faced by administrators are to ensure that members keep to the rules of the community, to ensure active participation by the members and to consciously increase the membership base. Administrators of online communities are faced with challenges such as the encouragement of participation of the members, how to encourage members to become part of the online community when they already belong to other online communities, how to get the discussions from getting repeated and to prevent the last discussion from being the only discussion which is exposed (Goff *et al*., 2011). Research has indicated that encouraging participation and building thriving communities is most cited as the key challenges faced by administrators of online communities (Chen, 2007:450; Malinen, 2015:228; Sangwan, 2005:4).

Additionally, although technical problems associated with the online community and poor usability has been cited as reasons why members abandon online communities; research has found that when members do not receive interesting content, they are likely to stop visiting the online community (Malinen, 2015:235). Administrators are also faced with the challenge of managing a small number of users of the online community (Zhou, 2011:67). Insufficient member stability creates problems for administrators since members can leave the online community at own will, which limits the social control and motivation for continuing with the online community (Matzat, 2010:1172). Successful interactions in online communities are not only dependable on the usability of the information but also on the social interactions taking place in the group, known as the sociability of the online community (Matzat, 2010:1171, 1172).

Considering these challenges, it is believed that the proposed model may be particularly beneficial to residential online activity communities on Facebook. Participation is key to the establishment of a sustainable, active residential online activity community and for participation to take place; members need to be committed towards the community. Knowledge of a model of factors contributing towards various forms of commitment and that may ultimately lead to online community citizenship behaviour directed towards administrators and members may then assist in the effective management of the residential online activity community. Administrators might be able to improve their facilitation endeavours by ensuring adequate performance of the factors contributing towards greater commitment towards the community. The proposed model might also assist a city to create committed residential online activity community members that will actively participate in discussion threads on Facebook and engage in citizenship behaviours that will be of benefit to both administrators and members of the community. In the end, active and sustainable residential online activity communities enable valuable information exchange between members relating to the particular city thus providing functional benefits to members such as important and useful information about the city, good suggestions and valuable ideas. An

active, sustainable residential online activity community can also provide social benefits to its members such as an opportunity to get to know people in the city, establish communication with fellow residents of the city and also interact with fellow residents. Furthermore, as this model might assist residential online activity communities to increase the commitment of the members and participation in the community, an organisation operating in a city might be able to identify problems experienced by the members and have the opportunity to rectify the problem which might increase customer satisfaction.

Consequently, the subsequent section provides more insight into the theory grounding online community citizenship behaviour and the two sub-dimensions of commitment (affective and normative) that may contribute to online community citizenship behaviour directed towards administrators and members of an online community. The relevant factors that have been identified from the literature review and that may contribute to the various forms of commitment within an online community environment are also explored. Based on the discussions, hypotheses are furthermore developed in support of the conceptual model that will be further investigated in the empirical part of the study among members of residential online activity communities on Facebook.

1.3 LITERATURE REVIEW

Customer citizenship behaviour (referred to as online community citizenship behaviour within an online community context) is grounded in the social exchange theory (Balaji, 2014; Groth, 2005; Jamak *et al.*, 2015; Shamin *et al.*, 2015).

1.3.1 The social exchange theory

The social exchange theory is based on the premise of voluntary actions of individuals which are motivated by the expected returns from the interaction (Blau, 1964:91). Therefore, it is predicted that the social exchange by one party of the relationship produces a diffuse obligation in the other party to respond with benefits at their preference (Blau, 1964). Due to this social exchange also taking place between an organisation and their customers, research has indicated that when customers perceive that they are benefiting from the service received by the organisation, they are most likely to respond by performing voluntary customer citizenship behaviours that will be to the advantage of the organisation (Bettencourt, 1997:398; Patterson *et al.*, 2003:2081; Shamin *et al.*, 2015:202). This means that when customers benefit from other customers or the organisation, they feel obligated to react by performing behaviours which are not expected or required of them, known as customer citizenship behaviours.

It has furthermore been established that the social theory can be applied to exchange between customers and organisation in online settings (Groth, 2001:82; Ponnusamy & Ho, 2015:54). Reciprocity is seen as a key element in the social exchange theory, where positive action is returned with another positive action (Tanskanen, 2015:579). Therefore, online community interactions can be seen as social exchange opportunities for members to respond with online community citizenship behaviours if the member feel that the online interaction has been beneficial. Within an online community context, Jin *et al.* (2010:588) further established that, due to the social exchange theory, a relationship is built and maintained between the members of an online community and the community. Benefits of a social system include friendship, love, status and honour, and if members feel that they have received these benefits from fellow members, they will be likely to perform citizenship behaviours (Chang *et al.*, 2015:868; Liao, 2008:1882).

The literature investigation further evidenced that owing to the social exchange theory; commitment may also have an impact on online community citizenship behaviours (Bateman *et al*., 2006:993; Bateman *et al*., 2011:848; Mpinganjira, 2006:6; Yong *et al*., 2011:692). Since commitment is viewed as a key element of relationship marketing, the next section introduces the relationship marketing concept followed by an overview of commitment and the relationships between commitment and online community citizenship behaviours.

1.3.2 Relationship marketing

Relationship marketing was initially defined by Berry (1983:25) who states that relationship marketing can be defined as “attracting, maintaining and enhancing customer relationship within a multi-service organisation”. Although this definition was adopted and extended by various authors (Grönroos, 1991; Gummesson, 2014 Jackson, 1985:1; Rust *et al*., 2001), the core elements such as 1) the attracting, maintaining and exchanging of customer relationships, 2) relationship marketing being a long-term continuous process, 3) a shift from transactional marketing, and 4) the network approach of relationship marketing was still evident in all the other definitions. Relationship marketing is also applicable to the online environment, with various authors who have defined online relationship marketing as the use of web features to establish, maintain and build long-term relationships with customers (Bai *et al*., 2007:35; Gan *et al*., 2007:5).

Regarding online communities, relationship marketing is relevant as research is required to understand the complex ways of the interaction between members and their communities is required to build and maintain online communities (Danescu-Niculescu-Mizil *et al*., 2013:307). Additionally, it was noted that active participation is not viewed as the only key to successful online communities, but it is also required that long-term, continuous relationships between members and the online community is established (Malinen, 2015:234).

Research has established that commitment can be viewed as a key underpinning of relationship marketing (Hennig-Thurau *et al*., 2002:232; Jesri *et al*., 2013:310; Morgan & Hunt, 1994:31) which will be further discussed in the next section.

1.3.3 Commitment

Commitment can be defined as the implicit and explicit pledge for the continuing of a relationship between exchange partners and is viewed as one of the factors which are associated with successful relational exchanges (Dwyer *et al.*, 1987:19). Commitment is regarded as a key construct of relationship marketing theory (Hunt *et al*., 2006:77; Lewin & Johnson, 1997:28; Morgan & Hunt, 1994:22), that relates to all marketing actions that focus on the establishment, development and maintenance of successful relational exchanges (Morgan & Hunt, 1994:22). Customers are thought to enter into relational exchanges should they believe that the benefits of the relationships exceed the costs associated with the relationship (Hunt *et al.*, 2006:83).

Originally commitment concerned the relationship between employees and organisations but was later found also to be relevant to the relationship between customers and organisations. In the initial stage of the investigation, commitment was perceived as a one-dimensional construct (Mowday *et al.*, 1979:230), but Allen and Meyer (1990:2) later noted three sub-dimensions, namely affective, continuance (calculative) and normative commitment. Bansal *et al.* (2004:238) and Meyer and Smith (2000:320) define *affective commitment* as the emotional attachment to, identification with and involvement by the customer in the organisation, thus the affective force which binds the customers to the organisation. Affective commitment in an online community can, therefore, be defined as the emotional connection with the online community which includes the identification with, the involvement with and the emotional attachment to the community (Cheung & Lee, 2009:283).

Continuance commitment, according to Bansal *et al.* (2004:238), is related to the perceived cost experienced by customers when they discontinue the relationship with the organisation. The cost refers to the social and economic benefits and not monetary value, therefore, continuance commitment in an online community environment, can be defined as the bond between the member and the online community that is grounded in the member's belief that their involvement with the community provides benefits to them which they will not easily find with any other community (Bateman *et al.*, 2011:843). Finally, normative commitment suggests the sense of obligation to continue employment with the organisation or when customers feel that they are obligated to stay in a relationship with the organisation (Gruen *et al.*, 2000:44; Meyer & Allen, 1991:64). Regarding online communities, members who are normative committed tend to feel

obligated to stay in the community as they already have a relationship with the online community (Brun *et al.*, 2014:10; Cheung & Lee, 2012:221).

This study, however, is only concerned with measuring affective and normative commitment, as previous research has proven that continuous commitment negatively influence citizenship behaviours (Fullerton, 2003:336; Meyer & Allen, 1997:38). Fullerton (2011:98) explains that if a customer feels trapped in a relationship with the service provider (continuance committed), they will not participate in advocacy activities since they would not like their friends and family to experience the same trapped feeling. Considering the purpose of this study to assist administrators of online communities to improve online community citizenship behaviours, it would, therefore, be senseless to examine continuous commitment in this study as continuous commitment has proved to impact citizenship behaviours negatively.

1.3.3.1 The relationship between commitment and online community citizenship behaviours

The positive effect of commitment on customer citizenship behaviour was established by Bettencourt (1997:388) who found that when customers are committed to the organisation, there is an increased likelihood of them saying positive things about the organisation and recommending the organisations to others. Research has also indicated that affective commitment is an antecedent of customer citizenship behaviour, as customers who are affectively committed are more probable to participate in customer citizenship behaviours. Affectively committed customers identify with the organisation's goals and values and are motivated to perform roles beyond what is required of them (Bove *et al.*, 2009:703; Curth *et al.*, 2014:153; Patterson *et al.*, 2003:2081). Within the online community environment, it was also found that as the affective commitment of members increases, the sense of responsibility to help other members in the community increases and the members are also more concerned with the well-being of the community members and therefore engage in citizenship behaviours (Kang *et al.*, 2007:123; Wasko & Faraj, 2005:49). Research has shown that members who are emotionally attached to the online community, are more likely to engage in online citizenship behaviours compared to members who have no emotional attachment (Yong *et al.*, 2011:692).

Considering the above discussion and previous research studies indicating that customer citizenship behaviours in an online community environment may be directed towards administrators and members (As listed in Table 1-1 and discussed in section 1.2.1), it is subsequently plausible that affective commitment may lead to members being willing to engage in citizenship behaviours towards both fellow members and administrators of online communities. Hence, it is hypothesised in this study that:

Concerning members of online communities:

H1	Affective commitment has a positive and significant effect on online community citizenship behaviour as directed towards administrators of residential online activity communities on Facebook.
H2	Affective commitment has a positive and significant effect on online community citizenship behaviour as directed towards members of residential online activity communities on Facebook.

Members' normative sense of having an obligation towards the community has a positive influence on online citizenship behaviour and will guide the members to spread the online community norms (Bateman *et al.*, 2006:994). When individuals have a high level of normative commitment towards an organisation or online community, they feel obligated to help others (Bateman *et al.*, 2006:988; Meyer & Allen, 1991:65).

Hence, considering the above discussion and previous research studies indicating that customer citizenship behaviours in an online community environment may be directed towards administrators and members (as listed in Table 1-1 and discussed in section 1.2.1), it is subsequently also plausible that normative commitment may lead to members being willing to engage in citizenship behaviours towards both fellow members and administrators of residential online activity communities on Facebook.

Hence, it is hypothesised in this study that:

H3	Normative commitment has a positive and significant effect on online community citizenship behaviour as directed towards administrators of residential online activity communities on Facebook.
H4	Normative commitment has a positive and significant effect on online community citizenship behaviour as directed towards members of residential online activity communities on Facebook.

It is furthermore recognised in this study that the citizenship behaviours directed towards fellow members and administrators in an online community may take on many forms, such as feedback, policing and helping behaviours. This matter will be further addressed in Chapter 3. Following an extensive literature investigation, Chapter 3 will identify possible forms of citizenship behaviours that members may direct towards administrators and fellow members of residential online activity communities on Facebook. The discussion will primarily focus on forms of citizenship behaviours previously noted as relevant in the commerce environments. These behaviours will then be further

examined in the empirical part of this study to assess their applicability within the residential online activity community environment.

1.3.3.2 Factors that may contribute to affective commitment in an online community environment

The following section provides an overview of the factors which may contribute to affective commitment in an online community environment.

1.3.3.2.1 Emotional support

Emotional support occurs when warmth and nurturance are provided to another individual and reassurance is given so that the people felt valued and cared for (Taylor *et al.*, 2004:355). Emotional support is viewed as one of the key reasons why individuals visit an online community, as individuals seek support from members who have faced similar problems and enable them to solve the problems (Johnson & Lowe, 2015:3). People need social interactions to satisfy their social needs for belonging and support, and therefore it was found that emotional support has a positive effect on affective commitment (Chen *et al.*, 2013:2534). Therefore, should the social interactions between members of the online community satisfy the member's social need of belonging, the member might also be affectively committed towards the community.

Taking into consideration the relationships mentioned above between emotional support and affective commitment, the possibility exists that the same relationships might exist within residential online activity communities on Facebook.

Thus, it is hypothesised in this study that:

H5	Emotional support has a positive and significant effect on affective commitment of members of residential online activity communities on Facebook

1.3.3.2.2 Social switching costs

Social switching costs related to the possible loss of a personal connection of friendship with an organisation should the individual switch to another organisation or service provider and therefore can be defined as the detriment or consequences that individuals experience when moving from one provider to another (Jones *et al.*, 2007:337). It is important to note that social switching costs result from positive sources of constraints as they include positive benefits and value like loss of friendships and special rights (Jones *et al.*, 2007:338).

It has previously been established that social switching costs are positively related to affective commitment (Jones *et al.*, 2007:346). Studies have also revealed that social switching costs are a proven antecedent of affective commitment for both non-luxury and luxury goods (Shukla *et al.*, 2016:325). Although the relationship above has not yet be confirmed within an online community environment, it can be argued that the same positive relationship might exist. High social switching costs of online community members might also have a positive effect on affective commitment, as the potential loss of personal connection and friendship might increase the level of psychological attachment towards the community and fellow members of the community (Jones *et al.*, 2007:346).

Thus, it is hypothesised in this study that:

H6	Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

1.3.3.2.3 Position involvement

Position involvement is defined as a situation in which important values or self-image is identified with a service provider (Bloemer & Odekerken-Schröder, 2007:25; Freedman, 1964:293). Position involvement is furthermore established by the extent to which individuals' public association with the service in question is in line with their values and self-image. Position involvement can be viewed as an identification process, which deals with personal attachment and determines if an individual can identify with the values and self-images of the brand or product in question (Pritchard *et al.*, 1999:335). Further evidence suggest that should an individual have a strong identification with the brand or product; they have a greater resistance to change and therefore are more committed (Pritchard *et al.*, 1999:335). Subsequently, studies have found that affective commitment is positively influenced by position involvement within a financial industry (Bloemer & Odekerken-Schröder, 2007:36; Crosby & Taylor, 1983:429). Although the relationship between position involvement (identification process) and affective commitment within an online community environment has not yet been established, it is argued that there might be a positive and significant effect between the two constructs as members of an online community, whose own values and self-image are the same as that of the community might also have high levels of affective commitment as they can identify with the online community.

Considering these relationships, it is hypothesised in this study that:

H7	Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

1.3.3.3 Factors that may contribute to normative commitment in an online community environment

This section provides an overview of the factors that may contribute to normative commitment within an online community environment.

1.3.3.3.1 Subjective norm

Subjective norm refers to the perceived social pressure, experienced by individuals to perform or not to perform the behaviour in question, meaning their desire to act according to others (Ajzen, 1991:188). The influence of compliance, therefore, takes place when a member of a community acknowledge the social influence resulting in support or acceptance from other members. Thus subjective norm suggests the influence of expectations of other members and is often referred to as social normative compliance (Shen *et al.*, 2011:159). The social pressure to act a certain way indicates that the subjective norm of individuals compel them not to switch to other providers as they feel obligated to stay with the providers (Bansal *et al.*, 2004:239).

The social environment of the customer influences subjective norm furthermore, as customers tend to try and please their peers or try to integrate them with the brand. This is especially true in the case of luxury brands where customers who are normatively committed to the luxury brand tend to feel a sense of obligation to continue the relationship with the organisation (Shukla *et al.*, 2016:325).The same relationship was also established within an online community environment, where it was found that subjective norm is positively associated with an online community members' normative commitment (Chen *et al.*, 2013:2533). Hence, members of online communities might feel normatively committed due to the impact of the subjective norm of fellow members of the online community from which the member may not want to deviate.

Hence it is hypothesised in this study that:

H8	Subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

1.3.3.3.2 Perceive critical mass

To understand perceive critical mass, it is important to first define critical mass since perceive critical mass was derived from the critical mass theory. Rodgers (1995:313) defined critical mass as the point where enough individuals have accepted the innovation for the innovation's future rate of adaption to become self-sustainable. Additionally, perceive critical mass was derived from this notion that due to the difficulty of individuals to determine the exact critical mass, when

individuals perceive that the threshold of critical mass was achieved, perceive critical mass is achieved (Cho, 2011:287). Hence, perceive critical mass refers to the perception of the individual that perceive critical mass has been achieved.

Furthermore, from a study measuring the effect of perceive critical mass on the use of groupware, it was concluded that the decision of members of an online community to participate and make use of the community, will depend on whether or not their peers are using and participating in the community (have adopted the technology) (Lou *et al.*, 2000:100). Within a social network context it was also found that perceive critical mass will only be reached, should members of the network believe that the site has a significant number of members with which the members can associate with because of, for example, common interest and friendship (Sledgianowski & Kulviwat, 2009:76). Perceive critical mass can, therefore, be viewed as an important factor affecting the intention to adopt technology (Sledgianowski & Kulviwat, 2009:80).

A study which measured the effect of social influences on normative commitment within a social network site environment further founded that perceive critical mass have a positive effect on normative commitment (Chen *et al.*, 2013:2534). Therefore, should members feel that other members frequently post on the online community, they may feel obligated (normative committed) to also remain with the community and similarly post messages and participate in the online community.

The relationships above indicate that perceive critical mass leads to normative commitment, and therefore when members of an online community have the perception that the critical mass threshold has been reached might also be normatively committed towards the online community.

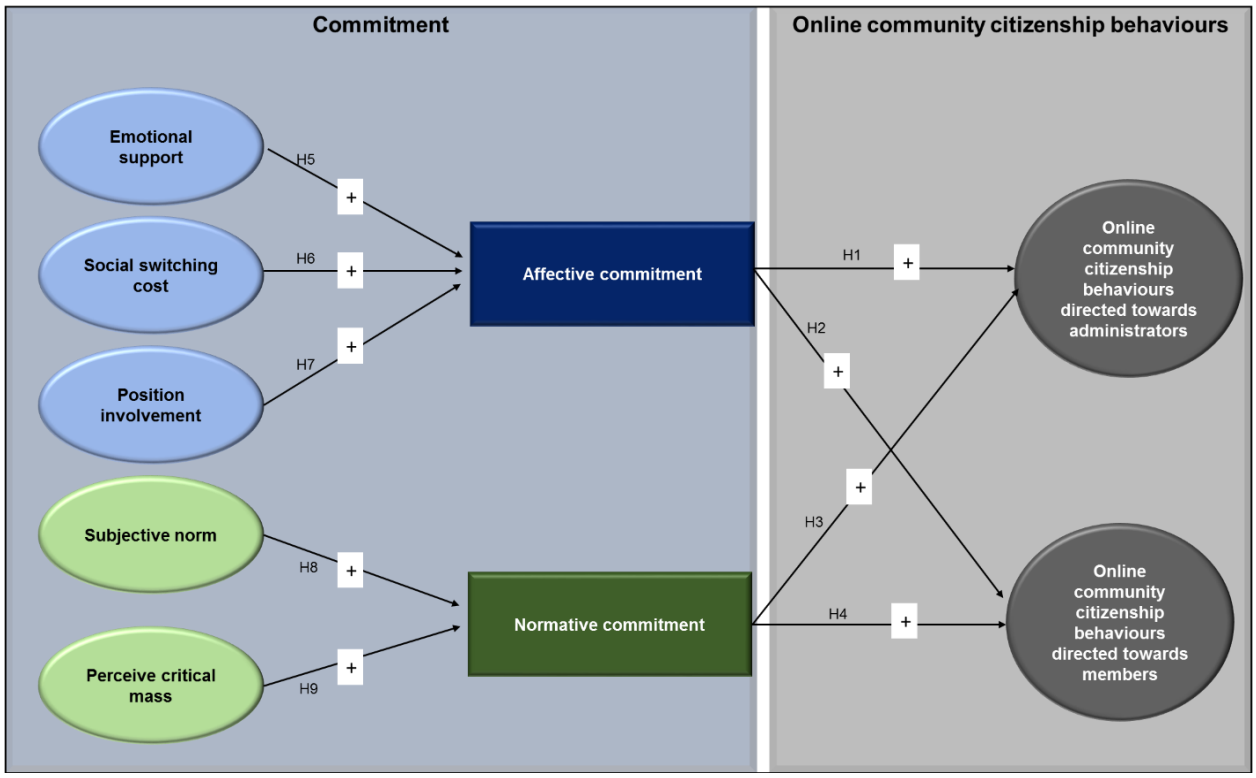
It is consequently further hypothesised in this study that:

H9	Perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

1.4 CONCEPTUAL MODEL AND PURPOSE OF THE STUDY

Taking into consideration the research hypotheses that were formulated in the preceding section, it is possible to propose the conceptual model for this study. The conceptual model is presented in Figure 1-1 below and implies that considering the previously established relationships between the identified research constructs as measured within online communities in general and in other research contexts, it is plausible that the same relationships may also be present within the context of this study, concerning residential online activity communities on Facebook.

Figure 1-1: A commitment and online community citizenship behaviour conceptual model of residential online activity communities on Facebook



Source: Developed by researcher.

Figure 1-1 indicates that online community citizenship behaviours within residential online activity communities on Facebook may be directed towards administrators and directed towards online community members. When members of an online community are emotionally attached (affective commitment) or experience a sense of obligation (normative commitment) towards the online community, they might be prone to perform extra-role behaviours directed towards administrators and directed towards the members of online communities.

It is furthermore suggested in Figure 1-1, that various factors may contribute towards the affective commitment of members within the residential online activity communities on Facebook and could include emotional support, social switching costs and position involvement. These relationships signify that when online community members experience warmth and nurturance like care and attention from other members and the members realise that by switching between communities they might lose the personal connection as well as when the members experience position involvement where their values correspond with the public association of the community, they may be affectively committed towards the online community. Moreover, a positive relationship between subjective norm and normative commitment is suggested, as members of a community may feel social pressure from other members and therefore feel obligated to contribute and take

part in the online community. In addition, when members perceive an online community to have received a threshold regarding the number of members, they may become normative committed towards the online community hence a positive relationship between perceive critical mass and normative commitment is suggested.

The possible combination of relationships documented in the literature review and shown in Figure 1-1 requires further investigation since the testing of the relationships have not yet been confirmed amongst members in a residential online activity community on Facebook. Consequently, it is the aim of this study to address the theoretical gap that has been identified in the marketing literature and to contribute to more knowledge on commitment and online community citizenship behaviour within the online community environment.

The following section provides more insight into the potential contribution of the proposed study to marketing theory and practice.

1.5 POTENTIAL CONTRIBUTION OF THE STUDY

The study aims to make the following theoretical and managerial contributions.

1.5.1 Theoretical contributions

Four theoretical contributions may be obtained from the findings of this study:

- The research findings may provide insight into the effect of different forms of commitment (affective and normative) on online community citizenship behaviours. While commitment is viewed as a multi-dimensional construct, no formal study has been conducted before, to measure the extent to which the two forms of commitment may contribute towards citizenship behaviour directed towards administrators and directed towards members within in an online community environment.

- Second, the study proposes to identify a novel group of factors that might contribute towards different forms of commitment within a residential online activity community on Facebook. A selection of factors as identified from various models in previous studies will be tested, and their contribution to affective and normative commitment to an online community environment will be established. These findings will subsequently advance knowledge on relationship marketing and online communities by identifying an appropriate set of factors that may contribute towards commitment within the online context.

- Third, this study aims to provide more insight into online community citizenship behaviours directed towards administrators and members of online activity communities. Administrators and members are seen as key role players within an online community, and therefore this new classification can add to the theoretical foundation of online activity communities and online communities in general. Specifically, as mentioned in section 3.4.2, following an extensive literature review in Chapter 3, possible forms of citizenship behaviours that members may direct towards fellow members and administrators of residential online activity communities on Facebook will be identified. The discussion will primarily focus on forms of citizenship behaviours previously noted as relevant in the commerce environments. These behaviours will then be further examined in the empirical part of this study to assess their relevance within the residential online activity community environment. Hence, although new measurement scales will not be developed, the adaption and assessment of existing citizenship scales within the context of this study, will contribute to the field of online communities and citizenship behaviour and will shed further light on the types of citizenship behaviours directed towards fellow members and administrators of online communities.

- Lastly, this study may also provide more insight into the extent to which relationship marketing theory may affect online community citizenship behaviour directed towards administrators and members of residential online activity communities on Facebook. This study aims to deepen the understanding of commitment by investigating the impact thereof on online community citizenship behaviours since the benefits received from the committed relationship might result in members performing voluntary behaviours.

1.5.2 Managerial contributions

This study also aims to make various managerial contributions, which include:

- Various Facebook groups exist and although some research has focused on certain types of Facebook groups, very limited research has been done regarding residential online activity communities on Facebook. The research findings and confirmation of the proposed model may then provide more insight into the functioning and effective management of residential online activity communities.

- The research findings may assist administrators of residential activity online communities to increase the level of commitment and participation of their members and thereby to foster greater sustainability of the community. Increased participation may furthermore create the impression of an active, value-adding residential online activity community that might appeal to other potential members to join the community.

- Administrators may be able to obtain a better understanding of affective commitment within an online community environment. Knowledge can also be gained into the extent to which administrators of residential online activity communities would need to improve the emotional support between members and have to cultivate an environment where the values of the members and the values of the community are the same, to foster greater levels of affective commitment.

- Confirmation of the research findings might also assist administrators to comprehend the level of normative commitment of the members of a residential online activity community. By understanding normative commitment, administrators and organisations might be able to increase the sense of obligation of members through the in-depth understanding of the subjective norms and perceive critical mass of the members. This in-depth understanding will enable administrators and organisations to design activities and strategies to increase these levels and ultimately increase the normative commitment of the members.

- City marketers might be better equipped to develop and utilise residential online activity communities to build relationships with residents, share knowledge with residents and increase social interactions amongst residents which might improve the social welfare of the residents of the city.

- Organisations and cities might also be able to expand their communication channels, and move beyond the traditional communication channels, by also including online communities in their communication plans through a better understanding of the construct and how commitment might lead to online community citizenship behaviours.

1.6 RESEARCH OBJECTIVES

The following section provides an overview of the primary and secondary objectives of this study.

1.6.1 Primary objective

The primary objective of this study is to develop a commitment and online community citizenship behaviour model for residential online activity communities on Facebook.

1.6.2 Secondary objectives

With the aim of achieving the primary objective of this study, the following secondary objectives have been formulated, which is presented in Table 1-3.

Table 1-3: Secondary objectives of this study

Secondary Objectives	
Secondary objective 1	To provide an overview of extant literature related to: 1a) the relationship marketing theory and social exchange theory. 1b) the main constructs of this research study, namely, affective commitment, normative commitment, online community citizenship behaviours and the identified factors that may contribute towards commitment in an online community environment. 1c) the interrelationships between the constructs of this research study.
Secondary objective 2	To develop a sample profile of the residential online activity community members on Facebook who participated in this research study.
Secondary objective 3	To measure the level of emotional support perceived by active members of the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 4	To measure the level of social switching costs perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 5	To measure the level of position involvement perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 6	To measure the level of subjective norm perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 7	To measure the level of perceive critical mass perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 8	To measure the levels of commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. Most specifically, by investigating the: 8a) level of affective commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. 8b) level of normative commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

Table 1-3: Secondary objectives of this study (cont.)

Secondary Objectives	
Secondary objective 9	To measure the levels of online community citizenship behaviours of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. More specifically to measure the extent to which active members of the residential online activity community on Facebook, have the intention to: 9a) provide feedback to administrators relating to the general improvement of the residential online activity community on Facebook. 9b) provide feedback to administrators relating to operational problems experienced on the residential online activity community on Facebook. 9c) perform policing behaviours towards administrators of the residential online activity community on Facebook. 9d) perform helping behaviours towards fellow members relating to the use of service of the residential online activity community on Facebook. 9e) perform helping behaviours towards fellow members of the residential online activity community on Facebook relating to personal problems they are experiencing.
Secondary objective 10	To examine the interrelationships among the identified research constructs of this study.

1.7 RESEARCH METHODOLOGY

The following sections provide a brief outline of the research methodology which was followed in this study.

1.7.1 Literature sources

The theoretical background of this study was based on secondary data obtained from academic journals, articles, books, research dissertations, accredited research documents and newspaper articles.

The databases used for this study include: SACat (National catalogue of books and journals in South Africa), SA ePublications (South African journals), EBSCOhost (International journals on Academic Search Premier, Business source premier, Communication and mass media complete and EconLit), Emerald (International journals), ScienceDirect (International journals), ProQuest (International dissertations in full text) and Internet (Google and Google Scholar).

1.7.2 Research design and data collection method

A research design is an outline used for conducting marketing research and gives the details of the procedures necessary for acquiring the information needed to solve the research problem (Malhotra, 2010:102) Research designs can be classified as exploratory, descriptive, and causal research designs (Burns *et al*., 2017:72). This study made use of a descriptive research design, which will be discussed in the next section.

1.7.2.1 Descriptive research design involving online surveys

A large share of marketing research use descriptive research where hypotheses normally exist, and the study aims to answer the questions of who, what, where and how (Aaker *et al.*, 2013:75; Burns *et al*., 2017:98). A descriptive research design is typically used to describe marketing characteristics or functions where specific hypotheses for the research project were formulated.

Methods to collect data for descriptive research designs include quantitative data using surveys and/or panels (Malhotra, 2010:104). Two types of descriptive studies are furthermore available for researchers to use namely cross-sectional and longitudinal studies. A cross-sectional study is most often used in descriptive research designs, where the collection of information from the selected sample is gathered at only one point in time (Malhotra, 2010:109; Burns *et al*., 2017:99). As this study collected quantitative data to examine the research hypotheses, and data was only collected at one point in time, a cross-sectional descriptive design was regarded most suitable.

Furthermore, because this study was descriptive, primary quantitative data was collected using a self-administered structured questionnaire. A computer-administered questionnaire was used, where respondents were directed to an online questionnaire, where the questionnaire was completed (Burns *et al*., 2017:179). Online questionnaires were selected for this research, as this type of data collection method is relatively inexpensive, and the sample of the study involves members of a residential online activity community on Facebook which takes place within the online environment (Burns *et al*., 2017:179).

The constructs, presented in the conceptual model in Figure 1-1, were measured using multiple items. An extensive literature review was conducted to establish valid and reliable measurement items for each construct assessed in the survey. Respondents were asked to indicate their level of agreement with each item, using a five-point unlabelled Likert-type scale where 1 indicated complete disagreement and 5 indicated complete agreement with the item. A Likert scale is viewed as an interval measurement scale type where the objects represent equal increments (Burns *et al*., 2017:209). The proposed layout of the questionnaire is presented in Table 1-4.

Table 1-4: Questionnaire layout

Layout	Description
Preface	The objective of the study was provided, confidentiality and anonymity were discussed, and the contact details of the researcher was supplied.
Screening questions	Screening questions included: • The respondent has to select which one of the listed residential Facebook groups have they written posts and/or replied to posts from other members of the group, during the past 12 months. Should the respondent be active on more than one group, they were requested to indicate the group they use most often. • The respondent also has to indicate if they are older than 18 years of age.
Section A	The items measuring the commitment construct and their antecedents were presented. Respondents were asked to indicate their level of agreement using the five-point Likert scale provided.
Section B	The items measuring the online community citizenship dimensions were presented. Respondents were asked to indicate their level of agreement using the five-point Likert scale provided.
Section C	Demographic information of respondents were recorded and include age, gender, race, employment and education and marital status.
Postscript	At the end of the questionnaire, the respondent was thanked for taking part in this research.

The online questionnaire was designed using “Google forms” which is an online survey design tool that enables researchers to get answers quickly and effectively. “Google forms” have some questions types to choose from as well as page branching and skip question logic. Responses were saved into an Excel sheet for further data analysis (Forms, 2017). Due to some members being active on more than one Facebook group, it was decided to include, as a screening question, the Facebook group where they most often participated during the last 12 months. Sections A and B were completed based on the interaction with this mentioned Facebook group.

1.7.3 The sampling process

A critical part of the research process is sampling, where conclusions are drawn from the entire population by taking measurements from only a proportion of the population (Babin & Zikmund, 2016:337). According to these authors, the steps in the selection of a sample include: 1) defining the target population, 2) selecting the sample frame, 3) determine if a probability or non-probability sample technique will be used, 4) plan procedures for selecting sampling units, 5) determine sample size, 6) select actual sampling units and 7) conduct fieldwork.

A summary of the required information for the sample plan of this study is presented in Table 1-5. Each step will be subsequently discussed.

Table 1-5: Sample plan

Element	Description
Target population	Males and females, older than the age of 18 who is currently an active member of a residential online activity community on Facebook in South Africa.
Sampling frame	A sample frame is not available for this study since the contact details of the members of these Facebook groups are not available to the researcher and the members of the Facebook groups can only be contacted through the message function of Facebook. A test-run of the data collection proved that using the message function is not effective at all and therefore the member is known but not contactable.
Sampling technique	Non-probability sampling which includes quota and convenience sampling will be used.
Sampling unit	Residential online activity communities on Facebook in the nine provinces of South Africa. Five residential online activity communities per province which include the biggest group according to the number of members, and four smaller groups.
Sampling element	Male and female adults, 18 years and older, who are current and active members of residential online activity communities in South Africa.
Sample size	The planned sample size is 500 respondents that will be proportionately calculated based on a residential online community Facebook group size.
Extent	South Africa
Period	October and November 2017

1.7.3.1 Target population

The target population of a research study can be defined as all the individuals or objects that are represented by the sample of the study (Babin & Zikmund, 2016:340; Brown *et al.*, 2014:301). The target population for this study included males and females, 18 years and older, who are current and active members of a residential online activity community on Facebook in South Africa. Mahery and Proudlock (2011:6) state that, in South Africa, when a person reaches the age of 18 years old, they are viewed as an adult. He/she can then conclude valid contracts without parental assistance, they can be employed to perform work, can act as a director of a company, can open a bank account, can apply for credit in their personal capacity, can sue or be sued in their own name, consume alcohol and decide where they want to reside. This study, therefore, refers to adults as persons who are 18 years or older and have these mentioned responsibilities and rights. Based on the mentioned responsibility and rights which a person acquires when they reach the age of 18, it is assumed that an adult can make reasonable choices and are legible to be interviewed. Furthermore, active and current members of online activity communities on Facebook were selected due to these members having experienced and participated in the online community and are therefore able to indicate their level of agreement with the measurement items in the questionnaire as well as the extent to which they plan to engage in citizenship behaviour.

1.7.3.2 Sampling frame

A sampling frame consists of all the population elements from which a sample will be drawn and forms the main basis of the sample units in the population (Brown *et al.*, 2014:303; Burns *et al*., 2017:239). Since the members of the residential online activity communities on Facebook within South Africa are known but not contactable, no sample frame existed.

1.7.3.3 Sampling technique

Sampling techniques can be classified into two broad categories namely, probability and non-probability sampling (Brown *et al.*, 2014:304). Probability sampling is a technique where every member of the population has a known probability of being selected (Babin & Zikmund, 2016:348). With probability sampling, a sample frame is required, and the information regarding the units/objects is needed before conducting the sampling technique (Aaker *et al.*, 2013:360,366). According to Brown *et al.* (2014:348), non-probability sampling is when the probability of any particular member of the population being selected is unknown.

- **Sampling technique for selecting sampling units**

  The sampling unit for this study included residential online activity communities on Facebook within South Africa. Since there was no sampling frame available, non-probability sampling was used. Regarding the sampling units, quota sampling was employed. Quota sampling refers to the process to ensure that the different subgroups within a population are represented based on the applicable sample characteristics required by the researcher (Babin & Zikmund, 2016:349). Based on the group size of residential online activity communities on Facebook of each province, the biggest group was included together with four smaller groups. The group sizes were furthermore used to proportionately calculate the number of respondents per group. Quota sampling for this study entails the determining of the number of members of each residential online activity community to be included.

- **Sampling technique for selecting sampling elements**

  The sample element of this study was male and female adults, 18 years and older, who are current and active members of residential online activity communities in South Africa. To select the sampling elements, convenience sampling was employed to reach the determined quotas. Convenience sampling is a sampling method in which the samples are achieved due to the samples being readily and conveniently available (Brown *et al*., 2014:305). A link to the questionnaire together with an invitation message were posted on

each selected residential online activity community on Facebook for the members to complete the online survey. The sample size for this study is subsequently discussed.

1.7.3.4 Sampling size

Some factors exist which can be used to determine the sample size for a given research project, including general rules of thumb, budget constraints and value of the information, to name but a few (Aaker *et al.*, 2013:380). The decision was made in this study to survey at least 500 respondents, to enable the researcher to counter for missing values in the data and to perform structural equation modelling. Missing values are created when a respondent has not answered a question in the questionnaire which complicates the testing of SEM models (Hair *et al.*, 2014:573). To perform structural equation modelling, Hair *et al.* (2014:576) recommend that when the number of factors is more than six, a sample size of 500 is required, and since the theoretical model of this study contains more than six factors, the recommendation was followed.

The sample per residential online activity community on Facebook was proportionately calculated based on the number of members of each Facebook group and are shown in Table 1-6.

Table 1-6: Proportionate calculation of total sample size per Facebook page

Province	Facebook group name	% of all groups	Sample size
Eastern Cape	What is happening in East London, South Africa.	20%	98
	Grahamstown.		
	Jeffreys Bay.		
	St Francis Bay- The Official Facebook Group.		
	Friends of King Williams Town.		
Free State	Beautiful Bloemfontein.	9%	43
	Bethlehem nuus.		
	Heibron Herald nuus.		
	Virginia, my dorp, my trots.		
	Odendaalsrus.		
Gauteng	People who live in Midrand.	8%	42
	Not just another group in Midrand.		
	Sandton community.		
	Ek is van die ooste.		
	Wat gebeur in Fochville.		

Table 1-6: Proportionate calculation of total sample size per Facebook page (cont.)

Province	Facebook group name	% of all groups	Sample size
Kwa-Zulu Natal	Durban North Community + Neighbours.	8%	41
	Amanzimtoti neighbours.		
	Westville info group.		
	Everything Musgrave.		
	Richards Bay.		
Limpopo	Nylstroom Dorp / Town.	6%	28
	Vaalwater - hart van die Waterberg.		
	Hoedspruit town, South Africa.		
	Naboomspruit.		
	Ellisras saampraat.		
Mpumalanga	Nelspruit!	12%	61
	Nelspruit / Witrivier / Barberton.		
	Middelburg Belfast Dullstroom Lydenburg Wall.		
	Barberton/Lowveld/Mpumalanga.		
	People who live in Marble-Hall.		
North West	Potchefstroom.	14%	72
	Brits, Ons Land En Sy Mense Praat Saam.		
	Staan Saam Rustenburg.		
	Concerned Community of Vryburg (CCV).		
	Klerksdorp, ons stad.		
Northern Cape	Saam Staan Kimberley!	6%	29
	Kuruman, Kathu, Postmasburg and Upington social network		
	Kathu.		
	Hopetown nuus.		
	Upington mense.		
Western Cape	Bellville, Kraaifontein,Brackenfell, Durbanville,Kuilsrivier, en alle areas.	17%	86
	Paarl pals.		
	Mosselbaai op sy BESTE!		
	Oudtshoorniete staan saam.		
	Staan saam Clanwilliam.		
TOTAL		**100%**	**500**

1.7.3.5 Pretesting the questionnaire

Pretesting of a questionnaire (pilot testing) is a screening procedure that includes a trial run of the questionnaire to be completed by a group of respondents with the aim of establishing and rectifying possible fundamental problems with the survey design (Babin & Zikmund, 2016:199, Malhotra, 2010:74). One of the ways to conduct pretesting of a questionnaire involves the researcher to collect data amongst a small group of respondents which correspond with the sample of the study (Babin & Zikmund, 2016:199). Normally about five to ten respondents are included in the pre-testing phase, but for this study, 30 respondents from the target population were requested to complete the questionnaire (Burns *et al*., 2017:76).

The data obtained from the pre-test was used to assess the measurement scale reliability using coefficient alpha and also to assess the uni-dimensionality of the scales (Churchill, 1979:69). Churchill (1979:68) states that the coefficient alpha is the first measure to assess the quality of the instrument and that a high coefficient alpha indicates a good and reliable instrument.

1.7.4 Data analysis

Once the questionnaire has been pretested, and the adjusted questionnaire has been surveyed among the larger sample, the data collected was analysed. The aim of data analysis is the use of statistical tools to present data in a form that satisfy the research objective (Burns *et al*, 2017:317). Before data analysis, data preparation which include data editing, coding, cleaning and dealing with missing data were performed (Aaker *et al.*, 2013:406; Brown *et al.*, 2014:359). Once the data preparation was completed, the Statistical Package for Social Sciences (SPSS) version 24 was used to determine frequencies and descriptive statistics for describing the demographic profile of the respondents and to provide insight into the constructs measured in this study. An Exploratory Factor Analysis (EFA) was conducted to assist in the verification of the various online citizenship behaviour factors and measurement scales that were adapted from the literature and assessed for relevance within the context of this study.

Using MPlus version 8 software, confirmatory factor analysis was conducted next, to assess the validity and construct reliability of the measurement model and to confirm further the validity of the various online citizenship behaviour scales examined in this study (Hair *et al.*, 2014:92). To achieve the primary objective of this study, structural equation modelling (SEM) was performed to determine the effect of the different types of commitment on online community citizenship behaviour (Hair *et al.*, 2014:639) and the extent to which the commitment factors are impacted by the variables identified in the literature review.

1.8 CHAPTER OUTLINE

The chapter outline for this study is presented in Table 1-7.

Table 1-7: Chapter layout

Chapter	Contents
Chapter 1	Chapter 1 offered an overview of the research study. The chapter focussed on providing a better understanding of the research background and problem studied. A literature review was also provided that offers more insight into the key theories, constructs and hypotheses for this study. The final section of the chapter was devoted to a discussion of the conceptual model, purpose and research objectives of the study, research methodology and chapter outline of the thesis.
Chapter 2	Chapter 2 will provide a detailed discussion on relationship marketing theory The chapter will furthermore explore the different types of commitment and will provide more insight into the antecedents of each type of commitment as portrayed in the conceptual model.
Chapter 3	Chapter 3 will focus on the social exchange theory and the citizenship behaviour construct. Online community citizenship behaviours will also be explored in more depth to obtain a greater understanding of the context of the study.
Chapter 4	Chapter 4 will provide more insight into the conceptual model and the research hypotheses that have been formulated for this study.
Chapter 5	Chapter 5 will provide a comprehensive discussion of the study's planned research methodology.
Chapter 6	Chapter 6 will present the findings from the data analysis and will include a discussion of the results obtained.
Chapter 7	Chapter 7 will offer the conclusions about online community citizenship behaviour and commitment and will also include a discussion of the final model for this study. This chapter will conclude with research implications as well as recommendations for further research.

1.9 SUMMARY

Customer citizenship behaviour is viewed as the optional, voluntary behaviour by customers. With the emerging of the internet, the definition of citizenship behaviour was first adapted to e-commerce and cited as e-customer citizenship behaviour and after that adapted to the online community environment, known as online community citizenship behaviour. Online community citizenship behaviour is grounded in the social exchange theory, which indicates that members of an online community are motivated to perform voluntary actions when they believe that they have benefitted from the service (experience) received by the organisation (online community). For this reason, online community interactions are seen as opportunities for members to respond to beneficial experiences by performing online community citizenship behaviours. Based on an investigation into the dimensions of offline customer citizenship behaviour and e-customer citizenship behaviour, it was concluded in this chapter that online community citizenship

behaviours could either be directed towards members or directed towards administrators of online communities, depending on who is receiving the behaviour.

Further evidence then indicated that commitment is an antecedent of online community citizenship behaviour, however, little is known about the extent to which various forms of commitment may contribute towards citizenship behaviours directed towards members and administrators of residential online activity communities on Facebook. Hence, it is the aim of this study to contribute to the field of relationship marketing and online community citizenship behaviour by investigating the effect of different commitment types on online community citizenship behaviour. The novelty of the research contribution is embedded in the categorisation of citizenship behaviour within an online community environment (i.e. member directed and administrator directed) and the uncovering of a novel set of factors they may contribute to normative and affective commitment and ultimately the stated citizenship behaviours.

Furthermore, from a managerial perspective, globally, online communities are regarded as one of the most popular forms of online services where members join socially to interact with other members, share knowledge and for entertainment reasons. Importantly, online activity communities are a type of community which is formed by members due to their common interest in a specific topic, like residents of a city forming a residential online activity community on Facebook. Participation by members of an online community is seen as a key element required for the success of the community and research further indicated that when members are committed towards the online community, their participation level increases. Therefore, as participation is a key challenge for administrators of such online community, it is important that administrators understand the factors that contribute to the commitment levels of members as to be able to impact the participation levels of these members. Administrators of residential online activity communities might consequently benefit from the proposed study by obtaining greater insight into commitment and to implement more effective community building attempts and retention efforts. Categorising the online community citizenship behaviours might also help administrators to better understand the type of citizenship behaviours performed by the members who actively participate in the community. Additionally, this study might support the digital marketing efforts of organisations and city marketers, which may benefit from the research findings to strengthen loyalty and coherence within a community.

Chapter 2 of this study will focus on commitment and the contributing antecedents.

CHAPTER 2

RELATIONSHIP MARKETING AND COMMITMENT

2.1 INTRODUCTION

It was established in Chapter 1, that this study aims to develop a commitment and online community citizenship behaviour model for residential online activity communities on Facebook. Currently, there seems to be limited knowledge on a set of factors that may contribute towards affective and normative commitment of members of a residential online activity community and the ultimate impact it may have on online community citizenship behaviour, as directed towards administrators and members of the online community. Insight into these matters may offer valuable assistance to administrators of online communities, as they will have a better understanding of the factors which might result in more committed members and contribute to voluntary citizenship behaviours. Knowledge of these matters may also provide insight into the relationship marketing theory (grounding commitment), customer citizenship behaviour and the extent to which these two main theories are connected through the social exchange theory. Based on the premises of the social exchange theory (Blau, 1964), committed members believing they receive benefits from the online community, may respond by performing voluntary behaviours.

Before the execution of the field study, however, it is first necessary to obtain a comprehensive understanding of the constructs and grounding theories relevant to the proposed model. The aim of Chapter 2 as such is to focus on the first part of the conceptual model and to provide more insight into relationship marketing and its core dimension namely commitment. Relationship marketing represents the attracting, maintaining and enhancing of long-term and profitable customer relationships, which creates value using a network orientated approach (Berry, 1983:28; Grönroos, 1996:11; Gummesson, 2014:5). Derived from the generic elements of relationship marketing, it was established that relationship marketing also applies to the online community environment where relationship marketing can be defined as the attraction, continuing and enhancing of member relationships through member participation, communication and value co-creation within a social network. It was further found that both members and administrators of online communities receive various benefits from relationship marketing initiatives.

Commitment is grounded in relationship marketing theory (Lewin & Johnston, 1997:28; Morgan & Hunt, 1994:31) and has been defined as the psychological state where customers are committed to establish, maintain and continue with the relationship which provide mutual benefits to all parties involved (Li *et al*., 2016:926; Moorman *et al*., 1992:316; Morgan & Hunt, 1994:23).

Commitment has also been found suitable to understand members' behaviour within an online community (Bateman *et al.*, 2011; Chen *et al.*, 2013; Jeong *et al.*, 2016; Yang *et al.*, 2017). Online community commitment is defined as the psychological state of a member to maintain and continue with the relationship which reflects mutual benefits for all parties involved. Commitment further comprises three sub-dimensions namely affective, continuance and normative commitment (Meyer & Allen, 1991).

These matters are further explored in Chapter 2 which is structured as follows: The chapter commences by defining marketing and relationship marketing. After this discussion, the nature of relationship marketing within an online community environment is presented, which is then followed by the benefits of relationship marketing for customers, organisations, members and administrators of online communities. The chapter concludes with a discussion on commitment. Insight is provided into the generic elements of commitment, the nature of commitment within an online community environment, the dimensions of commitment and the antecedents of commitment that are further explored in this study.

2.2 MARKETING AND RELATIONSHIP MARKETING DEFINED

The following sections include a discussion regarding marketing and relationship marketing.

2.2.1 Marketing defined

The term marketing was included in the English language since 1561, after which various definitions of the marketing concept has been published (Gamble *et al*., 2011:227). The first official marketing definition was published in 1960 by the American Marketing Association and stated that marketing could be defined as "business actions which are performed to direct the flow of goods and services from the producer to consumer" (AMA, 1960:15). This definition was revised in 1985 by the American Marketing Association and adapted to define marketing as the "process of planning and executing the concept, price, promotion and distribution of ideas, goods and service to create exchanges that will satisfy individual and organisational objectives and needs" (AMA, 1985:1). Again in 2004, the American Marketing Association adopted the definition by focussing on the creating and delivery of value through customer relationships compared to the previous definition which focussed only on the exchange taking place (Sheth & Uslay, 2007:302). The 2004 marketing definition define marketing "as an organisation function and set of processes for creating, communicating and delivering value to customers and managing these relationships with the customer in such ways that will benefit both the organisation and customer" (Rownd & Heath, 2008). In 2013, the American Marketing Association approved yet another revised definition of marketing, where marketing was defined as "the activity, set of institutions,

and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large" (AMA, 2017).

From the definitions provided it is then evident that the focus of marketing has shifted during the last few decades. Three paradigms of marketing have been introduced since the 1960s, as summarised by Gummesson (2017a:17):

- **Paradigm 1:** This paradigm took place from the beginning of 1970 and were characterised by the establishment of the 4P's of marketing (product, price, place and promotion), mass production and mass distribution of customers' goods.

- **Paradigm 2:** Followed between 1970 and 2000 where both service marketing and management evolved. During this paradigm, relationship marketing, customer relationship management and one-to-one marketing were introduced. Additionally, significant effort was placed on non-profit or societal marketing (Christopher *et al.*, 1991:6). During the 1980s, quality management was rediscovered with the focus on value and customer satisfaction.

- **Paradigm 3:** Started in 2000 and was the beginning of commonalities, interdependencies and stakeholder approaches where marketing complexity and theory generation took place. The main focus was a new marketing and service theory where relationships and networks are viewed as important. During this paradigm, online marketing and social media emerged and is growing at a rapid rate.

The following section provides more insight into the relationship marketing concept that developed during paradigm 2 and still resonates under paradigm 3.

2.2.2 Relationship marketing

The economic recession in early 1980 is viewed as the force behind relationship marketing when inflation took place without any economic growth (Sheth, 2017:1) and it was necessary to establish relationships with customers to generate sales. The next section provides an overview of relationship marketing definitions that have been formulated over the years and as well as key elements that appear to be generic among the definitions provided.

2.2.2.1 The generic elements of the relationship marketing concept

Since the first definition of relationship marketing by Berry (1983:25), various authors have adapted, extended and redefined the concept. Table 2-1 provides a summary of the most widely adopted definitions since the concept of relationship marketing was introduced.

Table 2-1: Definitions of relationship marketing

Author(s)	Adapted definition of relationship marketing	Author(s)	Adapted definition of relationship marketing
Berry (1983:25)	Relationship marketing can be defined as attracting, maintaining and improving the relationship with customers within multi-service organisations.	Rust *et al.* (2001)	Relationship marketing is a process of selecting the best customers, developing strong, deeper more personal relationships with them and creating customer equity.
Levitt (1983)	Relationship marketing is viewed as a 5-step process and includes awareness, exploration, expansion, commitment and dissolution.	Parvatiyar and Sheth (2001)	Relationship marketing is a comprehensive strategy and process which involves the attaining, retaining and joining discerning customers to develop exceptional value for both the organisation and customer.
Jackson (1985:1)	Relationship marketing aims to build and maintain lasting and profitable relationships between parties.	Gebert *et al.* (2003)	Relationship marketing focuses on the allocation of resources to assist business activities in gaining competitive advantages and managing the relationship between an organisation and current and prospective customers
Grönroos (1991:8)	Relationship marketing involves long-term relationships which develop between customers and other groups.	Kincaid (2003)	Relationship marketing includes the tactical usage of information, processes, technology and individuals to direct the relationship between the customer and organisation across the entire customer lifecycle.
Berry and Parasuraman (2004)	Relationship marketing involves the definition of attracting, developing and retaining customer relationships.	Kotler and Armstrong (2004)	Relationship marketing is the process of building and maintaining profitable customer relationships using the delivery of superior customer value and satisfaction.
Christopher *et al.* (1991)	Relationship marketing has a twofold focus on attaining and retaining customers.	Sin *et al.* (2005)	Relationship marketing is a complete process and strategy that allow the organisation to identify, obtain, retain and foster profitable customer through the building and maintenance of long-term relationships with them.

Table 2-1: Definitions of relationship marketing (cont.)

Author(s)	Adapted definition of relationship marketing	Author(s)	Adapted definition of relationship marketing
Webster (1992)	Relationship is a process of comprehending and managing profitable customer relationships using the delivery of superior customer value, service and satisfaction.	Blery and Michalakopoulos (2006)	Relationship marketing is a strategy which can assist the organisation to build long-term relationships with their customers and improve revenues using the correct management systems and use of customer-focused strategies.
Morgan and Hunt (1994:22)	Relationship marketing signifies all marketing activities which focus on the establishment, development and maintenance of successful relational exchanges.	Gummesson (2014:5)	Relationship marketing is grounded on the interaction within networks of relationships.
Cravens and Piercy (1994)	Relationship marketing is the understanding, explaining and management of the continuous cooperative business relationship between suppliers and customers.	Ramani and Kumar (2008)	Relationship marketing is a process of creating innovative capabilities and providing long-lasting competitive advantages.
Grönroos (1996:11)	Relationship marketing is used to identify, establish, maintain and exchange relationships between customers and other participants while gaining a profit and to meet the objective of all parties using a common exchange and accomplishment of promises.	Lambert (2009)	Relationship marketing is seen as a strategic, process orientated, cross-functional and value creating a strategy for buyer and seller to achieve superior financial performance.
Bennett (1996)	Relationship marketing pursues the establishment of long-term, committed, trusting and cooperative relationships with customers which are characterised by honesty and concern for high-quality products and services.	Benouakrim and El Kandoussi (2013:148)	Relationship marketing is a strategic process with the aim to establish, develop, maintain and strengthen the network of relationships between the various stakeholders, based on strong economic and social standards and the achievement of mutual objectives.
Ballantyne (1997)	Relationship marketing is an evolving framework for the creation, development and sustainment of valuable exchanges between parties where the exchanges emerge to provide continuous and constant associations between the parties.	Sheth *et al.* (2015)	Relationship marketing is defined as a continuous process of engaging in cooperative actions and plans with current and end-user customer to establish and enhance economic, social, psychological value and profitability.

Table 2-1: Definitions of relationship marketing (cont.)

Author(s)	Adapted definition of relationship marketing	Author(s)	Adapted definition of relationship marketing
Bendapudi and Berry (1997:33)	Relationship marketing is concerned with the understanding and satisfying of customer needs.	Kapadia (2017)	Relationship marketing is a type of marketing that differs from traditional marketing as it is not transactional but rather relational of nature that focuses on creating a better brand experience that will assist to attract new customers and retain existing customers.
O'Malley *et al.* (1997)	Relationship marketing is concerned with identifying, specifying, initiating, maintaining and terminating long-term relationships with important customers and parties. These relationships take place through the mutual exchange, promises fulfilment, relationship norms being adhered to satisfy needs and enhance the experiences of the parties involved.	Gummesson (2017b:5)	Relationship marketing is interaction within networks of relationships
Galbreath and Rodgers (1999)	Relationship marketing is concerned with the management of technology, process, information sources and individuals required to develop an environment which permits a 360-degree view of its customers.		

From Table 2-1 and a further literature review, it is evident that relationship marketing consists of various key elements that are generic to the concept. These key elements include:

- **Attracting, maintaining and enhancing customer relationships**

  The first key element noted from Table 2-1, is that relationship marketing concerns attracting, maintaining and enhancing relationships with customers. Grönroos (1996:19) indicated that relationship marketing has resulted from a shift in marketing from not only attracting customers but also maintaining these customers and enhancing the relationship between the customer and organisation through being concerned about the customer and taking care of them. Attracting customers is perceived as only an intermediary step in the marketing process, and closer relationships should be formed with customers to maintain the relationship and also to enhance the interaction (Sheth *et al.*, 2015:121). Various studies have indicated that retaining customers is more profitable than attracting new customers and has mentioned that it cost five times more to acquire new customers than to satisfy and retain existing customers (Kotler & Keller, 2016:163; Perreault *et al.*, 2015:46). The relational marketing process should, therefore, identify potential customers, establish a relationship with them and maintain and enhance this relationship to the benefit of the organisation and of the customer (Grönroos, 2004:101; Gummesson, 2017a:17).

- **Long-term, continuous process**

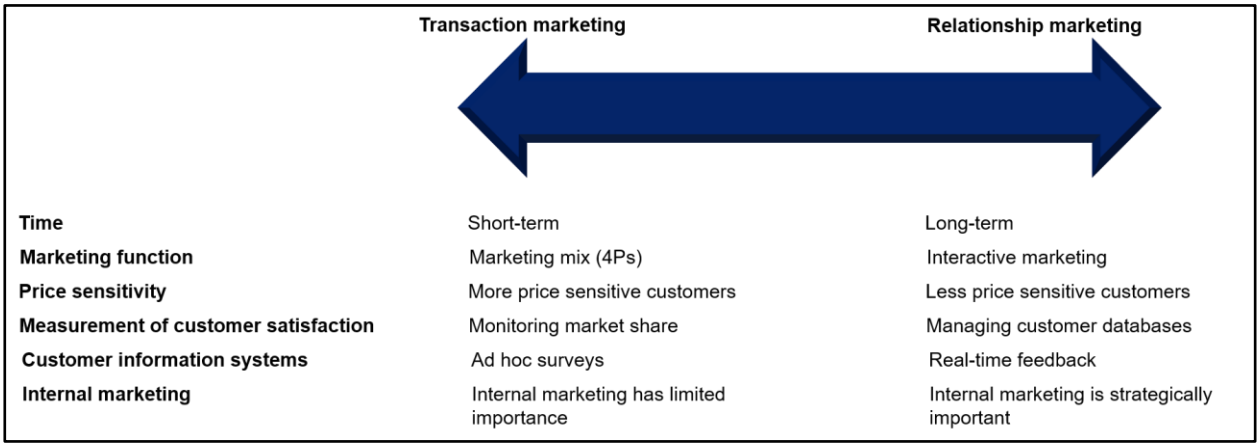
  Relationship marketing is furthermore characterised by long-term customer relationships which are customer participation focused (Gummerus *et al.*, 2017:2). From the beginning of the relationship marketing concept, it was mentioned that transactional marketing should be developed into long-term continuous relationships and should be an ongoing process instead of a brief encounter (Gummesson, 2017a:17; Morgan & Hunt, 1994:21). The shift from interest in a single transaction with customers to doing business on a long-term scale has changed the nature of consumption and usage from a pure outcome usage to an ongoing process usage or consumption (Grönroos, 2004:100). In order words, when customers interact with organisations, the interaction is not once-off with the focus on the outcome of the transaction but rather an interaction with the aim of developing a long-term relationship with the organisation. Relationship marketing is therefore viewed as a process and all marketing activities should focus on the management of this relational process (Grönroos, 2004:101) which can be viewed as a three-step process to attract, maintain and improve the relationship between customers (Benouakrim & El Kandoussi, 2013:148). Additionally, communication, interaction and value can be viewed as key processes necessary for relationship marketing (Grönroos, 2004:102). Communication in relationship

marketing must include a two-way and sometimes even a multi-way communication between the organisation and customers and should be aimed at maintaining and enhancing the relationship (Grönroos, 2004:105).

- **Swift from transactional exchanges to relational exchanges**

  Grönroos (1991:9; 1995:253) indicated a marketing strategy could be seen as a continuum, where transactional marketing is placed on the one side of the continuum and relationship marketing on the other side. This marketing strategy continuum is shown in Figure 2-1.

Figure 2-1: Marketing strategy continuum



Source: Adapted from Grönroos (1991:9; 1994:11).

From Figure 2-1, it is evident that there exist some distinct differences between transactional marketing and relationship marketing. Transactional marketing is more short-term based whereas relationship marketing, is a long-term process. With transactional marketing, the established 4P's are mostly used, however, this old-fashioned paradigm of marketing focuses only on the attraction of business instead of customer retention (Gummesson, 2008:16). Relationship marketing, on the other hand, make use of interactive marketing. Consequently, information about the product, place, promotion and product is not provided using one-way communication but rather using interactive marketing in which both the customer and the organisation participates.

Furthermore, in terms of the price sensitivity of customers, customers of transactional marketing tend to be more price sensitive whereas relationship marketing customers are less price sensitive due to the relationship which was developed between the parties. To measure customer satisfaction of transactional marketing customers, organisations monitor their percentage of market share while customer satisfaction of relationship marketing customers is measured using the management of customer databases. Internal marketing

is also viewed as an important element of relationship marketing compared to the limited use therefore in transactional marketing strategies. Internal marketing was originally defined by Berry (1981:25) as the activity of considering employees as internal customers, their tasks as internal products that satisfy the needs of these internal customers while achieving organisational goals. Since the initial mention of the concept, various authors have re-defined, tested and explored the concept (Abzari *et al.*, 2011; Grönroos, 1983). Internal marketing is therefore concerned with the hiring, training and motivating of employees so that these employees can serve customers better (Kotler & Keller, 2016:45). Consequently, when employees are trained and receive the relevant communication, they can understand the importance of relationship marketing and can apply relationship marketing strategies.

- **Value creation**

  Further research has also indicated that competition and self-interest are viewed as the major drivers of value within the transaction marketing discipline compared to relationship marketing where cooperation is believed to create value (Morgan & Hunt, 1994; Sheth & Parvatiyar, 1995:399). Competition gives customers more choices and therefore is viewed as value offered to customers for their self-interest (Sheth & Parvatiyar, 1995:399). Considering relationship marketing, Sheth (2017:3) states that there has been a shift in the revitalising of relationship marketing and indicates that a joint venture with customers is needed where a collaborative co-creation of value occurs through a mutual commitment to research and complementary capabilities of all parties. This commitment requires that both the organisation and the customer commit to resources like time, money and capabilities.

  Value-in-use seeks the active participation of customers in resource-sharing and contribution to enhance relational outcomes (Payne & Frow, 2017:13). These authors further mention that relationship marketing is therefore viewed as a key priority process since relationship marketing focus on the creation of continuous value-in-use instead of focussing only on building a relationship with customers. Customers are therefore no longer viewed as being passive but play an active role to create value since both the customer and the organisation are responsible for creating value. Subsequently, it is important that organisations change from viewing customers as passive receivers to ones where the customers are viewed as mutual value creators (Payne & Frow, 2017:13). Furthermore, since relationship marketing required more effort than transactional marketing, the relationship should create value for both the customer and the organisation (Grönroos, 2004:108). The valuing process of relationship marketing is therefore formed between organisations and customers when the value for the customer is developed over time.

- **Profitability**

  Relationship marketing also includes the idea that not all customers should be treated the same, and that companies should focus on the most profitable customers and maintain these customers so that the organisation does not have to acquire new customers all the time (Alander, 2010:11). For most organisations, the financial implication of relationship marketing is a prime concern, and therefore organisations need to improve the perceived customer value which will enable organisations to establish and maintain long-term relationships which are cost-effective (Ravald & Grönroos, 1996:21). Furthermore, it was found that stronger relationships associated with customer retention, results in higher sales, increased market share and profitability (Chenet *et al.*, 2010:342). Therefore relationship marketing is a strategy which results in long-term profitability (Gummesson, 1994:6).

- **Network orientated**

  Another key element present in the relationship marketing definitions is that of the network approach (Cravens & Piercy, 1994:39). Hennig-Thurau and Hansen (2000:4) mention the network approach to relationship marketing and suggests that organisations are viewed as players in numerous multi-faced and complex systems known as networks of relationships. It was further indicated that organisations become a network of relationships when all members of the network influence both quality and productivity (Gummesson, 1998:4). These networks are therefore a set of relationships, and within these relationships, the participants interact with each other. Subsequently, it is not only one participant that takes the initiative but rather all participants of the relationship who have a responsibility to be involved (Gummesson, 1998:10). Relationship marketing progresses to an interactive process where different types of contacts between organisations and customers take place (Grönroos, 2004:105). These contacts can take place between individuals, individuals and machines or individuals and systems. Gummesson (2008:289) furthermore suggests that relationship marketing is a marketing perspective focussing on the network organisation and the network society. Relationship marketing exists in three environments namely the market, society and the organisation which is woven together into a network. The relationship marketing environment, therefore, does not only include the market and society but also the organisation which has to transform into network organisation which consists of various relationships (Gummesson, 1994:10). Furthermore, relationship marketing also includes electronic relationships which are networks taking place using technology and also personal and social networks which consist of networks between friends and friends-of-friends (Gummesson, 1994:13). Additionally, the cooperation in a network promotes the success of relationship marketing strategies (Morgan & Hunt, 1994).

Consequently, while several definitions of relationship marketing have been provided in the past, against the background of relationship marketing elements described in this section, it is then possible to formulate the following definition of relationship marketing for this study:

Relationship marketing can be defined as a long-term continuous process of attracting, maintaining and enhancing of customer relationships using a network orientated approach, where the relational exchange is focused on value creation which may ultimately lead to greater profitability for the organisation.

The next section further explores relationship marketing within an online community environment.

2.2.2.2 The nature of relationship marketing within an online community environment

Information technology has changed many areas including marketing and will keep changing as it is far from reaching maturity (Gummesson, 2014:660). Furthermore, digital, mobile and social technological developments have impacted both the dynamics of the customer-organisation relationships as well as the organisation's relationship with all their stakeholders (Payne & Frow, 2017:13). Various studies have attempted to investigate and apply the concept of relationship marketing to online environments with the first definition of online relationship marketing developed by Gan *et al.* (2007:5), who defined the concept as using various interactive web features and tools to establish evaluate, maintain and build long-term relationships with customers. This definition was in the context of a hotel website study. Additionally, another tourism-related study has defined the concept in the online environment as a strategic marketing system which establishes, maintain, enhance and commercialise a network of customer relationships using promises, fulfilment or implementation across electronic channels such as the internet (Bai *et al.*, 2007:35). Thus, it seems that similar to the offline environment, the attraction, maintenance and enhancement of customer relationships are also important within an online e-commerce environment.

Furthermore, it seems that the same argument concerning relationship marketing practices may also be relevant to the online community environment. Considering the generic elements of the relationship marketing concept, it is plausible to argue that:

(i) Online communities should also aim to develop strategies to attract members to the community, to build and maintain the relationships between the members and the online community and finally to enhance these relationships with the members. Research has indicated that understanding the complex ways of the interaction between members and their online communities is required to build and maintain successful online communities

(Danescu-Niculescu-Mizil *et al*., 2013:307). Research further indicated that the member's interest in the topic of discussion is what initially attracts the member to the online community (Zhou *et al*., 2013:2439) and the posts and discussion threads of the online community, as well as the social support and friendships acquired through online communities, can assist with maintaining the member base of an online community (Ridings & Gefen, 2004). Therefore, since information and content are viewed as the main reasons why members join an online community, organisations and administrators should ensure that quality and relevant information is easily available to the members of the online community. Furthermore, social value and support which includes the perceived love, support and care, obtained from online communities can also attract members towards the community (Cobb, 1976:300; Zhou *et al*., 2013:2442). Given that not only the attraction of members is important to build relationships between customers and the online community, strategies should also be implemented to maintain the relationship and include advanced search capabilities to enable members to locate specific posts and threads of interest, the use of "experts" can further aid the establishment of credible information on particular areas of interest and the use of bulletin boards to assist members to find the suitable place for their postings (Ridings & Gefen, 2004).

(ii) Essentially, customer participation is viewed as a key element of the long-term, continuous process of relationship marketing. Member participation within the online community is also critical in building a relationship between the members and the online community. Since research indicated that the application of relationship marketing to online communities is quite complex as customers (members) of online communities are not passive receivers of information but active creators of information, administrators of online communities, should use this active participation to build relationships. Active participation is not only a key to successful online communities (Malinen, 2015:229), but is required to build long-term, continuous relationships between members and online communities. This notion has further meaning for relationship marketing in online communities, as active participation results in multiple interactions by the members thus making the relationship an ongoing process and not a brief encounter.

(iii) As mentioned, relationship marketing includes relational exchanges taking place between parties, which also takes place within an online community environment (Pai & Tsai, 2016:39). Online communities can be viewed as a relational exchange and not a transactional exchange as the interaction between members, and the online community is more long-term in nature, with individuals spending on average 35 minutes per day on Facebook (Cohen, 2017). Additionally, online communities such as Facebook is interactive

of nature and even resemble an online chat room due to the interactivity taking place between members (Deng & Tavares, 2013:171). An online community is therefore viewed as an interactive communication platform where customers and members can share information with each other (Park & Cho, 2012:407). Online communities are also seen as an electronic platform where feedback and interaction take place in real-time instead of delayed or ad-hoc (Zaidieh, 2012:18). When a member posts a message on the online community, the other members can immediately read and respond to the message thus creating real-time interactions.

(iv) Members of an online community can also be viewed as co-creators of value. Chou *et al*. (2016:61) mentioned that online value co-creation could take place by both knowledge contribution as well as online community citizenship behaviour. Relationship marketing strategies within online communities can, therefore, enable members of the online community to co-create value by contributing knowledge and information, as well as engage in activities which are voluntary. Further research has established that online communities create opportunities for organisations to create value for their users and customers since online communities are rich in user-generated content and support innovation using collaboration between the parties (Barrett *et al*., 2016:707). Additionally, members of online communities gain benefits such as increased product knowledge, communication with other members, increased reputation and enjoyment of interacting when the perform value co-creation activities within an online community (Nambisan & Baron, 2009:400).

(v) Profitability can also be achieved on online communities through the implementation of relationship marketing initiatives. Research indicates that within online communities, revenue and profitability are driven by advertising and transaction activity taking place in these communities (Hagel, 1999:65). Additionally, the profitability of an online community is very much influenced by the value offered on the online community (Hagel, 1999:60). Should the community not provide value to the members, the members will not participate and might lead to the online community closing down which will limit the profitability opportunities of the community. When organisations build a relationship with the members of an online community, they can get valuable input for new product development, where the members act as innovative customers (Füller, 2006:57). Using the new product development process, Füller (2006:58-60) indicated that members of an online community could actively participate in each stage of the new product development process through innovative suggestions. Additionally, this new product development interaction results in the co-creation of value taking place between the organisation and the members which enable the organisation to develop products that suit the needs of the members (Perks *et al*.,

2012:936) which in turn generate sales and revenue for the organisation. Additionally, Felgenhauer *et al*. (2017:2110) established that certain forms of social engagement activities in an online community (customer) environment such as asking and answering questions or receiving feedback has a positively influence customer profitability. Customer profitability is defined as the "net dollar contribution made by individual customers to an organisation (Mulhern, 1999:26). Therefore, when members engage in social engagement activities in an online community, the profitability of these members increase with regards to the organisation about which these questions and comments are made.

(vi) Finally, relationships within an online community do not only have two connections (customer and organisation) but multi-connections between the different members of the community and the organisation (Kozinets, 1999:257). Online communities make use of a social network approach, where connections and relationships between people are created and are based on online activity of the members which include social relationships such as friendship, co-working or information exchanges (Garton *et al*., 1999:75). Online communities are therefore social exchanges taking place between members within a network context (Faraj & Johnson, 2010:1469). Within an online community, members interact with each other, the members interact with the administrator of the online community and vice versa, thus a social network approach applies.

Taking the abovementioned into consideration, it is possible to develop the following definition for online community relationship marketing for this study:

Online community relationship marketing can be defined as a long-term continuous process of attracting, building, maintaining and enhancing online community member relationships through relational exchanges and a network orientated approach, which focusses on value creation that may ultimately lead to greater profitability for the online community and organisation.

Table 2-2 subsequently provides a further comparison of the similarities and differences between the relationship marketing elements as traditionally defined and the extent to which it is applied in online communities.

Table 2-2: Differences and similarities of relationship marketing elements as traditionally defined and applied to online communities

Element(s)	Traditionally defined	Online community environment
Attracting, maintaining and enhancing customer relationships	Focus on the attraction, maintaining and enhancing of customer – organisation relationships. The retaining of customers is more profitable than the attraction of new customers	Focus on the attraction, maintaining and enhancing of member-online community relationships. Members are attracted to build a relationship with the online community through an interest in the topic of discussion, posts and discussion threats and social support and friendships acquired through the online community. Quality and relevant information ensure that the relationship is maintained and enhanced.
Long-term, continuous process	The interaction between the customer and organisation are long-term where the management of the relational process is critical.	Member participation is viewed as a key element to build long-term relationships with members of an online community.
Switch from transactional exchange to relational exchange	The relational exchange takes place through interactive marketing between the organisation and the customer. Internal marketing is viewed as a key element since it is important for employees to understand and build the relationships with customers.	Interactive marketing, which refers to the two-way communication of members and the online community takes place when relational exchanges occur. Relational exchanges take place not only between the members and the online community but also between the members.
Value creation	Cooperation between the organisation and the customers takes place. Customers are active participants in transactions with the organisation.	Value co-creation takes place through knowledge sharing and contribution and online community citizenship behaviour.
Profitability	The focus is on profitable customers and to create value that is cost-effective for the organisation so that sales and market share increase.	Revenue and profitability are generated through advertisements and transaction activity. Social engagement activities generate revenue for the online communities.
Network approach	The different parties interact within a set of relationships such as individual-organisation, individual-system and individual machines.	Multi-connections take place between members and between the members and the online community.

Source: Developed by researcher.

2.2.2.3 Benefits of relationship marketing

Relationship marketing presents various benefits for customers and organisations in both offline as well as online environments. The subsequent sections provide more insight into benefits that have been reported in the literature. Following each section, an argument is presented on the extent to which these benefits may also be relevant within the online community environment, concerning members and administrators of online communities.

2.2.2.3.1 Benefits to customers (offline and online) and members of online communities

There are various relational benefits that customers can receive from relationship marketing initiatives in both offline (face-to-face) and online (e-commerce) environments:

(i) *Social benefits* are received when friendships are developed between customers, employees and the organisation through personal recognition between the parties in store. These social benefits refer to the benefit received from the relationship between the parties instead of the result from the transaction (Hennig-Thurau *et al.*, 2002:235). Social benefits include customers being recognised by employees, enjoying social aspects of the relationship with the organisation, and the development of a friendship with the organisation and its employees (Gremler & Gwinner, 2015:33; Hennig-Thurau *et al.*, 2002:244). Furthermore, customers are familiar with the employees of the organisation and are known by their name. With respect to an e-commerce environment, the social benefits of relationship marketing received by customers in an offline setting are replaced with personal service benefits within the online environment. The personal service benefits to customers include receiving the highest quality service, personalised service and quick problem handling (Colgate *et al.*, 2005:434). In other words, when relationships are established between online organisations and customers, the quality of service increase since the service is personalised based on the needs and wants of the customers. Online organisations further personally recognise customers and are therefore able to provide a higher quality of service and are able to speedily rectify problems.

(ii) *Special treatment benefits* mainly focus on the fact that customers can have positive returns from the relationship with the organisation (Gremler & Gwinner, 2015:33) in store. These benefits include getting faster service than most other customers, getting better prices than other customers, being placed higher on the priority list, and finally getting discounts and special deals (Hennig-Thurau *et al.*, 2002:236, 244). Additionally, online shopping customers who have developed a long-term relationship can also purchase more reliable products, get better prices and better service efficiency (Su *et al*., 2009:133). Long-term

online customers might be more prone to inform organisations when products are not reliable, and therefore organisations might have the opportunity to improve the reliability of the products. Furthermore, when online customers continuously use the service and products of the organisations, the online organisation might show appreciation by offering better prices to these online customers.

(iii) *Confidence benefits* include the customer knowing what they are getting themselves into when interacting with the organisation in a face-to-face environment, knowing that the employees of the organisation are honest, truthful, trustworthy, and have integrity. Confidence benefits include the reduced feelings of anxiety and risks when making a purchase and a feeling of knowing what to expect from the interaction (Gremler & Gwinner, 2015:33). When customers participate in online transactions, they might receive confidence benefits when there exists a long-term relationship with the online supplier (Yen & Gwinner, 2003:485). This type of benefit is very critical within the online environment since privacy and security have been established as a source of concern for online customers (Parasuraman *et al*., 2005:5). Therefore, when customers make an online purchase, they will not be anxious that the product might not be delivered or that money will be stolen since the customer has confidence and trust in the online organisation. Additionally, when online customers trust the online organisation with whom they have a relationship, they will feel confident to continue purchasing and using the service received.

(iv) In an online study, Colgate *et al.* (2005:433) established that another relational benefit for customers is that of *history benefits*, which include the organisation's extensive knowledge and familiarity with the customer as a result of the long-term relationship with them. Although the history benefits of relationship marketing have not yet been applied to offline environments, it is plausible to argue that this benefit might also exist where offline organisations, such as clothing retailers record and store customer information such as style and colour preference of customers. Customers might, therefore, benefit as they do not have to supply this type of information again thus saving time and organisations being able to better satisfy the needs to the customers by providing them with products which fit their preference. Online organisations can gain knowledge of customers' preferences and purchases by tracking usage and movement on the internet. Thus, when customers make online purchases, organisations can record the browsing and purchase history, and through the use of software the organisation is able to suggest and recommend products (Clow & Baack, 2016:248, 257). Hence, customers benefit from relationship marketing by receiving customised product recommendations.

Consequently, Table 2-3 provides a summary of the relationship marketing benefits relevant to the offline and online environment.

Table 2-3: Relationship marketing benefits for customers in the offline and online environment

Type of benefit	Offline	Online
Social benefit	Being recognised by employees, enjoyment of social aspects and development of friendships with employees and organisation (Gremler & Gwinner, 2015:33; Hennig-Thurau *et al*., 2002:244).	Personal service which includes quality service, personalised service and quick problem handling (Colgate *et al*., 2005:434).
Special treatment benefit	Faster service, better prices, higher on the priority list, receiving discounts and special deals (Hennig-Thurau *et al*., 2002:244).	More reliable products, better prices and better service efficiency (Su *et al*., 2009:133).
Confidence benefit	Reduced feeling of anxiety and risk when making a purchase and a feeling of knowing what to expect from the interaction (Gremler & Gwinner, 2015:33).	Privacy and feeling of security when making an online purchase (Parasuraman *et al*., 2005:5).
History benefits	When organisation gathers and store information from a previous visit and use this information in future interactions (Hennig-Thurau *et al.*, 2009:221) such as the customer's colour preference and clothing size.	Online organisations can gain knowledge about the customer's preference and requirements which lead to suggestions and recommendation of products which benefit the online customer (Clow & Baack, 2016:257).

Limited literature is available on the benefits of relationships formed within online communities. However, based on the characteristics of online communities as discussed in section 1.2.2.1 and a further investigation, it seems that the benefits presented in Table 2-3 may also be relevant and apply to members of online communities.

Specifically, in an online community environment, conversations between members are encouraged which lead to members receiving *social benefits*. These conversations could be of value to the various parties involved, including members, organisations and interested parties due to the social and emotional bonding taking place within the online community (Szmigin *et al.*, 2005:484). Since relationship marketing is underpinned by shared communication, the development of relationships between members of an online community results in both social and emotional bonds developing (Harridge-March & Quinton, 2009:175; Harridge-March *et al.*, 2010:62). This social bonding creates a sense of loyalty, which increases the members' level of participation and decrease their likelihood of switching to other communities (Harridge-March &

Quinton, 2009:175). Additionally, members of online communities gain social benefits from the establishment of long-term relationships with the online community (Hennig-Thurau *et al*., 2004:46). These social benefits include the agreement that it is a nice thing to chat with other like-minded individuals, that it is fun to communicate with other individuals in the online community and that it is nice to meet people using an online community (Hennig-Thurau *et al.*, 2004:46). Furthermore, as members of an online community exchange information on a particular topic of interest, they also learn more about each other, consequently deepening their level of personal relationships (Harridge-March *et al.*, 2010:63). Relationship marketing also enables members of an online community to develop personal friendships with other members of the community which include the identification with members and the enjoyment of the social component of these friendships. Online communities also provide emotional support to the members, as members can voice their grievances, anger and dissatisfaction on the online community while receiving emotional support from other members (Howard, 2009:37).

Further to the social benefits received, members of an online community might also receive *special treatment benefits* due to the long-term relationship between the members and the online community. When a member is acknowledged as an appreciated member amongst the members of a group (Franke & Shah, 2003:170), the member has built themselves a reputation which takes time to develop. Based on this reputation, the member might receive special treatment in the form of faster and quicker responses to their posts. Additionally, members of an online community might receive special treatment benefits such as reduced prices at local stores which is given only to members of a certain online community. Furthermore, these members might also become priority members due to their long-term relationship with the online community, and therefore their posts might get shared as priority members.

Zhang and Luo (2016:819) established that the *perceived confidence benefits* which result from relationship marketing activities are also relevant within the online community environment. When organisations maintain good relationships with members of an online community, the confidence in the organisation improves as member anxiety are reduced. Additionally, the member to member relationships on online communities can better satisfy the need for confidence through ongoing discussions, interaction and the development of friendships between the members. Furthermore, when online communities gain extensive knowledge about their members, these members might receive *history benefits* such as relevant recommendations and suggestions that might improve their experience with the online community. For example, Sam advertises the need for a second-hand vehicle and days or even weeks later when John advertises his second-hand vehicle, fellow members remember the post of Sam and responds by connecting these two members to buy and sell the second-hand vehicle.

2.2.2.3.2 Benefits to organisations (offline and online) and administrators of online communities

Customers and members are not the only groups benefiting from relationship marketing initiatives. There are also various relational benefits that organisations can receive from relationship marketing initiatives in both offline (face-to-face) and online (e-commerce) environments. These benefits include:

(i) Relationship marketing provides organisations with *customer-focused benefits* such as increased customer loyalty which is one of the most common benefits received by organisations who build long-term relationships with customers (Benouakrim & El Kandoussi, 2013:149; Palmatier *et al.*, 2006:140). This loyalty results in customers' continuous purchases and also the likelihood of positive word-of-mouth (WOM) where customers refer friends and family to make for example their purchases at a given store (Benouakrim & El Kandoussi, 2013:150; Hennig-Thurau *et al.*, 2002:232; Palmatier *et al.*, 2006:140). Therefore, since relationship marketing can increase customer satisfaction, these customers also tend to spread positive word-of-mouth and refer friends and family to the organisations (Alander, 2010:12). Wang *et al.* (2000:376) mentioned that within the online marketplace, long-term sustainability and profitability would only be achieved when organisations can build loyalty amongst the online customers. Harris and Goode (2004:139) agreed and mentioned that it is more difficult and more important for online organisations to build customer loyalty due to the competitive nature of the online retailing marketplace and the ever-increasing number of online organisations. Through the building of a long-term relationships with online customers, online organisations can record and analyse the buying behaviours and preferences of online customers, which can be used to recommend products and increase profit for the organisation (Yen & Gwinner, 2003:485). Online organisations can, therefore, build customer databases that record all transactions thus enabling the organisation to recommend a product based on historical transitional data of the online customer.

(ii) *Seller focused benefits* are received by the organisation when the implementation of relationship marketing efforts increases sales, profit and market share (Benouakrim & El Kandoussi, 2013:150; Palmatier *et al*., 2006:140). Research has further indicated that long-term customers are less price sensitive and more loyal to the store which can result in increased sales and profit for organisations (Alander, 2010:12). Whalley and Headon (2001:13) further noted that within an offline environment, a 5% increase in customer retention could create a 20% to 125% increase in profits.

Additionally, in a study which measured the daily sales of a major online shopping organisation, it was established that by implementing relationship marketing initiatives generated $210 additional sales per week (Kozlenkova *et al*., 2015:15). Reason being that when online retailers provide the information that buyers require and can let them feel safe and secure, they are more willing to purchase online. Since positive word of mouth which is viewed as a consequence of relationship marketing initiatives, has a direct effect on online retail sales, it is critical for online organisations to develop successful relationship marketing strategies to generate both positive word of mouth and sales (Verma *et al*., 2016:215).

(iii) Organisations can further create a *competitive advantage*, since relationship marketing is viewed as a sustainable source of competitive advantage (Jones *et al.*, 2015:188; Morgan & Hunt, 1999:281). Morgan and Hunt (1994:34) further note that relationship marketing creates actions which enable organisations to enjoy a sustainable competitive advantage over their rivals in the marketplace. The relational benefits gained by customers from relationship marketing activities can furthermore serve as a barrier to switching between suppliers, thus significantly benefitting organisations (Gremler & Gwinner, 2015:34).

Relationship marketing activities also result in strategic benefits for the organisation and include improved competitive position and reputation as well as enhanced opportunities and access to distribution channels (Sweeney & Webb, 2002:84). Therefore, sustainable competitive advantages can be created through long-term relationships with suppliers and customers (Ganeson, 1994:1) since research has established that long-term and profitable relationships can create competitive advantages for organisations (Su *et al*., 2009:131). These authors mentioned that organisations could create a competitive advantage through the establishment of beneficial relationships with customers which may lead to these customers becoming more loyal to the organisation and therefore only purchasing from the specific online organisation. Due to the advancements in technology, online organisations can customise products and services (Javalgi *et al*., 2005:664) and deliver superior products which create a competitive advantage for the organisation. When online organisations learn more about their customers and monitor and analyse their purchases, they can more easily manage relationships with these customers (Javalgi *et al*., 2005:664) which results in more loyal customers through the competitive advantages created.

(iv) Another benefit received by an organisation is the *cooperation* between the parties involved as partners are more eager to engage with long-term partners, and these types of partnerships are also more profitable (Benouakrim & El Kandoussi, 2013:150). Cooperation between all parties and the organisation is viewed as one of the grounding factors of

relationship marketing since cooperation takes place instead of confrontation between members (Percy *et al*., 2010:2600). These authors indicate that organisations that wish to implement relationship marketing should focus on elements such as trust, commitment, cooperation, keeping promises and sharing the values of the organisation. Therefore, when relationship marketing is established between the parties within a service interaction, organisations will benefit from the established cooperation since cooperative relationships have proven to be more profitable for the organisation when customers visit the store.

The introduction of electronic interaction between parties has furthermore created a network society, which offers a major opportunity for organisations to expand their communication landscape especially regarding the relationship building opportunities with customers (Szmigin *et al.*, 2005:480). Castells (2004:5) indicates a network society is a social structure that consists of networks which take place within digital information and communication technologies. Electronic interactions such as e-commerce, therefore, create a social structure between parties using a digital platform which expands the traditional communication landscape and provides digital opportunities to build relationships with customers.

Table 2-4 provides a summary of the relationship marketing benefits for organisation in the offline and online environment.

Table 2-4: Relationship marketing benefits for organisations in the offline and online environment

Type of benefit	Offline	Online
Customer focused benefits	Increased customer loyalty, increased satisfaction and positive word-of-mouth (Benouakrim & El Kandoussi, 2013:150; Palmatier *et al*., 2006:140).	Record and analyse online customer behaviour and building of a customer database (Yen & Gwinner, 2003:485). Long-term sustainability and profitability are furthermore created when the customer become loyal to relationship building activities (Wang *et al*., 2000:376).
Seller focussed benefits	Increased sales, profit and market share (Benouakrim & El Kandoussi, 2013:150; Palmatier *et al*., 2006:140).	Increased sales and positive word-of-mouth which positively affects online sales (Kozlenkova *et al*., 2015:15; Verma *et al*., 2016:215).

Table 2-4: Relationship marketing benefits for organisations in the offline and online environment (cont.)

Type of benefit	Offline	Online
Competitive advantage	Sustainable competitive advantage (Morgan & Hunt, 1994:34) and barrier to switch between suppliers (Gremler & Gwinner, 2015:34).	Long-term relationships with suppliers and customers can create competitive advantages for organisations (Ganeson, 1994:1; Su *et al*., 2009:131). Additionally, online organisations can customise products and service through the management of relationships with customers which creates more loyal customers (Javalgi *et al*., 2005:664).
Cooperation	Profitable partnerships are created (Benouakrim & El Kandoussi, 2013:150).	Opportunity to expand the online communication landscape (Szmigin *et al*., 2005:480) and the creation of a social structure between parties (Castells, 2004:5).

Based on the characteristics of online communities as discussed in section 1.2.2.1 and a further investigation, it seems that the benefits presented in Table 2-4 may also be relevant and apply to administrators of online communities.

Szmigin *et al.* (2005:480) state that when organisations implement relationship marketing initiatives, the interaction between the organisation and customers increase which results in the establishment of consumer-relevant communities. Therefore, when administrators build long-term relationships with the members of an online community, these members might become *more loyal towards* the online community. When a relationship exists between the members and the online community, there exists a higher degree of interpersonal communication since members' participation is more intense and create content which could be used by the administrator to attract new participants to the community (Szmigin *et al.*, 2005:486). Additionally, motivations have been established to increase commitment and participation in online communities, therefore, should administrators invest in building social motivation amongst members, the level of commitment will increase resulting in higher level of participation (Wang & Chen, 2012:573).

Concerning the *seller-focused benefit* of relationship marketing within an online community context, research has shown that word-of-mouth (WOM) between customers influence the profit of an organisation (Chevalier & Mayzlin, 2006:354). Additionally, researchers have identified that since online community commitment has a significant effect on positive WOM, online communities such as an online brand community of an organisation can increase the profitability of the organisation using the positive word-of-mouth being created through the online brand community

(Hur *et al*., 2011:1207). For example, when an online community member is committed towards the online community due to relationship marketing initiatives, these members are likely to provide positive word-of-mouth about the organisation to fellow members which might result in higher profit for the organisation through additional sales.

Additionally, organisations that use online communities and implement relationship marketing initiatives can benefit from these initiatives as the long-term discussions taking place in the online community can provide the organisations with valuable insights. These valuable insights might create a level of trust amongst the members, which may create a *competitive advantage* for the online community. Organisations can gain valuable insights into the brand preferences of the members as well as that of competitor brands (Quinton & Harridge-March, 2010:68). Relationship marketing initiatives might also provide a competitive advantage within the online community, since administrators might be able to limit the switching of members between online communities as solid relationships enable the administrator of an online community to provide high-quality information within an enjoyable online environment which creates a competitive advantage.

Relationship marketing initiatives might also improve the cooperation between administrators, members and fellow members of an online community. Instead of confrontation between these parties, they can work together to find solutions to problems, answers to questions posted and general enquiries from members. Additionally, the mutual participation taking place between the parties of an online community can be created by sharing of expertise and knowledge (Shen *et al*., 2014:145). Relationship marketing results in cooperation between parties (Morgan & Hunt, 1994:22) when members are committed to and trust the relationship between the parties of an online community they will work together to make the relationship work and will also show kindness and integrity towards the administrator and other members (Shen *et al*., 2014:146).

2.2.3 Commitment as a key dimension of relationship marketing

Commitment can be viewed as one of the key underpinnings of relationship marketing (Benouakrim & El Kandoussi, 2013:149; Hennig-Thurau *et al.*, 2002:232; Jesri *et al.*, 2013:310). The next section provides a discussion of the commitment concept. The section commences with a summary of the generic elements of commitment established from published commitment definitions. Then, these identified elements are applied to an online community environment.

2.2.3.1 The generic elements of the commitment concept

Table 2-5 provides a summary of the key definitions of commitment that were formulated over the past decades.

Table 2-5: Generic commitment definitions

Author(s)	Adapted definition of commitment	Author(s)	Adapted definition of commitment
Buchanan (1974:533)	Commitment can be defined as a subjective and emotional attachment towards the aims and beliefs of the organisation for the sake of the customers, apart from being of instrumental worth.	Wetzels *et al.* (1998:409)	Commitment is defined as a psychological response of the mind by which an attitude involving a continuation of a relationship with a business partner is formed.
Mowday *et al.* (1979:226)	Commitment can be viewed as the relative intensity of the person's recognition with and the participation in a particular organisation.	Meyer and Herscovitch (2001:301)	Commitment is seen as an influence that joins an individual's actions of relevance to one or more targets. Therefore, commitment is different from an exchange based on the types of motivations and target attitudes which can influence behaviour even when intrinsic motivations or positive attitudes are absent.
Brickman *et al.* (1987:2)	Commitment can be defined as the psychological connection that alleviates individual behaviour in cases where individuals might have otherwise be tempted to change the behaviour.	Bloemer and Odekerken-Schröder (2002:70)	Commitment can be defined as a customer's continuing desire to continue with the relationship with the supplier and the willingness to maintain the relationship.
Dwyer *et al.* (1987:19)	Commitment can be defined as an absolute promise of relational continuity between exchanging partners.	Bansal *et al.* (2004:236)	Commitment is viewed as the influence that binds an individual to continue purchasing products and services from the service provider.
Meyer and Allen (1991:61)	Commitment can be broadly defined as the psychological state where parties have the desire, need and obligation to maintain the relationship.	Gounaris (2005:127)	Commitment can be defined as the desire for the continuity established by the willingness to invest resources into the relationship.
Rusbult and Buunk (1993:180)	Commitment can be defined as the subjective state which involves both cognitive and emotional elements which are long-term and includes the desire to maintain the relationship.	Gustafsson *et al.* (2005:211)	Commitment can create a "stickiness" which keep the customer loyal towards a brand or organisation even when the level of satisfaction is poor.
Moorman *et al.* (1992:316)	Commitment to the relationship can be defined as the lasting desire to maintain the valuable relationship.	Klein *et al.* (2012:137)	Commitment is defined as an unforced and voluntary psychological bond that reflects devotion and accountability for a particular target.

Table 2-5: Generic commitment definitions (cont.)

Author(s)	Adapted definition of commitment	Author(s)	Adapted definition of commitment
Kelley and Davis (1994:59)	Commitment reflects respondents' demonstration of their intention to stay or leave the organisation, their willingness to assist the organisation and their views regarding the relationship with the organisation.	Li (2014:44)	Commitment is viewed as the desire to continue with the relationship and also to sustain the continuance of the relationship.
Morgan and Hunt (1994:23)	Relationship commitment can be described as an exchange partner who thinks that a continuous relationship with another partner is so significant that maximum effort are warrant to maintain the relationship.	Saleh and Akhavanfar (2015:688)	Commitment can be defined as the permanent longing to stay in a long-term relationship.
Soni *et al.* (1996:13)	Commitment is the extent to which a customer is committed to continuing the relationship.	Li *et al.* (2016:926)	Commitment can be viewed as the psychological attachment of an individual towards the organisation as well as the expectation to maintain the relationship by both parties.
Kim and Frazier (1997:139)	Commitment is viewed as the strength of the relational bonds between channel members.	Su *et al.* (2017:241)	Commitment is viewed as the desire of the customer to maintain a long-term, mutually beneficial relationship with the organisation and which can be viewed as a key contributor to building a relationship with the organisation.

Based on the definitions supplied in Table 2-5 and a broader literature review, the following generic elements of commitment have been identified and will now be further discussed.

- **The desire to maintain and continue with the relationship**

  Dalziel *et al.* (2011:404) and Geyskens *et al.* (1996:30) state that commitment is all about the constant notion and intention of parties to maintain the relationship between them. The desire to maintain the relationship indicates that the partners would like the relationship to continue for an indefinite period and, therefore, are willing to put some effort into the maintaining of the relationship (Bendapudi & Berry, 1997:18; Sharma *et al*., 2006:65; Terblanche, 2007:3). Maintaining relationships can be accomplished through investment such as time, money and effort, active management of the relationship, and the establishment of effective communication between the parties (Dagger *et al*., 2011:274). Additionally, relationships could be managed through the creation of trustworthy connections among the parties (Li *et al*., 2016:925) since trust can be viewed as a key element of relationship marketing. Committed members are therefore motivated to perform actions as mechanisms to protect and maintain these relationships (Lydon, 2010:636). The commitment theory provides useful information of how organisations can attempt to maintain relationships with customers as the duration of the relationship is a key element of the commitment construct (Gundlach *et al.*, 1995:80). Committed customers will, therefore, continue with the relationship and will continue to purchase products and use the service of the organisation (Bansal *et al.*, 2004:326).

- **Commitment reflects mutual benefits**

  It can further be derived from the list of definitions provided that commitment is built on the perception that mutual benefits will be obtained. Organisations will be committed to establish, develop and maintain relationships should they receive substantial benefits from the relationship (Morgan & Hunt, 1994:23). Additionally, Hennig-Thurau *et al.* (2002:235) established that relational benefits gained by customers directly influence the level of commitment towards the organisation. The personal dedication of an individual to stay in the relationship with the organisation is manifested on the prospective mutual benefits gained from the relationship (Bendapudi & Berry, 1997:23). These mutual benefits include the relational benefits explained in section 2.2.2.3.

- **Commitment reflects a psychological state**

  The definition of commitment indicates that commitment involves a psychological state such as a binding factor, a connection, a pledge or a devotion (Allen & Meyer, 1990:1; Jones *et*

al., 2010:17; Meyer & Allen, 1991:63). The psychological state of commitment had first been established regarding organisational commitment (O'Reilly & Chatman, 1986:493). These authors stated that the psychological state of commitment includes the involvement to gain specific extrinsic rewards, the identification based on a desire for a relationship and the involvement based on the similarity between the organisational values and the individual. The psychological state towards the organisation, therefore, indicates the degree to which the employee adopts the characteristics of the organisation and believe that organisations share similar values than that of the individual (O'Reilly & Chatman, 1986:493). The psychological state of commitment furthermore includes the tangible and physical rewards that employees gain from continuing with the relationship with the organisation such as money.

Applied to customers, the psychological state of commitment includes the desire, need and obligation to be committed (Allen & Meyer, 1990:4). Klein *et al.* (2012:137) mentioned commitment is a specific bond type that exists between organisations and individuals and seems characterised by the psychological bond that exists between the parties. Additionally, this perceived bond of commitment is socially constructed where the individual makes a deliberate choice to maintain and dedicate them towards the relationship (Klein *et al*., 2012:137). Commitment as a psychological state is socially constructed which means that the commitment lies within the individual and is based on the individual's own perception and situation (Klein *et al*., 2012:138). Furthermore, the psychological state of commitment signifies that individuals are not forced into being committed but rather decide and make a deliberate choice to be committed.

- **Commitment includes maximum efforts**

Since there are limited time and money available to most organisations, organisations should decide the amount of effort to be directed towards customers (Homburg *et al*., 2014:137). Additionally, these authors indicated that due to customers having the potential and inclination to switch to another organisation, organisations must determine their level of effort towards building a relationship with these customers. When customers have a high potential and inclination to switch to the organisation, more effort should intend towards the respective relationship (Parasuraman, 1982). Additionally, Morgan and Hunt (1994:23) indicated that committed relationships require the maximum efforts of all parties involved, and therefore when organisations believe the relationship has commitment potential, they should include the maximum effort to sustain the committed relationship. Effort can be defined as "the force, energy or activity by which work is accomplished" (Brown & Peterson, 1994:71). Additionally, researchers have also applied effort to the expectancy theory where

the level of effort will increase the belief that performance will follow (Vroom, 1964). Applied to the commitment theory, where the force, energy and activity to create relationships between customers and organisations increase, so will the level of commitment between customers and organisations increase. Therefore, a great deal of effort is required to build successful committed relationships.

- **Commitment is long-term orientated and requires sacrifices to be made**

  The long-term orientation of commitment is based on the notion that committed relationships are stable and will, therefore, last longer than unstable, uncommitted relationships (Anderson & Weitz, 1992:19). Additionally, these researchers have established that commitment is an essential component in the development and maintaining of mutually beneficial relationships between organisations and customers (Bansal *et al*., 2004:235, Morgan & Hunt, 1994:22). To illustrate the importance of long-term orientation of commitment, Ganeson (1994) indicated that it is important to understand the time orientation of retailers. Some retailers are short-term orientated which means that they only focus on the current period and situation. The authors established that for these customers, initiatives to build commitment would not be successful as they rely on market exchanges instead of relational exchanges. Retailers who are long-term orientated and exhibit focus on achieving prospective goals and are apprehensive about both current and future results will be suitable to build a long-term relationship with as they have a long-term orientation.

  Commitment furthermore includes the trade-off that customers make regarding the short-term sacrifices and the long-term benefits received from the committed relationship (Anderson & Weitz, 1992:19; Ritter & Andersen, 2014:1007). Short-term sacrifices might be the time spent by the customers to provide information such as preferences and requirements which can be used to build long-term relationships. The customer, therefore, scarifies their time but in the long-run, this can lead to benefits due to the long-term relationship created between the customer and the organisation. Furthermore, the long-term benefits from the relationship must, therefore, exceed the short-term sacrifices to justify the development of the relationships (Ritter & Andersen, 2014:1007). For example, the time and energy a customer spends to build the relationship must be less than the long-term benefits they are going to receive from the investment.

Consequently, while various definitions of commitment have been previously provided, taking into consideration the commitment elements presented in this section, it is then possible to provide the following definition of commitment for this study:

Commitment can be defined as a psychological state whereby organisations and customers have a desire to maintain and continue with the long-term orientated relationship that provides mutual benefits through maximum effort and short-term sacrifices.

2.2.3.2 The nature of commitment within an online community environment

(i) Online community commitment refers to online community members who voluntarily join the community and *maintain their membership* while receiving benefits from being a member and participating in the online community (Kim *et al.*, 2008:415). Since most online communities require voluntary commitment, participation and contributions to succeed, it is important that members maintain the relationship by generating new and updated content and provide social and emotional support to other members (Ren *et al*., 2007:378). Additionally, marketers have identified the importance of online communities such as online brand communities, to build and maintain the relationship between the customer and the organisation (Sung *et al*., 2010:430). These authors further state that online communities are platforms where long-term relationships between customers and organisations are introduced, maintained and promoted which results in loyalty and commitment of the members. Members of an online community might, therefore, invest time and money to continue with the relationship and will furthermore maintain the relationship through active participation in the online community.

(ii) *Commitment to an online community requires maximum effort* since members have a high rate of turnover, can easily move from one community to another, and that most members are registered at more than one community, it is challenging for online communities to build and maintain member commitment towards the community (Yang *et al.*, 2017:154). However, the commitment theory has been found to be a suitable theory to understand members' behaviour in online communities and, furthermore, various scholars have established that commitment is important to online environments and online communities (Bateman *et al.*, 2011; Chen *et al.*, 2013; Jeong *et al.*, 2016; Yang *et al.*, 2017:156). Online community commitment is, therefore, the active engagement of members which results in sustainable relationships between the members and the online community (Zhang *et al.*, 2013:836). Additionally, research has indicated that when members of online communities are committed towards the community, the online community is more likely to succeed, as members who are committed are more motivated to read, post and interact with the online

community (Bateman *et al.*, 2011). This notion is supported by Jeong *et al.* (2016:32) who indicated that committed members of an online community tend to interact actively and share information with other members and will not easily switch to other online communities.

(iii) Committed members also receive *mutual benefits*, as research has established that the central reason why members of an online community will be committed towards the community is due to the benefits of participation they are receiving (Jin *et al.*, 2010:588). Commitment within an online community is further viewed as a social exchange compared to a pure economic exchange as commitment within online communities are developed and maintained over a period and does not happen simultaneously and discreetly (Jin *et al.*, 2010:588). Additionally, the perceived support received by members of an online community, increase their level of commitment (Yang *et al*., 2017:162). The perceived support includes the ability of the community to provide the members with a means, ability and opportunity to communicate with other members and with the community (McWilliam, 2000:45). Concerning online communities, Kuo and Feng (2013:950) indicated that members receive various benefits for being committed and being members of the online community. These benefits include 1) learning benefits where members acquire information and knowledge from the community; 2) social benefits, when members can maintain the interpersonal relationships with other members; 3) self-esteem benefits, which refers to the benefit when members develop a better reputation and status within the community; and 4) hedonic benefits which includes the various pleasures than members obtain from being part of a community.

(iv) Since the *psychological state of commitment*, refers to the identification which is based on the desire for a relationship and the involvement due to the similarity of values (O'Reilly & Chatman, 1986:493), this identified element of commitment is also applicable to the online community context. Concerning an online community environment, community identification refers to individuals having a sense of belonging to the online community (Algesheimer *et al*., 2005:20). Research also established that online community interactions significantly improve the relationships between the member and community (organisations) as well as the relationship between the members (Luo *et al*., 2016:679).

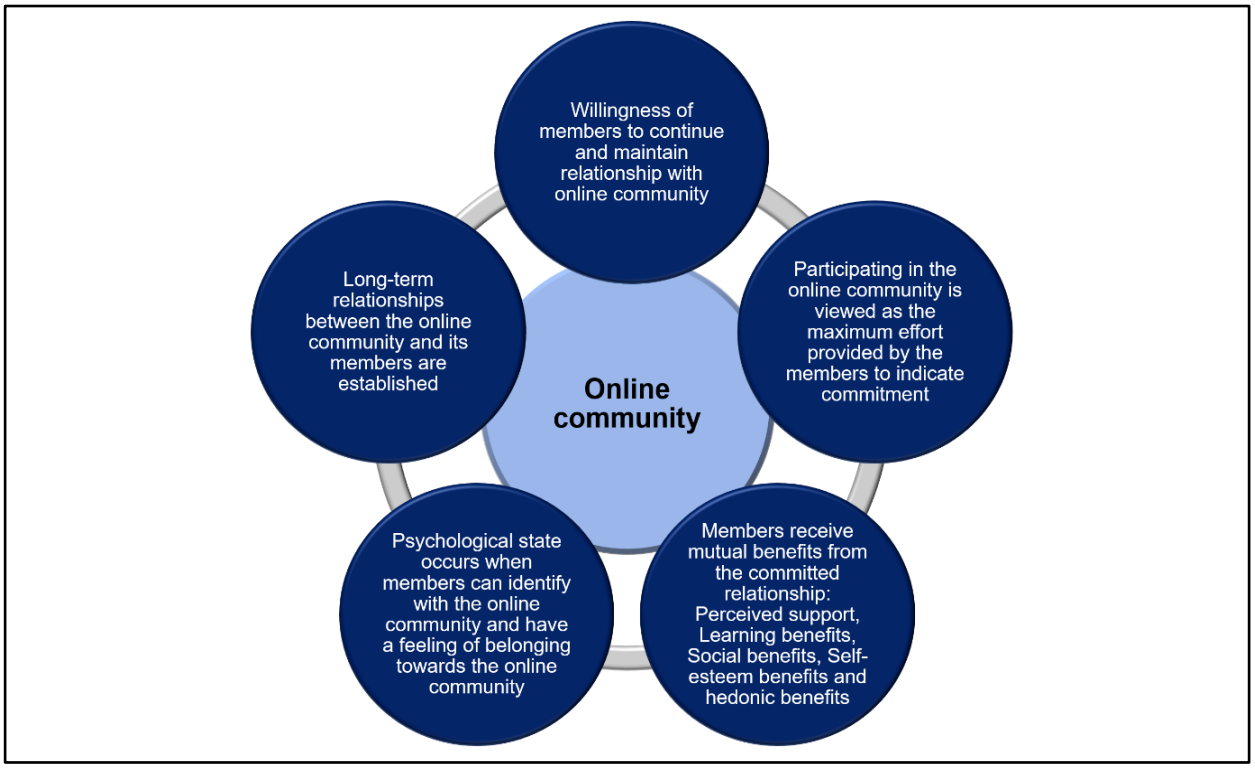
(v) Within an online community, research has established that *long-term relationships* between the online community and members are required for the existence of the community (Kim *et al*., 2008:416), therefore necessitating member commitment.

Taking the elements mentioned above regarding commitment within the online community environment into consideration, it is possible to develop the following definition for online community commitment for this study:

Online community commitment can be defined as a psychological state whereby administrators and members have a desire to maintain and continue with the long-term orientated relationship that provides mutual benefits through maximum effort and short-term sacrifices.

Figure 2-2 provides a summary of the elements of commitment within online communities, as identified in this section.

Figure 2-2: Commitment elements within online communities



Source: Developed by researcher.

2.2.3.3 Dimensions of commitment

Although some studies concerning the online community environment have examined commitment as a one-dimensional construct (Kuo & Feng, 2013; Liu *et al*., 2014), Meyer and Allen (1991) introduced the notion that commitment can be viewed as a multidimensional construct consisting of affective commitment, continuous commitment and normative commitment. This notion has further been supported by various scholars (Bateman *et al.*, 2011, Chen *et al*., 2013; Liu *et al.*, 2016; Zhang *et al*., 2013). As mentioned in section 1.3.3, this study

will only focus on affective and normative commitment, as dimensions of commitment which will be discussed in the next section and will also be investigated in the empirical section of this study.

2.2.3.3.1 Affective commitment

Affective commitment was initially defined in an organisational context by Allen and Meyer (1990:2) and later Meyer and Allen (1991:64) as the identification with, involvement in and the emotional attachment towards an organisation. The concept was later adopted within the consumer environment and refers to the desire of customers to be with the organisation and to buy from the organisation, due to an emotional and psychological based commitment (Bansal *et al.*, 2004:236; Keiningham *et al.*, 2015:435). Affective commitment is, therefore, the psychological position which connects the customer with the marketing partner, grounded on identification and attachment (Fullerton, 2011:93). Grounded in organisational commitment, identification refers to the employees developing an association with the attitudes, values and goals of the organisation (O'Reilly & Chatman, 1986:493). Regarding customers, this identification, therefore, concerns the identification that develops when customers can associate themselves with the goals, values and attitudes of the organisation. Subsequently, when customers are affectively committed, they also have an affection towards the organisation when they become attached to the organisation. Affective commitment is important to organisations as affective commitment is viewed as the basis on which relationships are built (Fullerton, 2005:1385). When customers are affectively committed, they remain with a company or brand based on the sincere attachment and bonding feeling.

Within an online community setting, affective commitment can be defined as the connection between a member and specific online community that is grounded in the strong emotional attachment to the community (Bateman *et al.*, 2011:843). Additionally, affective commitment can also be the desire-based attachment of the members to engage in a lasting relationship with the online community, and include the more emotional factor of the relationship as well as the degree to which the member of the online community are personally involved (Zhou *et al.*, 2012:280; Zhang *et al.*, 2013:837). Members of an online community might, therefore, continue their relationship with the online community due to their interactions, experience and strong emotional attachment to the online community and the other members (Zhang *et al.*, 2013:840).

Research further established that affective ties between members and the online community can be created when community members can develop feelings of attachment and identification or a sense of belonging with the community (Blanchard & Markus, 2004:71). The emotional attachment includes positive feelings of identification with the community, as well as the involvement with the online community (Liu *et al.*, 2016:694). Therefore, members who are

affectively committed towards the online community might be interested in the community, participate in the community and contribute to the discussion of the online community (Liu *et al.*, 2016:694; Sun *et al.* 2014:114). Additionally, online community literature indicates evidence that individuals may develop a strong emotional attachment towards the online community, with some members even stating that they love their online community (Greer, 2000:233; Preece, 1999b:78).

Research has also indicated that members are more motivated to assist members that they like and care for (Grant, 2007:408). Therefore when members have a strong attachment towards the online community and its members, it can be assumed that they care for and like these members and therefore will be more likely to help these members by answering their posts and questions.

Within the offline and online environment which include online communities, various studies have also established that affective commitment is the most important dimension compared to continuous and normative commitment since the emotional feelings of users and members are more important than the cognitive analysis of costs and benefits (Allen & Meyer, 1990; Chen *et al*., 2013; Li *et al*., 2006; Zhou *et al.*, 2012).

2.2.3.3.2 Normative commitment

The normative component of organisational commitment is influenced by the individual's experiences both before and after the interaction with the organisation (Allen & Meyer, 1990:4) and is defined as a sense of obligation to continue the employment with the organisation (Meyer & Allen, 1991:67). Bansal *et al.* (2004:236) applied this concept to a customer environment by stating that the normative component of commitment can be viewed as the binding of the customer to the organisation out of perceived obligation towards the organisation. Thus, normative commitment is based on the individual's belief about their obligations based on relevant norms which are normally social of nature (Keiningham *et al.*, 2015:435). Furthermore, these authors noted that with normative commitment, customer recognises that he/she and the organisation or brand share important norms and values. The sharing of norms and values build normative commitment since the organisations attempt to create obligated customers where they feel a responsibility to repay an act of goodwill (Fullerton, 2011:94).

Although some studies have indicated that normative commitment is poorly understood in the field of marketing relationships (Bansal *et al*. 2004:239; Fullerton, 2011:94), some studies have indicated that organisations are able to build normative commitment through the development of strong correspondence between the values of the organisations and that of the customers (Arnold *et al*., 2001:246; Drumwright, 1996:78; Fullerton, 2014:660; Handelman & Arnold, 1999:35) The

customer, therefore, becomes attached to the organisation when the organisation supports activities and causes which are important to the customers (Fullerton, 2014:660).

Normative commitment within an online community environment has been defined as a member's sense of obligation towards the online community based on the connection between the member and the specific online community (Bateman *et al.*, 2011:844; Zhang *et al.*, 2013:837). Therefore, online community members, who are normatively committed towards the community, feel obligated to continue to be a member of the community, feel that they must remain with the community and help the online community develop (Meyer & Allen, 1991:66; Sun *et al.* 2014:114). After receiving benefits from the online community, members might, therefore, feel obligated towards the online community to repay for the benefits received by supporting the community (Liu *et al.*, 2016:695). The feeling of indebtedness and loyalty results in members of online communities feeling obligated to repay the community as they have benefitted from the community (Bansal *et al.*, 2004:238). Members of an online community who have high levels of normative commitment will, therefore, continue with the relationship as they believe that it is the right thing to do (Algesheimer *et al.*, 2005:22).

Table 2-6 presents a comparison between the different types of commitment present in an offline environment and online community environment.

Table 2-6: Comparison of the different types of commitment between offline environment and online communities

Type of commitment	Offline environment	Online communities
Affective commitment	The desire of customers to be with the organisation and to buy from the organisation, due to an emotional and psychological attachment with the organisation (Bansal *et al.*, 2004; Keiningham *et al.*, 2015).	The strong emotional feeling of attachment and identification with the online community (Bateman, 2011).
Normative commitment	The binding of the customer out of perceived obligation towards the organisation (Bansal *et al*., 2004).	Member's sense of obligation to repay for benefits received from the online community by staying with the online community (Liu *et al.*, 2016).

It is possible to comment from Table 2-6, that affective commitment within an offline environment relates to the desire of customers to be with and buy from the organisation compared to the online community environment where affective commitment involves the attachment and identification with the online community. Table 2-6 furthermore shows that within an offline environment, normative commitment refers to the members' obligation towards the organisation whereas

normative commitment within an online community refers to the obligation to stay with the online community.

Various antecedents of commitment have been established within literature such as service quality and trust (Shukla *et al.,* 2016), satisfaction (Evanschitzky *et al.,* 2006) and utilitarian and hedonic value (Zhou *et al.,* 2015). However, only the antecedents, which was explained in Chapter 1 as being relevant to an online community environment, will be discussed in the next section.

2.2.3.4 Antecedents of commitment

2.2.3.4.1 Emotional support

Emotional support represents the availability of people to listen, care, sympathise, and provide assurance as well as to make a person feel valued, loved and cared for (Helgeson, 2003:25). Thus, the emotional support provides individuals with a means to discuss their feelings and voice their concerns and problems (Rosenbaum & Massiah, 2007:261). Emotional support is concerned with facets such as empathy, concern, caring, love and trust (Dalgard, 2010). Important to note is that emotional support is always valuable no matter the source of emotional support (Helgeson, 2003:26). In other words, it does not matter who is providing emotional support; an individual will always feel that the support is valuable.

Online emotional support refers to the offering of messages which include emotional affairs such as caring, understanding and empathy (Liang *et al*., 2011:72; Taylor *et al*., 2004:355). Emotional support, therefore, emphasises the concern among members which assist in solving problems indirectly (Liang *et al*., 2011:72). Research indicated that emotional support gained from online communities is one of the central reasons why members visit an online community and are one of the most cited psychological benefits from participating in online communities (Johnson & Lowe, 2015:8; Preece & Ghozati, 2001:245). Organisations are also in the position to provide emotional support to online community members, although research has indicated that members prefer emotional support from other members. The reason for this preference might be due to members regarding emotional support from the organisation as a way of marketing (Zhu *et al*., 2016:291).

2.2.3.4.2 Social switching costs

Social switching costs are viewed as a specific type of switching cost that refers to the potential loss of a personal connection or friendship with the organisation should the customer switch to another organisation (Jones *et al*., 2007:336). Social switching cost furthermore not only refers to

personal connections with the organisation but also to personal connections between customers of the organisation, for example among readers of a newspaper (Woisetschläger *et al.*, 2011:803). Social switching costs are furthermore viewed as positive switching costs, since the switching costs result from positive benefits, which include material benefits such as volume-based discounts and loyalty program benefits and social relations benefits such as friendships, which will be lost due to switching (Meng & Elliot, 2009; Haj-Salem & Chebat, 2014:1107). These positive switching costs therefore offer value-adding benefits which will be lost should the customer switch to alternative supplier (Haj-Salem & Chebat, 2014:1108). Research furthermore indicates that social switching costs relates to inward negative emotions, which are negative emotions such as embarrassment, guilt and sadness, which are triggered when customers hold themselves responsible for experiencing negative behaviours our outcomes (Tangney & Dearing, 2002:63). These inward negative emotions, will encourage a customer to rather continue with the relationship than to lose the benefits which are gained through the personal relationships between the customer and organisation (Haj-Salem & Chebat, 2014:1112).

Switching costs also appear to be relevant within the online community environment. Not all interactions creates opportunities to create social switching costs, however, online communities create opportunities where frequent and beneficial interactions between members can take place, which result in social switching costs to be formed (Woisetschläger *et al.*,,2011:804). Chen (2012:5668), found that when members decide to leave the community, they may lose friendships formed in the community or it might be very difficult to tell the other members that they are leaving. Should members, therefore, leave the online community, they might experience social switching costs such as loss of personal relationships with other members and the loss of friendships.

2.2.3.4.3 Position involvement

Freedman (1964) argued that it is important to differentiate between two forms of involvement namely product involvement and position involvement. This author states that product involvement is a result of important values which has been made prominent by a certain decision taken whereas position involvement results from images and values which are identified through a particular stand or brand.

Position involvement is an evaluation process whereby the individual decide the extent to which a specific brand is consistent with the individual's internal values and self-image (Chang & Gibson, 2015:41). In other words, individual's position involvement can be evaluated by deciding if their involvement with a specific brand is consistent with their principles and self-images (Bloemer & Odekerken-Schröder, 2007:25; Pritchard *et al*., 1999:336). These values and self-images relate to the individual's internal views (Pritchard *et al*., 1999:336). Position involvement is, therefore, a

critical process through which the extent to which a specific brand is consistent with internal values and self-images are evaluated (Chang & Gibson, 2015:41). Pritchard *et al.* (1999:336) refer to position involvement as being part of the identification process of customers. The identification process which includes position involvement is grounded in the social identity theory (Bhattacharya & Sen, 2003; King *et al*., 2016; Tajfel, 1978).

Social identity theory is defined as an individual's understanding that he/she belongs to certain social groups and that the group membership signifies some emotional and value to the individual (Tajfel, 1972:272). Social identity theory was initially concerned with the intergroup relations, conflict and cooperation between groups (Tajfel & Turner, 1979:34). The theory was further extended as a social psychological theory which included one's self and identity within a group environment (Turner *et al.*, 1987). The social identity of an individual indicates how an individual express themselves through mutual social identities, grounded in the sense of belonging to a specific social group (Hoffner & Rehkoff, 2011:733). Brown (2000:747) and Morin and Flynn (2014:118) furthermore indicate that individuals' rely on the group to approve and strengthen their own identity which includes both personal and social elements important in defining their self-concept. Company-customer identification, also based on the social identity theory, indicates that consumers have identification with the company should the identity of the company correspond with the customer's needs of self-continuity, self-distinctiveness and self-enhancement (King *et al.*, 2016:323). Since identification results in customers being psychologically attached to the organisation, these organisations benefit from this attachment as customers become more loyal and resistance to negative information increases (Bhattacharya & Sen, 2003:86). Customers will, therefore, have a position involvement with the organisation, should the values and images of the organisation be in line with that of the individual.

Within an online community environment, the social identity theory is applied when the member of an online environment develops self-awareness of the online community members that include similarities with other members as well as dissimilarities with non-members of the group (Ashforth & Mael, 1989:26; Dholakia *et al*., 2004:245). Since position involvement (identification) is grounded in the social identity theory, identification of members within an online community is defined as the impression of one's self regarding the defining features of the online group (Bagozzi & Dholakia, 2002:11). Ma and Agarwal (2007:52) indicate that members tend to be more satisfied with an online community with which they identify themselves with and may also positively influence their knowledge contribution to the online community. Additionally, Dholakia *et al*. (2004:245) indicated that members develop an identification with the online community when they believe that the community can fulfil their predetermined needs.

2.2.3.4.4 Subjective norm

Subjective norm is grounded in the theory of planned behaviour, which is a structural framework which anticipates and explains an individual's behaviour according to beliefs and attitudes (Ajzen, 1991:182). Central to the theory of planned behaviour is an individual's intention to perform a certain behaviour (Ajzen, 1991:181). Additionally, the intention to act can be predicted from attitudes towards the behaviour, perceived behaviour control and subjective norms (Ajzen, 1991:206). The attitude towards the behaviour is established through the individual's beliefs about the outcomes or results of performing the behaviour whereas the perceived behaviour control includes factors outside the control of the individual that might influence the intentions and behaviours (Montaňo & Kasprzyk, 2015:98).

Subjective norm is defined as the perception of the individual that most of the people important to them believe that they should perform the behaviour in question and access the social pressure to perform or not to perform (Ajzen, 1991:188; Rhodes & Courneya, 2003:130). In other words, when people who are important to the individual feel that they should perform a specific action, the individual will do so. The same will also happen when customers feel pressured by people who are important to them not to act. Therefore, by observing what other important people say or do create the perceived pressure on the individual to perform a behaviour or not perform a behaviour (Courneya *et al*., 2000:303). Subjective norm does not mean that the individual needs the assistance of others to perform the behaviour, rather it means that an individual will perform a behaviour should people who are important to them approve of the behaviour. Additionally, subjective norm includes the identifiable opinions of others that are familiar and important to the individual (Kim *et al*., 2013:205). Subjective norms are furthermore motivated by normative beliefs which are the social pressures from important individuals or groups, who agree or disagree with an individual's behaviour or action, and can cause individuals to comply with these pressures (Ajzen, 1991:195; Kim *et al*., 2013:205). When an individual believes that the referents do not approve the behaviour, the individual will have a negative subjective norm and will, therefore, be less motivated to act, and vice versa (Montaňo & Kasprzyk, 2015:98).

Within an online community environment, subjective norm is often presented by compliance (Shen *et al*., 2011:159). Compliance refers to the acceptance of social influence to obtain support or approval from significant other (Shen *et al*., 2011:159). Applied to an online community, the social influence resulting from the subjective norm, influence a member's intention within an online community. Therefore when a member believed that other members who are important to them approve of the behaviour to participate in the online community, they will do so. Subjective norm within an online community, therefore, indicate the effect of others' opinion on a member's

behaviour (Zhou, 2011:70). Importantly, subjective norm refers to the opinion of people who are significant and important to the member and not to any person.

2.2.3.4.5 Perceive critical mass

The concept of critical mass originated in the science discipline where critical mass indicated the number of radioactive material that must be present for a nuclear explosion to take place. This concept was then applied to the social science discipline and is referred to as the level of participants or actions that needed to be reached for a social movement to begin (Oliver *et al*., 1985:523). Additionally, critical mass has also been applied to technology adoption behaviour where the critical mass indicates the minimum number of users is adopting the technology before the speed of adoption increase significantly (Rodgers, 1995:313). In other words, the critical mass takes place at the point where enough individuals have participated or adopted the innovation or product so that the rate of adoption or participation becomes self-sustainable. Should the innovation be unable to reach the critical mass point, the innovation will be eventually eliminated (Van Slyke *et al.*, 2007:274). Additionally, critical mass forms the foundation of collective action (Lim, 2014:272; Lou *et al*., 2000:93). Collective action is defined as the actions or behaviours of a group of individuals working together to reach a common goal (Business dictionary, 2007). Therefore, if a critical mass of participants has not yet been reached, collective action will not be achievable (Shen *et al*., 2011:158). Since it is very difficult to determine the actual point of critical mass, it has been recommended in marketing theory to focus on perceive critical mass which is the perception of individuals of when a critical mass has been achieved (Lou *et al*., 2000:94). Individuals can determine the perceive critical mass through direct observation of the number of individuals that have accepted or participated in the specific action, or the communication that is taking place about the innovation or product (Lou *et al*., 2000:94).

Within the technology acceptance environment, the value and importance of perceive critical mass have been established (Lou *et al*., 2000). When the perceive critical mass of users have adopted the technology, the value of the technology increases and it will be more beneficial for users to engage in the accepted technology. Based on this finding, it can be argued that the same will happen within an online community environment. When the perceive critical mass of members has joined the online community, non-members will be more motivated also to join the online community. However, Economides and Himmerlberg (1994:5) mention that relationship between critical mass and the size of a network has a so-called chicken-egg paradox. This paradox is also applicable to an online community setting. When an online community has reached the perceive critical mass, customers will be more motivated to join the online community however to reach

the perceive critical mass the online community must grow in size which is difficult when the motivation to join the community (perceive critical mass) has not yet been reached.

2.3 SUMMARY

This chapter provided a detailed discussion of the marketing-, relationship marketing- and commitment concepts.

Research has indicated that marketing has shifted from focussing on the 4P's to focussing on relationships and networks between customers and organisations (Gummesson, 2017a:17). Various key elements of relationship marketing were derived from previous definitions and an extensive literature review. Based on these key elements of relationship marketing, it was possible to apply these elements to an online community environment and developed an online community relationship marketing definition for this study. This definition defined online relationship marketing as a long-term continuous process of attracting, building, maintaining and enhancing member relationships through relational exchanges and a network orientated approach, which focused on value creation that may ultimately lead to greater profitability for the online community and organisation. Additionally, both customers and members of an online community benefit from relationship marketing initiatives as do organisations and administrators of online communities.

Since commitment is viewed as a key element of relationship marketing, the chapter presented the various commitment definitions. Again, various key elements of commitment were determined based on the published definitions and literature review performed. Subsequently, online community commitment can be defined as a psychological state whereby administrators and members have a desire to maintain and continue with the long-term orientated relationship that provides mutual benefits through maximum effort and short-term sacrifices.

It was established that the multi-dimensional properties of commitment could be applied to online communities since affective- and normative commitment might be present for members of an online community. Additionally, this chapter provided a comprehensive discussion regarding the different antecedents of commitment which will be explored in the measurement model of this study.

Chapter 3 subsequently presents a more in-depth discussion of online community citizenship behaviour and the value co-creation function performed by customers and members of an online community.

CHAPTER 3

ONLINE COMMUNITY CITIZENSHIP BEHAVIOUR

3.1 INTRODUCTION

Chapter 2 provided an in-depth discussion regarding the marketing, relationship marketing and commitment concepts. Conclusively the elements of relationship marketing, initially considered as relevant within an offline (i.e. face-to-face) environment also applies to the online community environment. Likewise, it was established that the benefits of relationship marketing received by customers and organisations in an offline context could be applied to the online community context as well. Both members and administrators can take advantage of social-, special treatment-, confidence-, customer focussed, competitive advantage and seller-focused benefits when relationship marketing initiatives are implemented. Consequently, Chapter 2 continued with an in-depth investigation of the commitment construct considered as a key element of relationship marketing. It was established that online community commitment could define a psychological state whereby administrators and customers have a desire to maintain and continue with the long-term orientated relationship that provides mutual benefits through maximum effort and short-term sacrifices. Additionally, commitment was recognised as a multi-dimensional construct which consists of affective-, continuance- and normative commitment. For this study, the decision was taken to only examine affective and normative commitment further, as these dimensions have the potential to contribute to citizenship behaviours directed towards members and administrators of online communities. Accordingly, the antecedents of the two commitment dimensions, as shown in Figure 1-1, were also discussed in Chapter 2.

Chapter 3 provides more insight into online community citizenship behaviour which serves as the dependent variable of this study. Online community citizenship behaviour refers to the voluntary behaviour of members of an online community. Online communities include both members and administrators where administrators can accept members, send messages to group members, select more admins, delete members and change the settings of a group. As mentioned in section 1.2.1, little, however, is known about online community citizenship behaviour directed towards administrators and members of residential online activity communities on Facebook. Accordingly, it is further the intention of Chapter 3 to examine possible forms (dimensions) of citizenship behaviours directed towards administrators and towards members of online communities that will subsequently be explored it in the empirical part of this study. The discussion will primarily focus on forms (dimensions) of citizenship behaviours previously noted as relevant in the commerce

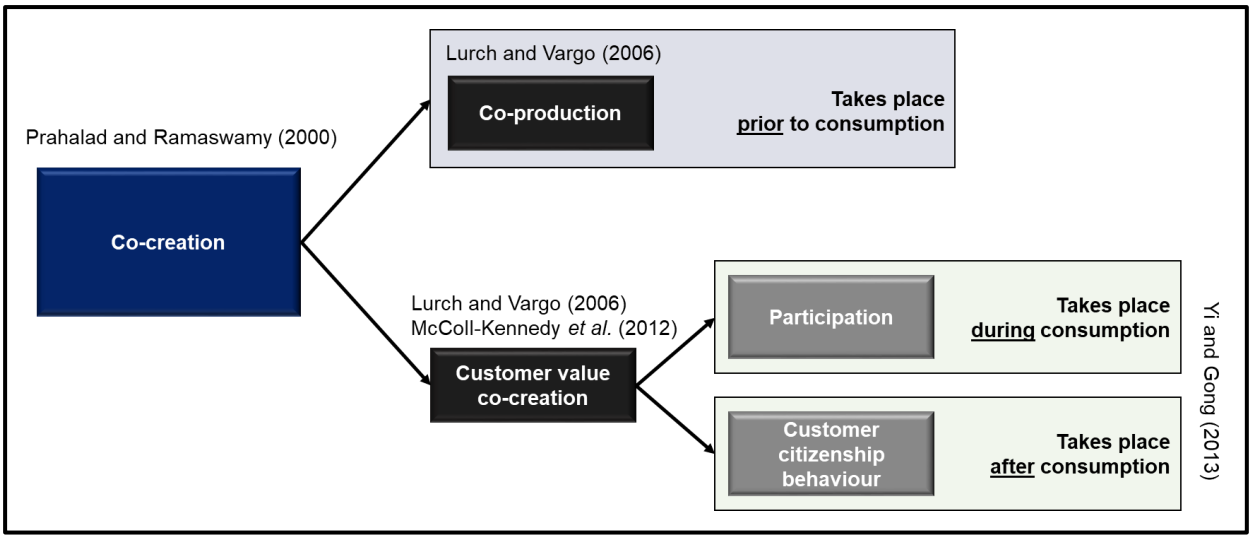
environments. These behaviours will then be further examined in the empirical part of this study to assess their applicability within the residential online activity community environment.

Hence, to obtain more insight into the matter of citizenship behaviour, Chapter 3 commences with an exploration of customer co-creation and positions the relevance of customer citizenship behaviour in the value co-creation process. The subsequent section then provides more insight into customer citizenship behaviour and the related forms of online community citizenship behaviour explored in this study. Next, possible citizenship behaviours directed towards members and administrators of online communities are explored. Since the empirical investigation is interested in online community members' intentions to perform these citizenship behaviours, Chapter 3 closes with an overview of the behavioural intention concept.

3.2 CUSTOMER CO-CREATION

An extensive literature investigation was conducted to obtain more insight into the customer co-creation concept. Figure 3-1 provides a graphical illustration of the customer co-creation concept and its related dimensions namely customer co-production and customer value co-creation.

Figure 3-1: Co-creation



Source: Developed by researcher.

Prahalad and Ramaswamy (2000:80) introduced the concept of *co-creation* when they identified that customers actively participate in creating value and contesting for value. Co-creation refers to the combined, cooperative, concurrent process where organisations and customers generate value through interaction (Galvagno & Dalli, 2014:644). These authors argued that suppliers and customers are therefore no longer on opposite sides of the interaction but rather interact with each other to create new opportunities.

Lusch and Vargo (2006:284) later noted that co-creation, in fact, comprises two components namely *co-production* and *value co-creation.* Co-production activities occur before a product or service is delivered. Value co-creation comprises two sub-dimensions, namely participation and customer citizenship behaviour. The creation of value through participation occurs at the consumption stage, while customer citizenship behaviour predominantly relates to value creation after the product or service has been consumed by the customer (Lusch & Vargo, 2006; Yi & Gong, 2013).

3.2.1 Co-production

As mentioned above, co-production involves the creation of value by the consumer before the delivery of the product or service since it includes activities such as originating and designing functions, resource collection and processes which create products which can be consumed at a later stage (Etgar, 2008:98). Therefore, co-*production* refers to customers' participation in the creation of the fundamental or core offering and include activities such as the co-design of a product, which normally takes place before the product or service is used (Lurch & Vargo (2006:284). Co-production can take place in different degrees ranging from no co-production taking place when the customer is merely present, and the organisation performs all the production to extensive co-production where the customer activity co-produce the service such as cash withdrawal at an ATM (Jacob, 2011:3; Lusch & Vargo, 2009:9). Co-production can include different activities such as the designing of products or assembling of products or the providing of new product ideas (Lusch & Vargo, 2009:8).

3.2.2 Customer participation as a dimension of customer value co-creation

Value can also be created through customer participation at the consumption stage (Yi & Gong, 2013:1281). Customer participation has been formally defined as the behaviours by customers that specify the active and responsible involvement in the governance and development of the organisation (Bettencourt, 1997:386). Additionally, customer participation behaviour refers to the in-role behaviours or mandatory behaviours that are compulsory for successful co-creation to take place and are therefore necessary for the successful establishment of service delivery (Chen *et al*., 2015:66; Revilla-Camacho *et al.*, 2015:1608; Yi & Gong, 2013:1281). Customer in-role or mandatory behaviours refer to actions that are expected and required for successful service delivery. Customers view this role of participation as the inputs that they are sacrificing whereas organisations view this type of behaviour as a resource to enhance service delivery (Tsai *et al*., 2017:522). Customer participation behaviour is therefore viewed as task performance (Yi & Gong, 2013:1280). This task performance/participation behaviour include the actions by customers which are expected and necessary for the service delivery to take place (Groth, 2005:11; Yi &

Gong, 2013:1280; Yi *et al*., 2011:88). Examples of in-role behaviours include customers being physically present, providing credit card information to make the purchase and providing the delivery address (Groth, 2005:10). Additionally, customer participation is required in services such as piano lessons, physical therapy, personal fitness training and in weight reduction programs (Yi *et al*., 2011:88). Customer participation is further a type of value creation since customer participation increase concurrently with commitment and motivation towards the organisation (Revilla-Camacho *et al*., 2015:1608). In other words, when customers are a commitment towards the organisation, they will also be motivated to participate in the service delivery process. Research has furthermore indicated that customer participation is beneficial to both the organisation and the customer since the organisation can adapt to the changing needs of customers and the customers feel more accomplishment thus are more satisfied with the service (Heidenreich *et al*., 2015:279).

Ennew and Blinks (1999:123) initially established that customer participation include three main dimensions namely information sharing, responsible behaviour and personal interaction.

- The notion of participation commences with the *sharing of information* between two parties (Ennew & Blinks, 1999:123). Should customers not supply the required information to organisations, they will be unable to perform the service delivery required (Yi & Gong, 2013:1280). Additionally, the information sharing dimension could be further divided into information supplied as a precondition to the service to be delivered and information which is not formally required but can assist with suitable service delivered (Ennew & Binks, 1999:123). The placing of the order at a restaurant can be viewed as an information sharing where the information is a precondition to the service whereas when the customer share information about a bad experience at another restaurant it can be viewed as information not formally required for the service to take place but will help the current restaurant to provide better service. Additional examples of information sharing as a precondition are when customers provide their hair stylist of the desired hairstyle they want, or clients supply financial information and documents to their accountant to submit their tax report (Kelley *et al*., 1990:315). Should this information not be supplied by the customer, the employee will not be able to solve the customer's problems and satisfy their needs and hence co-creation will not take place (Cossìo-Silva *et al*., 2016:12).

- The *responsible behaviour* dimension of customer participation is the acknowledgement that both the organisation and the customer have certain roles and responsibilities in the service delivery process (Ennew & Binks, 1999:123). Considering customers' responsibilities they need to be supportive, obliging to rules and regulations and accept

instructions from the organisation and employees (Yi & Gong, 2013:1280). The responsible behaviour dimension also refers to the customer performing the role of a partial employee of the organisation (Yen *et al*., 2004:9). Examples of responsible behaviour include customers being on time for an appointment and customers paying for the products and service received. Customers must, therefore, cooperate with organisations and employees by following rules and regulations otherwise very low levels of value co-creation will take place (Cossìo-Silva *et al*., 2016:12).

Research has indicated that customer participation can increase employees' job stress levels and therefore it is the responsibility of the organisation to provide training and communication to employees so that they better understand the benefits of customer participation and enable them to successfully implement the concept (Chan *et al*., 2010:58). Employees must, therefore, be open to suggestions by customers and must provide customers with opportunities to participate in the production and delivery process.

- *Personal interaction* within the participation process includes the personal interaction taking place between the employees of the organisation and the customers (Ennew & Binks, 1999:124). *Personal interaction* is required in the value co-creation process to create a trusted and enjoyable environment in which value co-creation can take place (Cossìo-Silva *et al*., 2016:12). The personal interaction dimension of customer participation includes the customer being friendly, kind and polite towards the employee while being courteous (Revilla-Camacho, 2015:1609). For example, when customer participates in the service delivery process, they should provide mandatory information to the employee in a positive and good manner as to create a positive environment for the co-creation of value to take place. Additionally, the behaviour of personal interaction is very much linked to the dimension established by Kellogg *et al.* (1997:210), who indicate that the building of a relationship with the organisation is viewed as a customer participation dimension. These dimensions include activities such as the customer smiling and offering words of compassion to the employee and getting to know the organisation and their employees by asking, for example, their names.

In addition to the dimensions identified by Ennew and Blinks (1999), Yi and Gong (2013:1280) added *information seeking* as a dimension of customer participation. Information seeking refers to customers searching for information on how to perform their roles and what is expected of them regarding the value co-creation they participate in. This is very important as co-creation will not take place if the customer does not know what is expected of them (Cossìo-Silva *et al*., 2016:12; Yi & Gong, 2013:1280. Through *seeking information*, customers are less uncertain as they

understand and can control the value-creation activities (Yi-Gong, 2013:1280). *Information seeking*, therefore, enable customers to understand and influence their co-creation setting and grasp their role as co-creators of value (Navarro *et al*., 2016:1336). Customers can seek or obtain this information by observing other customers while they use the service or asking the employees specific questions with regards to the service (Cossìo-Silva *et al*., 2016:12). The seeking of information is very important in the co-creation process since a customer who is not sure of their role in the process of co-creating value will eventually become passive, and then the co-creation of value will not take place (Cossìo-Silva *et al*., 2016:12).

In conclusion, customer participation, therefore, relates to the customer value co-creation activities that are required for the service delivery to take place. These activities include customers sharing important information with the employees and organisation, fulfilling the role of a partial employee where the customer understands the role they play in the service delivery process and obliging to the rules and regulations set by the organisation. This behaviour furthermore includes the personal interaction taking place between the employee and customer where a relationship is built based on respect, friendliness and courtesy and activities where the customer seeks information to better understand the role they have to play for value co-creation to take place.

3.2.3 Customer citizenship behaviour as a dimension of customer value co-creation

Finally, customers can also create value after the product or service has been consumed through customer citizenship behaviour (Yi & Gong, 2013:1280). As discussed in Chapter 1, section 1.2, customer citizenship behaviour originated from the concept of organisational citizenship behaviour (OCB) which was first established by Organ (1988:4). Customer citizenship behaviour is viewed as a type of customer value co-creation and include the extra role behaviours of customers that are voluntary of nature and provide value to the organisation (Groth, 2001:11; Yi *et al*., 2011:88). This type of customer value co-creation is viewed as not essential or required for the co-creation of the service delivery (Yi & Gong, 2013:1280; Yi *et al*., 2011:88). Extant literature has referred to this type of behaviour as voluntary customer behaviours (Bettencourt, 1997), customer extra-role behaviours (Keh & Teo, 2001:373) and customer citizenship behaviours (Groth, 2005). For this study, the term customer citizenship behaviour is used. Research has indicated that customer citizenship behaviour contributes towards customer value co-creation since customer citizenship behaviours can create a friendlier environment and increase service quality received by the organisation (Chiu *et al*., 2017:416). When customers provide constructive feedback to organisations, the organisation can improve the quality of service provided thus they participate in the creation of value. Moreover, customers who recommend the service or organisation to friends and family, enhance the reputation of the organisation and therefore

contribute to the value received by customers (Chiu *et al*., 2017:416). Yi and Gong (2013) state that the more customers are involved in customer citizenship behaviours, the more value they will receive since they actively participate in the creation of better value within the service encounter. Additionally, Gruen *et al.* (2007:537) mentioned that customer-to-customer interaction plays a pivotal role in the co-creation of value. Since these interactions enhance the service offering provided by organisations, especially where a group of people enjoy the service such as tours, conferences and boat trips, the interaction between customers which are not required for the service to take place, can contribute to the experience of the service (Gruen *et al*., 2007:537). Customer-to-customer interactions in online communities have proved to increase growth, profitability and loyalty for organisations and can also assist to improve the financial performance and brand equity of organisations (Bruhn *et al.,* 2014:167; Libai *et al.,* 2010:277). Examples of customer-to-customer interactions taking place on online communities include the exchange of information as well as the interactions where members can observe and learn from other members (Libai *et al.,* 2010:269).

Since the dependent variable is that of online community citizenship behaviours, the subsequent section aims to provide an in-depth discussion of customer citizenship behaviour and online community citizenship behaviour.

3.3 CUSTOMER CITIZENSHIP BEHAVIOUR DEFINED

3.3.1 Social exchange theory

As mentioned in section 1.3.1, customer citizenship behaviour is grounded in the social exchange theory. Accordingly, it is necessary to first understand the social exchange theory before examining the customer citizenship behaviour concept in more depth.

Various authors have contributed to the literature of social exchange theory namely, George Homans (1958) and Peter Blau (1964). Blau (1964) presented the most popular definitions when he mentioned that the social exchange theory is based on actions which depend on the rewards received from others. Homans (1958:598) used social exchanges to understand human behaviour whereas Blau (1964) applied this concept to understand organisational behaviour. Additionally, Blau (1964:94,259) focussed on the social norms of the organisation, where individuals expect mutual benefits such as gratitude, personal affection, economic return and trust when they perform according to the norms of the organisation. People and organisations, therefore, interact to receive maximum benefits at minimal costs (Salam *et al*., 1998:335). The benefits can include the desire for physical objects, social gains or psychological pleasure whereas the costs can include harmful objects, psychological penalties or social punishments

(Bagozzi, 1974:77). Reciprocity is further viewed as a core element of the social exchange theory (Tanskanen, 2015:579) since the social exchange theory is viewed as beneficial deeds towards other people where these beneficial deeds are reciprocated using service and expression of gratitude. Social exchange theory has been applied to various contexts such as electronic commerce transactions (Salam *et al*., 1998), information technology (Young-Ybarra & Wiersema, 1999), customer relationship management (Gefen & Ridings, 2002), online gaming (Hsu & Lu, 2004), social networking sites (Dwyer *et al*., 2007), and online social networks (Qin *et al*., 2011).

In applying the social exchange theory to customer citizenship behaviour, research has established that customers may want to repay or respond to a beneficial action by the employee using performing extra-role behaviour such as customer citizenship behaviour (Bove *et al*., 2009:703). For example, when a customer receives good service from an organisation, they will respond by telling their friends or family about the good service or they will assist other customers also to use and experience the good service. A social exchange, therefore, takes place, where the good service from the organisation is exchanged with friends, family and other customers. Additionally, the social exchange theory is vital in understanding behaviour between people as well as within a group environment (Sinkovics *et al*., 2014:846). When customers are satisfied with a service they received from the organisation, they feel obligated to respond by performing customer citizenship behaviours (Bettencourt, 1997; Groth, 2005). Alternatively, when members of an online community received relationship marketing (commitment) benefits such as the development of social and emotional bonds between members, these members might want to repay the receipt of these benefits by performing customer citizenship behaviours such as helping a fellow member when they experience a personal problem.

3.3.2 The generic elements of the customer citizenship behaviour concept

Table 3-1 summarises the most widely published definitions of customer citizenship behaviour.

Table 3-1: Customer citizenship behaviour definitions

Author	Definition
Gruen (1995:461)	Customer citizenship behaviour refers to the **beneficial**, and productive behaviours of customers which are **valued and cherished by the organisation** but are not directly related to the enforceable **requirements** of the individuals.
Bettencourt (1997:384)	Refers to the **helpful**, **discretionary** behaviours of customers that support the ability of the organisation to deliver service quality.
Groth (2001:13)	Customer citizenship behaviour is the **voluntary** and **optional** behaviour of customers which are not directly expected or rewarded by them but results in higher service quality and the **effective functioning of the organisation**.
Keh and Teo (2001:373)	Customer citizenship refers to the **extra-role behaviours** of customers when the customer is pro-actively involved with the organisation and has a personal interest in the organisation.
Groth (2005:11)	Customer citizenship behaviour is defined as the **voluntary** behaviour of customers that are **not required** for the successful delivery and production of service but **assist the organisation** overall.
Bove *et al.* (2009:698)	Customer citizenship behaviour is **voluntary** and **helpful** behaviours performed towards the organisation, employee or other customers which are **not required** for the central service delivery to take place. These behaviours can **positively influence the performance of the organisation**, the employees or **other customers** and usually assist in creating a required environment for the parties in a service interaction.
Gilde *et al.* (2011:619)	Customer citizenship behaviour describes the **helpful and voluntary behaviours** which are performed by customers over and above what they should typically perform in an exchange relationship.
Yi *et al.* (2011:88)	Customer citizenship behaviour includes only the **voluntary** customer behaviour that is not required for an effective service encounter.
Hansong *et al.* (2012:393)	Customer citizenship behaviour is the **voluntary and helpful behaviours** performed towards the organisation or other customers which are **not required** for the core service to take place.
Soch and Aggarwal (2013:103)	Customer citizenship behaviour is a form of extra-role behaviour which is **helpful**, considerate, kind or thoughtful acts that are **voluntary performed**.
Hau and Thuy (2016:608)	Customer citizenship behaviour refers to the **voluntary** behaviour which delivers **extraordinary value to the organisation** although it is not required by the customer.

From Table 3-1 and a further literature investigation, it is possible to identify the following generic elements of customer citizenship behaviour:

- **Customer citizenship behaviour is voluntary in nature**

The term voluntary can be defined as the "proceeding from the will or one's own choice or consent" (Merriam-Webster dictionary, 2017). Regarding citizenship, Bettencourt (1997:385) mentions that these types of behaviours are performed at the discretion of the customers. Additionally, Groth (2005:11) mentions that these voluntary behaviours are not required for the successful production of a product or service. In essence, customer citizenship behaviour is, therefore, voluntary behaviour (Chen *et al*., 2015:66; Lin, *et al*., 2016:26; Tung *et al.*, 2017:25) which means that customers decide themselves to perform these behaviours or not.

- **Customer citizenship behaviour is helpful and valuable to the organisation and its personnel**

  Positive feedback can motivate organisations to continue with the service they provide whereas the negative feedback provided by the customers can assist them to improve their service by correcting the problems experienced. When customers inform the organisation when something in the establishment is faulty, the organisation is in a position to rectify the problems. Yi *et al.* (2013:341) furthermore state that since customer citizenship behaviour enables customers to communicate anticipated problems, assist them to be more patient with a service delivery failure and are willing to adjust themselves to situations out of their control, organisations can keep running smoothly.

  Additionally, Garma and Bove (2011:634) established that customer citizenship behaviour is not only helpful and beneficial for the organisation but also for the service personnel of the organisation. These authors established that customer citizenship behaviours can improve the physical well-being of the service personnel since their workload and stress are reduced, their mood is more positive, and they can work in a more enjoyable environment. Additionally, the social well-being of the service personnel improves as a result from customer citizenship behaviour, where the personnel feel more appreciated, proud and valued by the customers (Garma & Bove, 2011:638-639).

- **Customer citizenship behaviour is helpful and valuable to other customers**

  Since customer citizenship behaviour include customers sharing their positive experiences with friends and family (Bettencourt, 1997), the customers' receiving this information benefit as they know that they will receive a good experience from the service provider. They will therefore not take the risk and interact with organisations which do not have a good reputation amongst their friends and family. In the qualitative phase of the study by Yi *et al.* (2013:347) a participant mentioned that the assistance and suggestions by fellow clients at a swim school assisted him on his first day to understand how the practise session works

which resulted in a very positive experience. Customers can directly help fellow customers to use the product correctly, for example by showing the person how to make calls or send messages on their new cell phone. Customers can also directly assist fellow customers by recommending a restaurant where they have received good service from.

- **Customer citizenship behaviour is not required for service delivery to take place**

  A key element of customer citizenship behaviour is the property that these types of behaviours are not required for service delivery to take place (Bove, 2009:698; Groth, 2005:11; Gruen, 1995:461; Hansong *et al*., 2012:393). As Organ (1988) mentioned, for an organisation to reach their goals, it is necessary for employees to perform behaviours which are not formally required of them. In the contexts of organisation and employees, these non-required behaviours are known as organisational citizenship behaviours. Regarding customers, customer citizenship behaviours do not have requirements and are not required behaviours for the organisation, and although these non-required behaviours have no relationship with purchasing, these behaviours are helpful for organisations to reach their goals (Di *et al*., 2010:1921). Whereas customer participation or in-role behaviour refers to the required behaviours of customers for a service interaction to take place, customer citizenship behaviour or extra-role behaviour are the non-required behaviours in a service delivery interaction (Chen *et al*., 2015:66). Therefore, organisations are not dependent on customer citizenship behaviours to ensure a service is produced, bought and consumed, but the behaviours will benefit the organisation should they be performed.

Consequently, while several definitions of customer citizenship behaviour were published in the past, based on the customer citizenship behaviour elements described in this section, it is possible to formulate the following definition of customer citizenship behaviour for this study:

Customer citizenship behaviour can be defined as voluntary behaviours by customers who are helpful for both the organisation, its personnel and other customers but are not required for the service delivery to take place.

3.3.3 The nature of citizenship behaviour within online community environment

Knowledge contribution together with other extra-role behaviours such as helping other users and communicating positive word-of-mouth is beneficial for the successful functioning of an online community (Chou *et al*., 2016:62). The authors furthermore mention that these beneficial and voluntary behaviours, positive influences the functioning of the online community and can, therefore, be viewed as online community citizenship behaviours. Compared to these extra-role behaviours, in-role or mandatory behaviours within an online community include members of an

online community on Facebook obeying the rules of the group such as the frequency of posts and topics of allowed posts (Yen *et al*., 2011:92).

A further literature investigation revealed that the generic elements of customer citizenship behaviour, discussed in section 3.3.2, may also be relevant and can be applied to online communities in the form of online community citizenship behaviour:

(i) Online community citizenship behaviour is also *voluntary* in nature. Chou *et al.* (2016:62) mentioned that voluntary behaviours such as assisting other members and expressing a positive word of mouth about the online community, assist with the sustainment of the online community and is furthermore beneficial for the successful functioning of the online community. Yen *et al.* (2011:90) agree and mention that the extra-roles or citizenship behaviour of members are optional behaviour and differ from the required behaviours or in-role behaviours of members that are expected and required activities. These voluntary behaviours by members of an online community are referred to as online community citizenship behaviours (Chou *et al*., 2016:62). For example, when members of the online community decide to reply to a post asking directions to the city centre, they are in fact performing customer citizenship behaviour since they voluntary choose to reply to the post.

(ii) Online community citizenship behaviours are *helpful and valuable to the online community/administrators* since the extra-role behaviours of members of an online community promote the effectiveness of such communities and also positively affects the online community (Yen *et al*., 2011:90). Based on the definition of organisational citizenship behaviours, Chiu *et al.* (2009:3) agreed and concluded that online community citizenship behaviours benefit the online community as these types of behaviours promote the effective functioning of the online community. For example, when members provide constructive suggestions to the administrators of the online community, the administrators are in a position to implement the suggestions, resulting in an improved online community and higher satisfaction levels amongst members (Yu-Hong *et al*., 2013:616). Furthermore, online community citizenship behaviours such as the policing of members can assist administrators to maintain the online community through the limiting of inappropriate behaviours of members.

(iii) Online community citizenship behaviours such as addressing member's problems, or providing social support when other members are in need, are viewed as important to an online community and are *helpful and valuable for the members of the online community* (Yong *et al*., 2011:683). Additionally, members of online communities can assist fellow members when these members post questions about problems they need to resolve. When

the members of the online community reply to these questions, they perform online community citizenship behaviours. Additionally, members can also offer suggestions and advice on how to use the online community.

(iv) Online community citizenship behaviours are *not required* of the members of the online community but are important for the online community to operate effectively. Online community citizenship behaviours include activities such as involvement in building the online community, welcoming new members, acknowledging members who contribute towards the online community and preventing other members to behave inappropriately (Bateman *et al.*, 2006:987). Kang *et al.* (2007:113) agreed and stated that online citizenship behaviours include all positive and relevant behaviours of online community members that are beneficial for the online community.

Subsequently, based on the discussion above, it is possible to formulate the following definition of online community citizenship behaviour for this study:

Online community citizenship behaviour can be defined as the voluntary behaviours of online community members which are helpful to the online community, the administrators and members, but are not required for the online community to exist.

As established in section 1.2.1, citizenship behaviours can be directed towards members and administrators of online communities. Little however is known on the forms (dimensions) of citizenship behaviours members of online activity communities may engage in when interacting with administrators and fellow members of these communities. Hence, the following section further explores key dimensions of citizenship behaviours that have been identified over the years in the commerce environments and argues on the extent to which the behaviours may be relevant in an online community environment, as directed towards other members and administrators of the online community. These proposed citizenship behaviours are then further explored and verified in the empirical part of this study among members of residential online activity communities on Facebook.

3.4 ONLINE COMMUNITY CITIZENSHIP BEHAVIOURS

3.4.1 Citizenship behaviours relevant to online community environments

As was indicated in Figure 3-1, customer value co-creation include both participation and customer citizenship behaviours. Towards clarification of what behaviours are included in the

customer citizenship domain, Table 3-2 provides a summary of behaviours relevant to participation and customer citizenship behaviour previously identified in the literature.

Table 3-2: Behaviours included and excluded in the customer citizenship behaviour domain

Behaviour	Description of behaviour	Examples of behaviour	Customer participation	Customer citizenship behaviour
Advocacy (Positive WOM)	Behaviours of customers when they recommend the product, service or organisation to fellow customers (Anaza, 2014:253; Groth, 2005:10).	Recommending the product or organisation to friends, family and peers and saying positive things about the organisation to other customers.		✓
Co-developer	The customer is actively involved in a significant proportion of the development the final product (Fang, 2008:91).	Customer providing product information to complete the product such as product specifications and requirements.	✓	
Conscientiousness	Behaviour where customers go beyond the basic purchasing requirement of transaction procedures (Di *et al.*, 2010:1925).	Being an honourable customer, complying with norms of the organisations and listening to the explanation of the employee.		✓
Courtesy	Behaviour where customers actively give warning as to avoid mistakes from happening which may influence other customers or the organisation (Di *et al.*, 2010:1925).	Activities include customer considering their behaviours towards employees and other customers; not causing problems with the organisation and not abusing the rights of other customers.		✓
Feedback	Providing feedback to the organisation (Groth, 2005:16). This feedback can be positive or negative feedback provided (Curth *et al.*, 2014:149).	Customers providing helpful feedback to customer service, customers completing feedback forms, informing the organisation of the great service they are receiving. Customers providing feedback when they had a negative experience with		✓
Helping behaviours	Behaviour where customers actively assist fellow customers or the company with tasks and questions (Di *et al.*, 2010:1925; Groth, 2005:15; Mpinganjira, 2016:3).	Assisting and teaching other customers to find and use the organisation's products.		✓
Information resource	Activities which involve the customer sharing information with the organisation during the new product development process (Fang, 2008:91).	Customer providing critical information such as the specs of the product during the product development process.	✓	

Table 3-2: Behaviours included and excluded in the customer citizenship behaviour domain (cont.)

Behaviour	Description of behaviour	Examples of behaviour	Customer participation	Customer citizenship behaviour
Information seeking	Information seeking is the activities performed by customers to understand and influence their co-creation setting and grasp their role as co-creator of value (Navarro *et al.*, 2016:1336; Yi & Gong, 2013:1280).	Customers searching for information on where the products are available, customers asking information about what the service and products offer.	✓	
Information sharing	Sharing of information between two parties (customer and organisation or employee) which are required for the service transaction to take place (Ennew & Binks, 1999:123; Yi & Gong, 2013:1280).	Activities such as giving your meal order to the waiter at a restaurant, providing clear instructions to the employee and answering the questions that employees have.	✓	
Responsible Behaviour	The understanding that both the customer and organisation has certain roles and responsibility to enable the service interaction to take place (Ennew & Binks, 1999:123).	Organisation – Delivering and producing the product. Customer – Paying for, and receiving the product.	✓	
Personal interaction	The process where physical and personal interaction takes place between the customer, employee and organisation (Ennew & Binks, 1999:124; Yi & Gong, 2013:1280).	The customer being physically present to board a plane, and being friendly, polite and courteous to the employee.	✓	
Policing of other customers	Observing other customers to ensure appropriate behaviours (Bettencourt, 1997:386).	Customer activities to prevent other customers from causing problems and informing the organisation if other customers perform inappropriate behaviours.		✓
Suggestions for service improvements	Customers are providing the organisations with suggestions and ideas to improve the service and products, which are not a result of a specific interaction with the organisation (Bettencourt, 1997:386).	Customers making suggestions of how the service can be improved, customers sharing their opinions of the service and products and customers contributing ideas for the improvement of the products and service.	✓	

It is further evident from Table 3-2 that there exist various forms of customer citizenship behaviours. Owing to the characteristics of an online community (section 1.2.2.1), the customer citizenship dimensions of feedback, policing and helping behaviour were deemed as relevant to online communities. Specifically, helping behaviours are relevant since members of online communities can assist by replying to posts that will help fellow members to solve personal problems and assist them of how to use the services of the online community correctly. Additionally, members of online communities are in a good position to provide feedback to administrators as to improve the online community. Although the key function of administrators is to moderate and facilitate the online community by keeping the community active and limit offensive content (Hess *et al*., 2013:576; Wu & Chang, 2005:949), members of an online community are in the position to assist administrators with the policing of customer's inappropriate behaviour. The policing dimension of customer citizenship behaviour is therefore very relevant to the online community context, hence the dimension is included in the measurement scale used. Additionally, to the knowledge of the research, no study conducted within the online community environment has tested the policing of customers (members) dimension in this context.

Consequently, based on the arguments above, feedback-, policing- and helping behaviours were considered as relevant in the context of this study and are discussed in more detail below.

3.4.2 Characteristics of the dimensions of citizenship behaviours examined in this study

This section provides a better understanding of the dimensions identified in section 3.4.1, by providing a discussion of the generic characteristics of each dimension and the application thereof to an online community context.

3.4.2.1 Feedback behaviour

The feedback and participation concepts have been used interchangeably in customer citizenship behaviour literature. Specifically, Bettencourt (1997:385) established that customers could act as consultants for the organisation when they perform voluntary behaviours in which they actively and responsibly get involved with the governance and development of the organisation (Graham, 1991:255, Van Dyne *et al*., 1994:767). This type of customer behaviour is labelled as customer participation – a dimension of customer citizenship behaviour. Customer participation includes behaviours where customers inform the organisation of ways to better satisfy their needs, thus making constructive suggestions and providing useful ideas (Bettencourt, 1997:395). Additionally, customer participation as a customer citizenship behaviour also includes customers informing the organisation should they experience a problem or even a good service (Bettencourt, 1997:395).

It is, however, important to state that customer participation as a dimension of customer citizenship behaviour is not the same as customer participation as a dimension of customer value co-creation. Customer participation (customer citizenship behaviour) is behaviour which is *not* required for the service interaction to take place thus voluntary behaviours such as customers providing suggestions to the organisation or customers informing the employees of problems experienced. In comparison, customer participation (customer value co-creation) refers to the behaviours which are required for service delivery and value creation to take place thus mandatory behaviours (Groth, 2005:11; Yi & Gong, 2013:1280; Yi *et al*., 2011:88). These behaviours include information sharing, responsible behaviour, personal interaction and information seeking customer behaviours as discussed in section 3.2. Additionally, Yi and Gong (2013:1281) conducted an exploratory factor analysis that included the different forms of customer participation as a customer value co-creation dimension and the different dimensions of customer citizenship behaviours. The results of the exploratory factor analysis empirically confirmed that these two concepts are not the same. For example, when a customer visits a restaurant to eat, they need to give the order to the waiter. The sharing of this information is a type of customer participation behaviour as a dimension of customer value co-creation. When the customer has received good service from the waiter, and they tell friends and family this behaviour is a type of customer participation as a dimension of customer citizenship behaviour. Both these behaviours add value however the former type is required for the service to take place whereas the latter type of behaviour is not required for the service delivery to take place.

Similar to Bettencourt (1997), the authors Rosenbaum and Massiah (2007:261) also used the concept of customer participation as a dimension of customer citizenship behaviour in their study. These authors investigated the influence of social-emotional support and instrumental support on the different dimension of citizenship within a service organisation. In this study, customer participation was seen as a dimension of customer citizenship behaviour, and the authors adapted the scale of Bettencourt (1997) to a gym scenario. The scale included gym customers notifying the employees at the gym should they experience a problem, gym customers providing constructing suggestions to gym employees of how to improve the service at the gym and gym customers also sharing useful ideas with the employees of the gym (Rosenbaum & Messiah, 1997:264).

Additionally, Yi and Gong (2013) conducted a study which included both the customer co-value creation behaviours of customer participation (the *required* behaviour for the service delivery to take place) and customer citizenship behaviour (voluntary behaviours). In this study, Yi and Gong (2013:1280) used the term feedback to measure the behaviour which Bettencourt (1997) and Rosenbaum and Massiah (2007) labelled as customer participation (voluntary behaviour).

Feedback, as a customer citizenship behaviour, refers to the solicited and unsolicited information that customers provide to an employee which are used to improve the service creation process (Groth *et al*., 2005:421). Important to note is that the same measurement scale was used to measure both feedback (Yi & Gong, 2013) and customer participation (voluntary behaviour) (Bettencourt, 1997; Rosenbaum & Massiah (2007). It can, therefore, be assumed that, in essence, these two concepts, customer participation (voluntary) and feedback are the same with regards to customer citizenship behaviour.

Within an online community environment, feedback refers to online community members providing feedback or suggesting additional information to administrators of the online community (Chou *et al*., 2016:62; Hsu & Yen, 2016:708). Research has indicated that the providing of feedback, as a type of citizenship behaviour is relevant to online communities. Yen *et al.* (2011) applied the concept of providing feedback as mentioned by Graham (1991) and Van Dyne *et al.* 1994) and indicated that members often become involved in the developed and control of the online communities through the providing of constructing feedback to community managers (administrators). Additionally, Chou *et al.* (2016:62) build on the research of Yi and Gong (2013) and Yen *et al.* (2011) and state that online community citizenship behaviour includes feedback as a dimension, which refers to the additional information provided to assist the community in the long-term.

3.4.2.2 Policing behaviour

The policing of other customers refers to the steps taken to prevent customers from causing problems where customers inform an organisation should they become aware of inappropriate behaviour by other customers as to promote appropriate behaviours (Bove *et al*., 2003:335; Tung *et al*., 2017:24). Inappropriate behaviours of customers refer to the behaviours within a relational exchange which unintentionally and deliberately disrupt the accepted norms of the given situation (Reynolds & Harris, 2009:322). These authors also established that these unacceptable behaviours negatively influence other customers and their evaluation of the service encounter. The policing of other customers, therefore, prohibits these unacceptable and inappropriate behaviours which benefit the organisation as the service encounter might be more positive for members. Various studies have focused on the policing of customers dimension such as a recent study by Tung *et al.* (2017) which tested this dimension within a hotel environment where guests develop a sense of obligation to inform hotel personnel when fellow guests act inappropriately.

Although no study has used the policing of customers behaviour within an online community context, it is possible to argue that since online communities enable members to post and comment their opinions and questions, the policing of members are critical to limit inappropriate

posts and comments. Adapted from Bove *et al.* (2009:704) and Mpinganjira (2016:6), these behaviours may include members suggesting solutions, answers and remedies to issues of inappropriate behaviour which may make other members of the online community unhappy. For example, members can inform the administrators of the online community when fellow members make racial comments or use curse language.

3.4.2.3 Helping behaviour

Another prominent dimension of citizenship behaviour is that of the helping behaviours between customers. Yi and Gong (2013:1281) mentioned that the helping behaviour of customers is intended to assist fellow customers. Within a service organisation, this helping behaviour is normally directed towards other customers instead of towards employees since other customers may require help rather than the employees (Groth *et al*., 2005:421). Additionally, the helping behaviour of customers can also assist fellow customers with the use of the product or service, or it can be intended to assist fellow customers with problems they experience with regards to the products or service (Yi & Gong, 2013:1281). In an offline context where membership of a museum group was investigated, Bhattacharya (1998:41) established that customer helping behaviours has a negative effect on the lapsing of membership which means that when members perform helping behaviours, they are less likely to lapse their membership. Groth (2005:15) furthermore established through a scale development study performed amongst adults within an offline environment, that customer citizenship behaviour relating to the helping behaviours of customers, include customers helping each other to find products, customers assisting each other with their shopping and customer teaching and explaining to each other to use the service correctly.

The helping behaviour of members within an online community environment refers to online community members performing helping behaviours to assist fellow members such as assisting members when they need help or experience problems (Chou *et al*., 2016:62; Yong *et al*., 2011:685). Since online communities consist of members, who share an interest in specific topics of interest (Armstrong & Hagel, 2000:87) the helping behaviour is very applicable to the online community environment as members who share a common interest can help each other. For example, when members experience a problem such as the need for a dentist, fellow members can help this member by providing the contact information of the dentist in the city.

The subsequent section further explores the possible relevance of the helping, feedback and policing dimensions to the context of this study and aims to provide clarification on the extent to which the behaviours may be directed towards administrators and members of an online community. Arguments are presented and debated as informed by the literature review that was discussed in sections 3.4.1 and 3.4.2.

3.4.3 Online community citizenship behaviours directed towards administrators and directed towards members

3.4.3.1 Participation / feedback

Considering the research by Yi and Gong (2013:1281) and Rosenbaum and Massiah (2007:264), the argument in this study is similar to the feedback (voluntary participation) that customers (the beneficiary of the service) would provide to organisations in offline and online environments (the benefactor of the service). It is plausible that members of online communities may also engage in feedback behaviour towards the administrator of the online community on Facebook. In this regard, Facebook members can be seen as the beneficiaries of the service and the administrator as the benefactor of the service.

The feedback provided to administrators can relate to general improvement suggestions or operational problems feedback. *Feedback relating to general improvement* includes members making suggestions to the administrators that will improve the online community's experience and inform the administrators of ways to better serve the needs of the members as well as the sharing of useful ideas to enhance the online community experience. For example, members of an online community can make suggestions to the administrators to open discussions regarding a relevant topic such as employment opportunities in the specific city. *Feedback relating to operational problems* refers to members notifying administrators of operational or functional problems experienced by the online community member. For example, members of an online community can inform the administrator when they are unable to post or comment due to a technical error or setting of the online community. Since the providing of feedback is provided to the administrators of the online community by the members, **this type of online community citizenship behaviour can be seen as behaviours directed towards administrators and not towards the members of the online community.**

3.4.3.2 Policing

It is further argued that members of online communities may also become involved in policing behaviour similar to the commerce environment, which may involve to assist the benefactor of the service to observe, amend and oppose negative actions of other beneficiaries of the service (Bettencourt, 1997:386; Bove, 2003:335; Gruen, 1995:462). Adapted from Bove (2003:335), the policing of members may include the actions that members take to prevent fellow members from causing problems in the online community. Although administrators are normally the people who limit harmful and inappropriate behaviours within online communities (Uridge *et al*., 2010:231), members can assist administrators through the policing of fellow members viewed as an online

community citizenship behaviour. Importantly, **these suggestions are made to the administrator of the online community and are therefore classified as online community citizenship behaviours directed towards administrators.** The administrators can, therefore, benefit from these behaviours as they will be in a better position to manage and limit the inappropriate behaviours of members which might result in a more successful online community.

3.4.3.3 Helping behaviour

Similar to the offline and online commerce environments, it is also plausible that within the online community environments, members (the beneficiaries of the service) would engage in helping behaviours as a form of citizenship behaviours.

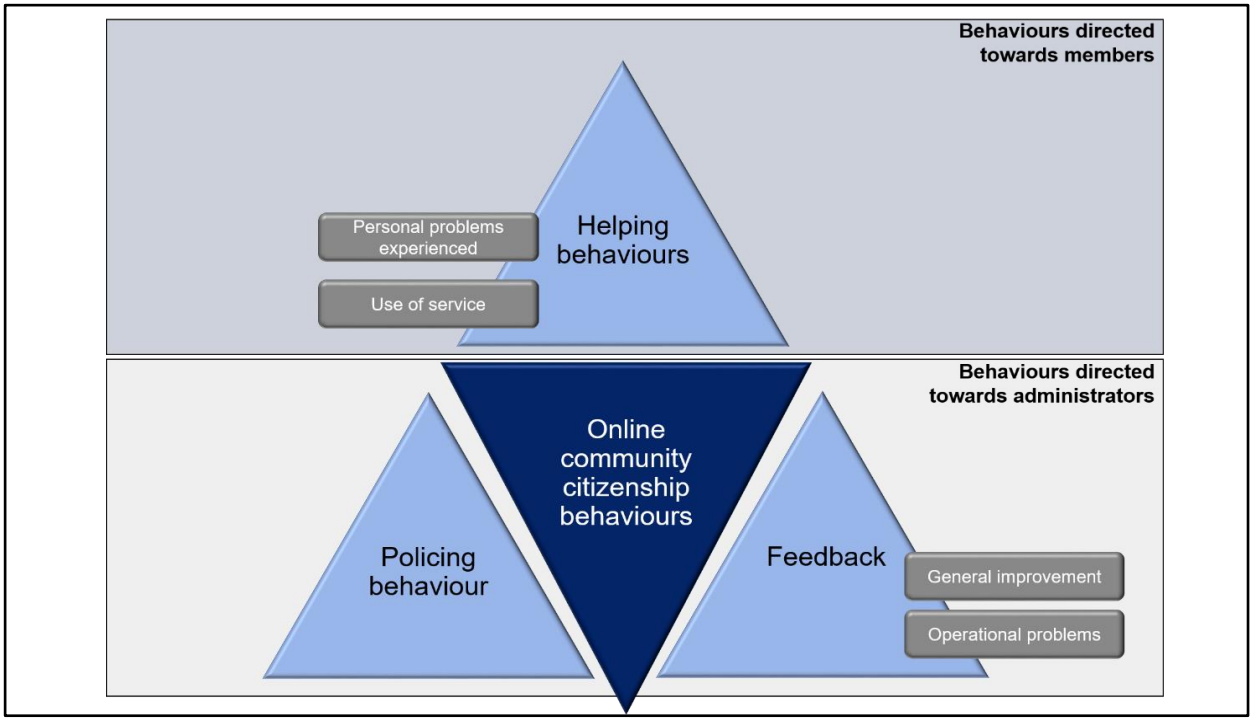
Research has indicated that helping behaviour can relate to personal problems experienced by the beneficiaries as well as the use of service (Yi & Gong, 2013:1281, Yong *et al*., 2011:690). The helping behaviours relating to *personal problems experienced* for example may concern where a member post that they urgently need the service of a dentist. Fellow members would then help by supplying the contact details of the dentist or advise how the member can solve a tooth-ache or just provide support to cope with a tooth-ache.

Additionally, members can also help fellow online community members *relating to the use of the online community service*. Adapted from Yi and Gong (2013:1281), this may include behaviours where members help and assist other members to correctly and accurately use the online community, where members teach and give advice to fellow members of how to correctly utilise the online community. For example, when a new member joins the online community, fellow members can help them by giving advice on how to post comments and teaching them how to search for specific topics.

Consequently, considering the above discussion, in an online community environment, helping behaviour may relate to assisting fellow members with personal problems experienced or in using the online community service. **Helping citizenship behaviours are subsequently directed towards fellow members of online communities.**

Figure 3-2 presents a graphical illustration of the possible citizenship behaviours directed towards the administrators of an online community and towards the online community members which will be further tested in the residential online activity community environment in this study.

Figure 3-2: Possible citizenship behaviours directed towards administrators and members of an online community



Source: Developed by researcher.

Since the empirical investigation is interested in online community members' intentions to perform citizenship behaviour, the next section provides an overview of the behavioural intention concept.

3.5 BEHAVIOURAL INTENTION

Behavioural intention refers to an individual's subjective intention that they will perform some behaviour (Fishbein & Ajzen, 1974:288). Additionally, these authors argue that the best predictor of an individual's behaviour is the intention of the individual to act and is irrespective of the nature of the behavioural standard. Various studies have presented likewise results and established that intention can be viewed as a forecaster of future behaviour (Armitage & Connor, 2001:486; Shahriar Ferdous & Jay Polonsky, 2013:563). More recently, Wang and Yu (2017:185) established that a high purchase intention has a positive influence on actual behaviour. Thus it can be argued that intention will most likely result in actual behaviour.

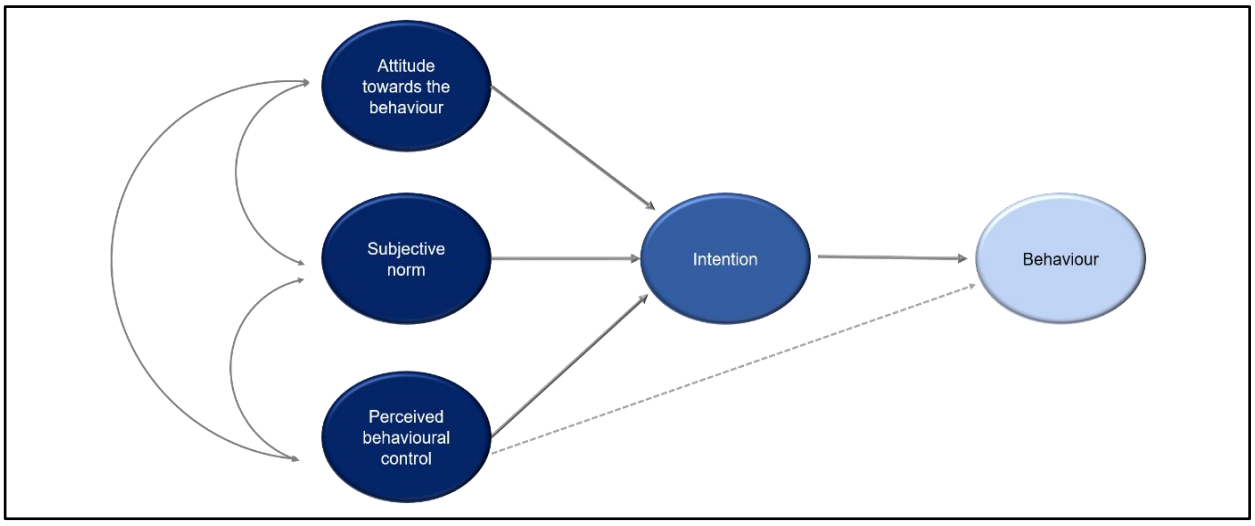
Southey (2011:44) furthermore indicates that behavioural intention is related to the theory of reasoned action (TRA) and also argue that behavioural intention indicates the likelihood of a customer to behave in a certain way in the future based on the individual's attitudes and normative beliefs. Developed by Ajzen and Fishbein (1980), this theory indicates that the most important predictor of behaviour is the intention of the individual to perform the behaviour. The intention,

therefore, is defined as an individual's motivation to perform a behaviour and signifies the effort and time which they are prepared to invest acting to (Ajzen, 1991:181). Extending on the theory of reasoned action, Ajzen (1991) developed the theory of planned behaviour which added the variable of perceived behavioural control as a factor which influences intention. Perceived behaviour control is viewed as an individual's confidence in their ability to perform the behaviour (Ajzen, 1991:184). Yang and Farn (2009:211) further state that when customers have confidence in their ability to perform a behaviour, the relationship between intention and actual behaviour is stronger. For example, when customers believe that they can afford a new car, the intention to purchase the car will result in the actual purchase of the new car. Applied to an online community environment, when committed members believe they can perform online community citizenship behaviours, the intention to perform these behaviours will result in the actual performance of the behaviours. Therefore, according to the theory of planned behaviour (Ajzen, 1991:188):

- when an individual has a favourable evaluation of what it will be like to perform the behaviour,
- and there exists social pressures to perform the behaviour,
- and the confidence to perform the behaviour,
- and the intention to perform the behaviour,
- it will result in the individual actually performing the behaviour.

As shown in Figure 3-3, the 1) attitude towards the behaviour, 2) subjective norm of the individual, and 3) perceived behavioural control, influence intention which leads to behaviour.

Figure 3-3: Theory of planned behaviour



Source: Adapted from Ajzen (1991:182).

3.6 SUMMARY

This chapter provided an overview of online community citizenship behaviour which is derived from customer citizenship behaviour, as applied to an online community environment.

Towards an understanding of online community citizenship behaviour, the chapter commenced with a discussion about co-creation, which refers to customers and organisations working together to create value (Galvagno & Dalli, 2014:644). Additionally, Lusch and Vargo (2006:284) indicated that co-creation consists of two components, namely 1) co-production which refers to the creation of the core offering and include activities such as co-design taking place before the product and service is used, and 2) value co-creation or customer value co-creation, which refers to value being created by the customer during/after the use of the service. Research has further indicated that customer value co-creation include two types of behaviour namely customer participation and customer citizenship behaviour (Yi & Gong, 2013:1280). Although both behaviours contribute to the creation of value, customer participation refer to the mandatory behaviours which are required for value co-creation to take place whereas customer citizenship refers to the extra-role or voluntary behaviour which are not required for value co-creation to take place (Chen *et al*., 2015:66; Yi & Gong, 2013:1281; Yi *et al*., 2011:88). Additionally, customer participation takes place during consumption whereas customer citizenship behaviour takes place after consumption.

As indicated in sections 1.3.1 and 3.3.1, customer citizenship behaviour is grounded in the social exchange theory. This means that, within an online community when members receive benefits from building a long-term relationship with the online community, they will reciprocate by performing online community citizenship behaviours. This chapter furthermore identified key generic elements of customer citizenship behaviour and based on these identified elements, for this study, customer citizenship behaviour can be defined as voluntary behaviours by customers who are helpful for both the organisation, its personnel and other customers but are not required for the service delivery to take place. Based on these identified elements, online community citizenship behaviour can be identified as the voluntary behaviours of online community members which are helpful to the online community, the administrators and members, but are not required for the online community to exist.

Based on the research by Bettencourt (1997), Bove *et al.* (2003), Rosenbaum and Messiah (2007) and Yi and Gong (2013), this chapter identified customer participation/feedback, policing of customers and helping behaviours as potentially relevant dimensions of customer citizenship behaviours in an online community environment. The feedback dimension of citizenship behaviours, refers to members providing feedback and suggestions to the administrators of the

online community (Chou *et al*., 2016:62; Hsu & Yen, 2016:708); whereas the policing of online community members represents the active role of the members where they monitor, correct and oppose the negative actions and inappropriate behaviours of fellow members (Bove *et al.*, 2003:335). Also, helping behaviours of online community members refer to the helping behaviours performed by members to assist fellow members (Yi & Gong, 2013:1281).

It was furthermore argued that both feedback and the policing of members appear to be directed towards the administrators of the online communities since the members inform the administrators of the community of inappropriate behaviours of fellow members. Additionally, based on research by Rosenbaum and Messiah (2007) and Yi and Gong (2013), the feedback dimension might relate to suggestions to the administrator for general improvement or solutions to operational problems experienced. Concerning the helping behaviour dimension, it was argued in this chapter that this dimension might be directed towards members since the behaviour is performed by members where they help each other. Additionally, this helping behaviour can refer to assistance relating to personal problems experienced or relating the use of the online community service.

The chapter concluded with a discussion regarding behavioural intention which refers to the subjective intention of an individual to perform a certain behaviour (Fishbein & Ajzen, 1974:288). Research has further established that when an individual has the intention to perform the behaviour, they are likely to perform the actual behaviour (Wang & Yu, 2017:185). Therefore, when online community members indicated they have the intention to perform online community citizenship behaviours, this intention is likely to result in the actual performing of these behaviours.

Chapter 4 focuses on the interrelationships among the constructs presented in Figure 1-1 with specific reference to online communities.

CHAPTER 4

MODEL CONCEPTUALISATION

4.1 INTRODUCTION

Chapters 2 and 3 provided an in-depth discussion regarding the independent and dependent variables of this study. Chapter 2 revealed that commitment could be viewed as a multi-dimensional construct consisting of affective, normative and continuous commitment, of which only the first two dimensions are further examined in this study. The chapter further explored various antecedents' of affective and normative commitment that may also be relevant in the online community environment. Chapter 3 provided more insight into online community citizenship behaviour and possible dimensions that may be relevant and represent online community citizenship behaviour directed towards members and directed towards administrators of an online community.

The purpose of this chapter is to further elaborate on the hypotheses that were formulated in Chapter 1 and to provide more insight into possible interrelationships among the independent and dependent variables of this study, namely commitment, its antecedents and online community citizenship behaviours. The chapter concludes with the theoretical model proposed for this study.

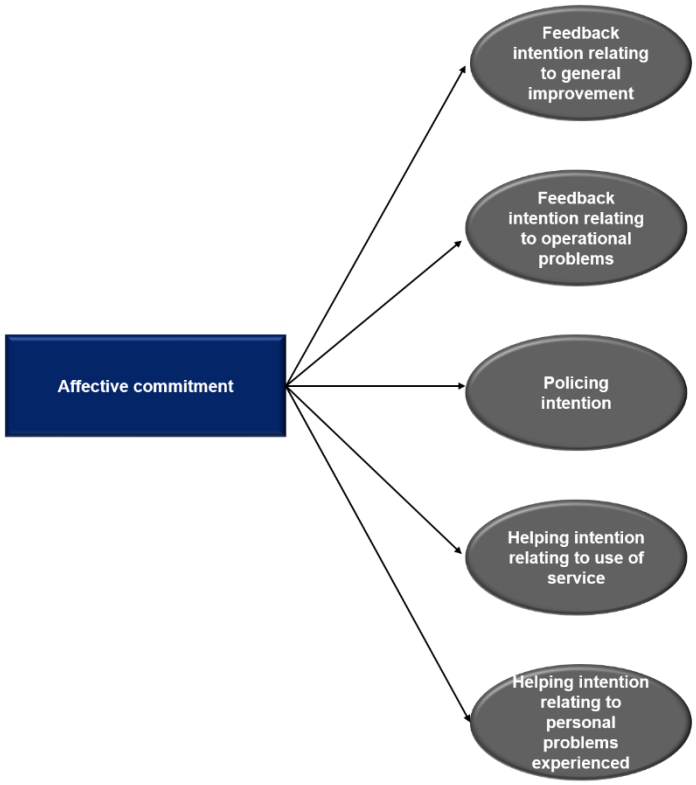
4.2 INTERRELATIONSHIPS OF CONSTRUCTS

The subsequent section provides an overview of existing literature and interrelationships among the constructs which contribute to the formulation of the hypotheses for this study.

4.2.1 Relationship between affective commitment and online community citizenship behaviours

The proposed relationship between affective commitment and online community citizenship behaviour is presented in Table 4-1.

Table 4-1: Proposed relationship between affective commitment and online community citizenship behaviour

Proposed relationship between constructs	Author(s)	Research context
	Bettencourt (1997:388)	Offline: Grocery retailing customers
	Yi and Gong (2008:975)	Offline: Language academy students
	Bove *et al*. (2009:702)	Offline: Service context customers
	Curth *et al*. (2014:153)	Offline: Health club clients
	Bateman *et al*. (2006:993)	Online: Online community members
	Bateman *et al*. (2011:848)	Online: Online community members
	Yong *et al*. (2011:692)	Online: Online community members
	Mpinganjira (2016:7)	Online: Online community members

Affective commitment within an online community context refers to the psychological attachment towards the online community and feelings of closeness (Kim *et al*., 2008:413; Ren *et al.* 2012:79). Affective commitment also indicates the desire of the online community members to continue the relationship (Royo-Vela & Casamassima, 2011:522). The role of this psychological attachment is particularly important to online group settings since members can easily switch between groups (Kim *et al*., 2008:413).

As indicated in Table 4-1, affective commitment has been established to be antecedent of customer citizenship behaviour within offline environments (Bettencourt, 1997; Bove *et al.* 2009; Curth *et al.* 2014; Yong *et al.* 2011) and online community environments (Bateman *et al.* 2006; Bateman *et al.* 2011; Mpinganjira, 2016). Bettencourt (1997:398) established that customers who are committed towards a service organisation such as a grocery retailer are more prone to provide feedback relating to ways that the store can better their service (feedback intentions relating to general improvement) or inform the store when they are experiencing a problem (feedback intentions relating to problems experienced). Additionally, Bove *et al.* (2009:703) founded that when customers are committed towards the employees who serve them, they are likely to perform

roles which are beyond what is expected of them such as providing suggestions for service improvements and takes steps to prevent problems caused by other customers (policing intentions). Similarly, Curth *et al.* (2014:153) and Yi and Gong (2008:975) identified that when customers establish a close and long-term relationship with an organisation, thus when they are committed towards the organisation, these customers act in a helpful and friendly manner towards fellow customers and perform customer citizenship behaviours (helping intentions relating to the use of service and personal problems experienced).

Table 4-1 furthermore indicates that within an online community setting, Yong *et al.* (2011:692) established that members of an online community who has high levels of affective commitment towards the community are more willing to participate in online community citizenship behaviours. In other words, when members can identify themselves with the community, believe in the values of the community and when the online community has personal meaning for the members, they are more willing to perform extra-role behaviours by assisting fellow members in finding solutions to their questions or provide well-informed advice to online community members hence performing helping intentions relating to the use of the service or relating to personal problems experienced (Yong *et al*., 2011:690). Additionally, Bateman *et al.* (2011:848) established that when members of an online community have a strong emotional attachment towards the online community (affective commitment), these members will help fellow members by replying to their posts. When affectively committed members like the online community, they also care about the online community and can identify themselves with the online community (Blanchard & Markus, 2004:76). Consequently, the members become more motivated to help fellow members for whom they care for (Grant, 2007:401) by means of replying to their posts (Bateman *et al.,* 2011:845). Members of an online community who like the community will, therefore, perform behaviours such as online community citizenship behaviours, which will contribute towards the maintaining of the online community (Bateman *et al*., 2006:987). Chiu *et al.* (2015b:509) agreed and indicated that the more an individual identifies with the organisation, the more they will act in ways which are beneficially for the organisation and other customers. More recently, Mpinganjira (2016:4, 7) debated that the high levels of identification associated with commitment might be a reason why affective commitment has a particularly significant influence on citizenship behaviours. The author argued that affective committed members of an online community are likely to perform customer citizenship behaviours such as helping other online community members with their problems and offering solutions to issues which makes the online community members unhappy.

Consequently, taking the abovementioned relationships into consideration and the arguments presented in section 3.4.3, it is proposed in this study that there is a possibility that when members of a residential online activity community on Facebook have a strong emotional connection

towards the online community, they might have the intention to perform online community citizenship behaviours directed towards administrators as well as members of the online community. Specifically, affectively committed members may have the intention to provide feedback to the administrators of the online community which relate to general improvement suggestions and feedback relating to operational problems they are experiencing. Also, affectively committed online community members may have the intention to perform policing behaviour where they monitor the members and offer solutions to the administrators about inappropriate behaviours by the members. Furthermore, when online community members have a strong emotional bond with the online community, they may have the intention to perform helping behaviours towards fellow members relating to personal problems experienced or relating to the use of the online community service.

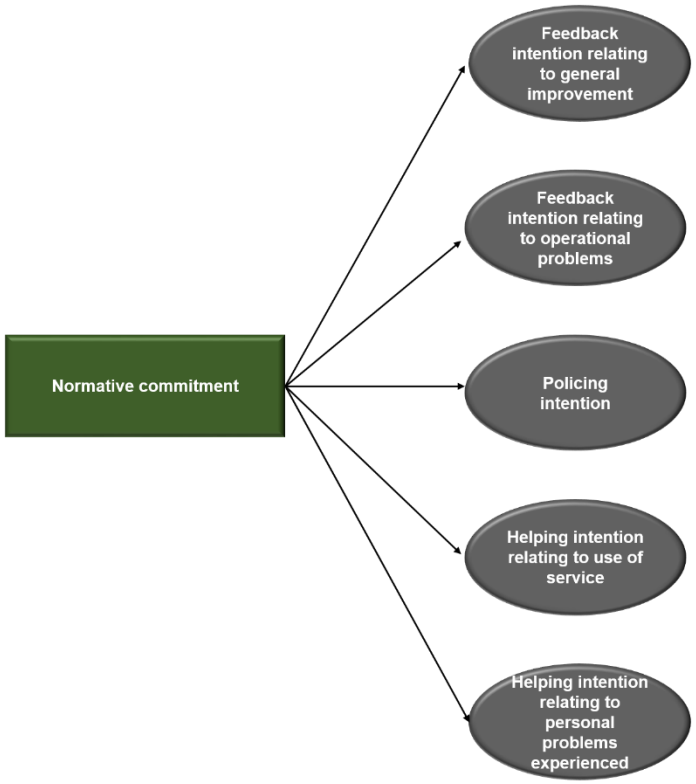
These matters require further empirical investigation to verify their relevance within the context of this study. Hence hypothesis 1 and hypothesis 2, as stated in section 1.3.3.1, were expanded to assist in the empirical investigation of the proposed relationships:

H1a	Affective commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
H1b	Affective commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.
H1c	Affective commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
H2a	Affective commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
H2b	Affective commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.

4.2.2 Relationship between normative commitment and online community citizenship behaviour

The proposed relationship between normative commitment and online community citizenship behaviour is presented in Table 4-2.

Table 4-2: Proposed relationship between normative commitment and online community citizenship behaviour

Proposed relationship between constructs	Authors	Research context
	Meyer and Allen (1991:68)	Offline: Employees
	Meyer *et al.* (2002:37)	Offline: Employees
	Spik (2016:13)	Offline: Employees of different service organisations
	Fullerton (2011:98)	Offline: Banking, hairdressing and auto-repair customers
	Bateman *et al.* (2006:993)	Online: Online community members

Normative commitment towards an online community can be defined as the sense of obligation that a member has towards the online community (Ren *et al*., 2011:102). Within an online community environment, members may, therefore, become normative committed when they adopt the values of the online community and feel obligated to reciprocate with activities in their quest to repay for benefits received (Bateman *et al*., 2006:987).

It is evident form Table 4-2 that there exist limited studies which tested normative commitment within an online community environment, and therefore, studies related to organisational citizenship behaviour were consulted to gain further insight into the relationship between normative commitment and citizenship behaviour. Specifically, it seems that Meyer *et al.* (2002:37) and Spik (2016:13) established that normative commitment positively correlates with organisational citizenship behaviour. This means that when employees feel they have an obligation towards the organisation, they will reciprocate by performing actions such as helping fellow employees, which are not required of them. As indicated by Spik (2016:13), when employees have a high level of normative commitment towards the organisation, the employees also feel obligated to assist other as they believe that it is the right thing to do for the organisation.

Similar arguments seem to be relevant to the marketing environment. Although affective commitment indicates to be a strong predictor of advocacy as a form of customer citizenship behaviour, the study by Fullerton (2011:98) further revealed that the obligation to stay in the relationship with the supplier also has a positive effect on being a reference customer (Fullerton, 2011:98). Bateman *et al.* (2006:994) also established that normative commitment of online community members' influences citizenship behaviour, but this study only measured community citizenship behaviour regarding social encouragement and social control.

It is evident that very limited research has been published concerning the effect of normative commitment on citizenship behaviours with the majority of the research referring to organisational citizenship behaviour. However, based on the established research within an offline retail environment (Fullerton, 2011), and online community environment (Bateman *et al.*, 2006) and taking into consideration the arguments presented in section 3.4.3, the possibility exists that normative commitment may positively impact online community citizenship behaviours directed towards administrators and members of an online community. Specifically, when online community members must stay in the relationship with the community, they might have the intention to provide feedback to the administrators of the online community relating to operational problems they are experiencing. Also, normative committed online community members might also have the intention to provide feedback to the administrators relating to the general improvement of the online community by making suggestions of how the administrators can improve the group's experience and better serve the needs of the online community. Furthermore, normative committed members might also have the intention to monitor the behaviour of fellow members and might offer suggestions to the administrators when members behave inappropriately. Normative committed online community members might furthermore have the intention to assist fellow members relating to personal problems experienced and the correct use of the online community's service.

These matters also require further empirical investigation to verify their relevance within the context of this study. Hence hypothesis 3 and hypothesis 4, as stated in section 1.3.3.1, were expanded to assist in the empirical investigation of the proposed relationships:

H3a	Normative commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
H3b	Normative commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.

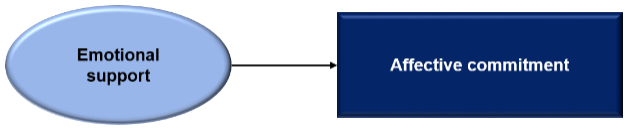
H3c	Normative commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
H4a	Normative commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
H4b	Normative commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.

4.2.3 Relationship between emotional support and affective commitment

Emotional support refers to individuals listening, caring and sympathising with others while making the person feel valuable, cared and loved for (Helgeson, 2003:25). Within an online community setting, emotional support include the representation of concern amongst members that can assist members to solve problems experienced indirectly (Liang *et al*., 2011:72).

The proposed relationship between emotional support and affective commitment is presented in Table 4-3.

Table 4-3: Proposed relationship between emotional support and affective commitment

Proposed relationship between constructs	Authors	Research context
	Chen *et al*. (2013:2534)	Online: Social network site users
	Chen and Shen (2015:60)	Online: Social commerce website users
	Mpinganjira (2016:7)	Online: Online community members

In the context of an online community, Chen *et al*. (2015:60) established that emotional support positively relates to online community commitment. Although this study has not tested community commitment as a multi-dimensional construct, the authors were able to establish that when individuals are offered advice, guidance and useful information through the online community, they will be more committed towards the community. Therefore, when empathy, concern, love and caring are experienced through the online community, the members proved to be more committed towards the online community. Additionally, within a social network site context, Chen *et al.* (2013:2533) established that emotional support has a positive and significant effect on affective commitment. When members of a social network site provide emotional support by offering suggestions to overcome problems and members comforted and encourage each other, the receiving members become more emotionally connected towards the social network site.

Additionally, in a study amongst online community members, Mpinganjira (2016:4) also established that social support, which include both informational and emotional support, positively and significantly influence affective commitment. The author argued that this relationship exists due to the online community members performing affectively committed behaviours towards members when they have to receive informational and/or emotional support.

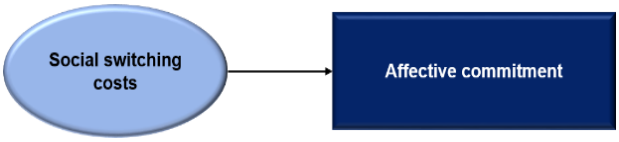
Considering these previously established relationships, it can then be argued that when members of a residential online activity community comfort, encourage and listen to fellow members as well as express interest and concern, the members receiving these emotional support behaviours might also become affectively committed towards the residential online activity community. Therefore, it is possible to present hypothesis H5 as follows:

H5 Emotional support has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

4.2.4 Relationship between social switching costs and affective commitment

The proposed relationship between social switching costs and affective commitment is presented in Table 4-4.

Table 4-4: Proposed relationship between social switching costs and affective commitment

Proposed relationship between constructs	Authors	Research context
	Jones *et al.* (2007:346)	Offline: Non student adults
	Shukla *et al.* (2016:325)	Offline: Luxury brands

Social switching costs refer to the potential loss of a personal connection or friendship with the current service provider, should the individual decide to terminate the relationship with the current supplier (Jones *et al*., 2007:337). Additionally, social switching costs are viewed as a type of switching costs which include personal relationship switching costs (social switching costs) and brand relationship loss costs (Burnham *et al*., 2003:112). Within a social network site, which is similar to an online community, Chen (2012:5660) has stated that social switching costs refers to the potential loss of the personal bonds and friendships which has been developed with the site and which will be lost if the member decided to end the relationship with the particular site or online community.

In an offline context where non-student adults were interviewed, Jones *et al.* (2007:346) established that social switching costs positively and significantly influence affective commitment. These authors argued that this relationship exists because social switching costs originate from positive sources of constraints such as the loss of social connections and benefits as well as personal friendships and privileges which will be lost if the individual switch from the present supplier to another supplier (Jones *et al*., 2007:338; Kim *et al*., 2010:138). These positive sources denote that there exists a social relationship between the customer and the current supplier, otherwise, if it didn't exist, no loss will be incurred. Furthermore, affective commitment is grounded in the relative positive characteristics of relationships (Jones *et al*., 2007:338) and therefore should the possibility for individuals exist to lose the personal friendships and relationships which they have developed with the current supplier when they switch, they will be more affectively committed due to the current personal and emotional connection between the customer and the supplier. Customers will, therefore, be affectively committed towards the service provider which results in a barrier to exit the relationship. More recently, Shukla *et al.* (2016:327) established that as with non-luxury brands, within an offline luxury brand context, social switching costs positively and significantly influence affective commitment. Managers of luxury brands, therefore, should increase social switching costs, through the creation of personal relationships with the customers which results in the creation of an emotional bond between the customers and the service provider (Shukla *et al*., 2016:329).

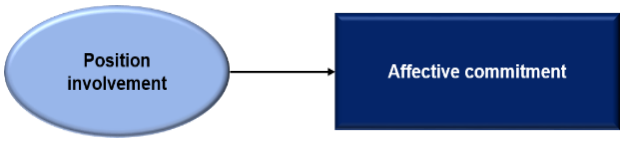
The author could not locate any study which measures the relationship between social switching costs and affective commitment within an online community context. However considering the findings of the studies mentioned in this section, it can be argued that online communities provide opportunities to build personal relationships between members and the community (Armstrong & Hagel, 2000:86). When residential online activity community members then decide to terminate the relationship with the community, these established personal relationships might have been lost, which could contribute to social switching costs. Furthermore, when the members believe that these social switching costs are high, it means that the relationships they have with other members online are important to them and therefore they might also be emotionally connected (affectively committed) towards the residential online activity community. Consequently, hypothesis H6 for this study can be formulated as:

H6	Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

4.2.5 Relationship between position involvement and affective commitment

Table 4-5 provides the proposed relationship between position involvement and affective commitment.

Table 4-5: Proposed relationship between position involvement and affective commitment

Proposed relationship between constructs	Authors	Research context
	Crosby and Taylor (1983:429)	Offline: Residents voting for/against Michigan bottle ban
	Bloemer and Odekerken-Schröder (2007:36)	Offline: Banking customers

Position involvement refers to the circumstances where the customer can identify with significant values or self-images of the service provider that are shaped by the extent to which the customer can associate with the particular service provider (Bloemer & Odekerken-Schröder, 2007:35; Freedman, 1964:293). Although the concept of position involvement has not yet been applied to an online community context, considering the principles of this concept it is possible to argue that position involvement of online community members refers to the identification of the members with the values and self-images of the online community.

Empirically tested research concerning position involvement and affective commitment was conducted within an offline marketing environment which included banking customers of three bank branches of a Belgian bank. It was established that position involvement positively and significantly influence the affective commitment level of these banking customers (Bloemer & Odekerken-Schröder, 2007:40). When the image of the service provider corresponds with the lifestyle of the customers and the values and norms of the service provider mirrors the personality of the customer then these customers were willing to continue with the relationship with the service provider, as they identified with and were attached towards the service provider (Bloemer & Odekerken-Schröder, 2007:41; Fullerton, 2011:93).

As mentioned, to the researcher's knowledge the relationship of position involvement on affective commitment within an online community has not yet been empirically tested. However, based on the research done by Bloemer and Odekerken-Schröder (2007) and Crosby and Taylor (1983), it can be argued that, when members of a residential online activity community perceived the image of the online community to come close to reflecting the lifestyle of the members, and reflect the kind of person the members are as well as the service provided by the online community making

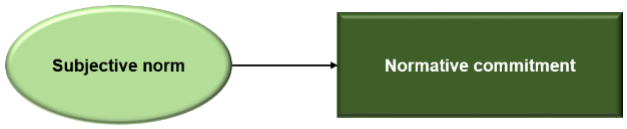
the members feel important (Pritchard *et al*.,1999:345) then these members might have a stronger emotional attachment towards and identification with the residential online activity community. Therefore, the hypothesis H7 for this study can be formulated as:

H7	Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

4.2.6 Relationship between subjective norm and normative commitment

The proposed relationship between subjective norm and normative commitment is presented in Table 4-6.

Table 4-6: Proposed relationship between subjective norm and normative commitment

Proposed relationship between constructs	Authors	Research context
	Shukla *et al.* (2016:330)	Offline: Luxury brand customers
	Bansal *et al.* (2004:240)	Offline: Auto repair customers
	Zahedi & Lu (2003:2262)	Online: Website users
	Chen *et al.* (2013:2533)	Online: Social network site users

When an individual believes that people who are important to them think that they should perform a certain behaviour or not, a high level of subjective norm is reached (Ajzen, 1991:188; Rhodes & Courneya, 2003:130). Therefore, subjective norm refers to an individual to perform or not to perform the behaviour depending on the approval or disapproval of these important people (Courneya *et al*., 2000:303). Within an online community environment, compliance represents subjective norm (Shen *et al*., 2011:159). When online community members comply, they accept the social influences of others (Shen *et al*., 2011:159), and, therefore when people who influence their behaviours, are important and valuable to them or even their friends, feel that they should actively participate in the online community; these members will comply due to subjective norm.

In a study within the offline environment, consisting of respondents who purchased luxury brands such as LVMH, Gucci, Prada and Cartier to name but a few, it was established that subjective norm has a significantly and positively effect on normative commitment (Shukla *et al*., 2016:330). Again, this study measured subjective norm regarding important people and people cared for who will approve of the responded to switch between luxury brands (Shukla *et al*., 2016:328).

Customers are therefore influenced by their social environment and will feel obligated to stay in a relationship (normative commitment) should their peers and/or important people not approve of them switching to another brand (Shukla *et al*., 2016:324).

Within a website environment, Zahedi and Lu (2003:2262) proposed that a high level of the customer's subjective norm will positively influence their level of commitment towards the website. Although this relationship was not empirically tested, this proposition leads to future research. More relevant to this study, is the positive and significant relationship between subjective norm and normative commitment which was established by Chen *et al.* (2013:2533) within an online social network site context. These authors established that when influential people to the members of the social site feel that they must frequently post content on the site, they will feel obligated to stay on the site and post content.

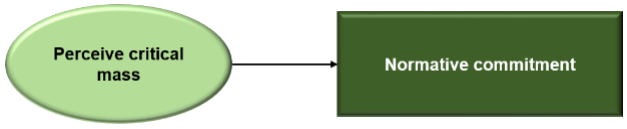
Consequently, following these studies it can be argued when people who are important to these members and their friends feel that they should frequently post content on the residential online activity community on Facebook, these members might feel obligated to do so. Therefore, hypothesis H8 for this study can be articulated as follows:

H8	Subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

4.2.7 Relationship between perceive critical mass and normative commitment

The proposed relationship between perceive critical mass and normative commitment is presented in Table 4-7.

Table 4-7: Proposed relationship between perceive critical mass and normative commitment

Proposed relationship between constructs	Authors	Research context
	Chen *et al.* (2013:2534)	Online: Social network site users

The critical mass theory refers to the small portion of the population which has a big influence on collective action (Oliver *et al*., 1985:524). Further applied to the innovation diffusion research, critical mass refers to the point where a sufficient number of individuals have adopted the innovation resulting in the adoption rate of the innovation becoming self-sustainable (Rodgers,

1995:313). However, since actual critical mass is difficult to determine, individuals usually refers to their perception of when this point is reached, hence the concept of perceive critical mass is used (Lou *et al*., 2000:94). Considering the definition of perceive critical mass within a social network site (Sledgianowski & Kulviwat, 2009:76), it can be reasoned that perceive critical mass within an online community refers to the point where the member feels that a significant number of the people with which they can associate with, has joined the online community. The associated people include individuals from the member's social group, individuals from their society, work environment, individuals who are their friends and also their peers (Chen *et al*., 2013:2535; Hsu & Lu, 2004:863,864).

Research has empirically established that when a member perceives a social network site to have reached the critical mass of the number of members who post contents frequently on the site, these members will also be normatively committed towards the site (Chen *et al*., 2013:2531). Reason being that when a critical mass of active members is reached, members will feel obligated to continue being a member of the site and will also continue to post content on the site.

Although limited studies have tested the effect of perceive critical mass on normative commitment, the researcher is of the opinion that it is important to include the construct of perceive critical mass in this study; since, perceive critical mass is viewed as one of the most relevant and significant constructs which predicts the acceptance of a communication technology method (Lou *et al*., 2000:99; Van Slyke *et al*., 2007:278). Furthermore, owing to the definition of normative commitment, it can be argued that when members of a residential online activity community perceived that most of the people in their social class, society, group of friends, peers and work environment, have joined the community; they might feel obligated to continue being a member of the residential online activity community and might post comments and take part in discussion on the online community. Consequently, hypothesis H9 for this study is formulated as follows:

H9	Perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

4.3 PROPOSED THEORETICAL MODEL

The proposed theoretical model includes two main constructs namely commitment (Chapter 2) and online community citizenship behaviour (Chapter 3). Since commitment can be viewed as a multi-dimensional construct (section 2.3.3), the theoretical model includes affective commitment and normative commitment. As discussed in section 3.4.3, the study proposed that online community citizenship behaviours may be directed towards administrators and members of the

online community. Furthermore, it is suggested in section 3.4.3, that online community citizenship behaviours directed towards administrators include feedback behaviour relating to general improvement and operational problems and also policing behaviour. Also, the study proposes that online community citizenship behaviours towards online community members include helping behaviours relating to use of the online community service and personal problems experienced.

Based on the social exchange theory (section 3.3.1) and the discussion regarding the proposed relationship between the different types of commitment and online community citizenship behaviours (sections 4.2.1 and 4.22) the theoretical model proposes that affective commitment and normative commitment might positively and significantly impact feedback intention relating to general improvement of the online community, as directed towards administrators of residential online activity communities on Facebook. Additionally, the theoretical model proposes that affective commitment and normative commitment might also have a positively and significantly effect on feedback intention relating to operational problems experienced on the online community as directed towards administrators of residential online activity communities on Facebook. The proposed theoretical model also suggests that affective commitment and normative commitment might positively and significantly impact on the policing intention, as directed towards administrators of residential online activity communities on Facebook.

Furthermore, the theoretical model proposes that affective commitment and normative commitment might positively and significantly impact the helping intention of members relating to the use of service, as directed towards members of online communities on Facebook. Also, the theoretical model also suggests that affective commitment and normative commitment might have a positive and significant effect on the helping intention of members relating to personal problems experienced, as directed towards members of online communities on Facebook.

Additionally, a set of antecedents for each type of commitment were identified based on previously established relationships as mentioned in sections 4.2.3 to 4.2.7. Consequently, the proposed theoretical model for this study is presented in .

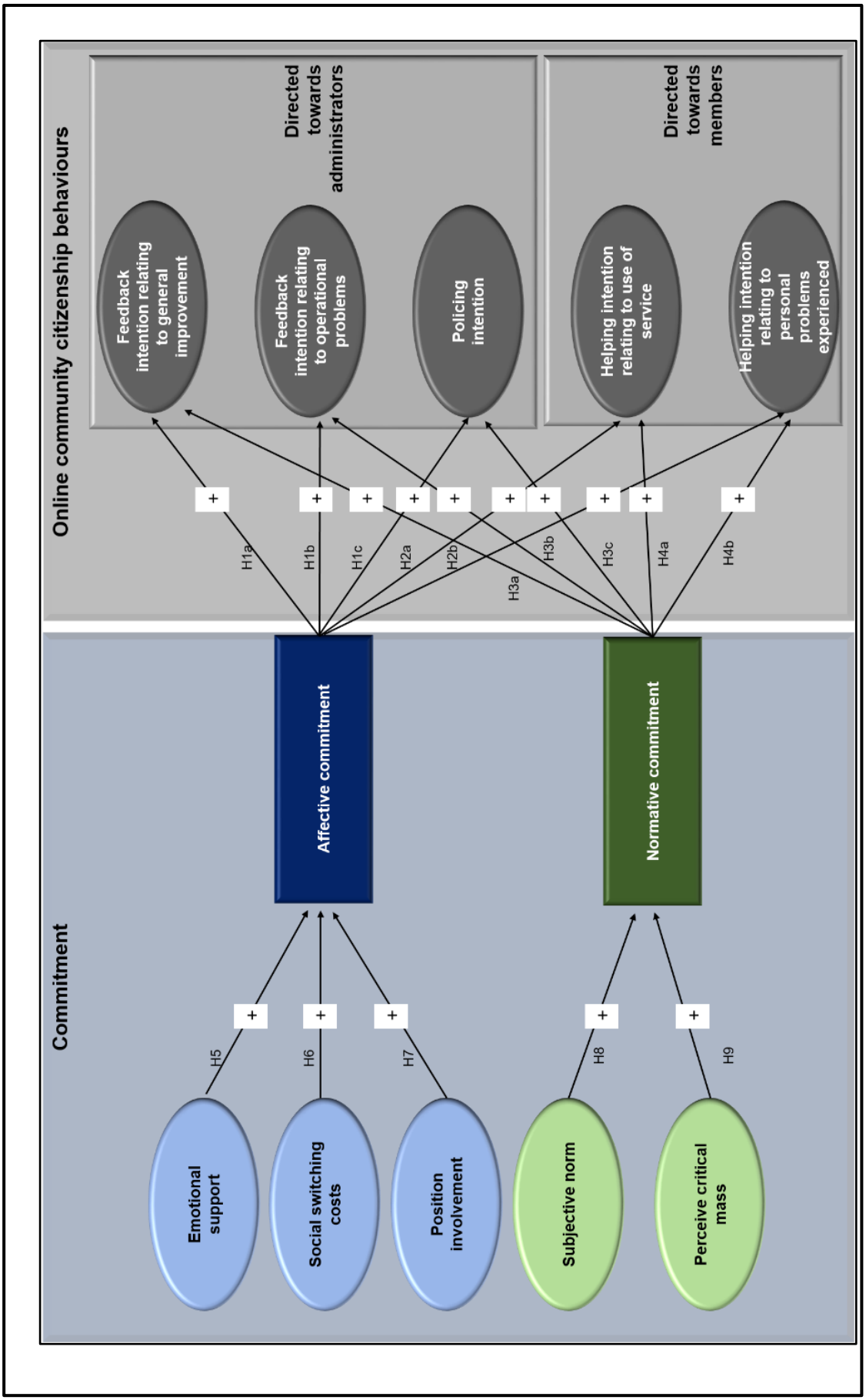


Figure 4-1: Proposed theoretical model

Source: Developed by researcher.

4.4 SUMMARY

Chapter 4 presented the proposed hypotheses of this study which were formulated based on arguments presented in previous studies.

Additionally, a visual representation of the proposed model was presented which will be further tested in the empirical phase of this study to address the research objectives stated in Chapter 1. The subsequent Chapter 5 aims to provide a better understanding of the research methodology utilised for this study. The discussion focuses on an explanation of the research design, sampling methods, data collection and data analysis of this study.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

Chapters 1 to 4 provided a comprehensive literature review about the proposed model, constructs, factors and their related theories. A wide variety of research studies were also consulted that led to the identification of the research hypotheses that will be subsequently examined in the empirical part of this study.

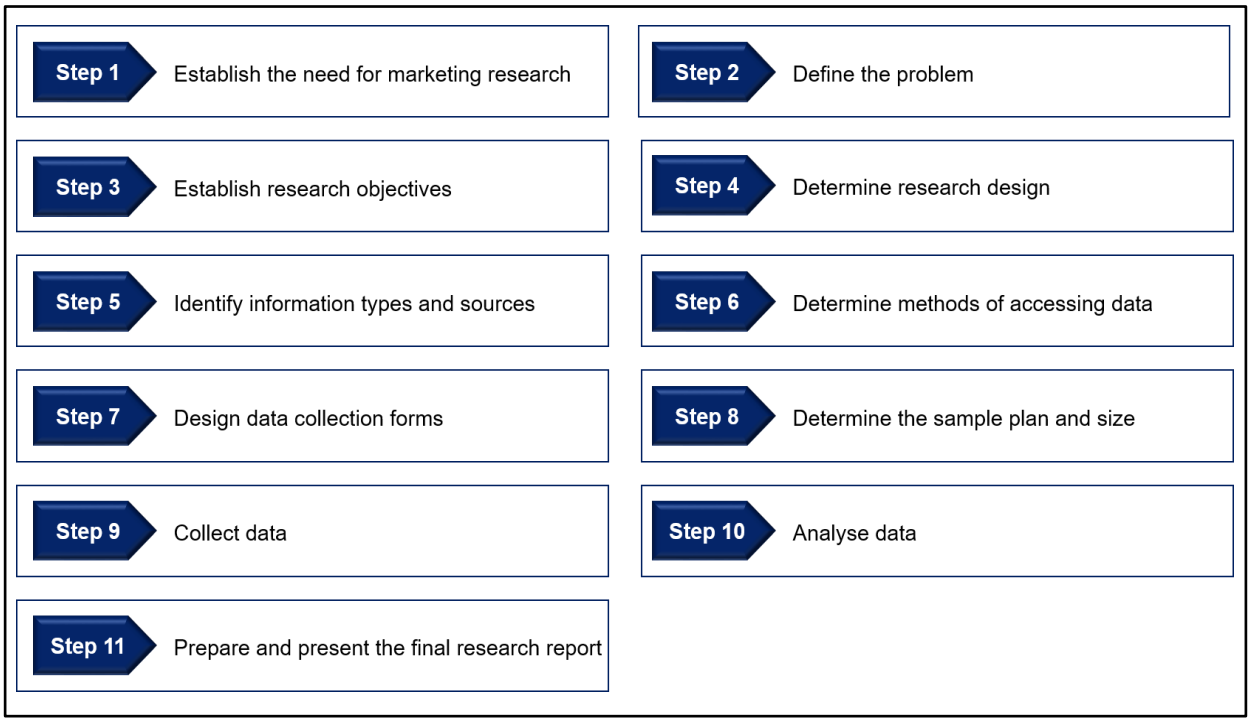
Chapter 5 aims to provide a better understanding of the research methodology used to test and achieve the stated objectives of the study empirically. The marketing process suggested by Burns *et al.* (2017:68) was followed as a framework. Hence, the subsequent sections include discussions regarding the research objectives, research design, collection forms, sample design, data collection and data analysis relating to this study.

5.2 THE MARKETING RESEARCH PROCESS

Marketing research refers to the "process of designing, gathering, analysing and reporting information that may be used to solve a specific marketing problem" (Burns *et al*., 2017:37). The marketing research process is viewed as a sequence of steps which means that the steps in the marketing research process takes place in a specific order and follow each other (Burns *et al*., 2017:67). Marketing research includes all the stages of information management such as the specification of the information required, the collection and analysis of the information and finally the interpretation of the results (Brown *et al*., 2014:4). Additionally, market research includes idea generation, problem definition, theory development and the communication of the findings (Babin & Zikmund, 2016:5).

Although various marketing research processes exist (Babin & Zikmund, 2016:63; Brown *et al*., 2014:19; Malhotra, 2010:60), this study followed the research process of Burns *et al.* (2017) because it was recently published and it includes all the critical steps required in a marketing research process. The marketing process suggested by Burns *et al.* (2017) is presented in Figure 5-1 and is discussed and applied to this study in the subsequent sections.

Figure 5-1: Research process



Source: Adapted from Burns *et al.* (2017:68).

5.2.1 Step 1: Establish the need for marketing research

In general, the need to make sensible and informed decisions normally creates the need and motivation to conduct marketing research (Babin & Zikmund, 2016:19). When organisations need to make decisions for which they have inadequate information the need for marketing research is established (Burns *et al*., 2017:69).

In this research study, the need for marketing research was determined based on an extensive literature review conducted within the marketing, customer citizenship and commitment domain. Following the literature investigation, the research problem was established in section 1.2, which for ease of reference is presented again in the next section.

5.2.2 Step 2: Define the problem

The defining of the problem is viewed as the most important step of the research process (Burns *et al*., 2017:71), since all aspects of the research should tie-back to the problem identified (Brown *et al*., 2014:19). Additionally, the success of the research project is subject to a well-defined problem statement which needs to be formulated before the continuing of the research process (Burns *et al*., 2017:74).

Based on the discussion in section 1.2.1, the problem statement for this study is formulated as follows:

Based on an investigation into the dimensions of offline customer citizenship behaviour and e-customer citizenship behaviour, as well as online community citizenship behaviour, it was concluded in Chapter 1 that online community citizenship behaviours could either be directed towards members or directed towards administrators of online communities, depending on who is receiving the behaviour. However, currently, no research could be located that measures the impact of affective and normative commitment on online community citizenship behaviour, as directed towards administrators and members of residential online activity communities on Facebook. Additionally, there seems to be limited knowledge on a set of factors that may contribute towards affective and normative commitment of members of a residential online activity community.

Knowledge of these matters may contribute to a greater understanding of the impact of affective and normative commitment on online community citizenship behaviour as directed towards administrators and members of the residential online activity community. The examining of the different types of commitment within a residential online activity community may also provide a more robust and comprehensive framework for understanding why members continue to be committed to the residential online activity community. Additionally, the research findings may also offer more insight into the extent to which relationship marketing theory may impact online community citizenship behaviour directed towards administrators and towards members of the residential online activity community and the antecedent factors that may precede affective and normative commitment within a residential online activity community environment on Facebook.

5.2.3 Step 3: Establish research objectives

Research objectives aim to guide researchers on the information required to analyse and make decisions related to the problem identified (Burns *et al*., 2017:71). Research objectives normally answer the question of why the research project is being conducted and should be determined before the research project commences (Feinberg *et al*., 2013:29).

The primary objective and secondary objectives of this study are presented in Table 5-1.

Table 5-1: Primary and secondary objectives

Primary objective
The development of a commitment and online community citizenship behaviour model for residential online activity communities on Facebook.
Secondary objective 1
To provide an overview of extant literature related to: 1a) the relationship marketing theory and social exchange theory. 1b) the main constructs of this research study, namely, affective commitment, normative commitment, online community citizenship behaviours and the identified factors that may contribute towards commitment in an online community environment. 1c) the interrelationships between the constructs of this research study.
Secondary objective 2
To develop a sample profile of the residential online activity community members on Facebook who participated in this research study.
Secondary objective 3
To measure the level of emotional support perceived by active members of the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 4
To measure the level of social switching costs perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 5
To measure the level of position involvement perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 6
To measure the level of subjective norm perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 7
To measure the level of perceive critical mass perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

Table 5-1: Primary and secondary objectives (cont.)

Secondary objective 8
To measure the levels of commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. Most specifically, by investigating the: 8a) level of affective commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. 8b) level of normative commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.
Secondary objective 9
To measure the levels of online community citizenship behaviours of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. More specifically to measure the extent to which active members of the residential online activity community on Facebook, have the intention to: 9a) provide feedback to administrators relating to the general improvement of the residential online activity community on Facebook. 9b) provide feedback to administrators relating to operational problems experienced on the residential online activity community on Facebook. 9c) perform policing behaviours towards administrators of the residential online activity community on Facebook. 9d) perform helping behaviours towards fellow members relating to the use of service of the residential online activity community on Facebook. 9e) perform helping behaviours towards fellow members of the residential online activity community on Facebook relating to personal problems they are experiencing.
Secondary objective 10
To examine the interrelationships among the identified research constructs of this study.

5.2.4 Step 4: Determining the research design

The research design of a study refers to the research approached to be used to address the research objectives stated (Babin & Zikmund, 2017:67; Burns *et al*., 2017:72) and depends on the type of research that is being conducted (Aaker, 2013:74). Most literature refers to three types of research designs namely exploratory, descriptive and causal research designs (Babin & Zikmund, 2016:53; Burns *et al*., 2017:72).

5.2.4.1 Exploratory research design

Exploratory research is conducted in an unstructured, informal way to gain a better understanding of the nature of the research problem (Burns *et al*., 2017:94) and is flexible and qualitative of nature (Aaker, 2013:74). This type of research design is unstructured since the nature of the

research might change when the researcher gains further information about the topic (Burns *et al*., 2017:95). An exploratory research design furthermore has the intention to clarify unclear situations or determine ideas which could result in business opportunities (Babin & Zikmund, 2016:54). Brown *et al.* (2014:61) and Burns *et al.* (2017:95) further mention that exploratory research is normally used to 1) gain background information about a problem or when the problem has not yet been clearly defined, 2) assist in explaining and defining a term or concept, 3) allow the researcher to define the problem and formulate hypotheses for the study, and, 4) help the organisation to prioritise which research problems should be addressed first. Various methods are available to perform exploratory research. They include the investigation of secondary data currently available, the conducting of experience surveys to gain information, performing of a case analysis of the available information and hosting focus groups to gain information through an unstructured and spontaneous discussion (Aaker, 2013:74; Burns *et al*., 2017:97,98). Additionally, the investigation of previous research, the conducting of a literature review and pilot studies are seen as techniques to perform exploratory research (Babin & Zikmund, 2016:64).

5.2.4.2 Descriptive research design

Descriptive research designs are used to define the characteristics of people, groups, organisations and objects (Babin & Zikmund, 2016:54). Researchers usually perform descriptive research when they have a considerable good understanding of the marketing situation which guides the study towards a specific problem (Babin & Zikmund, 2016:54). Descriptive research is normally used to describe characteristics of a certain group, to establish the amount of people who behave in a particular way and to make specific predictions and answer the questions who, what, where, when and how (Brown *et al*., 2014:179; Burns *et al*., 2017:98).

Descriptive studies can be classified as either longitudinal studies or cross-sectional studies (Aaker, 2013:75; Brown *et al*., 2014:180; Burns *et al*., 2017:99). With longitudinal studies, the sample elements do not change and the measurement is repeated at different times whereas cross-sectional studies are conducted only once and provide a snapshot of the population (Brown *et al*., 2014:180; Burns *et al*., 2017:99). Additionally, longitudinal studies make use of consumer panels which include a fixed sample of respondents whereas with cross-sectional studies the sample is drawn to represent the population of interest (Brown *et al*., 2014:180; Burns *et al*., 2017:99).

5.2.4.3 Causal research design

A causal research design enables the researcher to make causal conclusions where the cause-effect relationship between constructs are determined (Babin & Zikmund, 2016:57). The test

conducted in a causal research design is normally focussed where educated predictions are made with regards to the cause-and-effect relationships (Aaker, 2013:75; Babin & Zikmund, 2016:57). Causal research designs are also more long-term in nature which can make this type of research design more expensive (Babin & Zikmund, 2016:57). Techniques to conduct causal research includes experiments and experimental designs (Burns *et al*., 2017:103).

To determine the most suitable research design, researchers have to investigate and understand the objectives of the study. Usually, the objectives of the study are to gain background information and develop hypotheses to be tested or to measure the state of a variable and test hypothesis which indicate a relationship between two or more variables (Burns *et al*., 2017:93).

Based on the primary and secondary objectives presented in Table 5-1, this study made use of a descriptive research design.

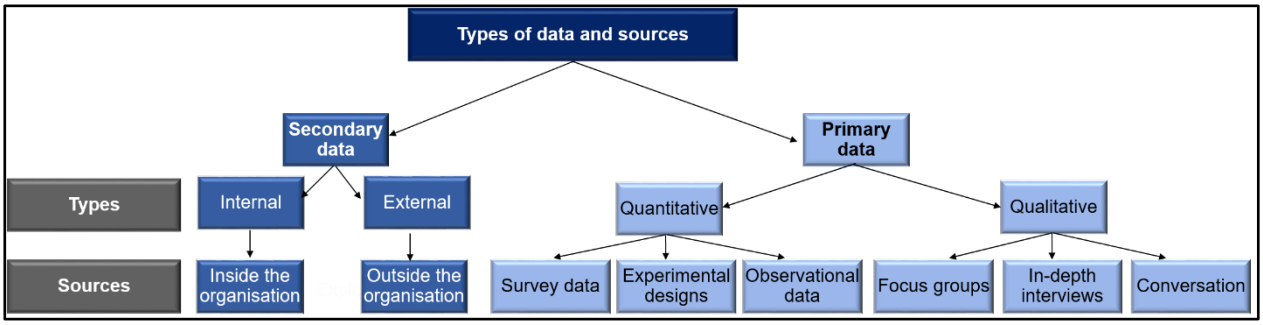
Objective 2 aims to provide a demographic profile of residential online communities on Facebook and a descriptive research design is viewed as the most effective design to describe market segments (Babin & Zikmund, 2016:54). Additionally, descriptive research is also suitable when statistically analysing the data collected through surveys (Burns *et al*., 2017:172). Hence in this study, a descriptive research approach is followed to analyse the respondents' level of agreement concerning the statements measured in the survey and to obtain insight into the interrelationships among the constructs measured (secondary objectives 3 to 10).

Furthermore, although longitudinal studies have various advantages such as the possibility to conduct time series analysis and more reliable data with regards to purchasing behaviour (Brown *et al*., 2014:181), it was decided to make use of a cross-sectional descriptive research design for a few reasons. Firstly, longitudinal research is quite expensive and due to financial constraints, it was not possible to employ longitudinal research. Secondly, the researcher wanted the information obtained to be representative and since longitudinal research tend to be non-representative (Brown *et al*., 2014:183) it was decided to make use of a cross-sectional study which is more representative of the population of interest (Burns *et al*., 2017:99). Lastly, with cross-sectional studies very specific sample elements within the population can be targeted to participate whereas panel data uses panel information which is available (Brown *et al*., 2014:185). Hence, by following a cross-sectional descriptive research design, the researcher can sample a selection of residential online activity communities on Facebook that are fully aligned with the population of this study.

5.2.5 Step 5: Identify information types and sources

During this step, the type of information and the sources to gather this information will be discussed. Data can be classified as primary or secondary data (Burns *et al*., 2017:72). Primary data include information which is collected specifically for the problem at hand whereas secondary data include information which has already been collected (Burns *et al*., 2017:72; Feinberg *et al*., 2013:69). Figure 5-2 provides a summary of the different types of data and the sources thereof.

Figure 5-2: Types of information and sources



Source: Adapted from Babin and Zikmund (2016), Brown *et al.* (2014), Burns *et al.* (2017), Creswell (2014) and Malhotra (2010).

As indicated in Figure 5-2, secondary data can be classified into internal and external secondary data (Brown *et al*., 2014:89; Burns *et al*., 2017:119). Internal secondary data include data from inside the organisation which has already been collected by an organisation or researcher and can include sales records, invoices as well as information captured in the organisation's internal database (Burns *et al*., 2017:119; Hair *et al*., 2013:54). External secondary data is acquired from outside the organisation and in the case of marketing research can include information gathered from business source directories, articles, dictionaries and encyclopaedias as well as marketing directories (Burns *et al*., 2017:121; Hair *et al*., 2013:54).

Figure 5-2 further indicates that primary data can be classified into two categories namely quantitative research and qualitative research (Babin & Zikmund, 2016:116; Brown *et al*., 2014:89*;* Burns *et al*., 2017:143). Quantitative research involves research which is collected through a set of structured questions with fixed response options and is normally administrated to a large number of respondents (Burns *et al*., 2017:143). In comparison, qualitative research includes the collection, analysis and interpreting of unstructured data through the observation of what people do or say (Burns *et al*., 2017:144). The key differences between qualitative and quantitative research are presented in Table 5-2.

Table 5-2: Key differences between qualitative and quantitative research

Aspect	Qualitative	Quantitative
Aim	To uncover ideas and research objectives and gain an understanding of underlying motives and problems.	To test research questions or hypotheses and make generalisations from the sample results to the population of interest.
Method	Observe participants and interpret results.	Measure respondents and test results.
Data collection methods	Unstructured and open-ended.	Structured with categories provided.
Researcher involvement	The researcher is very involved resulting in subjective results.	Researcher have limited involvement, resulting in objective results.
Sample	The sample is small in natural settings.	Large samples which produce results which can be generalised.
Research design	Exploratory.	Descriptive and causal.
Data analysis	Data analyses are continuous and take place during data collection and non-statistical methods are used.	Data analyses take place after data is collected and statistical methods are used to analyse data.

Source: Adapted from Babin and Zikmund (2016:111) and Silver *et al.* (2013:58).

For this study, both primary and secondary data were collected. External secondary data was collected, where published academic articles in accredited journals were used to provide an overview of the extant literature. Although primary data is timeous and expensive to collect (Malhotra, 2010:132), primary data had to be collected since data for the specific problem has not yet been collected and therefore the need existed to collect data for the specific problem at hand. Quantitative data was collected to obtain numerical values which can be statistically analysed to test hypotheses of this study (Babin & Zikmund, 2016:111; Creswell, 2014:3). As indicated in Table 5-2, quantitative data were also collected since this type of data are more objective of nature as the researchers are uninvolved and also enable researchers to include large samples which can produce generalizable results. Furthermore, quantitative research is mostly used for descriptive research designs which were used in this study. Quantitative data is furthermore analysed through statistical methods, which is required for this study since hypotheses will be statistically tested. A prerequisite for the collection of quantitative data is that the researcher must have established the precise information that needed to be collected (Burns *et al*., 2017:144) and since the researcher of this study has conducted a thorough literature review which has indicated the precise information to be collected to achieve the research objectives for this study, it is plausible to argue that for this study primary quantitative data can be collected.

The process of accessing the sources of both primary and secondary data for this study will be explained in the following section.

5.2.6 Step 6: Determining methods of accessing data

Since secondary data is always collected before primary data collection (Burns *et al*., 2017:116), the section will commence with a discussion of the secondary data collection followed by a discussion regarding primary data collection.

5.2.6.1 Methods of collecting secondary data

As mentioned secondary data can be classified into internal and external data sources (Burns *et al*., 2017:119).

- *Internal secondary data* can be collected from the internal databases of organisations where the data are normally gathered during the normal course of business transactions (Burns *et al*., 2017:119; Hair *et al*., 2013:54). Additionally, the accounting system of an organisation, sales information, service records and product returns can provide valuable sources of internal secondary data (Babin & Zikmund, 2016:154). Since various internal company information is available, should this information be maintained and categorised properly, internal data can be very valuable to companies and can be used to analyse product performance, measure distribution effectiveness and develop segmentation strategies (Hair *et al*., 2013:54).

- *External secondary data* is information recorded and stored by entities outside the organisations and include governments, universities, newspapers, journals and trade organisations (Babin & Zikmund, 2016:154; Feinberg *et al*., 2013:81).

For the purpose of the study, external secondary data was collected from several academic sources such as the Journal of Marketing, Journal of Marketing Research, Journal of Service Management, Journal of Interactive Marketing, European Business Review and Journal of Consumer Behaviour, conference papers and also textbooks. These external secondary data sources were used to provide a detailed literature review of relationship marketing (Chapter 2), online community citizenship behaviour (Chapter 3). Literature reviews can also assist researchers to conceptualise a model which summarise the relationships between constructs (Hair *et al*., 2013:63). In this study, a literature review was conducted to explore the existing interrelationship between the constructs of this study (Chapter 4). Secondary data was used to provide a detailed literature review since secondary data has relatively low cost to retrieve, are

readily available through the North-West University library subscriptions, can be collected in a short time frame and provide great variety and flexibility (Silver *et al*., 2013:42).

5.2.6.2 Methods of collecting primary, quantitative data

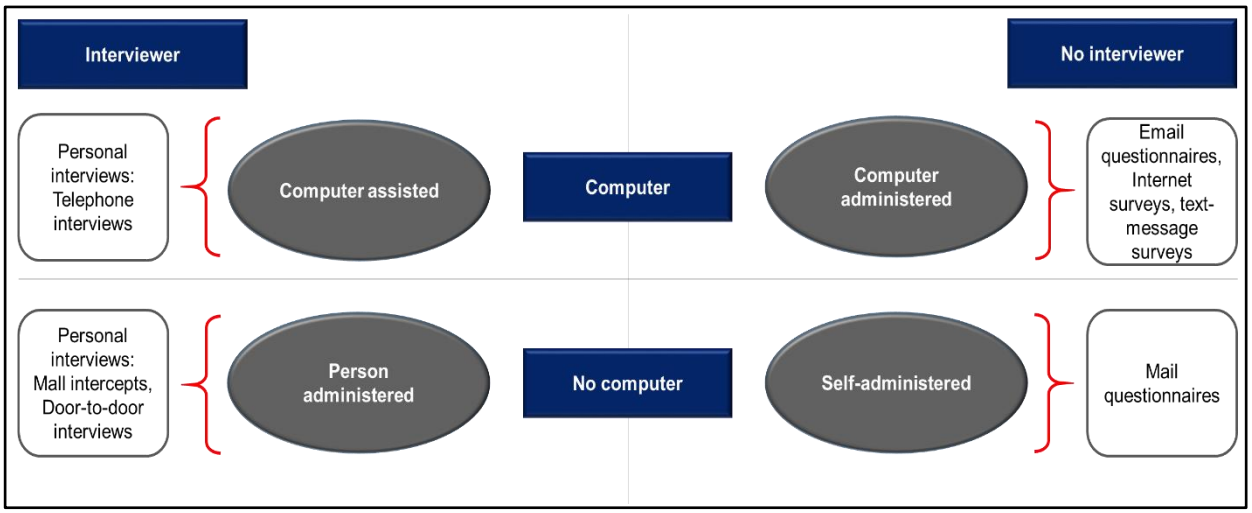
As indicated in Figure 5-2, experimental designs, observational data and surveys can be used to collect quantitative data.

- *Experimentation* is normally used in causal research designs where the researcher can control the research situation and test the potential for causal relationships between variables (Babin & Zikmund, 2016:234, Brown *et al*., 2014:158). The experimental design is the specific process that will be used to arrange the independent variables into treatments and the assigning of treatments into units (Silver *et al*., 2013:79). When conducting experiments, the researcher can manipulate one or more independent variables while keeping constant other independent variables as to examine the effects on the dependent variable (Babin & Zikmund, 2016:234). The aim of experimental research design is therefore to establish the independent influence on the different variables under control situation (Rose & Bliemer, 2009:587). Before conducting experiments, researchers should decide if the variables should be labelled or not, the number of attribute levels and the design type to be used (Rose & Bliemer, 2009:590). Experiments are very expensive and time-consuming and therefore are not used very often (Silver *et al*., 2013:84).

- In *observational data* studies, the researcher observes a specific aspect of human behaviour with the aim to record the data while being as objective as possible (Williams, 2007:67). Observational studies are furthermore a systematic process where actual behaviour patterns or people, events and objects are recorded (Babin & Zikmund, 2016:208). As initially defined by Cochran (1965:234), observational studies are normally conducted to explain the cause-effect relationships in situations where controlled experiments are not feasible. Therefore, observational studies have the same aim as causal studies which is to predict the causal effect between variables however observational studies do not make use of randomisation to assign units to the control group (Austin, 2011:402). Observational studies can either be direct or indirect (Brown *et al*., 2014:200; Burns *et al*., 2017:146). Direct observational studies refer to the observation of the actual activity or behaviour whereas indirect observational studies refer to the observation of the results or effect of the behaviour rather than the behaviour itself (Burns *et al*., 2017:146). Additionally, observational studies can be structured or restructured and represents the degree to which the observed phenomena are predetermined (Burns *et al*., 2017:146).

- A *survey* comprises of interviews being conducted amongst a large number of respondents using a predetermined and designed questionnaire (Babin & Zikmund, 2016:167; Burns *et al*., 2017:171). Figure 5-3 provides a summary of the different types of surveys based on the presence of an interviewer and computer.

Figure 5-3: Types of surveys



Sources: Adapted from Babin and Zikmund (2016:175-198) and Burns *et al.* (2017:175).

From Figure 5-3 it is evident that when the survey is conducted by an interviewer and a computer is used, then the survey is known as a computer-assisted survey. Examples of these types of surveys include personal interviews where the respondents are telephonically contacted to complete the questionnaire. In the instance where an interviewer is present without a computer, person administered surveys are performed. Person administered surveys are personal interviews taking place where respondents are intercepted in malls or when personal interviews are conducted at respondents' doorsteps in an attempt to increase the participation of respondents.

Figure 5-3 also shows that surveys can be conducted without an interviewer, such as self-administrated surveys where the survey is conducted with the assistance of a computer such as email questionnaires being sent to respondents, internet surveys where the questionnaire is posted on a website or text-messages where the questionnaire is sent to the respondent's phone. In contrast, mail questionnaires are performed without an interviewer and with no computer assisting the collected. Mail questionnaires are questionnaires sent to respondents through the postal service.

This study made use of a survey to collect the primary, quantitative data for this study. Although surveys have various disadvantages such as the questions not accurately measuring the

respondents' attitudes and the difficulty to collect in-depth data (Hair *et al*., 2013:109), surveys also have various advantages. A survey was selected since this data collection technique is quick, relatively inexpensive and can accurately be used to assess the information about a population (Babin & Zikmund, 2016:168). Additionally, data collected through surveys enable the researcher to conduct statistical tests (Babin & Zikmund, 2016:168; Burns *et al*., 2017:172) which were performed to achieve the determined objectives of the study. Additionally, in comparison to experiments and observational studies, surveys enable the researcher to accommodate and include large samples so that the results can be generalised to the population of interest (Burns *et al*., 2017:148; Hair *et al*., 2013:109). Furthermore, surveys include standardised measures which mean that each respondent complete the same set of questions, resulting in the data that is consistent across all respondents which enable the research to compare results and produce meaningful results (Burns *et al*., 2017:172; Fowler, 2014:3). Furthermore, surveys are easy to administrate and the concepts and relationships which are not directly measurable can be studied (Hair *et al*., 2013:109).

With respect to the specific survey method applied, the decision was made to make use of computer-assisted questionnaires where the questionnaire for this study was posted on the specific Facebook group as per the sample determined, as shown in Figure 5-6. Currently, online surveys are the most frequently used type of survey where the internet is used to collect the data (Hair *et al*., 2013:116). Online surveys were used since the sample of this study included members of residential online activity communities on Facebook and therefore it made sense to contact and survey respondents in the environment, namely the online community they are using. Additionally, online surveys, a type of computer-assisted questionnaire were chosen for this study since online surveys limit missing data (Boyer *et al*., 2002:371*)* as a researcher is able to design the online survey in such a way where the respondent needs to answer the question before they can continue to the next question or submit the form. Furthermore, data collected through online surveys are quicker, since the responses are automatically recorded in a workable document such as Excel (Babin & Zikmund, 2016:195; Boyer *et al*., 2002:371*)* and therefore the researcher does not have to spend the time to capture each response. This automated recording of data, also reduce capturing error as human interaction is limited (Babin & Zikmund, 2016:195). Another reason why online surveys were chosen is that research has further indicated that online surveys produce data which are more reliable and valid than paper-based questionnaires (Boyer *et al*., 2002:371*).* Online or web surveys also allows for more interactivity and creativity where researchers are able to attract respondents through creative visual appeal (Babin & Zikmund, 2016:195). Online surveys also allow for questioning to branch off into different questions depending on the respondent's answer into a screening question (Babin & Zikmund, 2016:196). Therefore, in this study the answers to the screening questions (section 5.2.7.4) was used to

determine the following question. For example, when the respondent indicated that they are not older than the age of 18, they did not continue with the questionnaire but instead were directed to a screen where they were thanked for their willingness to participate but unfortunately do not qualify to participate.

The next step in the research process concerns the design of the collection form or questionnaire used in this study.

5.2.7 Step 7: Designing of collection forms

The design of the data collection form is viewed as one of the most important steps in the research process since the quality of the data collection form determine the quality of data collected (Burns *et al*., 2017:73). This study makes use of a questionnaire to communicate with the respondents by asking them questions related to the constructs included in this study. Table 5-3 provides a summary of the statements, response formats and measurement scales used in the questionnaire of the study. Furthermore, Table 5-3 presents the sources from where the statements were adapted for study as well as the relevant hypothesis which will be tested through the data analysis of the statements.

5.2.7.1 Developing questions

A very important step in the design of a questionnaire is the decision of what questions should be asked (Burns *et al*., 2017:216). The hypothesis established for the study gives the researcher a very good indication of what needs to be measured in the study (Babin & Zikmund, 2016:305). Therefore, by ensuring the questions included will address the hypothesis stated, the researchers can ensure that the questionnaire is relevant to the study (Babin & Zikmund, 2016:305).

For this study, the statements or questions which were included in the questionnaire were adapted from established, valid and reliable scales used previously to measure the specific constructs. Reason being that these statements have been tested and the validity and reliability have been established. Furthermore, by using existing scales, the researcher has ensured that the statements are relevant to the study and the analysis of the statements has addressed the objectives and hypothesis stated. Table 5-3 provides a summary of the adapted statements and sources used in this study. Furthermore, where relevant, a few self-generated items were added to the existing measurement scales to further assist in obtaining insight into the constructs measured.

5.2.7.2 Questionnaire response format

Two types of response formats exist namely open-ended (unstructured) or close-ended (structured) responses (Brown *et al*., 2014:271; Hair *et al*., 2010:180).

Open-ended response questions present a problem or statement to the respondent and ask the respondent to answer the problem or statement in their own words (Babin & Zikmund, 2016:306). Respondents are therefore free to reply using their own words instead of being limited to choose from a set of alternatives (Brown *et al*., 2014:272). Open-ended questions can be used in both interview and no interview surveys where the respondents either verbally report the answer to the interviewer or write/type their answer in the space provided in a paper or electronic questionnaire (Feinberg *et al*., 2013:274). When using open-ended questions, the researcher can establish the insights, side comments and explanations of the respondents which can aid the researcher to develop a "feel" for the research findings (Feinberg *et al*., 2013:274). Additionally, open-ended questions are very beneficial to exploratory research designs, since the responses can assist the researcher to determine the ranges of responses to be included in close-ended questions (Babin & Zikmund, 2016:307). A major disadvantage of open-ended questions is the possibility of interviewer bias, where the interviewer does not record the response correction (Babin & Zikmund, 2016:308; Brown *et al*., 2014:274). Additionally, open-ended questions take more time to complete and therefore are more costly (Feinberg *et al*., 2013:274). Generally, open-ended questions can be classified into two categories where the questions seek factual information for the respondent or where the questions are more exploratory in nature (Brown *et al*., 2014:274).

Close-ended response questions or *fixed alternative questions* present the respondent with a limited number of particular response alternatives from which they must choose (Babin & Zikmund, 2016:306). Malhotra (2010:344) indicates that close-ended response questions can be classified into three types' namely multiple-choice questions, dichotomous questions or scale questions.

- **Multiple-choice questions**

  Multiple-choice questions require the respondents to select an answer from a pre-determined, codified list of options (Feinberg *et al*., 2013:276). The researcher may request the respondent to only select one option or various options (Feinberg *et al*., 2013:276; Malhotra, 2010:344). Asking respondents to indicate their ethnicity (Black/White/Asian/ Coloured) is an example of a multiple-choice question.

  Multiple choice questions overcome the disadvantages of open-ended questions namely interviewer bias, cost and time associated with data capturing (Feinberg *et al*., 2013:277).

However, the design of multiple choice questions might be a timeous exercise which may involve costs as the researcher must ensure that the question involves all possible response alternative (Feinberg *et al*., 2013:277).

- **Dichotomous questions**

Dichotomous questions include one or two alternatives response options (Babin & Zikmund, 2016:309; Malhotra, 2010:278). In some instances, the option of a natural alternative such as “don’t know” are included in dichotomous questions (Feinberg *et al*., 2013:278). Although dichotomous questions are relatively easy and quick to complete, the risk exists that the topic of interest may have grades of feeling which will be incorrectly measured using a dichotomous type of question (Feinberg *et al*., 2013:279). Asking respondents to indicate their gender (male/female) is an example of a dichotomous question.

- **Scale questions**

Scale questions provide the respondents with a range of which the measured objects are located (Malhotra, 2010:282). Scaling questions can be divided into comparative- and non-comparative scales (Malhotra, 2010:289; Hair *et al*., 2013:175).

a) Comparative scales

Comparative scales comprise of the direct comparison of objects (Malhotra (2010:289). Comparative scales aim to have the respondent indicate their attitude, behaviour or feeling about an object on the basis of some other object (Hair *et al*., 2013:175). A major disadvantage of comparative scales is that the reference point might be unclear and therefore different respondents might use different reference points (Aaker, 2013:267). Examples of comparative scales include rank-order scales, constant sum scales and paired-comparison scales (Hair *et al*., 2013:177). Rank-order scales allow respondents to compare objects by indicating their order or preference whereas constant sum scales ask respondents to allocate a given number of points to a set of objects so that the total equals 100 (Hair *et al*., 2013:177; Malhotra, 2010:291). Paired-comparison scales provide the respondents with groups of characteristics where the respondents have to select the most important characteristic of each group (Hair *et al*., 2013:177).

b) Non-comparative scales

Non-comparative scales enable the respondent to indicate their attitude, feeling or behaviour of a specific object without any reference to another object (Hair *et al*.,

2013:175). With non-comparative scales, each object is measured independently of other and can either be continuous rating or itemised rating scales (Malhotra, 2010:289). *Continuous rating scales* has infinite categories whereas itemised rating scales provide the respondent with a scale which has a number or brief description associated with each category (Aaker, 2013:270; Malhotra, 2010:308). *Itemised rating scales* can either be a single-item scale or multiple-item scale (Hair *et al*., 2013:178). A single-item rating scale is where data is collected about only one attribute such as age whereas multiple-item scale includes several statements relating to the object or construct under investigation (Hair *et al*., 2013:178).

Likert scales are a popular type of a multi-item scale (Aaker, 2013:271). When using a Likert scale, the researchers need to determine the statements related to the issue or object and the respondents have to indicate how much they agree or disagree with each statement (Brown *et al*., 2014:251). Developed by Rensis Likert in 1932, the original scale which was designed to measure attitudes has been extensively adapted and modified (Edmondson *et al.*, 2012:74). Although the initial Likert scale consisted of five options, various researchers have modified the scale to a 7-point measurement (Edmondson *et al*., 2012:81). Likert-type scales are very useful in questionnaires since it allow respondents to not only indicate if they agree or not but rather their level of agreement or disagreement (Mitchell & Jolley, 2013:298). Additionally, since Likert type scales produce interval data, powerful statistical calculations can be performed with the responses which are not possible with dichotomous scales (Mitchell & Jolley, 2013:298).

Another type of multi-item scale is the semantic differential scale (Aaker, 2013:272). The semantic differential scale includes a series of bipolar adjectives (extreme opposites) for the different properties of the object being investigated and the respondents indicate their feeling of each property along a continuum (Brown *et al*., 2014:251; Burns *et al*., 2017:210). The opposite words of phrases are positioned at the endpoints of the continuum with five to seven separators between each point (Burns *et al*., 2017:210). This type of scale enables researchers to plot a profile of the brand or company image under investigation (Burns *et al*., 2017:210).

For this study, closed-end question types were used since closed-end questions provide specific direction and therefore it is viewed as an effective way of obtaining specific information required (Cormier *et al*., 2013:153). As further indicated in Table 5-3, all three types of close-ended questions namely multiple choice, dichotomous and scale questions were used in the

questionnaire. Regarding the scale question type, the study included non-comparative scales and specifically multi-item rating scales using a 5-point unlabelled, continuous Likert scale.

5.2.7.3 Measurement scales

Measurement scales refer to the guidelines used for assigning numbers to objects in a way that the assigned numbers represents quantities of attributes (Brown *et al*., 2014:243). Measurement scales directly influence the quality of the responses (Hair *et al*., 2010:153) and therefore researchers should apply caution when deciding on the scale to be used. In research, there are four types of scales used to measure attributes namely nominal, ordinal, interval and ratio scales (Brown *et al*., 2014:244).

- **Nominal Scales**

  Nominal scales are the lowest level of measurement where numbers are assigned to classes of objects or objects with the aim of identifying the object (Brown *et al*., 2014:245; Hair *et al.*, 2010:153; Silver *et al*., 2013:101). Therefore, nominal scales are used as unique identifiers or individuals or are used to categorise individuals into groups (Brown *et al*., 2014:245) and therefore the numbers assigned serve only as labels (Boone & Boone, 2012:3). Since the number assigned to an individual only indicate identification, researchers are only able to calculate the mode of responses which is the number of times the category was selected (Brown *et al*., 2014:245). The statistical opportunities of nominal scales are therefore very limited. Demographic questions such as age, gender and race are examples of nominal scales (Brown *et al*., 2014:244).

- **Ordinal scales**

  With ordinal scales numbers are assigned based on some form of order (Brown *et al*., 2014:245). Ordinal scales have nominal scale properties but also allow for the categorisation of the objects based on how much of the characteristic exists relative to others (Babin & Zikmund, 2016:274). Ordinal scales are therefore a ranking scale where the numbers assigned indicate the relative degree to which the objects have some characteristic and furthermore enable the researcher to determine if the object has more or less of a certain characteristic (Boone & Boone, 2012:3; Malhotra, 2010:286). Importantly, although ordinal scales indicate the level of characteristic, it does not indicate how much more or less of the characteristic is present (Malhotra, 2010:286). Level of education or income categories are examples of ordinal scales frequently used in marketing research (Brown *et al*., 2014:244).

- **Interval scales**

  Interval scales have the properties of both ordinal and nominal scales where the assigned numbers can allow and indicate the size of the differences between and among numbers (Babin & Zikmund, 2016:275; Brown *et al*., 2014:247). However, interval scales do not have zero points (Boone & Boone, 2012:3). Using interval scales allow the researcher not only to calculate the mode and median scores but also mean score or average since the scale positions are equal (Brown *et al*., 2014:248). The most commonly used interval scale used by researchers is the Likert scale where the respondents need to indicate their level of agreement or disagreement with a series of statements (Burns *et al*., 2017:209).

- **Ratio scale**

  Ratio scale measures are the scale type where a zero point exists (Burns *et al*., 2017:207). The ratio scale type is the highest level scale since it allows researchers to establish the absolute difference between each scale point as well as the possibility to make absolute comparisons between the responses (Hair *et al*., 2010:155). The absolute or zero point indicates the absence of the characteristic being measured (Feinberg *et al*., 2013:124).

This study included nominal, ordinal and interval scales as indicated in Table 5-3. All demographic questions were measured using nominal scales expect the question about the respondent's highest level of education which was an ordinal scale. Regarding the interval scale used, the questions in section A and section B which deal with the constructs investigated in this study made use of a 5-point unlabelled, continuous Likert scale. As suggestion by Burns *et al.* (2017:215), when a researcher wants to establish the respondent's opinion regarding a particular construct, the ideal scale to use is that of a Likert scale more specifically a 5-point Likert agreement/disagreement scale. Although the original Likert scale consisted of a 5-point measurement, various authors have debated and argue the question of the number of scale options to be used (Allen & Seaman, 2007; Cummins & Gullone, 2000). However, in a study by Leung (2011) which did a comparison of the psychometric properties and normality of 4-, 5-, 6- and 11- point Likert scales they have established that there exists no difference between these scale points in terms of the mean scores, standard deviation, item-to-item correlation, reliability, exploratory factor analysis or factor loadings (Leung,2011:419). Based on this finding, it was decided to use a 5-point unlabelled, continuous Likert scale. The responses obtained from the Likert scale presented ordinal data, which was then statistically processed to produce interval data.

5.2.7.4 Questionnaire layout

Questionnaire flow refers to the ordering of the questions used in the questionnaire (Babin & Zikmund, 2016:320). The questions should flow from general to more specific information and conclude with demographic information to develop a good and effective questionnaire (Hair *et al*., 2013:194). Additionally, the layout of the questionnaire should be neat and attractive and the instructions must be well explained (Babin & Zikmund, 2016:321).

As mentioned, this study made use of online surveys using Google Forms. Google Forms is a user-friendly tool to create online surveys where the responses are collected into an online spreadsheet (Wolber, 2012). Agarwal (2014) presented a few characteristics of Google Forms as the online survey tool such as the possibility to create more than one survey at a given time, the fact that Google Forms are also mobile friendly, the automatic capturing of the data into an Excel spreadsheet and lastly, the wide range of question types available in Google Forms. Based on these characteristics, Google Forms were chosen since nine questionnaires (for each province) had to be created where the data were collected simultaneously. Furthermore, the automatic capturing of the responses resulted in time being saved and also the possibility of incorrect capturing was limited.

The questionnaire used for this study is provided in Annexure A and included the following sections:

- **Introduction**

  The introduction of the questionnaire is critical since this section is what the respondent reads or hears before they begin with the questionnaire (Burns *et al*., 2017:223). The main function of the introduction is to inform the respondent what the questionnaire is about and additionally, the introduction informs the respondent who is doing the survey and how the respondent was selected (Burns *et al*., 2017:223; Hair *et al*., 2013:194).

  For this study, a comprehensive introduction was provided. The introduction included the objective of the study, information regarding the confidentiality and anonymity of the respondents and results. The introduction furthermore indicated the number of questions in the questionnaire as well as the contact details of the researcher.

- **Screening questions**

  Screening questions are used to search out respondents who meet the qualifications of the questionnaire and respondents who do not (Burns *et al*., 2013:223). Screening questions

are important since it prevents unqualified respondents from completing the questionnaire and being included in the study (Hair *et al*., 2013:194).

The questionnaire for this study consisted of two screening questions. The first question requested the respondent to select which one of the listed residential Facebook groups have they written posts and/or replied to posts from other members of the group, during the past 12 months. Should the respondent be active on more than one group, they were requested to indicate the group they use most often. The purpose of this screening question was to ensure that the respondent is an active member of the Facebook group and, therefore, the respondent will be able to answer the questions. In-active members would not have been able to answer the questions and were therefore excluded.

The second screening question asked the respondent if they were older than 18 years of age. The ethical committee requested that respondents be older than 18 years of age and therefore should the respondent indicate that they were younger than 18 years of age they were directed to the thank you message and could not complete the questionnaire.

- **Research question section**

  The second section of the questionnaire includes the research questions which were based on the research objectives of the study (Hair *et al*., 2013:194).

  - Section A: Commitment

    Section A of the questionnaire included the statements related to the commitment construct measured in this study. Section A measured the respondent's level of agreement/disagreement with the statement related to emotional support, social switching costs, position involvement, affective commitment, subjective norm, perceive critical mass and normative commitment. The respondents were asked to think about their overall experience as a member of the residential Facebook group which they mentioned in question 1 of the questionnaire and indicate the extent to which they agree with each of the statements using a 5-point unlabelled, continuous Likert scale.

    The section consisted of thirty-six statements which were adapted from previous valid and reliable studies and are indicated in Table 5-3. Respondents were asked to indicate their level of agreement/disagreement using a 5-point unlabelled, continuous Likert scale where 1 indicated strongly disagree and 5 indicated strongly agree.

- Section B: Online community citizenship behaviour

  Section B consisted of seventeen statements which relate to the online community citizenship behaviours. Similar to Section A, the respondents were requested to consider the Facebook group they mentioned in question 1 and to indicate their level of agreement/disagreement with the statements provided. The measurement items asked in Section B included the types of online community citizenship behaviour which was identified in section 3.4.3 and that have previously been measured in the commerce environment. As discussed in section 3.4.3 and shown in Table 5-3, the scale items were adapted and aligned to the context of this study to assess their relevance to online community citizenship behaviours on Facebook. Five citizenship scales were measured and included feedback (general improvement, operational problems experienced), policing and helping behaviour (use of service, personal problems experienced). Section B also made use a 5-point unlabelled, continuous Likert scale where 1 indicated strongly disagree and 5 indicated strongly agree.

- Section C: Demographic information

  The purpose of Section C was to obtain more insight into the demographic information of the respondents. To achieve the secondary objective 2, the respondents were asked to indicate their gender, age group, employment status, marital status, ethnicity and their highest level of education.

  The statements which appeared in the questionnaire is provided in Table 5-3. The table also indicates the response format and measurement scale for each statement. Furthermore, Table 5-3 shows the secondary objective and hypothesis related to the statement as well as the source study from where the statement was adapted for this study.

Table 5-3: Summary of statements, response format, measurement scale, secondary objectives, hypothesis and source

Statement	Response format	Measurement scale	Secondary objective	Hypothesis	Source
Screening questions					
During the past 12 months, on which one of the following residential Facebook groups have you written posts and/or replied to posts from other members of the group? (If more than one group, please indicate the one you most often use.)	Multiple-choice	Nominal	N/A	N/A	Self-generated
Are you older than 18 years of age?	Dichotomous				
Section A: Commitment					
Emotional support					
CEmoSup1: Were on my side.	Multi-item Likert scale	Interval	3 & 10	H5	Chen *et al*. (2013)
CEmoSup2: Comforted and encouraged me.					
CEmpSup3: Read my posts about my personal feelings.					
CEmpSup4: Expressed interest and concern in my well-being.					
CEmpSup5: Supported and reassured me.					
Social switching costs					
If I switch to another residential Facebook group, I might:					
CSSwit1: Lose the friendships I have developed with the current group	Multi-item Likert scale	Interval	5 & 10	H6	Shukla *et al*. (2016)
CSSwit2: Lose important personal relationships which I have developed with my current group.					
CSSwit3: Feel very uncomfortable to tell the members of my current group that I am switching to another group.					

Table 5-3: Summary of statements, response format, measurement scale, secondary objectives, hypothesis and source (cont.)

Statement	Response format	Measurement scale	Secondary objective	Hypothesis	Source
CSSwit4: Find it very difficult to tell the administrator(s) of my current group that I am switching to another group.	Multi-item Likert scale	Interval	5 & 10	H6	Self-generated
CSSwit5: Feel very uncomfortable to tell the administrator(s) of my current group that I am switching to another group.					
CSSwit6: Find it very difficult to tell the members of the current group that I am switching to another group.					
Position involvement					
I prefer to be a member of this residential Facebook group because:					
CPosInv1: The image of this group comes the closest to reflecting my lifestyle.	Multi-item Likert scale	Interval	4 & 8	H7	Bloemer and Odekerken-Schrôder (2007)
CPosInv2: When interacting with the members of this group, it reflects the kind of person I am.					
CPosInv3: The persona of this group comes the closest to reflecting my personal image.					
CPosInv4: The persona of this group comes the closest to reflecting my lifestyle.					Self-generated
CPosInv5: When having conversations with the members of this group, it reflects the kind of person I am.					
Affective commitment					
CAffect1: I feel emotionally attached to this residential Facebook group.	Multi-item Likert scale	Interval	8 & 10	H1 & H2	Bloemer and Odekerken-Schröder (2007); Chen *et al.* (2013)
CAffect2: This residential Facebook group has a great deal of personal meaning to me.					
CAffect3: I feel a strong sense of identification with this residential Facebook group.					

Table 5-3: Summary of statements, response format, measurement scale, secondary objectives, hypothesis and source (cont.)

Statement	Response format	Measurement scale	Secondary objective	Hypothesis	Source
CAffect4: I would be very happy to stay with this residential Facebook group.	Multi-item Likert scale	Interval	8 & 10	H1 & H2	Self-generated
CAffect5: I feel a strong sense of belonging to this residential Facebook group.					
Subjective norm					
In general, the following people think that I should frequently post content on this residential Facebook group:					
CSubNor1: People who influence my behaviour.	Multi-item Likert scale	Interval	6 & 8	H8	Chen *et al.* (2013)
CSubNor2: People who are important to me.					
CSubNor3: My friends.					
CSubNor4: People who are valuable to me.					Self-generated
CSubNor5: Influential people.					
Perceive critical mass					
The following people frequently post contents on this residential Facebook group:					
CPerMas1: Most people in my social group.	Multi-item Likert scale	Interval	7 & 10	H9	Chen *et al.* (2013)
CPerMas2: Most people in my society.					
CPerMas3: Most people in my work environment.					
CPerMas4: Most of my friends.					Self-generated
CPerMas5: Most of my peers.					

Table 5-3: Summary of statements, response format, measurement scale, secondary objectives, hypothesis and source (cont.)

Statement	Response format	Measurement scale	Secondary objective	Hypothesis	Source
Normative commitment					
In general, I would feel:					
CNorm1: Obligated to continue posting content on this residential Facebook group.	Multi-item Likert scale	Interval	8 & 10	H3 & H4	Chen *et al.* (2013)
CNorm2: Guilty if I stop posting content on this residential Facebook group.					
CNorm3: Obligated to continue taking part in conversations on this residential Facebook group.					Bateman *et al.* (2011)
CNorm4: A sense of duty to continue posting content on this residential Facebook group.					Self-generated
CNorm5: Responsible to continue taking part in conversations on this residential Facebook group.					
Section B: Online community citizenship behaviours					
Feedback intentions regarding general improvement					
If provided with the opportunity, I will:					
AImprov1: Make constructive suggestions to the administrators of the residential Facebook group that will assist in improving the group's experience.	Multi-item Likert scale	Interval	9 & 10	H1a & H3a	Rosenbaum and Massiah (2007); Yi and Gong (2013)
AImprov2: Inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members.					
AImprov3: Share a useful idea with the administrators of the residential Facebook group that will assist in enhancing the experience of the group.					

Table 5-3: Summary of statements, response format, measurement scale, secondary objectives, hypothesis and source (cont.)

Statement	Response format	Measurement scale	Secondary objective	Hypothesis	Source
Feedback intentions regarding operational problems					
When noticing a functional/operational problem on the residential Facebook group, I will:					
AProb1: Let the administrators know about it, even if the problem does not involve me directly.	Multi-item Likert scale	Interval	9 & 10	H1b & H3b	Rosenbaum and Massiah (2007); Yi and Gong (2013)
AProb2: Notify the administrators, even if the problem does not affect me directly.					Self-generated
AProb3: Inform the administrators, even if the problem does not concern me directly.					Rosenbaum and Massiah (2007)
Policing intentions					
If provided with the opportunity, I will suggest to the administrators of the residential Facebook group:					
AMon1: Solutions to issues of inappropriate member behaviour that may make other members of the group unhappy.	Multi-item Likert scale	Interval	9 & 10	H1c & H3c	Mpinganjira (2016)
Amon2: Answers to issues of unfitting member behaviour that may concern other members of the group.					
Amon3: Remedies to problems of inappropriate member behaviour that may upset other members of the group.					
Helping intention relating to the use of service					
If provided with the opportunity, I will:					
MHelpS1: Assist other members of the residential Facebook group in correctly using the group.	Multi-item Likert scale	Interval	9 & 10	H2a & H4a	Yi and Gong (2013)
MHelpS2: Help other members of the residential Facebook group to accurately operate the group.					

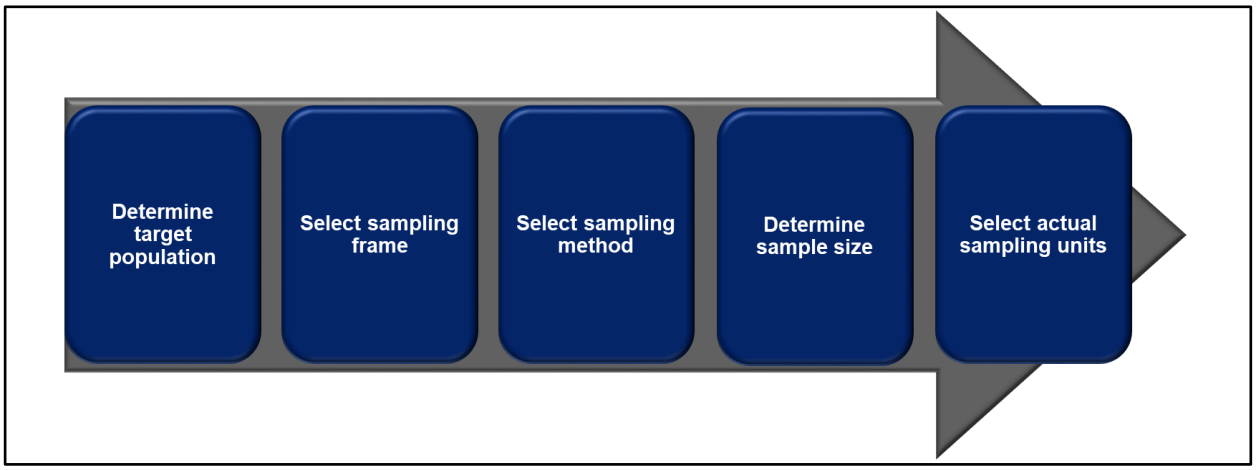
Table 5-3: Summary of statements, response format, measurement scale, secondary objectives, hypothesis and source (cont.)

Statement	Response format	Measurement scale	Secondary objective	Hypothesis	Source
MHelpS3: Teach other members of the residential Facebook group in properly utilising the group.	Multi-item Likert scale	Interval	9 & 10	H2a & H4a	Yi and Gong (2013)
MHelpS4: Give advice to other members of the residential Facebook group in correctly using the group.					
Helping intention relating to personal problems experienced					
When provided with the opportunity to reply to posts on the residential Facebook group, I will:					
MHelpP1: Assist other members who need my help with a personal matter.	Multi-item Likert scale	Interval	9 & 10	H2b & H4b	Yi and Gong (2013)
MHelpP2: Give advice to other members who need my help with a personal problem.					
MHelpP3: Help other members who need guidance with a personal issue.					
MHelpP4: Support other members who need my guidance with a personal matter.					Self-generated
Section C: Demographic information					
Please indicate your gender	Dichotomous	Nominal	2	N/A	Self-generated
Please indicate your age group	Multi-choice				
Which ONE of the following options best describes your employment status?					
Please indicate your marital status.					
Please indicate your ethnicity.					
Please indicate your highest level of education		Ordinal			

5.2.8 Step 8: Determine the sample plan and size

Sampling includes the gathering of information from a portion of a larger group or population and then making estimates from the sample to the larger population (Silver *et al*., 2013:152). Sample plans provide information of each sample element or unit which is drawn from the target population (Burns *et al*., 2017:73). Adapted from Zikmund and Babin (2016:340) this study followed the following five steps to determine the sample of the study which is shown in Figure 5-4. These steps are discussed in the following sections.

Figure 5-4: Steps to select a sample



Sources: Adapted from Babin and Zikmund (2016:340).

5.2.8.1 Determine the target population

The population of the study comprises of the entire group from whom the researchers aim to draw conclusions based on the information supplied by the sample and include the objects or individuals that meet the requirements for being a member of the overall group (Brown *et al*., 2014:301; Burns *et al*., 2017:238). These author further mention that the objectives of the study normally specify the target population. The sample of a study is the subset of the population which represents the population whereas the sample unit is viewed as the basic level of investigation (Burns *et al*., 2017:239). A population of a study consists of four parts namely element, sampling unit, extent and time (Silver *et al*., 2013:154).

The *element* refers to the objects from which of about which the information is required while the *sampling unit* refers to the element which is available for selection at some stage. The *extent* refers to the geographical area in which the study was conducted and the *time* refers the time frame when the research was conducted (Malhotra, 2010:372; Silver *et al*., 2013:154). Based on the definition of a population by Malhotra (2010:372) and Silver *et al.* (2013:154), the population and rationale for this study are defined in Table 5-4.

Table 5-4: Study population and rationale

Part	Description		Rationale
Element	Males and females, older than the age of 18 who is currently an active member of a residential online activity community on Facebook in South Africa.		Both males and female members were included in the population to ensure that the sample represents both genders. Additionally, all nine provinces of South Africa were selected to ensure the study obtained feedback from respondents across the country.
Sampling unit	Residential online activity communities on Facebook in the nine provinces of South Africa. Five residential online activity communities per province which include the biggest group according to the number of members, and four smaller groups.		The biggest residential Facebook group of each province were included together with four additional groups to ensure representativeness of the population.
	Province	Facebook group name	
	Eastern Cape	What is happening in East London, South Africa, Grahamstown Jeffreys Bay St Francis Bay- The Official Facebook Group Friends of King Williams Town	
	Free State	Beautiful Bloemfontein Bethlehem nuus Heilbron Herald nuus Virginia, my dorp, my trots Odendaalsrus	
	Gauteng	People who live in Midrand Not just another group in Midrand Sandton community Ek is van die ooste Wat gebeur in Fochville	

Table 5-4: Study population and rationale (cont.)

Part	Description		Rationale
Sampling unit	Province	Facebook group name	
	Kwa-Zulu Natal	Durban North Community + Neighbours Amanzimtoti neighbours Westville info group Everything Musgrave Richards Bay	
	Limpopo	Nylstroom Dorp / Town Vaalwater - hart van die Waterberge Hoedspruit town, South Africa Naboomspruit Ellisras saampraat	
	Mpumalanga	Nelspruit! Nelspruit / Witrivier / Barberton Middelburg Belfast Dullstroom Lydenburg Wall Barberton/Lowveld/Mpumalanga People who live in Marble-Hall	
	North West	Potchefstroom Brits, Ons Land En Sy Mense Praat Saam Staan Saam Rustenburg Concerned Community of Vryburg (CCV) Klerksdorp, ons stad	
	Northern Cape	Saam Staan Kimberley! Kuruman, Kathu, Postmansburg and Upington social network Kathu Hopetown nuus Upington mense	

Table 5-4: Study population and rationale (cont.)

Part	Description		Rationale
Sampling unit	Province	Facebook group name	
	Western Cape	Bellville, Kraaifontein, Brackenfell, Durbanville, Kuilsrivier, en alle areas Paarl pals Mosselbaai op sy BESTE! Oudtshoorniete staan saam Staan saam Clanwilliam	
Extent	South Africa		Additionally, all nine provinces of South Africa were selected to ensure the study obtained feedback from respondents across the country.
Time	26 October 2017 to 19 November 2017		Data were collected following the ethical clearance obtaining and pre-testing of the questionnaire was performed.

Source: Researcher's own compilation

5.2.8.2 Selecting the sampling frame

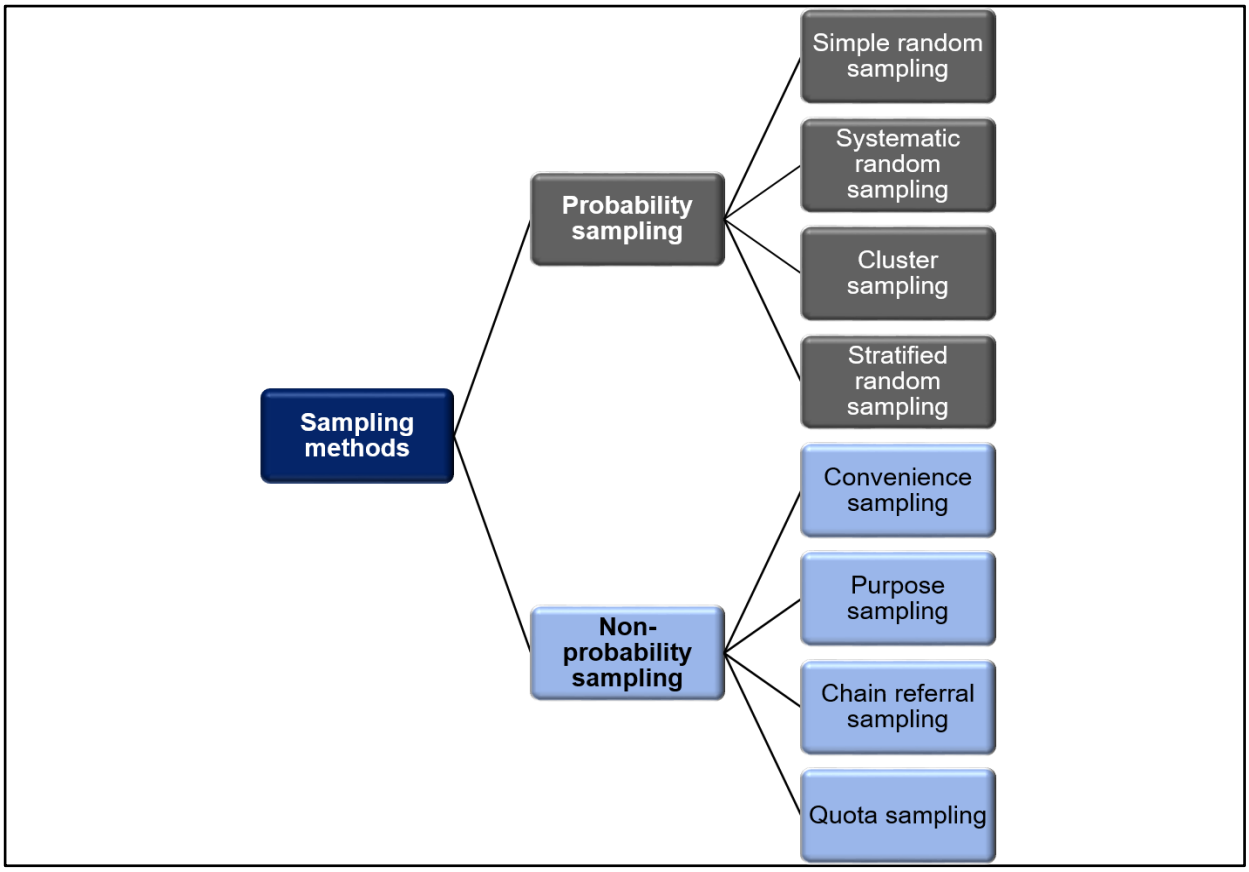
The sample frame of a study consists of a list of the population elements or units (Brown *et al*., 303; Burns *et al*., 2017:73). The sample frame is, therefore, the main source of sample units of the population where both the sample and sample unit exist (Burns *et al*., 2017:239).

Although the members of the residential online activity Facebook groups are known to the researcher, the members are not accessible to the researcher. Facebook does not publish the email addresses of the members and only allow personal messages to be sent to members. Unfortunately, members do not read or access these messages. Therefore, no sample frame exists for this study.

5.2.8.3 Selecting the sampling method

The sampling designs or sampling methods can be categorised into either probability or non-probability sample (Burns *et al*., 2017:241; Malhotra, 2010:376). The two categories and the types of a sampling method for each category are shown in Figure 5-5 which will be discussed in the subsequent sections.

Figure 5-5: Sampling methods



Source: Adapted from Burns *et al.* (2017) and Hair *et al.* (2014).

5.2.8.3.1 Probability sampling

When the sampling units are selected by chance, probability sampling takes place (Hair *et al*., 2014:140; Malhotra, 2010:376). Each member of the population has a known, non-zero chance of being included in the sample (Babin & Zikmund, 2016:348; Brown *et al*., 2014:307). Therefore, probability sampling enables the researcher to pre-specify each potential sample of a given size which could be selected from the population as well as the probability of selecting each sampling (Malhotra, 2010:377). The researcher determines specific rules for selecting the members from the population to ensure unbiased selection of the sample and also to ensure proper sample representation of the population (Hair *et al*., 2014:140). As indicated in Figure 5-5, there exists four different types of probability sampling methods.

- *Simple random sampling* is a probability approach where every sampling unit has an equal and known chance of being selected in the sample (Babin & Zikmund, 2016:351; Hair *et al*., 2014:140). For example, with simple random sampling, the researcher write all the names of the provinces in South Africa on pieces of paper and place the pieces of paper in a hat. The researcher then blind-folded pick a piece of paper from the hat. Although the simple random sampling is easily understood and can be generalised to the population of the study, this sampling method requires a complete and accurate list of all sample elements which is usually difficult to obtain (Hair *et al*., 2014:141).

- *Systematic random sampling* is very similar to simple random sampling however systematic random sampling requires that the defined population can be ordered in some way (Hair *et al*., 2014:141). Systematic sampling is a sampling method was a starting point is chosen by means of a random process and then every *n*th number on the list is selected (Babin & Zikmund, 2016:351; When using systematic random sampling, the researcher sampling units are selected by determining a skip interval (Hair *et al*., 2014:141). The skip interval is calculated by dividing the defined target population list size by the desired sample size (Hair *et al*., 2014:141). Next, the researcher selects the starting point and includes every nth (skip interval) element (Hair *et al*., 2014:141). For example, if the skip interval is calculated at 10 and the starting point at 8, then the 8^{th} unit will be included, 18^{th} unit, 28^{th} unit, 38^{th} unit etc. Systematic random sampling is viewed as a very attractive and economical method, however, the possibility of hidden patterns in the list and again the prerequisite that a complete and accurate list of the population must exist (Hair *et al*., 2014:141).

- Another probability sampling method is the *stratified random sampling* method. Stratified random sampling includes the dividing of the population into different homogenous groups known as strata and then the selection of the samples from the different strata (Babin &

Zikmund, 2016:353; Hair *et al*., 2014:143). Two approaches can be followed to derive samples from the strata namely proportionately stratified sampling where the sample size from each stratum is dependent of the stratum's size relative to the population, or disproportionately stratified sampling where the stratum's size relative to the population does not influence the sample size of each stratum selected (Babin & Zikmund, 2016:353; Hair *et al*., 2014:143). Although the dividing of the population into homogeneous strata groups ensure representativeness and the opportunity to investigate each stratum it is difficult to determine the correct basis according to which the dividing of the population must take place (Hair *et al*., 2014:143).

- *Cluster sampling* is very similar to stratified random sampling with the main difference that in the case of cluster sampling the population is divided into collectively exhaustive and mutually exclusive subpopulation called clusters (Babin & Zikmund, 2016:354; Hair *et al*., 2014:143). Clusters are therefore heterogenetic groups compared to stratums being homogeneous (Hair *et al*., 2014; 143). A commonly used form of cluster sampling is area sampling where clusters are created using geographical areas (Hair *et al*., 2014:144). Cluster sampling is a popular form of probability sampling as it is cost-effective and easy to implement however researchers should ensure that the clusters are heterogenic of nature and that the factor used to determine the cluster are appropriate to the research study (Hair *et al*., 2014:145).

5.2.8.3.2 Non-probability sampling

Non-probability sampling depends on the individual judgement of the researcher instead of the change to select the sample elements (Hair *et al*., 2014:140; Malhotra, 2010:376). With non-probability sampling, not all elements have the opportunity to be included in the sample (Brown *et al*., 2014:304) and therefore the probability of a specific member of the population being selected in unknown (Aaker *et al*., 2013:366; Babin & Zikmund, 2016:348). Although non-probability sampling produces a good estimation of the population, they do not permit the researcher to objectively evaluate the precision of the sample results (Malhotra, 2010:376). Additionally, non-probability sample eliminates the cost and effort to develop a sampling frame (Aaker *et al*., 2013:366). The level of representativeness of the defined population relies on the sampling approach being used and also how well the approach has been executed (Hair *et al*., 2014:140). Furthermore, non-probability sampling is seen as pragmatic and can be used for market research (Babin & Zikmund, 2016:348). Four non-probability sampling methods exist namely convenience sampling, judgement sampling, quota sampling and snowball sampling (Babin & Zikmund, 2016:348).

- *Convenience sampling* is a sampling method where the samples are obtained that are conveniently available (Babin & Zikmund, 2016:348). Convenience sampling is, therefore, the inclusion of population elements because they are readily available (Brown *et al*., 2014:305). Convenience sampling is normally used to obtain results quickly and is also economical to execute (Babin & Zikmund, 2016:348). Examples of convenience sampling include the use of students, members of society, mall-intercepts or people on the street, to name but a few (Malhotra, 2010:377).

- Another type of non-probability sampling is *judgement sampling* where experienced individuals choose the sample based on their judgement regarding the relevant characteristics required for the sample member (Aaker *et al*., 2013:367; Babin & Zikmund, 2016:349). Although the sample is not fully representative of the population, the researcher can select samples which satisfy the specific research purpose (Babin & Zikmund, 2016:349). Examples of judgement sampling include test markets to determine the potential for a new product, expert witnesses used in court or purchase engineers who are interviewed about their opinion of a new product (Malhotra, 2010:379).

- *Quota sampling* ensures that the different subgroups in a population are represented on applicable sample characteristics according to the desire of the researchers (Babin & Zikmund, 2016:349). With quota sampling, the researchers have a specific quota to achieve, for example, some male respondents and female respondents (Aaker *et al*., 2013:368; Babin & Zikmund, 2016:349). One major advantage of quota sampling is that when the sample is effectively managed, the quota sampling can provide a very representative sample of the population (Babin & Zikmund, 2016:350).

- *Snowball sampling* include the use of some process for selecting a few initial respondents and then using these respondents to seek out additional respondents (Babin & Zikmund, 2016:350). Probability sampling is sometimes used to select the initial respondents and snowball sampling (non-probability sampling) to obtain the rest of the sample (Aaker *et al*., 2013:367; Babin & Zikmund, 2016:350). For examples, referrals from respondents can be used to contact and interview more respondents (Malhotra, 2010:381).

It is evident from the abovementioned discussion that a key prerequisite for probability sampling is an accurate and complete sample frame. Since this study does not have a sample frame to implement probability sample, non-probability sampling methods were used. This study made use of a two-stage sampling method which included both convenience- and quota sampling. Firstly, quota sampling was used to ensure the appropriate subgroups, in this case, the different

residential online activity communities on Facebook, are identified and included in the study (Hair *et al*., 2013:146). Additionally, quota sampling was used to reduce the selection bias by fieldworkers, where the fieldworkers select respondents according to their own judgement (Hair *et al*., 2013:146). The biggest residential Facebook group of each province were included together with four additional groups to ensure representativeness of the population. After quota sampling, the quotas were realised using convenience sampling, where the link to the questionnaire was posted on the different residential online activity Facebook groups. Convenience sampling was chosen since a large sample had to be obtained in a relatively short period (Hair *et al*., 2013:146). The sample size for each residential online community is explained in the next section.

5.2.8.4 Determining the sample size

The sample size of a study refers to the number of elements to be included in the study (Malhotra, 2010:374). The determining of sample size differs between sampling designs and since this study make use of a non-probability sampling design, the sample size will not by use of formulas as in the case of probability sampling (Hair *et al*., 2013:147,149). For the purpose of this study, the group sizes of each Facebook group were used to determine the sample size. The sample size per Facebook group was proportionately calculated through an investigation of group's size relative to all the other selected groups. All nine group sizes were therefore 1) summed together, 2) then the % of each group relative to all the groups were calculated and 3) multiplying the % calculated by the sample size required. In addition, since this study involves the measurement of a structural equation model (SEM), the recommendation of Hair *et al.* (2014) was used to determine the sample size. Hair *et al.* (2014:576) suggest that the adequate sample size for a SEM model is determined by the number of constructs included in the scale. When the number of factors is more than six, a sample size of 500 is required. Therefore, since this study includes more than six factors, the sample size was 500 respondents. Consequently, the sample size for this study is presented in Table 5-5.

Table 5-5: Sample size of the study

Province	Facebook group name	Group size	% of all groups	Sample size
Eastern Cape	What is happening in East London, South Africa.	82 682	20%	98
	Jeffreys Bay.	17 074		
	Grahamstown.	13 061		
	St Francis Bay- The Official Facebook Group.	5 327		
	Friends of King Williams Town.	5 324		

Table 5-5: Sample size of the study (cont.)

Province	Facebook group name	Group size	% of all groups	Sample size
Free State	Beautiful Bloemfontein.	39 217	9%	43
	Bethlehem nuus.	5 030		
	Virginia, my dorp, my trots.	4 811		
	Odendaalsrus.	2 739		
	Heibron Herald nuus.	2 001		
Gauteng	People who live in Midrand.	26 549	8%	42
	Wat gebeur in Fochville.	12 441		
	Ek is van die ooste.	9 279		
	Not just another group in Midrand	2 490		
	Sandton community.	2 164		
Kwa-Zulu Natal	Richards Bay.	17 954	8%	41
	Everything Musgrave.	12 731		
	Westville info group.	12 398		
	Amanzimtoti neighbours	6 796		
	Durban North Community + Neighbours.	1 741		
Limpopo	Ellisras saampraat	13 868	6%	28
	Hoedspruit town, South Africa.	9 839		
	Vaalwater - hart van die Waterberg.	4 400		
	Nylstroom Dorp / Town.	4 340		
	Naboomspruit.	2 200		
Mpumalanga	Nelspruit / Witrivier / Barberton.	32 541	12%	61
	Nelspruit!	29 212		
	Barberton/Lowveld/Mpumalanga.	7 807		
	Middelburg Belfast Dullstroom Lydenburg Wall	5 395		
	People who live in Marble-Hall.	4 324		
North West	Potchefstroom.	38 071	14%	72
	Brits, Ons Land En Sy Mense Praat Saam.	24 219		
	Staan Saam Rustenburg.	20 824		
	Klerksdorp, ons stad.	4 715		
	Concerned Community of Vryburg (CCV).	2 367		
Northern Cape	Kuruman, Kathu, Postmasburg & Upington social network	14 175	6%	29
	Saam Staan Kimberley!	13 383		
	Kathu.	5 691		
	Hopetown nuus.	1 357		

Table 5-5: Sample size of the study (cont.)

Province	Facebook group name	Group size*	% of all groups	Sample size
	Upington mense.	1 334		
Western Cape	Oudtshoorniete staan saam.	41 100	17%	86
	Bellville, Kraaifontein,Brackenfell, Durbanville,Kuilsrivier, en alle areas..	26 984		
	Mosselbaai op sy BESTE!	21 975		
	Paarl pals	9 754		
	Staan saam Clanwilliam.	8 104		
TOTAL			**100%**	**500**

* Facebook group sizes as on 28 September 2017

5.2.8.5 Selecting the actual sample units

During the final stage of the sampling process, the researcher must decide how to contact the prospective respondents (Hair *et al*., 2013:152). The prospective respondents were contacted through a message posted on the wall of the specific residential online activity community on Facebook. Figure 5-6 presents an example of such a message.

Figure 5-6: Facebook invitation message



In conclusion, the summary of the sample plan for this study is presented in Table 5-6.

Table 5-6: Sample plan for the study

Sample plan	
Target population	Males and females, older than the age of 18 who is currently an active member of a residential online activity community on Facebook in South Africa.
Sampling frame	No sampling frame exists.
Sampling method	Non-probability sampling which includes both quota-and convenience sampling.
Sampling units and elements	Residential online activity communities on Facebook in the nine provinces of South Africa. Five residential online activity communities per province which include the biggest group according to the number of members, and four smaller groups. Male and female adults, 18 years and older, who are current and active members of residential online activity communities in South Africa.
Sample size	500

Source: Researcher's own compilation.

5.2.9 Step 9: Collecting data

Data collection begins when the sample plan for the study has been formalised (Babin & Zikmund, 2016:69). During this step of the marketing research process, the respondents provide their information in reply to questions asked by the researcher (Burns *et al*., 2017:290). The questions might be asked through face-to-face interviews, or over the telephone or with an online survey (Burns *et al*., 2017:290). The data collection for this study will be discussed next.

5.2.9.1 Pilot testing (pre-testing the questionnaire)

As mentioned in section 1.7.3.5, the questionnaire was pre-tested before the actual data for the study was collected. Pre-testing the questionnaire is also known as a pilot study which refers to a small-scale research project where data is collected from respondents in the same way than the large-scale study (Babin & Zikmund, 2016:64). Pilot studies are normally less structured than in the large-scale study and the sample size is much smaller (Malhotra, 2010:74). Pilot studies are done to refine the measures and reduce the risk that the large-scale study might include flaws that will influence the data collected (Babin & Zikmund, 2016:64).

The sample population of the pilot test was the same as for the large-scale study and a sample size of 30 was determined for the pilot testing. The reliability of the items was tested, and due to the items having good reliability, no changes were made to the questionnaire. Subsequently, the 30 responses of the pilot testing were added to the actual data collection for this study.

5.2.9.2 Large-scale data collection

The large-scale data collection that followed the completion of the pilot test included all questions as presented in Table 5-3 and were used to test the hypotheses and reach the secondary objectives of the study. Active members of the biggest residential online activity Facebook group and four smaller groups per province were invited to complete the online survey. Data collection took place from 26 October 2017 to 19 November 2017.

The invitation messages and link to the self-administrative, online questionnaire was posted on the walls of the different residential online activity Facebook groups. No fieldworkers were used, the researcher herself posted the link together with an invitation message to ask members to participate in the research. After data collection, the marketing research process continued with data analysis, which will be discussed next.

5.2.9.3 Ethical considerations

Various ethical considerations were considered for this study. Firstly, ethical clearance was obtained from the North-West University's ethics in commerce research committee with ethics number: NWU-00600-17-S4 allocated to this study. During the data collection phase of this study, no responded were subject to harm in any ways whatsoever. Respondents' voluntary participated, and could withdraw from the survey at any time without having to indicate their reason for withdrawal. The respondents also participated on the basis of informed consent, since sufficient background information about the study were supplied on the first page of the questionnaire. The background information provided about the study ensured that the respondents understood what the study is about and the implications of participation. In addition, privacy and anonymity of the respondents were ensured by not recording any personal information about the respondents. The results of the study were saved in a password protected file, in a secure location with only the research candidate and supervisor having access to the results. Lastly, no offensive, discriminating or any other unacceptable language were used in the questionnaire or invitational message that were posted on Facebook.

5.2.10 Step 10: Analysing the data

Data obtained from respondents are captured into an electronic dataset which is a matrix arrangement of numbers in rows and columns such as a Microsoft Excel spreadsheet (Babin & Zikmund, 2016:70; Burns *et al*., 2017:305). Subsequently or simultaneously with the capturing of data into the spreadsheet, the data are coded where identification codes or values are associated with the possible responses (Brown *et al*., 2014:353; Burns *et al*., 2017:306). In the case of online

questionnaires, which were used in this study, the data file is generated and expanded as each respondent submit their completed online questionnaire (Burns *et al*., 2017:306). The coding of data is sometimes built into the generation of these data files, or the researcher does the coding after the data file has been generated (Burns *et al*., 2017:306). In this study, the electronic data file generated by Google Forms had to be coded after the responses were submitted.

When all the data has been captured, the researcher should check the raw data for any problem responses which should be deleted known as editing (Burns *et al*., 2017:307). If online questionnaires are used, the researcher must verify the answers to the screening questions and must code any open-ended questions (Hair *et al*., 2013:245).

As mentioned Google Forms were used as the online questionnaire software program which also converted the data file with all the completed questionnaires into an Excel spreadsheet. The completed Excel spreadsheet was checked by the researcher and since Google Forms allowed the researcher to make certain questions mandatory, incomplete responses were not a problem. However, for this study, the researcher did delete any response where the respondent did not comply with the screening question (age and active membership). Following the editing of the data file, the researcher exported the Excel spreadsheet into the Statistical Package of the Social Sciences (SPSS) where the variable list has already been created. The data analysis for this study was performed using SPSS (Version 24) and MPlus (Version 8) and will be discussed in the next section.

5.2.10.1 Data analysis techniques used in this study

After the data has been collected, captured and edited and coded, various statistical procedures can be used to better understand the responses obtained (Hair *et al*., 2013:268). Data analysis refer to the process where the dataset is described by calculating some statistics which characterise the various aspects of the dataset (Burns *et al*., 2017:317).

5.2.10.1.1 Descriptive statistical analysis

Descriptive statistical techniques concern the frequency distribution of the data which assist with the summation of the information presented in a frequency table (Aaker *et al*., 2013:409). The mean and median scores are calculated to indicate the characteristics of the responses whereas the frequency and standard deviation indicates the similarity of the responses (Babin & Zikmund, 2016:365; Malhotra, 2010:486). The different types of descriptive techniques used in this study are presented and discussed in Table 5-7.

Table 5-7: Types of descriptive techniques used in this study

Descriptive technique	Definition	Used in this study
Mean	Calculates the average value which indicates the central tendency since it shows the centre of the distribution of the data (Aaker *et al*., 2013:410; Babin & Zikmund, 2016:365; Malhotra, 2010:486). The mean score is calculated by dividing the sum of the responses by the number of respondents who have answered the question (Aaker *et al*., 2013:410).	Table 6-3 Table 6-4 Table 6-5 Table 6-6 Table 6-7 Table 6-8 Table 6-9 Table 6-12 Table 6-13
Percentage	The percentage is the number of respondents who have answered the question in a specific way, multiply by 100 (Aaker *et al*., 2013:410).	Table 6-1 Table 6-2
Standard deviation	The average spreading of the values in a set of responses around their mean. It is calculated by subtracting the mean score from the square of each number and them summating it followed by dividing that sum by the total number of responses minus one then taking the square root of the result (Hair *et al*., 2013:259).	Table 6-3 Table 6-4 Table 6-5 Table 6-6 Table 6-7 Table 6-8 Table 6-9 Table 6-12 Table 6-13

5.2.10.1.2 Reliability and validity

The measurement used by marketing researchers should aim to be both reliable and valid and therefore researchers should always test the reliability and validity of the scale used (Burns *et al*., 2017:215; Hair *et al*., 2013:165).

- **Reliability**

  The reliability of a scale refers to the capability of the scale to achieve consistent scores for the same variable, when collected during different time periods, across different respondents and across the items forming the variable (Brown *et al*., 2014:258). Therefore, reliability indicates the degree to which the scale provides consistent results if repeated measurement takes place (Burns *et al*., 2017:215; Malhotra, 2010:318). Approaches to test for reliability include test-retest method, alternative-form method and internal consistency method (Malhotra, 2010:318).

To test for *test-retest reliability,* the respondents are administrated with identical sets of the scale items at two different times under nearly the same conditions (Hair *et al*., 2013:165; Malhotra, 2010:318). In *alternative-forms reliability*, two equally the same scales are constructed and the same respondent is measured at two different times, each time with one of the two scales developed (Malhotra, 2010:318). The scores of the two measurements are then correlated to access the reliability of the scale. *Internal consistency* is tested by assessing the degree to which the individual items of the scale are correlated (Hair *et al*., 2013:166). Two popular techniques to measure internal consistency is the split-half test and coefficient alpha or Cronbach's alpha score of the scale (Malhotra, 2010:319). In the split-half test, the scale items are divided into two halves and each halves' score are correlated with the other halves' score (Hair *et al*., 2013:166). The Cronbach's alpha score calculate the average of all possible split-half measures which results from the different ways of splitting the scale items (Malhotra, 2010:166; Hair *et al*., 2013:166). Cronbach's alpha values of 0.70 are regarded as acceptable. However, values above 0.80 are preferred (Pallant, 2013:104).

Since the test-retest reliability is sensitive to the time interval between the measures and that the alternative-forms reliability is time-consuming and expensive to perform (Malhotra, 2010:319) it was decided to use the internal consistency measure to test the reliability of the scale used for this study. Additionally, the Cronbach's alpha scores were calculated since Malhotra (2010:319) suggested the use of the Cronbach's alpha score to overcome the problem of using the split-halve reliability where the results of the test are depended on how the scale is split. Additionally, the construct reliability (CR) of the scale which is calculated using confirmatory factor analysis was also used to test the internal consistency of the scale (Hair *et al*., 2014:601). A CR score of higher than 0.70 indicates the scale have internal consistency (Hair *et al*., 2014:619).

For the purpose of this study, the Cronbach's alpha values were calculated for the data obtained from the pilot study to establish the internal consistency of the data and if the measurement items of the scale are correlated (Hair *et al*., 2013:166). The construct reliability (CR) values were calculated for the data obtained from the large scale data collection as part of the confirmatory factor analysis performed. The CR was established as it is often used in conjunction with SEM models to determine the reliability and internal consistency of the measure before construct validity is determined (Hair *et al*., 2014:619).

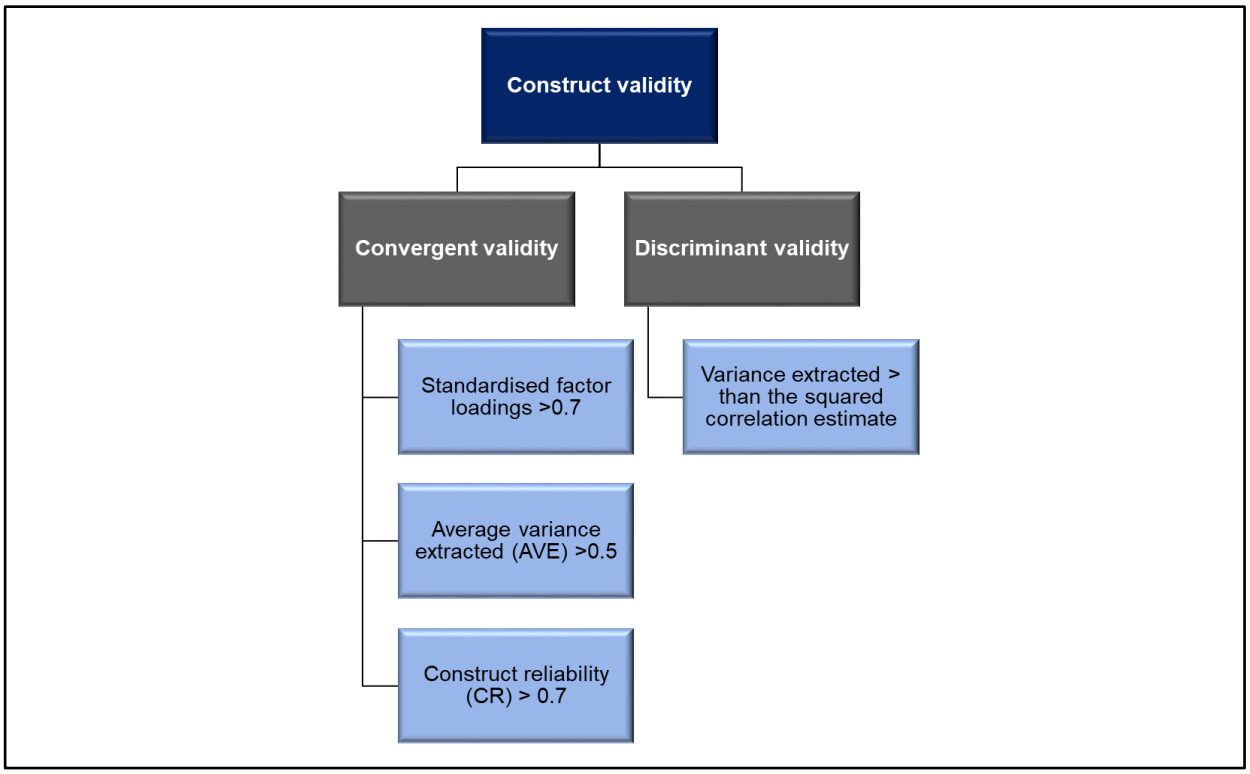
- **Validity**

  As previously mentioned, a measurement scale should also be valid and therefore the validity of the scales used in this research was tested. Validity refers to the accuracy of the measurement, in other words, the measurement measure what it is supposed to and truly represents the construct (Babin & Zikmund, 2016:281; Burns *et al*., 2017:215).

  The validity of the measurement scales used in this study was determined by evaluating content validity and construct validity (Hair *et al*., 2014:618; Malhotra, 2010:320). *Content validity* or face validity refers to the degree to which the individual measures correspond with the intended construct's definition (Babin & Zikmund, 2016:282). These authors state that content validity can be achieved by gaining input from various experts to judge how well each item in the scale is presented by the construct' definition. For this study, experts in the field of marketing were consulted to provide feedback regarding the proposed questionnaire to be used. After their recommendations and suggestions were incorporated, members of residential online activity communities on Facebook were contacted and were asked to review the questionnaire and to indicate if there were any questions which they were unable to answer or which they did not understand. A total of 12 members provided feedback in this regard, and some of the responses are presented in Appendix B. All these members concluded that they are able to answer all the questions and understood each question. Following the feedback from experts in the field of marketing and members of the residential online activity communities on Facebook, the pilot study was performed (section 5.2.9.1). Based on the Cronbach's alpha results obtained from the pilot study data (section 6.6.1), no changes were made to the questionnaire and therefore large-scale data collection was conducted (section 5.2.9.2). Since content validity alone is not sufficient to measure the validity of the scale, construct validity should also be tested (Malhotra, 2010:320).

  Construct validity is the extent to which a set of measured items actually indicates the theoretical latent construct that those items were designed to measure (Hair *et al*., 2014:618). Construct validity is multifaceted and are achieved when the scale exhibits convergent validity and discriminant validity (Malhotra, 2010:321). Figure 5-7 presents a diagram of the different ways to estimate construct validity of a scale. The subsequent section provides a discussion of Figure 5-7.

Figure 5-7: Construct validity



Source: Adapted from Hair *et al*. (2014:618, 619).

– Convergent validity

Convergent validity refers to the extent to which the scale positively correlates with other measures in the same construct (Malhotra, 2010:321). Convergent validity depends on internal consistency, therefore highly reliable scales normally contain convergent validity (Babin & Zikmund, 2016:283). Hair *et al.* (2014:618) indicates that convergent validity can be tested by investigating the factor loadings of the measurement items. Factor loadings are calculated using confirmatory factor analysis (Hair *et al*., 2014:618). The minimum requirement for convergent validity is that all factor loadings should be statistically significant and furthermore, the standardised loadings should be higher than 0.50 but ideally 0.70 and higher (Hair *et al*., 2014:618). Additionally to factor loadings, these authors indicate that convergent validity can also be tested by examining the average variance extracted (AVE). AVE is calculated as the mean variance extracted for the items loading on a construct and indicates convergence (Hair *et al*., 2014:619). The formula for calculating the AVE value is:

$$AVE = \frac{\sum_{i=1}^{n} L_i^2}{n}$$

Where:

L = standard factor loadings

n = number of items

Hair *et al.* (2014:619) indicates that an AVE value of 0.50 or higher suggest adequate convergent validity. For the purpose of this study, the AVE of the measurement scale will calculated by performing a confirmatory factor analysis, which will be discussed in section 5.2.10.2.2. Lastly, convergent validity can be confirmed through the investigation of the construct reliability (Hair *et al*., 2014:619). The formula to calculate CR is as follows:

$$CR = \frac{\left(\sum_{i=1}^{n} L_i\right)^2}{\left(\sum_{i=1}^{n} L_i\right)^2 + \left(\sum_{i=1}^{n} e_i\right)^2}$$

Where:
L = standard factor loadings
n = number of items
e = error variance for an item

A CR value of higher than 0.70 indicates good reliability and therefore also convergent validity (Hair *et al*., 2014:619).

- Discriminant validity

  Discriminant validity is the degree to which a construct is truly distinct from other constructs (Hair *et al*., 2014:619). Therefore, discriminant validity confirms that a construct is unique and describes some occurrences that other constructs do not (Babin & Zikmund, 2016:283). Discriminant validity can be confirmed when the average variance extracted (AVE) for any two constructs are greater than the squared correlated estimate between them (Fornell & Larcker, 1981:49).

Both convergent and discriminant validity were tested for the full scale data collected.

5.2.10.2 Inferential statistics

Factor analysis is an interdependence technique with the primary aim to define the underlying structure among the variables in the study (Hair *et al*., 2014:92). Therefore factor analysis is a statistical technique used when the researcher is interested in discovering which variables in a group of subsets are relatively independent of each other (Tabachnick & Fidell, 2014:660). There are two major forms of factor analysis, namely exploratory factor analysis and confirmatory factor analysis (Hair *et al*., 2014:92; Pallant, 2013:188) which will be discussed next.

5.2.10.2.1 Exploratory factor analysis (EFA)

EFA is used in the early stages of the research with the aim to gather information about the interrelationships amongst a set of variables (Pallant, 2013:188). EFA is therefore used to establish the number of continuous latent variables which are required to explain the correlations

amongst a set of variables (Muthèn & Muthèn, 2010:41). Pallant (2013) recommends three steps in performing exploratory factor analysis, however, to ensure thoroughness, the process of exploratory factor analysis for this study also included step one of the process suggested by Hair *et al.* (2014:94) which is the objective of exploratory factor analysis.

(i) Objective of factor analysis

Hair *et al.* (2014:94) state that the starting point for factor analysis should be the research problem of the study. Since the aim of exploratory factor analysis is to condense information into a smaller set of new dimension with the minimum loss of information (Hair *et al*., 2014:94), exploratory factor analysis is applicable for this study. Since this study aims to provide more insight into online community citizenship behaviours directed towards administrators and towards members of an online community, an EFA was performed to investigate the structure of the online community citizenship behaviour constructs that were adapted from previous studies who measured citizenship behaviours in the commerce environment. The aim of the EFA analysis would be to verify the extent to which the measurement items assessed would be relevant and can be grouped into the same five citizenship factors as was initially identified in the commerce environment.

(ii) The assessment of the suitability of the data for factor analysis

Pallant (2013:189) mention that there are two main issues to consider when determining if the data are suitable for exploratory factor analysis namely the sample size and the strength of the relationship between the variables. In terms of the sample size, Costello and Osborne (2005:4) recommend that the minimum sample size to perform exploratory factor analysis is a respondent to variable ration of 10:1, Hair *et al.* (2014:100) agreed with this recommendation and mention that although a ratio of 5:1 are desired, a more acceptable sample size is 10:1. Since the sample size of this study is 500, the sample size adhere to the recommendation by Hair *et al* (2014:100) and a respondent to variable ration of 29:1 was achieved.

In addition to the sample size, the strengths of the inter-correlations among the items should also be addressed (Pallant, 2013:190). Tabachnick and Fidell (2013:667) suggest that researchers examine the correlation matrix produced, and should only a few coefficients be greater than 0.30, then the applicability of exploratory factor analysis should be reconsidered. Pallant (2013:190) suggests the use of two statistical measures to assess the factorability of the data namely the Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy. Should Bartlett's test of sphericity be significant ($p <$

0.05) and the KMO measure of sample adequacy be 0.60 or higher, then the data are suitable for exploratory factor analysis (Bartlett, 1954; Kaiser, 1974; Pallant, 2013:190; Tabachnick & Fidell, 2013:668). For the purposed of this study, both the Bartlett's test of sphericity and KMO measure of sample adequacy will be assessed to determine the suitability of the data obtained from the pilot test for factor analysis.

(iii) Factor extraction method

When it has been established that the data is suitable for factor analysis, the researcher should decide which method to use for the factor extraction (Malhotra, 2010:643). The determining of the smallest number of factors which can be used that will represent the interrelationships among the set of variables the best is known as factor extraction (Pallant, 2013:190). Tabachnick and Fidell (2014:686) mention that various extraction methods exists. Factor extraction methods include principal components method, principle factors method and maximum likelihood factoring. Since Beavers *et al.* (2013:6) conclude that the most used factor extraction methods are principal components method and maximum likelihood, these methods will be further discussed. The aim of principal components analysis (PAC) is to extract the maximum variance from the data with each component whereas maximum likelihood (ML) factor extraction determines the population values for factor loadings by computing loadings that maximise the probability of sampling the observed correlation matrix from the population (Tabachnick & Fidell, 2014:688,689). Although various authors have stated that PAC is a useful method for factor analysis (Malhotra, 2010:643, Pallant, 2013:190), Costello and Osborne (2005:2) argue that PCA are not a true method of factor analysis and therefore recommend the using of ML factor analysis. PCA is only a data reduction method and does not take into account the underlying structure which is influenced by the latent variables (Ford *et al*., 1986:293). Additionally, Fabrigar *et al.* (1999:277) argue that should data be relatively normally distributed the maximum likelihood estimation is the best choice since this method enable the calculation of a wide range of indexes of the goodness of fit of the model as well as statistical significance testing of the factor loadings and correlations among the factors and also include the calculation of confidence intervals.

Based on the recommendation by Costello and Osborne (2005) it was decided to use ML as the extraction method for this study. It was important to not only reduce the factors of the online community citizenship behaviour construct but to also investigate the structure of the construct and therefore ML was the most appropriate extraction method to be used (Ford *et al*., 1986). However, since the data of this study is not normally distributed, the robust

maximum likelihood (RML) extraction method were used. The RML is a well-know and widely used estimator in CFA analysis where the variables slightly or moderately deviate from normality (Li, 2016:937). Compared to the ML estimator, the RML approach is less dependent on the assumption of normal distribution when the RML is implemented the parameter estimates are still calculated using the asymptotically unbiased ML estimator but the standard errors and chi-square test statistics are corrected to improve the robustness of ML when the data is not normally distributed (Li, 2016:937).

Besides the factor extraction method, researchers should also decide on the number of factors to retain (Pallant, 2013:191). Various techniques are available to determine the number of factors to retain, such as the determination based on eigenvalues, the determination based on scree plot, the determination based on a percentage of variance (Malhotra, 2010:643,644). The eigenvalue of a factor indicates the amount of the total variance explained for the factor and it is suggested that factors with an eigenvalue of 1 or higher should be retained (Hair *et al*., 2014:107; Pallant, 2013:191). The scree test which includes the plotting of the latent roots against the number of factors in their order of extraction can also be used to determine the number of factors to be retained (Hair *et al*., 2014:108). The scree test identifies the optimum number of factors which can be extracted afore the amount of unique variance begins to dominate the common variance structure (Cattell, 1966). It is suggested that the number of factors above the elbow or break in the plot be retained (Cattell, 1966; Pallant, 2013:191). The number of factors to be retained can also be determined by calculating the percentage of variance extracted by the factors (Malhotra, 2010:644). Hair *et al.* (2014:107) and Malhotra (2010:644) suggest that the factors retained should account for at least 60% of the variance.

Following the recommendation by Hair *et al.* (2014:109) and Williams *et al.* (2010:6), this study, employs the eigenvalue test and scree test to determine the number of retained factors.

(iv) Factor rotation

Subsequent to determining the factor extraction method and number of factors to be retained, the results should be interpreted (Pallant, 2013:192). The rotation of factors is performed to assist and improve the interpretability and scientific utility of the results (Tabachnick & Fidell, 2014:690). The rotation of factors does not change the underlying solution but rather displays the pattern of loadings in a way which makes it easier to interpret (Pallant, 2013:192). Two main categories of factor rotation exist namely orthogonal rotation and oblique rotation (Hair *et al*., 2014:111; Malhotra, 2010:645). Orthogonal rotation is used

when the underlying construct is not correlated or are independent whereas oblique rotation is used when the underlying construct is correlated (Tabachnick & Fidell, 2014:690). Since the underlying construct namely online community citizenship behaviour consist of factors which are correlated, oblique rotation was used and therefore further discussed.

Various oblique rotation methods exist namely, Oblimin, Promax, Orthoblique, Quartimin and Geomin (Finch, 2011:553; Hair *et al*., 2014:114) with various studies which have aimed to establish the best oblique rotation method to used (Asparouhov & Muthèn, 2009; Brown, 2001; Finch, 2011; Sass & Schmidt, 2010). Sass and Schmidt (2010:98) compared the results of four oblique rotation methods (Quartimin, CF-Equamax, CF-Facparsim and Geomin) and established than for simple structures both Quartimin and Geomin rotation methods perform equally well whereas CF-Equamax and CF-Facparsim rotation methods are less bias for more complex factor structures. A similar finding was established by Asparouhov and Muthèn (2009:431) who compared the results between Geomin and Quartimin rotation and founded that the Geomin rotation produced the least bias in factor loadings. Additionally, Asparouhov and Muthèn (2009:407) mention that for studies where little is known about the true factor loadings, the Geomin rotation method are the most promising method to use as this rotation works well for simple to moderate complicated loading structures.

Based on the previous section discussion about rotation methods, this study will use oblique rotation with the Geomin rotation method. This decision is based on the correlation nature of the online community citizenship behaviour construct. Furthermore, since the factor structure is not complex and based on previous studies which tested the different rotation methods, the Geomin rotation method was the most suitable method for this study.

5.2.10.2.2 Confirmatory factor analysis (CFA)

CFA is used to test how well the measured variables represent a smaller number of constructs (Hair *et al*., 2014:602). CFA aims to confirm the number of factors or constructs and the loadings of the observed variables compared to what is expected based on theory (Malhotra, 2010:725). CFA, therefore, test the measurement model specified by the researcher (Perry *et al*., 2015:12). In CFA the researcher specifies which variables are together and are assigned to a specific factor which results in pattern matrix being produced (Schumacker & Lomax, 2016:93). CFA is therefore different than EFA since the researcher specifies both the number of factors and also to which variable each factor must load (Malhotra, 2010:603). In the case of EFA, the researcher explores the data and the researcher is provided with the number of factors compared to specifying this information in a CFA (Malhotra, 2010:603). This study will make use of a CFA to investigate if the

measurement model are convergent and discriminant valid. The CFA will therefore be used to compute the factor loadings, AVE and CR values to test for convergent validity. In addition, the CFA will also be used to compute the correlation matrix of the measurement model to investigate the discriminant validity of the measurement model.

In addition, to assess construct validity (section 5.2.10.1.2), a CFA also provides overall fit statistics which are used to establish how well the measurement model fit with the data collected (Hair *et al*., 2014:617). This author states that theory enables the researcher to develop a measurement model and through the equations implied by the measurement model it is possible to calculate an estimated covariance matrix for the measurement model. Using both the covariance matrixes of the data collected and of the measurement model, the fit statistics compare the two covariance matrices and indicate how good the fit is between them.

The model fit statistics produced by CFA can be categorised into four groups namely: Chi-Square, absolute fit measures, incremental fit indices and parsimony fit indices (Hair *et al*., 2014:630). Although various measures per category exist, it was decided to use the Chi-Square (x^2) and normed chi-squared (x^2/df) since Perry *et al.* (2015:13) mentioned that it is the clearest parameter to test for model fit. However, although Hair *et al.* (2014:630) suggest relying on at least one absolute fit measure and one incremental fit index in addition to the x^2 result it was decided to use two measures per category. Therefore, in addition to the x^2 value, the study also examined the Root mean square error of approximation (RMSEA) and Normed chi-square which is absolute fit measures and the Comparative fit index (CFI) and Tucker-Lewis index (TLI) which is part of the incremental fit indices category (Hair *et al*., 2014:630). Table 5-8 provides a description of each of the fit indices and the suggested cut-off values which were used in this study.

Table 5-8: CFA fit indexes used

Fit index	Description	Suggested cut-off values
Chi-square (X^2)	A statistical test which indicates the amount of difference between the expected and observed co-variance (Suhr, 2014:1). Sample size of the data have significant effect on the x2 value when the sample size increases the x2 value will also increase (Hair *et al*., 2014: 578).	X^2 should not be statistically significant (Hair *et al*., 2014:578)
Normed chi-square (X^2 /degree of freedom)	To minimise the influence of sample size on the x2 value, normed chi-square is regarded as a good alternative. Normed chi-square indicates the fit per degree of freedom (Wheaton *et al*., 1977:99).	< 5.0 (Wheaton *et al*., 1977:99)

Table 5-8: CFA fit indexes used (cont.)

Fit index	Description	Suggested cut-off values
Root Mean Square Error of Approximation (RMSEA)	Measure to correct problems associated with X^2 with regards to large sample size and are therefore a good fit statistic to use for larger samples (Hair *et al*., 2014:579).	<0.08 (Hair *et al*., 2014:579)
Comparative Fit Index (CFI)	An enhanced version of the normed fit index (NFI) where the values range between 0 and 1 (Hair *et al*., 2014:580).	Values above 0.90 suggested a better fit (Hair *et al*., 2014:580)
Tucker-Lewis index (TLI)	Similar to the normed fit index (NFI) but is essentially a comparison of the normed chi-square values for the measurement model which takes into account model complexities (Hair *et al*., 2014:580).	Values above 0.90 and closest to 1 indicate a good fit (Hair *et al.* 2014:580)

Source: Adapted from Hair *et al.* (2014), Suhr (2014), and Wheaton *et al.* (1977).

5.2.10.3 Structural equation modelling (SEM) for assessing structural models

SEM describes the relations among observed and latent variables in different types of theoretical models and provides a means to quantitatively test hypothesis (Schumacker & Lomax, 2016:1). SEM enable the researcher to specify the relationships between a single measured variable and other measured variables and provide researchers with the opportunity to answer questions which include multiple regression analysis of factors (Tabachnick & Fidell, 2014:731). Importantly, all structural equation models have three characteristics, namely 1) the estimation of multiple and interrelated dependent relationships; 2) the ability to signify unobserved concepts in the relationships and can account for measurement error in the estimation process and 3) are able to define a model and explain the complete set of relationships (Hair *et al*., 2014:547). In comparison to CFA, SEM can test the relationships between the latent variables and consists of two elements namely the measurement model (CFA) and the structural model (Schreiber *et al*., 2006:325). The structural model shows the interrelations among the latent constructs and the observed variables as a result of structural equations which is similar to performing various regression equations (Schreiber *et al*., 2006:325).

In order to obtain useful results from SEM, it is imperative that good measurement theory is acquired (Hair *et al*., 2014:567). In what way the items measuring each construct has been selected has an influence on the remainder of the SEM analysis (Hair *et al*., 2014:567). The starting point in selecting the items begins with a proper theoretical definition of the construct which forms the foundation for selecting the individual items (Hair *et al*., 2014:567). Mostly the researcher performs a literature review to establish the construct definition and identify the items to measure the constructs (Hair *et al*., 2014:557). A comprehensive literature review was

performed in this study and are presented in Chapter 2 and Chapter 3 which were used to establish the measurement theory of the constructs investigated.

It is furthermore important that researchers pay attention to the type of data being analysed, the impact and solutions to missing data and the influence of sample size (Hair *et al*., 2014:569). In terms of the type of data being analysed, SEM was initially restricted to only interval or ordinal data, however with technological advances in software programs, some programs can also now use nominal data (Hair *et al*., 2014:570). Additionally, although researchers have debated the use of covariance- versus correlation variance as an input, some SEM software programs can calculate a model result for raw data without the researcher being required to calculate a correlation or covariance matrix separately (Hair *et al*., 2014:570). However, Hair *et al.* (2014:570, 573) suggest the use of covariance matrices as this type of matrix provide better flexibility and more information than correlation matrices. SEM is quite sensitive to sample size and therefore consideration should be given regarding the number of respondents required in order to be able to perform SEM. As mentioned in section 5.2.8.4, Hair *et al.* (2014) provide suggestions regarding the acceptable sample size for SEM analysis which was followed in this study.

Prior to the specification of the structural model, it should firstly be determined if the measurement model is reliable and valid (Hair *et al*., 2014:576). As discussed in section 5.2.10.1.2, the reliability of the measurement model were determine by evaluating the CF value obtained from the CFA analysis. The suggestion by Hair *et al.* (2014:619) was followed, which states that a CR value of higher than 0.70 indicates the scale have internal consistency and are therefore reliable. Concerning the validity of the measurement model, CFA will be used to test for both convergent- and discriminant validity of the full scale data collected (section 5.2.10.1.2). To test for convergent validity, the standardised factor loadings will be computed and should be greater than 0.5. In Addition, the AVE values and CR values will also be calculated, and as suggested by Hair *et al.* (2014:618), the AVE value should be higher than 0.50 and the CR values should be higher than 0.70 to confirm that the measurement scale positively correlates with other measures in the same construct (Malhotra, 2010:321). Discriminant validity of the measurement model, which indicate that the construct is different from other constructs (Hair *et al*., 2014:619) will be investigated using the recommendation by Fornell and Larker (1981:49). These authors argue that discriminant validity is confirmed when the AVE of any two constructs are greater than the square correlation between them. Furthermore, the goodness-of-fit of the measurement model will be assessed by comparing the fit indices obtained from the CFA with the recommended cut-off values presented in Table 5-. Should the fit-indices of the measurement model be better than the recommended cut-off values, the measurement model is considered valid.

Subsequently to establishing that the measurement model are reliable and valid, the structural model must be specified. The structural model are specified when the researcher adds single-headed directional arrows between the constructs to indicate the structural hypothesis (Hair *et al*., 2014:585). A path diagram can then be developed to indicate the measurement specifications as well as the structural hypothesis (Hair *et al*., 2014:585). The structural model for this study, which includes that path diagrams is in .

Next, the structural model and hypothesised theoretical relationships are tested. When testing the structural model, the researcher should include the estimate parameters for the structural relationships since these parameters provide direct empirical evidence with regards to the hypothesised relationships within the structural model (Hair *et al*., 2014:587). These estimates of parameters are critical to SEM analysis as these parameters are used to compute the covariance matrix of the structural model (Tabachnick & Fidell, 2014:735). A parameter estimated by the structural equation software indicates the strength of the specific relationship between the constructs (Hair *et al*., 2014:544). To test the structural model, the validity of the structural model is assessed by evaluating the goodness-of-fit indices (Hair *et al*., 2014:587). A new structural estimated covariance matrix is computed which include the structural relationships of the structural model and are used to calculate the goodness-of fit indices which are compared with the recommended cut off values presented in Table 5-. Should the goodness-of-indices of the structural model be better than the recommended cut-off values, the structural model is regarded as valid.

SEM is furthermore used to test the stated hypotheses and therefore confirming that the sample data fit the theoretical model (Schumacker & Lomax, 2016:119).

5.2.11 Step 11: Prepare and present the final research report

The final step in the marketing research process is the preparing and presenting of the final marketing research report (Hair *et al*., 2013:74). The final research report can either be a written or oral presentation where the research process, results and recommendations are presented (Malhotra, 2010:760).

The final research report for this study will be presented in Chapter 6 and Chapter 7. Chapter 6 will include the results of the empirically testing performed in this study and Chapter 7 will provide a detail discussion of the researcher's recommendations and conclusions with regards to this research study.

5.3 SUMMARY

This chapter presented the research methodology used in this study. The marketing research process suggested by Burns *et al.* (2017) was used as the framework for the discussion of the research methodology employed in this study. The research problem and objectives were presented and based on these objectives it was determined that the study will make use of a descriptive research design. Additionally, quantitative data will be collected and which will be empirically analysed to test the hypotheses and achieve the stated objectives.

The data collection form for this study is that of online surveys, which was used to collect data from male and female members who are older than the age of 18 and are currently an active member of a residential online activity community on Facebook in South Africa. The data collected will be analysed and describe using descriptive analysis, exploratory and confirmatory factor analysis and structural equation modelling. The research report about this study will be presented in Chapter 6 and include the results and major findings of this study.

CHAPTER 6

DISCUSSION AND INTERPRETATION OF RESULTS

6.1 INTRODUCTION

Chapter 5 provided a comprehensive discussion regarding the research methodology employed in this study. In chapter 6, the results obtained from the field are reported. The chapter commences with an explanation of the realised sample, which is then followed by an overview of the demographic profile of the respondents who participated in this study as well as the descriptive statistics of the items measured. After this discussion the results from the exploratory factor analysis are examined to obtain certainty regarding the structure of the online community citizenship constructs investigated. The final part of this chapter is devoted to a discussion of the reliability and validity of the measurement model assessed as well as the structural equation modelling (SEM) results, to assist in concluding on the hypotheses tested in this study.

6.2 SAMPLE REALISATION

The study was conducted amongst members of residential online activity communities on Facebook and included Facebook groups of cities in all nine provinces of South Africa. Since no sample frame existed, a non-probability sampling which included quota and convenience sampling was used. The sample was proportionality determined as mentioned in section 5.2.8.4. The sample realisation for this study is indicated in Table 6-1.

Table 6-1: Sample realisation

Province	Targeted sample	Attempted to participate	Did not qualify to participate	Qualified and participated	Realised %	% of total sample
Eastern Cape	98	103	26	77	79%	14%
Free state	43	71	25	46	107%	8%
Gauteng	42	61	12	49	117%	9%
Kwa-Zulu Natal	41	64	20	44	107%	8%
Limpopo	28	50	9	41	146%	8%
Mpumalanga	61	119	39	80	131%	15%
North West	72	112	37	75	104%	14%
Northern Cape	29	59	14	45	155%	8%
Western Cape	86	110	22	88	102%	16%
TOTAL	**500**	**749**	**204**	**545**	**109%**	

As mentioned in section 5.2.7.4, the questionnaire included screening questions which were used to qualify the respondents to complete the questionnaire. Based on the population of the study, as discussed in section 5.2.8.5, only respondents who are older than 18 years of age and have written posts and/or replied to posts from other members of a residential online activity community on Facebook in South Africa, during the past 12 months, qualified to participate in this study. Table 6-1, as such, indicates that a total of 749 respondents attempted to participate in the survey of which 204 respondents were excluded from the study as they did not qualify to participate. Furthermore, since the online survey did not allow the respondents to submit the questionnaire before all questions were answered, it was not necessary to disregard any further incomplete questionnaires. Hence, as per Table 6-1, the study aimed to survey 500 respondents and the final sample for this study is 545 respondents that resulted in a sample realisation rate of 109%.

Overall, participation in the Eastern Cape Province was lower than expected and only 79% of the proposed sample was realised whereas, in all other provinces, the realised sample was more than 100%. Furthermore, although only 79% of the proposed sample for the Eastern Cape Province was achieved, it was deemed acceptable since the number of respondents obtained are quite high in relation to the other provinces. The final sample of 545 respondents' falls within the minimum sample range as suggested by Hair *et al.* (2014:576) for conducting an SEM analysis and are therefore considered sufficient for this study.

6.3 DEMOGRAPHIC PROFILE OF THE STUDY

The demographic information of the respondents are presented in Table 6-2 and discussed below to achieve the secondary objective 2 of this study.

Table 6-2: Demographic profile

Demographic variable	Count (N)	Percentage (%)
Gender		
Male	80	14.6%
Female	463	85.0%
Did not answer	2	0.40%

Table 6-2: Demographic profile (cont.)

Demographic variable	Count (N)	Percentage (%)
Gender		
Male	80	14.6%
Female	463	85.0%
Did not answer	2	0.40%
Age group		
18 to 26 years	75	13.8%
27 to 35 years	127	23.3%
36 to 47 years	167	30.6%
48 to 66 years	161	29.5%
67 years and older	15	2.8%
Employment status		
Self-employed	129	23.7%
Full-time employed by an organisation	262	48.1%
Part-time employed by an organisation	25	4.6%
Full-time student	26	4.7%
Housewife or househusband	45	8.2%
Retired	27	5.0%
Unemployed	19	3.5%
Did not answer	12	2.2%
Marital status		
Single	81	14.9%
Married	350	64.2%
Living with partner	57	10.4%
Divorced or separated	40	7.3%
Widowed	15	2.8%
Did not answer	2	0.4%
Ethnicity		
White	502	92.0%
Black	9	1.7%
Coloured	16	2.9%
Indian	9	1.7%
Asian	0	0.0%
Did not answer	9	1.7%

Table 6-2: Demographic profile

Demographic variable	Count (N)	Percentage (%)
Highest level of education		
Primary school completed	0	0.0%
Some high school	27	5.0%
Matric / Grade 12	166	30.5%
Diploma	160	29.4%
Degree	106	19.4%
Postgraduate degree	85	15.6%
Did not answer	1	0.1%

As indicated in Table 6-2, mostly females participated in the online survey. A total 85.0% of the respondents who participated in the study are female whereas 14.6% are male. Only 0.4% (2 respondents) did not indicate their gender. Furthermore, as shown in Table 6-2, the majority of the respondents (62.9%) are older than 36 years with 30.6% of these respondents being between the ages of 36 to 47 years and 29.5% of these respondents were between the ages of 48 to 66 years.

As further indicated in Table 6-2, the majority of the respondents (76.4%) are employed, with 48.1% of the respondents being full-time employed by an organisation, 23.7% of the respondents being self-employed and 4.6% of the respondents indicating that they are part-time employed. Furthermore, 21.4% of the respondents are currently not part of the workforce, with 4.7% of the respondents indicating that they are full-time students, 8.2% of the respondents being a housewife/househusband, 5.0% of the respondents being retired and 3.5% of the respondents indicating that they are unemployed. Only 2.2% of the respondents who participated in this study, did not answer the question concerning their employment status.

Concerning the marital status of the respondents, almost two-thirds of the respondents (64.2%) specified that they are married, followed by being single (14.9%) and living with a partner (10.4%). Less than 10% of the respondents are divorced or separated (7.3%) or widowed (2.8%).

The majority (92.0%) of the sample population of this study indicated their ethnicity as being White. Hence less than 10% of the respondents are black (1.7%), coloured (2.9%) and Indian (1.7%). Considering the highest level of qualification, the majority of the respondents (59.9%) indicated that they either have a diploma (29.4%) or matric/grade 12 (30.5%) whereas only 5.0% of the participatory respondents have some high school education. Furthermore, little over one third (35.0%) of the respondents are graduated, with 19.4% of the sample population having a

degree and 15.6% of the sample that have obtained a postgraduate degree as their highest level of qualification. Only 0.1% of the respondents did not indicate their highest level of education.

Based on the information provided in section 6.2 and Table 6-1, the main findings regarding the sample profile of the residential online activity community members on Facebook who participated in this research can be formulated as:

Main finding 1:	The realised sample are all current and active members of residential online activity communities on Facebook that are situated across the nine provinces in South Africa.
Main finding 2:	Both males and female members participated in this study with the majority of the respondents being female (85.0%).
Main finding 3:	All the respondents who participated in this study are older than 18 years of age, with the majority (62.9%) being older than 36 years.
Main finding 4:	A total of 30.6% of the respondents are between the ages of 36 to 47 years and 29.5% of the respondents are between the ages of 48 to 66 years.
Main finding 5:	The respondents who participated in this study are mainly white (92.0%) and employed (76.4%). Almost two thirds of them are married (64.2%); the majority of the respondents (59.9%) have either a diploma (29.4%) or matric/grade 12 (30.5%) whereas little over one third (35.0%) of the respondents are graduated, with a degree (19.4%) or a postgraduate degree (15.6%) as the highest level of qualification.

Sections 6.4.1 to 6.4.2 subsequently provide more insight into the descriptive statistics of the items measured.

6.4 LEVEL OF COMMITMENT

Section A of the questionnaire consisted of 36 questions used to measure affective and normative commitment and their antecedents. Respondents were asked to indicate their level of agreement with each statement using a 5-point unlabelled, continuous Likert scale where 1 indicated strongly disagree and 5 indicated strongly agree.

6.4.1 Affective commitment

Twenty-one individual questions in the questionnaire measured affective commitment and the antecedents, therefore. The affective commitment construct consisted of three antecedents' namely emotional support, social switching costs and position involvement. Table 6-3 indicates the mean score and standard deviation (SD) of the statements measuring the emotional support factor.

Table 6-3: Respondents' level of agreement with emotional support

Statement	Mean	SD
When faced with difficulties in general, some members of this residential Facebook group:		
CEmoSup1: Were on my side.	3.56	0.95
CEmoSup2: Comforted and encouraged me.	3.56	1.00
CEmoSup3: Read my posts about my personal feelings.	3.22	1.12
CEmoSup4: Expressed interest and concern in my well-being.	3.35	1.09
CEmoSup5: Supported and reassured me.	3.41	1.08

From Table 6-3, it appears that concerning the emotional support received; the respondents agreed the most with the statements that "When faced with difficulties in general, some members of this residential Facebook group were on my side and comforted and encouraged me" (mean = 3.56, SD = 0.95 and 1.00). Also, the respondents agreed the least with the statement that, "When faced with difficulties in general, some members of this residential Facebook group read my posts about my personal feelings" (mean = 3.22, SD = 1.12). Although the respondents agreed the least with this statement, the means scores leaned towards the higher end of the agreement scale. Additionally, the standard deviation (SD) values for the measurement items ranged between 0.95 and 1.12.

The main findings concerning emotional support can be stated as:

Main finding 6:	The respondents agreed the most that when they are faced with difficulties in general, some members of the residential Facebook group are on their side and comforted and encouraged them.
Main finding 7:	The respondents agreed the least that when they are faced with difficulties in general, some members of the residential Facebook group read their posts about their personal feelings.

Social switching costs, viewed as an antecedent of affective commitment were measured through six individual items in Section A of the questionnaire. Table 6-4 provides the means scores and standard deviation of the items measuring social switching costs.

Table 6-4: Respondents' level of agreement of social switching costs

Statement	Mean	SD
If I switch to another residential Facebook group, I might:		
CSSwit1: Lose the friendships I have developed with the current group.	1.90	1.20

CSSwit2: Lose important personal relationships which I have developed with my current group.	1.85	1.16
CSSwit3: Feel very uncomfortable to tell the **members** of my current group that I am switching to another group.	1.83	1.18
CSSwit4: Find it very difficult to tell the **administrator**(s) of my current group that I am switching to another group.	1.76	1.16
CSSwit5: Feel very uncomfortable to tell the **administrator**(s) of my current group that I am switching to another group.	1.77	1.16
CSSwit6: Find it very difficult to tell the **members** of the current group that I am switching to another group.	1.75	1.12

The level of agreement regarding the statements measuring social switching costs is very low with mean scores ranging between 1.75 and 1.90. Considering the unlabelled, continuous Likert scale that was used to measure these items, it, therefore, seems that the respondents were in low agreement with the items presented. The statement that the respondents agreed the most with was that of “If I switch to another residential Facebook group, I might lose the friendships I have developed with the current group” (mean = 1.90, SD = 1.20). Also, respondents agreed the least with the statement “If I switch to another residential Facebook group, I might find it very difficult to tell the members of the current group that I am switching to another group” (mean = 1.75, SD = 1.12). Furthermore, the standard deviation (SD) values for the measurement items ranged between 1.12 and 1.20.

The find findings of the social switching costs factor are, therefore:

Main finding 8:	The respondents generally were in low agreement with the items that measured social switching cost.
Main finding 9:	The respondents agreed the most that if they switch to another residential Facebook group, they will lose the friendships which they have developed with the current group.
Main finding 10:	The respondents agreed the least that if they switch to another residential Facebook group, they might find it very difficult to tell the members of the current group that they are switching to another group.

The respondents’ level of position involvement were measured by five statements in Section A. The respondents also had to indicate their level of agreement using a 5-point unlabelled, continuous Likert scale where 1 indicated that they strongly disagreed with the statement whereas 5 indicated that they strongly agreed with the statement. Table 6-5 indicates the mean scores and SD of the statements measuring position involvement as a factor of affective commitment.

Table 6-5: Respondents' level of agreement of position involvement

Statement	Mean	SD
I prefer to be a member of this residential Facebook group because:		
CPosInv1: The image of this group comes the closest to reflecting my lifestyle.	3.17	1.15
CPosInv2: When interacting with the members of this group, it reflects the kind of person I am.	3.06	1.24
CPosInv3: The persona of this group comes the closest to reflecting my personal image.	2.77	1.18
CPosInv4: The persona of this group comes the closest to reflecting my lifestyle.	2.84	1.17
CPosInv5: When having conversations with the members of this group, it reflects the kind of person I am.	3.09	1.23

It is evident in Table 6-5 that concerning the position involvement of the online community members, the respondents agreed the most with the statement that "I prefer to be a member of this residential Facebook group because the image of this group comes the closest to reflecting my lifestyle" (mean = 3.17, SD = 1.15) whereas the respondents disagreed the most with the statement that "I prefer to be a member of this residential Facebook group because the persona of this group comes the closest to reflecting my personal image" (mean = 2.77, SD = 1.18). Furthermore, the standard deviation (SD) values for the measurement items ranged between 1.15 and 1.24.

Consequently, the main findings concerning position involvement can be stated as:

Main finding 11:	The respondents agreed the most that they prefer to be a member of this residential Facebook group because the image of the community comes the closest to reflect their lifestyle.
Main finding 12:	The respondents agreed the least that they prefer to be a member of this residential Facebook group because the persona of the group comes the closest to reflect their personal image.

Affective commitment, viewed as a type of commitment was measured using five individual statements. Table 6-6 presents the mean scores and SD of the five items relating to the affective commitment factor.

Table 6-6: Respondents' level of agreement of affective commitment

Statement	Mean	SD
All things considered:		
CAffect1: I feel emotionally attached to this residential Facebook group.	2.40	1.29
CAffect2: This residential Facebook group has a great deal of personal meaning to me.	2.54	1.27
CAffect3: I feel a strong sense of identification with this residential Facebook group.	2.65	1.26
CAffect4: I would be very happy to stay with this residential Facebook group.	3.76	1.00
CAffect5: I feel a strong sense of belonging to this residential Facebook group.	3.03	1.26

As presented in Table 6-6, the statement on which the respondents agreed the most with (mean = 3.76, SD = 1.00) was "All things considered, I would be very happy to stay with this residential Facebook group". The statement which the respondents agreed the least with (mean = 2.40, SD = 1.29) were "All things considered, I feel emotionally attached to this residential Facebook group". In addition, the standard deviation (SD) values for the measurement items ranged between 1.00 and 1.29.

Based on this information presented in Table 6-, the main findings about affective commitment can be specified as:

Main finding 13:	The respondents agreed the most that when they take all things into consideration, they will be happy to stay with their residential Facebook group.
Main finding 14:	The respondent agreed the least with the statement that they feel emotionally attached to this residential Facebook group.

6.4.2 Normative commitment

Section A of the questionnaire also included statements which measured the normative commitment factor and the antecedents of normative commitment. Fifteen statements were included in the questionnaire of which five statements measured the subjective norm factor, five statements measured the perceive critical mass factor and five statements measured the normative commitment construct.

Table 6-7 presents the mean scores and standard deviation of the measurement items which was used to measure the subjective norm factor.

Table 6-7: Respondents' level of subjective norm

Statement	Mean	SD
In general, the following people think that I should frequently post content on this residential Facebook group:		
CSubNor1: People who influence my behaviour.	2.19	1.12
CSubNor2: People who are important to me.	2.47	1.24
CSubNor3: My friends.	2.59	1.28
CSubNor4: People who are valuable to me.	2.54	1.26
CSubNor5: Influential people.	2.39	1.24

Concerning the respondent's level of subjective norm, it is evident from Table 6-7 that the respondents agreed the most with the statement "In general, the following people think that I should frequently post content on this residential Facebook group: my friends" (mean = 2.59, SD = 1.28) whereas the respondents agreed the least with the statement "In general, the following people think that I should frequently post content on this residential Facebook group: people who influence my behaviour" (mean = 2.19, SD = 1.12). Additionally, the standard deviation (SD) values for the measurement items ranged between 0.12 and 1.28.

Therefore, the main findings concerning subjective norm of the residential online activity community on Facebook can be stated as follows:

Main finding 15:	The respondents agreed the most that in general, their friends are the people who think that they should frequently post content on this residential Facebook group.
Main finding 16:	The respondents agreed the least that in general, the people who influence their behaviour are the people who think that they should frequently post content on this residential Facebook group.

Respondents' level of perceive critical mass concerning their residential online activity community is presented in Table 6-8. Again, respondents were asked to indicate their level of agreement with the statements using a 5-point unlabelled, continuous Likert scale where 1 indicated strongly disagree with the statement and 5 indicated strongly agree with the statement.

Table 6-8: Respondents' level of perceive critical mass

Statement	Mean	SD
The following people frequently post contents on this residential Facebook group:		
CPerMas1: Most people in my social group.	2.92	1.19

CPerMas2: Most people in my society.	3.52	1.11
CPerMas3: Most people in my work environment.	2.57	1.22
CPerMas4: Most of my friends.	2.71	1.23
CPerMas5: Most of my peers.	2.64	1.21

Concerning the perceive critical mass factor, it is evident in Table 6-8, that the respondents agreed the most with the statement "The following people frequently post contents on this residential Facebook group: most people in my society" (mean = 3.52, SD = 1.11). Additionally, respondents agreed the least with the statement that "The following people frequently post contents on this residential Facebook group: most people in my work environment" (mean = 2.57, SD = 1.22). Furthermore, the standard deviation (SD) values for the measurement items ranged between 1.11 and 1.23.

The main findings relating to the perceive critical mass of the respondents concerning their residential online activity community can be reported as follows:

Main finding 17:	The respondents agreed the most that most people in their society are the people who frequently post contents on their residential Facebook group.
Main finding 18:	The respondents agreed the least that most people in their work environment are the people who frequently post contents on their residential Facebook group.

The mean scores and standard deviation of the measurement items of normative commitment of the respondents who participated in this study are presented in Table 6-9.

Table 6-9: Respondents' level of normative commitment

Statement	Mean	SD
In general, I would feel:		
CNorm1: Obligated to continue posting content on this residential Facebook group.	2.14	1.27
CNorm2: Guilty if I stop posting content on this residential Facebook group.	1.68	1.07
CNorm3: Obligated to continue taking part in conversations on this residential Facebook group.	1.92	1.18
CNorm4: A sense of duty to continue posting content on this residential Facebook group.	1.93	1.20
CNorm5: Responsible to continue taking part in conversations on this residential Facebook group.	1.99	1.19

The level of agreement regarding the statements measuring normative commitment is very low with mean scores ranging between 1.68 and 2.14. Considering the unlabelled, continuous Likert scale that was used to measure these items, it, therefore, seems that the respondents were in low agreement with the items presented. Based on the mean scores and standard deviation of the measurement items presented in Table 6-9, it is evident that the highest response was obtained for the statement “In general, I would feel: Obligated to continue posting content on this residential Facebook group” (mean = 2.14, SD = 1.27). Table 6-9 also indicates that the respondents agreed the least with the statement that “In general, I would feel guilty if I stop posting content on this residential Facebook group” (mean = 1.68, SD = 1.07). Additionally, the standard deviation (SD) values for the measurement items ranged between 1.07 and 1.27.

The main findings regarding the level of normative commitment of respondents regarding their residential online activity community can be formulated as follows:

Main finding 19:	The respondents generally were in low agreement with the items that measured normative commitment
Main finding 20:	The respondents agreed the most that in general, they would feel obligated to continue posting content of this residential Facebook group.
Main finding 21:	The respondents agreed the least that in general, they would feel guilty if they stop posting content on this residential Facebook group.

6.5 ONLINE COMMUNITY CITIZENSHIP BEHAVIOUR

Section B of the questionnaire measured the respondents’ level of online community citizenship behaviours directed towards administrators and members concerning their residential online activity community on Facebook.

As explained in section 3.4.3, previous citizenship behaviour scales employed in the commerce environment was adapted and tested among members of online activity communities on Facebook. Hence it is first necessary to perform an exploratory factor analysis to verify the extent to which the measurement items assessed would be relevant and can be grouped into the same five citizenship factors as was initially identified in the commerce environment.

After this investigation, the descriptive statistics (means and standard deviations) for the identified measurement items will be reported.

6.5.1 Exploring the underlying structure of online community citizenship behaviours

Subsequently to establishing the objective of the EFA (section 5.2.10.2.1), the suitability of the data to perform an EFA should be accessed. The Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy are popular methods to test for the suitability of the data (Pallant, 2013:190) and was used for this study. The Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy were computed, and the results are presented in Table 6-10.

Table 6-10: Bartlett's test of sphericity and KMO measure of sample adequacy

Kaiser-Meyer-Olkin measurement of sampling adequacy		0.92
Bartlett's test of sphericity	Approx. chi-square	12733.16
	Df	136
	Sig.	0.000

It is evident from Table 6-10 that the KMO measurement of sampling adequacy is 0.92; this is greater than the suggested minimum value of 0.60 (Tabachnick & Fidell, 2013:668). Additionally, Table 6- also indicates that the Bartlett's test of sphericity is significant at $p < 0.05$.

Therefore, the main finding concerning the suitability of the data for an EFA can be formulated as:

Main finding 22:	The sample obtained from the field study is adequate for exploratory factor analysis as the KMO measurement of sampling adequacy is 0.92 and Bartlett's test of sphericity is significant at $p < 0.05$.

As discussed in section 5.2.10.2.1, the study used the robust maximum likelihood (RML) factor extraction method with oblique Geomin rotation method to perform the factor analysis. The computed Geomin rotated loadings for the data are presented in Table 6-11.

Table 6-11: Geomin rotated loadings

Statement	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
If provided with the opportunity, I will:					
AImprov1: Make constructive suggestions to the administrators of the residential Facebook group that will assist in improving the group's experience.	**0.892***	0.010	0.005	0.018	-0.007
AImprov2: Inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members.	**0.982***	-0.003	-0.012	-0.014	0.002
AImprov3: Share a useful idea with the administrators of the residential Facebook group that will assist in enhancing the experience of the group.	**0.855***	0.014	0.038	0.029	0.030
When noticing a functional/operational problem on the residential Facebook group, I will:					
AProb1: Let the administrators know about it, even if the problem does not involve me directly.	0.024	**0.900***	-0.028	0.013	0.053*
AProb2: Notify the administrators, even if the problem does not affect me directly.	0.004	**0.985***	0.012	0.006	-0.014
AProb3: Inform the administrators, even if the problem does not concern me directly.	-0.009	**0.959***	0.034*	0.007	-0.005
If provided with the opportunity, I will suggest to the administrators of the residential Facebook group:					
Amon1: Solutions to issues of inappropriate member behaviour that may make other members of the group unhappy.	0.078*	0.082*	0.046	**0.772***	-0.037
Amon2: Answers to issues of unfitting member behaviour that may concern other members of the group.	-0.052*	0.003	-0.015	**0.992***	0.013
Amon3: Remedies to problems of inappropriate member behaviour that may upset other members of the group.	0.024	-0.028	0.002	**0.902***	0.034
If provided with the opportunity, I will:					
MHelpS1: Assist other members of the residential Facebook group in correctly using the group.	-0.021	0.014	**0.911***	-0.011	0.024
MHelpS2: Help other members of the residential Facebook group to accurately operate the group.	0.000	0.012	**0.966***	-0.004	-0.021
MHelpS3: Teach other members of the residential Facebook group in properly utilising the group.	0.034	0.015	**0.928***	0.004	-0.009
MHelpS4: Give advice to other members of the residential Facebook group in correctly using the group.	0.019	-0.018	**0.840***	0.052	0.052

Table 6-11: Geomin rotated loadings (cont.)

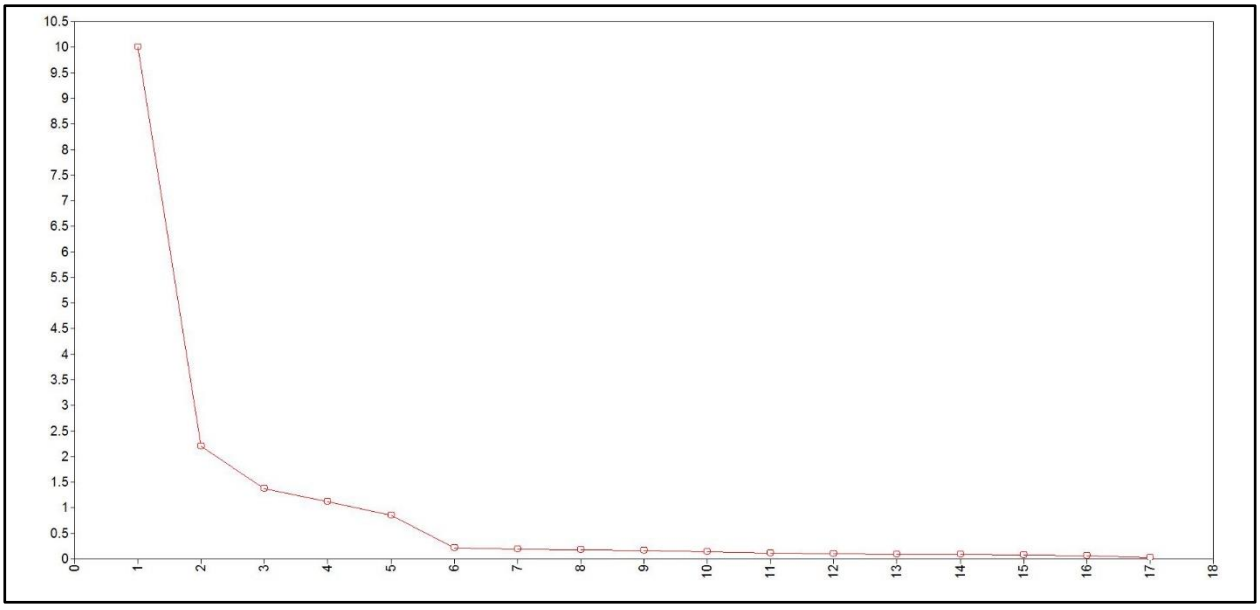
Statement	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
When provided with the opportunity to reply to posts on the residential Facebook group, I will:					
MHelpP1: Assist other members who need my help with a personal matter.	0.049	0.04	0.012	0.021	**0.832***
MHelpP2: Give advice to other members who need my help with a personal problem.	-0.013	0.004	0.001	0.009	**0.957***
MHelpP3: Help other members who need guidance with a personal issue.	0.008	0.005	-0.008	-0.015	**0.978***
MHelpP4: Support other members who need my guidance with a personal matter.	-0.007	-0.015	0.031	0.006	**0.935***

Note: * indicates significant at 5% level

Based on the factor loadings presented in Table 6-11, it is evident that five factors were extracted concerning online community citizenship behaviours with all factor loadings above 0.700. Furthermore, when comparing the measurement items of the five factors as presented in Table 6-11 with items of the original scales adapted for this study (as per Table 5-3), it can be concluded that the measurement items assessed can be grouped into the same five citizenship factors as was initially identified in the commerce environment.

In addition to the factor loadings presented in Table 6-, the scree plot for the EVA is presented in Figure 6-1.

Figure 6-1: Scree plot



The scree plot presented in Figure 6-1 indicates that based on the number of factors above the elbow or break in the plot, a total of five factors should be retained (Cattell, 1966; Pallant, 2013:191). Also, the y-axis of the scree plot indicates the eigenvalues values, and based on the recommendation by Hair *et al.* (2014:107) a total of five factors should be retained since the eigenvalues for these five factors are 1 or higher.

Therefore, the main findings concerning the EFA can be formulated as:

Main finding 23:	The Geomin rotated factor loadings of the EFA confirmed that a total of five online community citizenship behaviour factors are extracted.
Main finding 24:	Based on the scree plot and eigenvalues computed by an EFA, a total of five online community citizenship behaviour factors should be retained.
Main finding 25:	The measurement items assessed can be grouped into the same five citizenship factors as was initially identified in the commerce environment.
Main finding 26:	Applied to the context of this study, the five extracted factors are labelled as 1) feedback intention relating to general improvement; 2) feedback intention relating to operational problems; 3) policing intention; 4) helping intention relating to the use of service; and 5) helping intention relating to personal problems experienced.

6.5.2 Level of online community citizenship behaviours directed towards administrators and directed towards members

As indicated in section 3.4.3, and established in the preceding section, online community citizenship behaviours towards administrators included feedback behaviour concerning general improvement, operational problems and policing behaviour. The online community citizenship behaviours towards members included helping behaviour concerning use of service and personal problems experience.

Table 6-12 presents the respondents' level of agreement with the measurement items about online community citizenship behaviour directed towards administrators.

Table 6-12: Respondents' level of online citizenship behaviours directed towards administrators

Dimension	Statement	Mean	SD
Feedback intention relating to general improvement	If provided with the opportunity, I will:		
	AImprov1: Make constructive suggestions to the administrators of the residential Facebook group that will assist in improving the group's experience.	3.34	1.23
	AImprov2: Inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members.	3.32	1.24
	AImprov3: Share a useful idea with the administrators of the residential Facebook group that will assist in enhancing the experience of the group.	3.41	1.22
Feedback intention relating to operational problems	When noticing a functional/operational problem on the residential Facebook group, I will:		
	AProb1: Let the administrators know about it, even if the problem does not involve me directly.	3.50	1.28
	AProb2: Notify the administrators, even if the problem does not affect me directly.	3.43	1.30
	AProb3: Inform the administrators, even if the problem does not concern me directly.	3.42	1.30
Policing intention	If provided with the opportunity, I will suggest to the administrators of the residential Facebook group:		
	AMon1: Solutions to issues of inappropriate member behaviour that may make other members of the group unhappy.	3.41	1.26
	Amon2: Answers to issues of unfitting member behaviour that may concern other members of the group.	3.39	1.24
	Amon3: Remedies to problems of inappropriate member behaviour that may upset other members of the group.	3.36	1.24

It is evident from Table 6-12 that, concerning the feedback intention relating to general improvement factor, the respondents agreed the most with the statement "If provided with the opportunity, I will share a useful idea with the administrators of the residential Facebook group that will assist in enhancing the experience of the group" (mean = 3.41, SD = 1.22). The respondents agreed the least with the statement "If provided with the opportunity, I will inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members" (mean = 3.32, SD = 1.24). It is furthermore evident from Table 6-12 that, with regards to the feedback intention relating to operational problems factor, the respondents agreed the most with the statement "When noticing a functional/operational problem on the residential Facebook group, I will let the administrators know about it, even if the problem does not involve me directly" (mean = 3.50, SD = 1.28) and agreed the least with the statement "When noticing a functional/operational problem on the residential Facebook group, I will inform the administrators,

even if the problem does not concern me directly" (mean = 3.42, SD = 1.30). Finally, Table 6-12 indicates that, pertaining to the policing intention factor, the respondents agreed the most with the statement "If provided with the opportunity, I will suggest to the administrators of the residential Facebook group solutions to issues of inappropriate member behaviour that may make other members of the group unhappy" (mean = 3.41, SD = 1.26) and the least with the statement "If provided with the opportunity I will suggest to the administrators of the residential Facebook group remedies to problems of inappropriate member behaviour that may upset other members of the group" (mean = 3.36, SD = 1.24) although the mean score indicates that respondents will still in agreement with the statement. Additionally, the standard deviation (SD) values for the measurement items ranged between 1.22 and 1.30.

The main findings about online community citizenship behaviours directed towards administrators of their residential online activity community can, therefore, be formulated as:

Main finding 27:	The respondents agreed the most that if they were provided with the opportunity, they would share a useful idea with the administrators of the community which will assist the administrators to enhance the experience on the online community.
Main finding 28:	The respondents agreed the least that if they were provided with the opportunity they would inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members.
Main finding 29:	The respondents agreed the most that when they notice a functional/operational problem on the residential Facebook group they will let the administrator know about it, even if the problem does not involve them directly.
Main finding 30:	The respondents agreed the least that when they notice a functional/ operational problem on the residential Facebook group they will inform the administrators, even if the problem does not concern them directly.
Main finding 31:	The respondents agreed the most that if they were provided with the opportunity, they would suggest solutions to the administrators about issues of inappropriate member behaviour that may make other members of the group unhappy.
Main finding 32:	The respondents agreed the least that if they were provided with the opportunity, they would suggest remedies to the administrators about problems of inappropriate member behaviour that may upset other members of the residential Facebook group.

The respondents' level of agreement with the measurement items about online community citizenship behaviour directed towards members is presented in Table 6-13.

Table 6-13: Respondents' level of online community citizenship behaviour towards members

Dimension	Statement	Mean	SD
Helping intention relating to the use of service	If provided with the opportunity, I will:		
	MHelpS1: Assist other members of the residential Facebook group incorrectly using the group.	3.41	1.19
	MHelpS2: Help other members of the residential Facebook group to accurately operating the group.	3.33	1.19
	MHelpS3: Teach other members of the residential Facebook group in properly utilising the group.	3.27	1.21
	MHelpS4: Give advice to other members of the residential Facebook group in correctly using the group.	3.37	1.19
Helping intention relating to personal problems experienced	When provided with the opportunity to reply to posts on the residential Facebook group, I will:		
	MHelpP1: Assist other members who need my help with a personal matter.	3.62	1.09
	MHelpP2: Give advice to other members who need my help with a personal problem.	3.57	1.11
	MHelpP3: Help other members who need guidance with a personal issue.	3.53	1.11
	MHelpP4: Support other members who need my guidance with a personal matter.	3.56	1.13

As presented in Table 6-13, in terms of the helping intention relating to the use of service factor, the respondents agreed the most with the statement "If provided with the opportunity, I will assist other members of the residential Facebook group incorrectly using the group" (mean = 3.41, SD = 1.19) and the least with the statement "If provided with the opportunity, I will teach other members of the residential Facebook group in properly utilising the group" (mean = 3.27, SD = 1.21) although the mean score indicates that respondents will still in agreement with the statement. Additionally, it is event from Table 6-13 that, pertaining to the helping intention relating to personal problems experienced factor, the respondents agree the most with the statement "When provided with the opportunity to reply to posts on the residential Facebook group, I will assist other members who need my help with a personal matter" (mean = 3.62, SD = 1.09). Also, the respondents agreed the least with the statement "When provided with the opportunity to reply to posts on the residential Facebook group, I will help other members who need guidance with a personal issue" (mean = 3.53, SD = 1.11). Additionally, the standard deviation (SD) values for the measurement items ranged between 1.09 and 1.21.

The main findings about online community citizenship behaviours directed towards members of their residential online activity community can, therefore, be formulated as:

Main finding 33:	The respondents agreed the most if they were provided with the opportunity they will assist other members of the residential Facebook group incorrectly using the group.
Main finding 34:	The respondents agreed the least if they were provided with the opportunity they will teach other members of the residential Facebook group in properly utilising the group.
Main finding 35:	The respondents agreed the most that when provided with the opportunity to reply to posts on the residential Facebook group, they will assist other members who need their help with a personal matter.
Main finding 36:	The respondents agreed the least that when provided with the opportunity to reply to posts on the residential Facebook group, they will help other members who need guidance with a personal issue.

6.6 RELIABILITY AND VALIDITY ASSESSMENT

The reliability and validity of the measurement model were determined through reliability testing and confirmatory factor analysis (CFA). For this study, the reliability of the measurement model was evaluated through the calculation of the Cronbach's alpha values and construct reliability (CR) values and the validity of the measurement model was assessed by testing for evidence of construct validity.

6.6.1 Reliability testing

Reliability of a scale is viewed as an indication of the measurement's internal consistency which indicates that measurement is consistent when multiple attempts result in the same result (Babin & Zikmund, 2016:280). Scale reliability, therefore, refers to the degree to which a scale can duplicate similar results in repeated measures (Hair *et al*., 2013:165). The coefficient alpha or Cronbach's alpha is used to calculate a measure's reliability, where the internal consistency is determined by calculating the average of all possible split-half reliabilities for a multiple-scale item (Babin & Zikmund, 2016:280). For this study, the Cronbach's alpha scores were calculated using the data collected to pre-test the questionnaire. A total of 30 responses were obtained, and the data was used to test the internal consistency of the questionnaire before the large-scale data was collected. The Cronbach's alpha values calculated are presented in Table 6-14.

Table 6-14: Cronbach's alpha values

Commitment	Cronbach's alpha value
Emotional support	0.91
Social switching costs	0.93
Position involvement	0.91
Affective commitment	0.91
Subjective norm	0.93
Perceive critical mass	0.86
Normative commitment	0.93
Online community citizenship behaviour	**Cronbach's alpha value**
Feedback intention relating to general improvement	0.96
Feedback intention relating to operational problems	0.98
Policing intention	0.95
Helping intention relating to the use of service	0.98
Helping intention relating to personal problems experienced	0.94

Cronbach's alpha values of above 0.70 are considered acceptable to indicate the reliability of the measurement scale (Babin & Zikmund, 2016:281; Pallant, 2013:104) and therefore based on the Cronbach's values presented in Table 6-, the main finding concerning the reliability of the measurement scales can be formulated as:

Main finding 37:	All the measurement scales assessed in this study have good internal consistency as the Cronbach's alpha values are above the suggested cut off value of 0.70.

As discussed in section 5.2.9.1, the questionnaire for this study was pre-tested to refine the measures and limit the risk of problems with the data collected for the full-scale study. Based on the Cronbach's alpha values presented in Table 6- it was concluded that no changes had to be made to the questionnaire and the same questionnaire was therefore used to collect data for the full-scale study. Based on this conclusion and since the sample criteria were the same between the pre-test data and full-scale study, the 30 questionnaires obtained from the pilot study were added to the dataset of the full-scale study.

The CR values were also used to indicate if the measurement items are reliable and were determined through a confirmatory factor analysis, which is discussed in the next section.

6.6.2 Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) was used to estimate the measurement model of the study (Malhotra, 2010:725). Emotional support (ES), social switching costs (SSC), position involvement (PI), affective commitment (AC), subjective norm (SN), perceive critical mass (PCM), normative commitment (NC), Feedback intention relating to general improvement (FGI), Feedback intention relating to operational problems (FOP), Policing intention (P), Helping intention relating to the use of service (US) and Helping intention relating to personal problems experienced (PP) were included in the measurement model and was used to test for reliability (CR values) and construct validity.

6.6.2.1 Fit statistics

Fit statistics are used to compare the covariance matrix of the measurement model with sample data obtained in the study (Hair *et al*., 2014:617). These authors further state that using the fit statistics provided by the CFA, the researcher can examine all aspects of construct validity using various empirical measures.

The fit statistics for the measurement model are presented in Table 6-15.

Table 6-15: Fit statistics for measurement model

Indexes	X^2	df	X^2/df	TLI	CFI	RMSEA
	2266.32	1259	1.80	0.96	0.96	0.04
Recommended values			<5.00	>0.90	>0.90	<0.08

Note: X2 = Chi-square, df = degree of freedom, TLI = Tucker-Lewis index, CFI = Comparative Fit index, RMSEA = Root mean square error of Approximation

Table 6-15 indicates that the normed chi-square (x^2 /df) ratio of the measurement model is 1.80 which is well below the suggested cut-off value of <5.00 (Wheaton *et al.*, 1977:85). In addition to the normed chi-square, it is also evident from Table 6-, that concerning the incremental fit indices, the Comparative fit index (CFI) and the Tucker-Lewis index (TLI) exceeded the guidelines of greater than 0.90 as the value of two indices are both 0.96 (Hair *et al.*, 2014:631). In addition to the incremental fit indices, the absolute fit measures which include the Root mean square error of approximation (RMSEA) for this study was calculated at 0.04 which is well below the recommended guideline of 0.08 (Hair *et al.*, 2014:630).

Consequently, the main finding concerning the model fit of the measurement model is as follows:

Main finding 38: The model fit statistics of the measurement model, established through a confirmatory factor analysis indicated acceptable model fit.

6.6.2.2 Convergent validity

Convergent validity is achieved when the items of the measurement model indicate a high proportion of variance in common (Hair *et al.*, 2014:618). To test for convergent validity, the researcher should first investigate the factor loadings of the measurement items. The measurement items have convergent validity when the factor loadings are significant and above 0.50 (Hair *et al.*, 2014:618). Table 6-16 presents the standardised factor loadings of the items used in this study and also includes the standard errors and p-values, indicating significance.

Table 6-16: Standardised factor loadings for model

Latent variable	Items	Factor loadings	S.E.	p-value*
Emotional support	CEMOSUP1	0.67	0.04	0.001
	CEMOSUP2	0.78	0.03	0.001
	CEMOSUP3	0.79	0.03	0.001
	CEMOSUP4	0.91	0.02	0.001
	CEMOSUP5	0.93	0.01	0.001
Social switching costs	CSSWIT1	0.70	0.04	0.001
	CSSWIT2	0.78	0.03	0.001
	CSSWIT3	0.92	0.02	0.001
	CSSWIT4	0.96	0.01	0.001
	CSSWIT5	0.94	0.02	0.001
	CSSWIT6	0.94	0.01	0.001
Position involvement	CPOSINV1	0.80	0.02	0.001
	CPOSINV2	0.84	0.02	0.001
	CPOSINV3	0.96	0.01	0.001
	CPOSINV4	0.95	0.01	0.001
	CPOSINV5	0.74	0.03	0.001
Affective commitment	CAFFECT1	0.89	0.01	0.001
	CAFFECT2	0.93	0.01	0.001
	CAFFECT3	0.91	0.01	0.001
	CAFFECT4	0.61	0.03	0.001
	CAFFECT5	0.85	0.02	0.001

Table 6-16: Standardised factor loadings for model (cont.)

Latent variable	Items	Factor loadings	S.E.	p-value*
Subjective norm	CSUBNOR1	0.78	0.03	0.001
	CSUBNOR2	0.93	0.02	0.001
	CSUBNOR3	0.94	0.01	0.001
	CSUBNOR4	0.97	0.01	0.001
	CSUBNOR5	0.84	0.02	0.001
Perceive critical mass	CPERMAS1	0.75	0.03	0.001
	CPERMAS2	0.58	0.04	0.001
	CPERMAS3	0.65	0.03	0.001
	CPERMAS4	0.88	0.02	0.001
	CPERMAS5	0.83	0.02	0.001
Normative commitment	CNORM1	0.83	0.02	0.001
	CNORM2	0.83	0.02	0.001
	CNORM3	0.91	0.02	0.001
	CNORM4	0.93	0.01	0.001
	CNORM5	0.92	0.01	0.001
Feedback intention relating to general improvement	AIMPROV1	0.91	0.01	0.001
	AIMPROV2	0.96	0.01	0.001
	AIMPROV3	0.93	0.01	0.001
Feedback intention relating to operational problems	APROB1	0.93	0.02	0.001
	APROB2	0.99	0.01	0.001
	APROB3	0.98	0.01	0.001
Policing intention	AMON1	0.90	0.02	0.001
	AMON2	0.94	0.01	0.001
	AMON3	0.92	0.02	0.001
Helping intention relating to personal problems experienced	MHELPP1	0.91	0.01	0.001
	MHELPP2	0.96	0.01	0.001
	MHELPP3	0.96	0.01	0.001
	MHELPP4	0.91	0.02	0.001
Helping intention relating to the use of service	MHELPS1	0.89	0.02	0.001
	MHELS2	0.96	0.01	0.001
	MHELPS3	0.97	0.01	0.001
	MHELPS4	0.95	0.01	0.001

*Note: $p < 0.001$; S.E = Standard error

It is evident from Table 6-16 that all factor loadings are above the suggested cut-off value of 0.50 and are also significant since $p < 0.001$ (Hair *et al.*, 2014:618).

Therefore the main finding about the factor loadings of the measurement items can be formulated as:

Main finding 39:	All standardised factor loadings of the measurement model loaded significantly onto their respective latent constructs and thus should be retained.

In addition to the investigation of the factor loadings of the measurement items, Hair *et al.* (2014:619) also suggest that to test for convergent validity the average variance extracted (AVE) and construct reliability (CR) of the measurement model must be calculated.

The AVE and CR values of the measurement model are presented in Table 6-17.

Table 6-17: Average variance extracted (AVE) and construct reliability (CR) of the measurement model

Variable	AVE	CR
Emotional support	0.81	0.91
Social switching costs	0.87	0.95
Position involvement	0.86	0.93
Affective commitment	0.71	0.92
Subjective norm	0.80	0.95
Perceive critical mass	0.56	0.86
Normative commitment	0.89	0.94
Feedback intention relating to general improvement	0.93	0.95
Feedback intention relating to operational problems	0.93	0.97
Policing intention	0.85	0.94
Helping intention relating to the use of service	0.87	0.96
Helping intention relating to personal problems experienced	0.89	0.97

It is evident from Table 6-17 that the AVE values of the measurement constructs range between 0.56 and 0.93, which are above the cut-off value of 0.50 (Hair *et al*., 2014:619). Additionally, as indicated in Table 6-17, the CR values of the measurement constructs ranges between 0.86 and

0.97, which suggest good reliability since the values are above the recommended value of 0.70 (Hair *et al*., 2014:619).

The main findings concerning the AVE and CR values of the measurement model can be stated as:

Main finding 40:	The average variance extracted (AVE) values of the measurement constructs are all above 0.50 which indicate adequate convergence of the measurement items.
Main finding 41:	The construct reliability (CR) values of the measurement constructs are all above 0.70 which suggest that internal consistency exists for all constructs measured

Based on the investigation of the factor loadings and the calculation of the AVE and CR values of the measurement model, the main finding concerning the convergent validity of the measurement model can be formulated as:

Main finding 42:	All twelve constructs of the measurement model have convergent validity.

6.6.2.3 Discriminant validity

Discriminant validity refers to “the degree to which a construct is really distinct from other constructs” (Hair *et al*., 2014:619). A rigorous test to determine discriminant validity is the compare the average variance extracted (AVE) of any two constructs with the squared correlation estimate between these two constructs (Fornell & Larcker, 1981:49). These authors indicate that discriminant validity is achieved when the AVE for any two constructs are greater than the squared correlation estimate of the two constructs.

Table 6-18 presents the correlation matrix of the measurement model which indicate the AVE and the correlation estimates of the latent variables. The AVE values are indicated in brackets on the diagonal.

Table 6-18: Correlation matrix for latent variables with AVE

Latent variable	ES	SSC	PI	SN	PPC	AC	NC	FGI	FOP	P	US	PE
Emotional support (ES)	**(0.81)**											
Social switching costs (SSC)	0.24	**(0.87)**										
Position involvement (PI)	0.56	0.34	**(0.86)**									
Subjective norm (SN)	0.32	0.40	0.47	**(0.80)**								
Perceive critical mass (PCM)	0.34	0.38	0.46	0.58	**(0.54)**							
Affective commitment (AC)	0.50	0.43	0.69	0.51	0.52	**(0.71)**						
Normative commitment (NC)	0.27	0.55	0.43	0.53	0.50	0.54	**(0.89)**					
Feedback intention relating to general improvement (FGI)	0.30	0.25	0.27	0.31	0.32	0.32	0.34	**(0.93)**				
Feedback intention relating to operational problems (FOP)	0.27	0.27	0.30	0.23	0.21	0.25	0.28	0.58	**(0.93)**			
Policing intention (P)	0.31	0.26	0.30	0.31	0.28	0.32	0.32	0.68	0.68	**(0.85)**		
Helping intention relating to the use of service (US)	0.28	0.27	0.34	0.38	0.35	0.37	0.36	0.64	0.57	0.64	**(0.87)**	
Helping intention relating to personal problems experienced (PP)	0.38	0.25	0.35	0.35	0.34	0.38	0.30	0.46	0.44	0.43	0.57	**(0.89)**

Note: All correlations are statistically significant at $p < 0.001$. AVE values are presented in brackets on the diagonal

It can be concluded from Table 6-18, that all correlations between the latent variables are significant ($p < 0.001$) and that the AVE for any two variables is greater than the squared correlation between them (Fornell & Larcker, 1981:49). For example, the AVE of emotional support (0.81) and social switching costs (0.87) are both higher than the squared correlation between them (0.06). Similar, the AVE value of feedback intention relating to general improvement (0.93) and subjective norm (0.80) is higher than the squared correlation between them (0.10). The main finding concerning the discriminant validity of the measurement model can, therefore, be formulated as:

Main finding 43:	The results obtained from the correlation matrix which include the AVE- and correlation values of the constructs indicate that all constructs presented in the measurement model have discriminant validity.

6.6.2.4 Summary of model validity

Burns *et al.* (2017:215) note that measurement scales employed by a researcher should be valid, which indicate that the measurement scales measure what it was intended to measure (Babin & Zikmund, 2016:281) and therefore indicate the accuracy of the measurement (Burns *et al*., 2017:215). Both content- and construct validity can be used to test if the measurement scales are valid (Hair *et al*., 2014:618; Malhotra, 2010:320) and were also used in this study.

Content validity includes the subjective judgements by experts to judge the appropriateness of the measurement (Feinberg *et al*., 2013:131). For this study, experts in the field of marketing were consulted to judge the measurement scales to be used for this study. In addition to the consultation of experts, the measurement items used for this study was adapted from existing scales which was proven to be valid. Furthermore, the questionnaire was pre-tested (section 5.2.9.1) and it was determined that the measurement instrument did have internal reliability (section 6.6.1).

Construct validity is concerned with understanding the theoretical foundation of the obtained measures (Feinberg *et al*., 2013:131). These authors indicate that to test for construct validity, both convergent validity and discriminant validity should be confirmed. Convergent validity indicates that the multiple items used to measure the same construct share a high proportion of variance (Hair *et al*., 2013:167) and therefore correlates positively with other measures of the same construct (Malhotra, 2010:321). Discriminant validity is the degree to which a single construct is unique and differs from other constructs (Hair *et al*., 2013:167). A CFA was performed to examine both convergent- and discriminant validity of the measurement model to establish construct validity. As indicated in section 6.6.2.1, based on fit statistics it was concluded that the

measurement model had acceptable model fit. Additionally, section 6.6.2.2 presented the results concerning the convergent validity and based on the factor loadings, AVE- and CR values; it was confirmed that the measurement model does have convergent validity. Furthermore, based on the discriminant validity results presented in section 6.6.2.3, it was concluded that the measurement model also has discriminant validity.

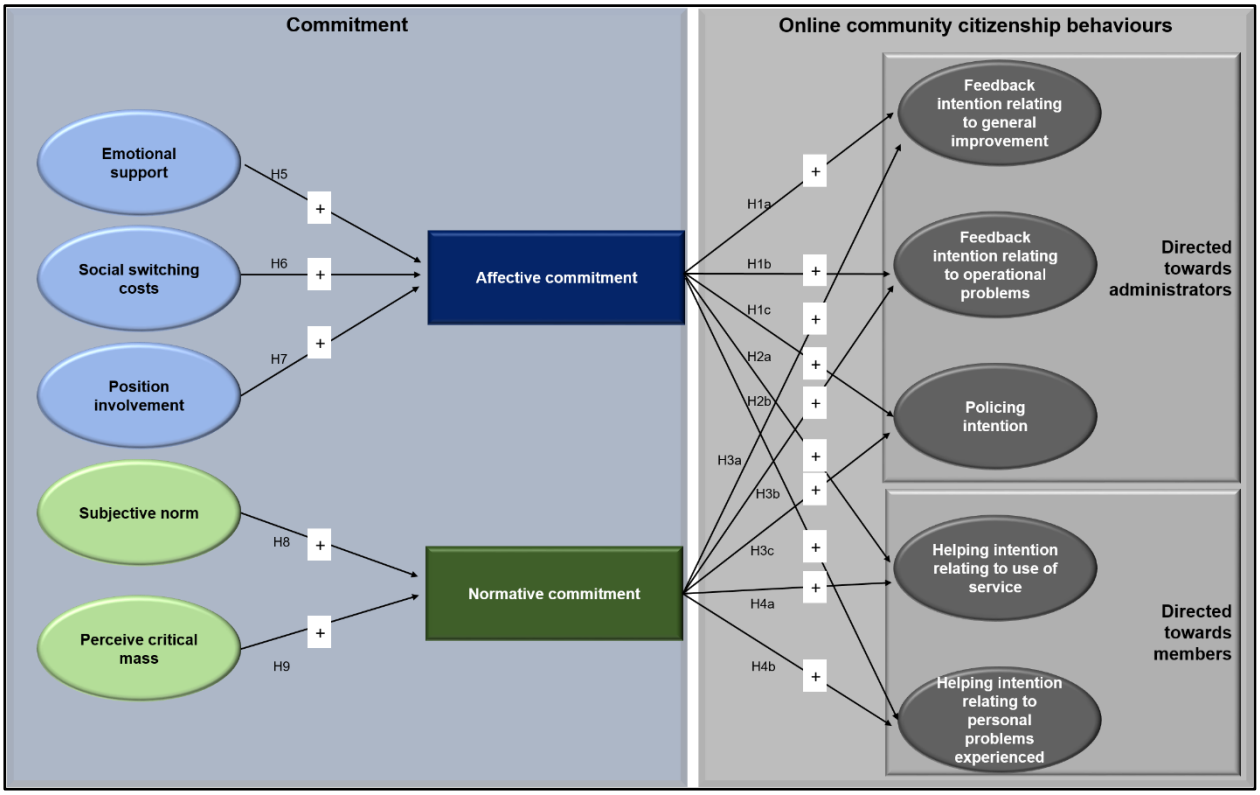
Consequently, the main finding about content- and construct validity of the measurement model can be formulated as:

Main finding 44:	Content validity was achieved since the measurement items measured what they were supposed to measure.
Main finding 45:	The measurement model proved to have construct validity since both convergent- and discriminant validity was achieved.

6.7 STRUCTURAL EQUATION MODELLING (SEM)

The theoretical model of this study, presented in Figure 6-2 was tested through the use of Structural Equation Modelling (SEM). Maximum likelihood estimation was used to calculate the estimates of the relationships between the constructs.

Figure 6-2: The proposed theoretical model of this study



The alternative hypotheses of the theoretical model presented in Figure 6-2 is summarised in Table 6-19.

Table 6-19: Alternative hypotheses of the theoretical model

Alternative hypothesis of the proposed theoretical model	
H1a	Affective commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
H1b	Affective commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.
H1c	Affective commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
H2a	Affective commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
H2b	Affective commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.
H3a	Normative commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
H3b	Normative commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.
H3c	Normative commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
H4a	Normative commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
H4b	Normative commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.
H5	Emotional support has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
H6	Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
H7	Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
H8	Subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.
H9	Perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

6.7.1 Assessment of the structural theoretical model

Structural equation modelling was used to test the structural model and the hypothesised theoretical relationships (Hair *et al*., 2014:587). The fit statistics of the structural model is presented in Table 6-20.

Table 6-20: Fit statistics of structural model

Indexes	X2	df	X2/df	TLI	CFI	RMSEA
	2457.70	1290	1.90	0.95	0.95	0.04
Recommended values			<5.00	>0.90	>0.90	<0.08

Note: X^2 = Chi-square, df = degree of freedom, TLI = Tucker-Lewis index, CFI = Comparative Fit index, RMSEA = Root mean square error of Approximation

Table 6-20 indicates that the normed chi-square (X^2/df) value of the structural model (1.90) is smaller than the cut-off value of <5.00 (Wheaton *et al*., 1997:85). Also, both the TLI- and CFI values of the theoretical model were computed at 0.95 which is above 0.90 as suggested by Hair *et al.* (2014:631) and can, therefore, be deemed as being acceptable. Furthermore, the RMSEA value of the structural model was 0.04 which is smaller than the suggested cut-off value of 0.08 (Hair *et al.*, 2014:630).

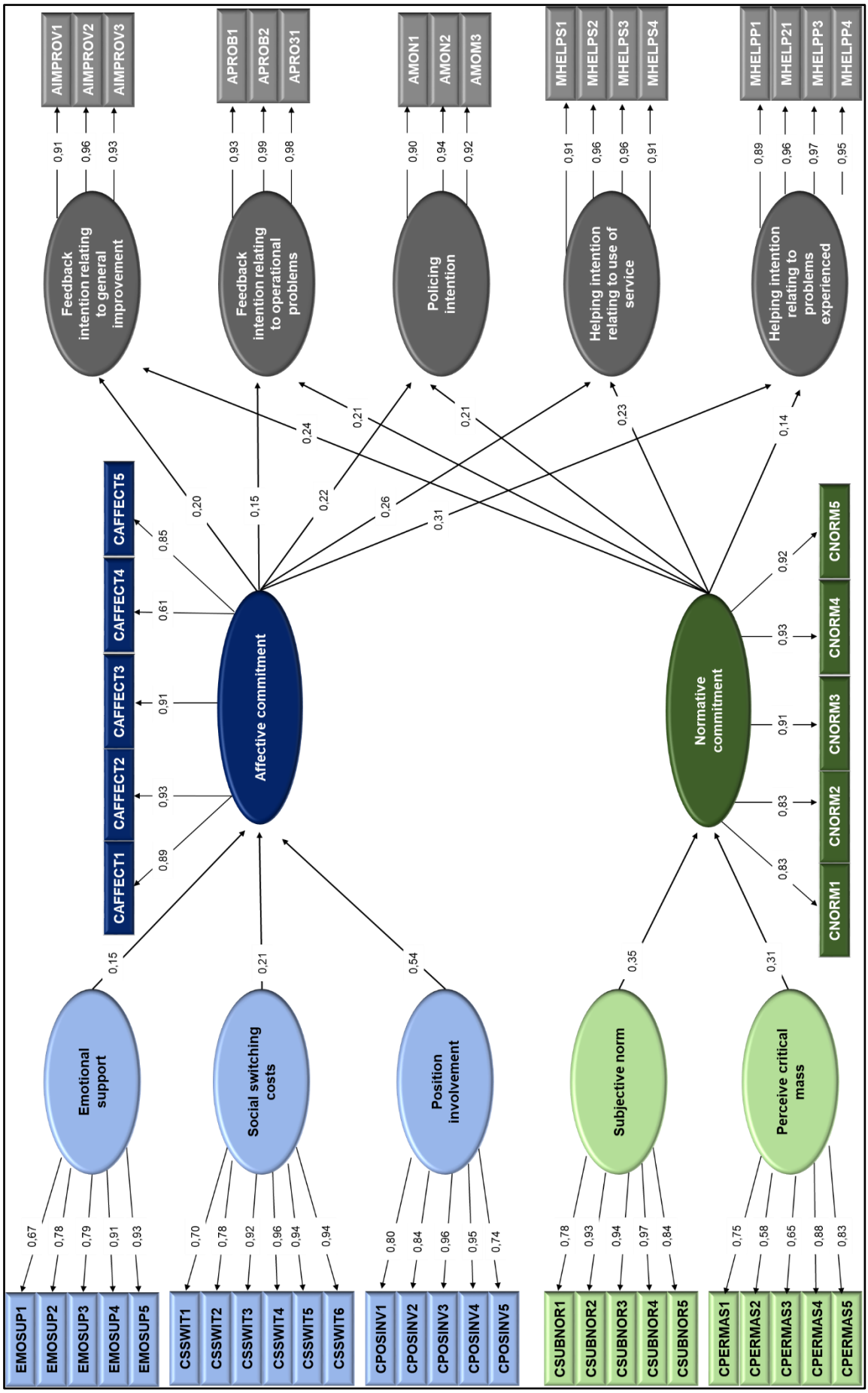
Therefore, considering the results presented above, the main results about the model fit of the structural model can be presented as:

Main finding 46:	The fit indices indicated that the structural model fits the observed data reasonability well.

6.7.2 Hypothesis testing

When a model fit of the structural model has been achieved, the stated alternative hypothesis (Table 6-19) could be tested. The structural model with the standardised regression weights for each specified relationship is presented in Figure 6-3.

Figure 6-3: Structural model estimation



In addition to **Error! Reference source not found.**, the standard regression weights (ß weights), S.E. (standard errors) and p-values (statistical significance) of the alternative hypotheses (H1 to H9) are presented in Table 6-21.

Table 6-21: Hypothesis testing: direct effects

Hypothesis	Relationship	ß weights	S.E.	p-value
H1a	Affective commitment → Feedback intention relating to general improvement	0.20	0.06	0.001*
H1b	Affective commitment → Feedback intention relating to operational problems	0.15	0.06	0.007**
H1c	Affective commitment → Policing intention	0.22	0.06	0.001*
H2a	Affective commitment → Helping intention relating to the use of service	0.26	0.06	0.001*
H2b	Affective commitment → Helping intention relating to personal problems experienced	0.31	0.05	0.001*
H3a	Normative commitment → Feedback intention relating to general improvement	0.24	0.05	0.001*
H3b	Normative commitment → Feedback intention relating to operational problems	0.21	0.05	0.001*
H3c	Normative commitment → Policing intention	0.21	0.05	0.001*
H4a	Normative commitment → Helping intention relating to the use of service	0.23	0.05	0.001*
H4b	Normative commitment → Helping intention relating to personal problems experienced	0.14	0.05	0.003**
H5	Emotional support → Affective commitment	0.15	0.05	0.001*
H6	Social switching costs ⟶ Affective commitment	0.21	0.04	0.001*
H7	Position involvement ⟶ Affective commitment	0.54	0.05	0.001*
H8	Subjective norm ⟶ Normative commitment	0.35	0.05	0.001*
H9	Perceive critical mass ⟶ Normative commitment	0.31	0.05	0.001*

Note: *Relationship is statistically significant at $p<0.001$; ** Relationship is significantly significant at $p<0.01$; ß = beta coefficient; S.E. = Standard error

It is evident from Table 6-21 that the standard regression weights between the constructs are all positive since the ß weights range between 0.14 and 0.54**.** Additionally, Table 6- indicates that all the relationships between the constructs are significant at $p < 0.001$ or $p < 0.01$.

Concerning hypothesis H1(a to c), Table 6-21 indicates that affective commitment has a positive and significant impact on feedback intentions relating to general improvement of the online community, as directed towards residential online activity community's administrators (ß weight = 0.20; $p < 0.001$). Similarly, it is evident from Table 6-21 that affective commitment also has a

positive and significant impact of feedback intentions relating to operational problems experienced on the online community, as directed towards administrators of residential online activity communities on Facebook (ß weight = 0.15; $p < 0.01$). Additionally, Table 6-21 shows that affective commitment has a positive and significant effect on policing intention as directed towards administrators of residential online communities on Facebook (ß weight = 0.22; $p < 0.001$). Both hypotheses H2a and H2b are supported, indicating that affective commitment has a positive and significant impact on helping intention relating to the use of service (ß weight = 0.26; $p < 0.001$) and helping intention relating to personal problems experienced (ß weight = 0.31; $p < 0.001$), as directed towards members of a residential online activity community.

Table 6-21 furthermore indicate that normative commitment has a positive and significant effect on feedback intention relating to general improvement as directed towards administrators of residential online activity communities on Facebook (ß weight = 0.24; $p < 0.001$). Both hypotheses H3b and H3c are supported which showed that normative commitment has a positive and significant effect on feedback intention relating to operational problems (ß weight = 0.21; $p < 0.01$) and also policing intention (ß weight = 0.21; $p < 0.001$), as directed towards administrators of residential online activity communities on Facebook. Hypothesis 4a and hypothesis 4b indicates that normative commitment has a positive and significant impact on helping intention relating to the use of service (ß weight = 0.23; $p < 0.001$) and normative commitment has a positive and significant effect on helping intention relating to personal problems experienced (ß weight = 0.14; $p < 0.01$), as directed towards members of residential online activity communities on Facebook.

As indicated in Table 6-21, hypothesis 5 was supported and showed that emotional support has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook (ß weight = 0.15; $p < 0.001$). Additionally, concerning hypothesis 6, Table 6-21 shows that social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook (ß weight = 0.21; $p < 0.001$). Similarly, about hypothesis 7, position involvement has a positive and significant impact on affective commitment of residential online activity community members on Facebook (ß weight = 0.54; $p < 0.001$). Table 6-21 further indicate that concerning hypothesis 8, subjective norm positively and significantly impacts normative commitment (ß weight = 0.35; $p < 0.001$) and regarding hypothesis 9, perceive critical mass has a positive and significant impact on normative commitment (ß weight = 0.31; $p < 0.001$) of members of residential online activity communities on Facebook.

Consequently, the main findings relating to the hypotheses of this study are summarised in Table 6-22.

Table 6-22: Summary of the main findings relating to the hypotheses of the study

Hypotheses for structural equation modelling		Finding
H1a	Affective commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.	Supported
H1b	Affective commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.	Supported
H1c	Affective commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.	Supported
H2a	Affective commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.	Supported
H2b	Affective commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.	Supported
H3a	Normative commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.	Supported
H3b	Normative commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.	Supported
H3c	Normative commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.	Supported
H4a	Normative commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.	Supported
H4b	Normative commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.	Supported
H5	Emotional support has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.	Supported
H6	Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.	Supported
H7	Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.	Supported
H8	Subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.	Supported
H9	Perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.	Supported

Based on the findings presented in Table 6-22, the following main findings about the alternative hypotheses of this study can be formulated as:

Main finding 47:	Affective commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook
Main finding 48:	Affective commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook
Main finding 49:	Affective commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
Main finding 50:	Affective commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
Main finding 51:	Affective commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.
Main finding 52:	Normative commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
Main finding 53:	Normative commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.
Main finding 54:	Normative commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
Main finding 55:	Normative commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
Main finding 56:	Normative commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.
Main finding 57:	Emotional support has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
Main finding 58:	Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
Main finding 59:	Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

Main finding 60:	Subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.
Main finding 61:	Perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

6.8 SUMMARY OF MAIN FINDINGS

The following section provides an outline of the main findings established in this chapter.

6.8.1 Main findings according to the research objectives of this study

The main findings about the research objectives of this study (sections 1.6.2 and 5.2.3) are presented Table 6-23.

Table 6-23: Summary of main findings according to the secondary objectives of the study

Secondary objective 1	
To provide an overview of extant literature related to: 1a) the relationship marketing theory and social exchange theory. 1b) the main constructs of this research study, namely, affective commitment, normative commitment, online community citizenship behaviours and the identified factors that may contribute towards commitment within an online community environment. 1c) the interrelationships between the constructs of this research study.	
Theoretical overview of extant literature regarding relationship marketing and social exchange theory was provided in Chapter 2 and Chapter 3.	
A theoretical overview of extant literature concerning the main constructs namely commitment and customer citizenship behaviour was provided in Chapter 2 and Chapter 3.	
Chapter four provided an overview of extant literature concerning the interrelationships between the constructs of this study which resulted in the proposed theoretical model presented in Chapter 4.	
Secondary objective 2	
To develop a sample profile of the residential online activity community members on Facebook who participated in this research study.	
Main finding 1	The realised sample are all current and active members of residential online activity communities on Facebook that are situated across the nine provinces in South Africa.
Main finding 2	Both males and female members participated in this study with the majority of the respondents being female (85.0%).
Main finding 3	All the respondents who participated in this study are older than 18 years of age, with the majority (62.9%) being older than 36 years.

Table 6-23: Summary of main findings according to the secondary objectives of the study (cont.)

Secondary objective 2 (cont.)	
Main finding 4	A total of 30.6% of the respondents are between the ages of 36 to 47 years and 29.5% of the respondents are between the ages of 48 to 66 years.
Main finding 5	The respondents who participated in this study are mainly white (92.0%) and employed (76.4%). Almost two thirds of them are married (64.2%); the majority of the respondents (59.9%) have either a diploma (29.4%) or matric/grade 12 (30.5%) whereas little over one third (35.0%) of the respondents are graduated, with a degree (19.4%) or a postgraduate degree (15.6%) as the highest level of qualification.
Secondary objective 3	
To measure the level of emotional support perceived by active members of the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.	
Main finding 6	The respondents agreed the most that when they are faced with difficulties in general, some members of the residential Facebook group are on their side and comforted and encouraged them.
Main finding 7	The respondents agreed the least that when they are faced with difficulties in general, some members of the residential Facebook group read their posts about their personal feelings.
Secondary objective 4	
To measure the level of social switching costs perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.	
Main finding 8	The respondents generally were in low agreement with the items that measured social switching cost.
Main finding 9	The respondents agreed the most that if they switch to another residential Facebook group, they will lose the friendships which they have developed with the current group.
Main finding 10	The respondents agreed the least that if they switch to another residential Facebook group, they might find it very difficult to tell the members of the current group that they are switching to another group.
Secondary objective 5	
To measure the level of position involvement perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.	
Main finding 11	The respondents agreed the most that they prefer to be a member of this residential Facebook group because the image of the community comes the closest to reflect their lifestyle.
Main finding 12	The respondents agreed the least that they prefer to be a member of this residential Facebook group because the persona of the group comes the closest to reflect their personal image.

Table 6-23: Summary of main findings according to the secondary objectives of the study (cont.)

Secondary objective 6	
To measure the level of subjective norm perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.	
Main finding 15	The respondents agreed the most that in general, their friends are the people who think that they should frequently post content on this residential Facebook group.
Main finding 16	The respondents agreed the least that in general, the people who influence their behaviour are the people who think that they should frequently post content on this residential Facebook group.
Secondary objective 7	
To measure the level of perceive critical mass perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.	
Main finding 17	The respondents agreed the most that most people in their society are the people who frequently post contents on their residential Facebook group.
Main finding 18	The respondents agreed the least that most people in their work environment are the people who frequently post contents on their residential Facebook group.
Secondary objective 8	
To measure the levels of commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. Most specifically, by investigating the: 8a) level of affective commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. 8b) level of normative commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.	
Main finding 13	The respondents agreed the most that when they take all things into consideration, they will be happy to stay with their residential Facebook group.
Main finding 14	The respondent agreed the least with the statement that they feel emotionally attached to this residential Facebook.
Main finding 19	The respondents generally were in low agreement with the items that measured normative commitment.
Main finding 20	The respondents agreed the most that in general, they would feel obligated to continue posting content of this residential Facebook group.
Main finding 21	The respondents agreed the least that in general, they would feel guilty if they stop posting content on this residential Facebook group.

Table 6-23: Summary of main findings according to the secondary objectives of the study (cont.)

Secondary objective 9	
To measure the levels of online community citizenship behaviours of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. More specifically to measure the extent to which active members of the residential online activity community on Facebook, have the intention to: 9a) provide feedback to administrators relating to the general improvement of the residential online activity community on Facebook. 9b) provide feedback to administrators relating to operational problems experienced on the residential online activity community on Facebook. 9c) perform policing behaviours towards administrators of the residential online activity community on Facebook. 9d) perform helping behaviours towards fellow members relating to the use of service of the residential online activity community on Facebook. 9e) perform helping behaviours towards fellow members of the residential online activity community on Facebook relating to personal problems they are experiencing.	
Main finding 27	The respondents agreed the most that if they were provided with the opportunity, they would share a useful idea with the administrators of the community which will assist the administrators to enhance the experience on the online community.
Main finding 28	The respondents agreed the least that if they were provided with the opportunity they would inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members.
Main finding 29	The respondents agreed the most that when they notice a functional/operational problem on the residential Facebook group they will let the administrator know about it, even if the problem does not involve them directly.
Main finding 30	The respondents agreed the least that when they notice a functional/operational problem on the residential Facebook group they will inform the administrators, even if the problem does not concern them directly.
Main finding 31	The respondents agreed the most that if they were provided with the opportunity, they would suggest solutions to the administrators about issues of inappropriate member behaviour that may make other members of the group unhappy.
Main finding 32	The respondents agreed the least that if they were provided with the opportunity, they would suggest remedies to the administrators about problems of inappropriate member behaviour that may upset other members of the residential Facebook group.
Main finding 33	The respondents agreed the most if they were provided with the opportunity they will assist other members of the residential Facebook group incorrectly using the group.
Main finding 34	The respondents agreed the least if they were provided with the opportunity they will teach other members of the residential Facebook group in properly utilising the group.
Main finding 35	The respondents agreed the most that when provided with the opportunity to reply to posts on the residential Facebook group, they will assist other members who need their help with a personal matter.
Main finding 36	The respondents agreed the least that when provided with the opportunity to reply to posts on the residential Facebook group, they will help other members who need guidance with a personal issue.

Table 6-23: Summary of main findings according to the secondary objectives of the study (cont.)

Secondary objective 10	
To examine the interrelationships among the identified research constructs of this study	
Main finding 22	The sample obtained from the field study is adequate for exploratory factor analysis as the KMO measurement of sampling adequacy is 0.92 and Bartlett's test of sphericity is significant at $p < 0.05$
Main finding 23	The Geomin rotated factor loadings of the EFA confirmed that a total of five online community citizenship behaviour factors are extracted.
Main finding 24	Based on the scree plot and eigenvalues computed by an EFA, a total of five online community citizenship behaviour factors should be retained.
Main finding 25	The measurement items assessed can be grouped into the same five citizenship factors as was initially identified in the commerce environment.
Main finding 26	Applied to the context of this study, the five extracted factors are labelled as 1) feedback intention relating to general improvement; 2) feedback intention relating to operational problems; 3) policing intention; 4) helping intention relating to the use of service; and 5) helping intention relating to personal problems experienced.
Main finding 37	All the measurement scales assessed in this study have good internal consistency as the Cronbach's alpha values are above the suggested cut off value of 0.70.
Main finding 38	The model fit statistics of the measurement model, established through a confirmatory factor analysis indicated acceptable model fit.
Main finding 39	All standardised factor loadings of the measurement model loaded significantly onto their respective latent constructs and thus should be retained.
Main finding 40	The average variance extracted (AVE) values of the measurement constructs are all above 0.50 which indicate adequate convergence of the measurement items.
Main finding 41	The construct reliability (CR) values of the measurement constructs are all above 0.70 which suggest that internal consistency exists for all constructs measured.
Main finding 42	All twelfth constructs of the measurement model have convergent validity.
Main finding 43	The results obtained from the correlation matrix which include the AVE- and correlation values of the constructs indicate that all constructs presented in the measurement model have discriminant validity.
Main finding 44	Content validity was achieved since the measurement items measured what they were supposed to measure.
Mind finding 45	The measurement model proved to have construct validity since both convergent- and discriminant validity was achieved.
Main finding 46	The fit indices indicated that the structural model fits the observed data reasonability well.
Main finding 47	Affective commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
Main finding 48	Affective commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.
Main finding 49	Affective commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.

Table 6-23: Summary of main findings according to the secondary objectives of the study (cont.)

Secondary objective 10 (cont.)	
Main finding 50	Affective commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
Main finding 51	Affective commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.
Main finding 52	Normative commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.
Main finding 53	Normative commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.
Main finding 54	Normative commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.
Main finding 55	Normative commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.
Main finding 56	Normative commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.
Main finding 57	Emotional support has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
Main finding 58	Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
Main finding 59	Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.
Main finding 60	Subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.
Main finding 61	Perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

6.9 CONCLUSION

The chapter provided the empirical results obtained from the data collected for this study. The sample realisation indicated to be representative of the population and included 545 usable responses which fall within the required sample size range for structural modelling to be performed. It was established that respondents who participated in this study matched the population of this study and included both male and female members who are older than 18 years of age and who are active members or a residential online activity community in South Africa. Concerning the structure of the online community citizenship behaviour construct, an EFA

signified that five factors could be extracted which were presented in section 6.5.1. Using various established assessment methods, it was determined that the measurement scales used for this study are both reliable and valid with good model fit statistics. It was furthermore evident from the SEM analysis that the structural model presented good model fit statistics and that all hypotheses were positive and significant. Thus all proposed hypotheses were supported. The chapter concluded with a summary of the main findings according to the secondary objectives of this study. Chapter 7 will provide the conclusions of this study as well as suggestions for future research on this topic.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

Chapter 7 presents the conclusions concerning online community citizenship behaviour directed towards administrators and members in the residential online activity community environment. The discussion is based on the empirical results reported in Chapter 6 and the theoretical findings presented in Chapters 1 to 5.

The chapter commences with an overview of the research problem and the purpose of the study which set the scene for the rest of the discussion. After that, the conclusions, implications and recommendations for all secondary objectives are presented. The subsequent section provides a summative table which presents the linkages between the objectives, the chapters providing the theoretical background, relevant sections in the questionnaire, the hypotheses of the study and main findings as well as the conclusions and recommendations according to each of the secondary objectives. The chapter concludes with a discussion of the limitations of this study and recommendations for further research on this topic.

7.2 OVERVIEW OF THE STUDY

As explained in section 1.2.2.4, Facebook groups have become a popular online community platform which is used by members to gain information and knowledge (Da Valeck *et al*., 2009:187). Facebook groups, as an online community, provide various benefits to members such as social support and social interaction where members are brought together and interact with each other about a common interest and topic. In addition to member benefits, as presented in section 1.2.2.2, organisations and administrators also benefit from online communities since the interactions taking place between members can provide organisations and administrators with valuable information about their members and can also provide them with more insight into problems experienced by their customers. Hence, online communities are regarded as being beneficial to the members and also to the organisation or administrator managing the online community.

As further noted from section 1.2.2.6, although the number of online communities has increased significantly during recent years, administrators of online communities, however, are still finding it difficult to encourage and maintain participation and to build thriving online communities (Chen,

2007:450; Malinen, 2015:228; Sangwan, 2005:4). Members can easily leave online communities when technical problems are not resolved, or they do not receive useable content (Malinen, 2015:235). Administrators furthermore struggle to get members to join the online community and to encourage continuous discussion between the members (Goff *et al*., 2011). Section 1.2.2.3 also indicates that administrators seem to have difficulty to obtain vital member commitment towards the online community (Gupta & Hee-Woong, 2007:39, Gupta *et al*., 2010; 514).

Customer citizenship behaviour may then present a solution to the challenges faced by administrators as it can assist them in increasing participation and build thriving communities. Section 1.3.1 notes that online community citizenship behaviours are grounded in the social exchange theory (Bettencourt, 1997:398; Blau, 1964; Shamin *et al*., 2015:202) and due to this social exchange taking place within a residential online activity community, when members receive relational benefits, they will reciprocate by performing online community citizenship behaviours (Chang *et al*., 2015:868; Liao, 2008:1882). Therefore, members who have received relational benefits might participate in the online community by providing feedback, providing help to other members and performing policing behaviours. These behaviours can take place by posting and replying to posts on the residential online activity community. Online community citizenship is therefore of significance to online communities such as residential online communities on Facebook as it can promote the effective functioning of the online community (Chiu *et al*., 2009:1).

A further observation from the literature review is that the citizenship behaviours performed by members of an online community may be directed towards members and administrators. As noted in section 1.2.1 and presented in Table 1-1, similar to offline and online retail environments where customer citizenship behaviour can be directed towards the customer and the organisation, within an online activity community it appears that online community citizenship behaviours may be directed towards administrators and towards members.

In facilitating the various forms of citizenship behaviours, member commitment, however, is required. As explained in section 2.2.3, commitment is considered as a key dimension of the relationship marketing theory and refers to the psychological state whereby organisations and customers have a desire to maintain and continue with the long-term orientated relationship that provided mutual benefits through maximum effort and short-term sacrifices. Commitment is comprised of three sub-dimensions relating to affective, continuous and normative commitment (Meyer & Allen, 1991).

Within an online community context committed members tend to have higher participation levels compared to uncommitted members (Gupta *et al.* 2010:514; Malinen, 2015:228) and commitment

positively affects online community citizenship behaviour (Bettencourt, 1997:388). Specifically, it was established in section 1.3.3.1, that both normative and affective commitment might contribute to online citizenship behaviour. Additionally, section 1.3.3.2 also established that various factors may contribute towards the affective commitment of the members such as emotional support, social switching costs and position involvement. Similarly, it was noted in section 1.3.3.3, that various factors may contribute towards the normative commitment of the members such as subjective norm and perceive critical mass.

The above-mentioned relationships, however, have not been formally investigated within the residential online activity community environment on Facebook and requires further investigation. Specifically, further insight is required into the extent to which normative and affective commitment may impact on online community citizenship behaviours directed towards both members and administrators of the residential online activity community. As noted in section 1.3.3.1 when members of an online community are emotionally attached (affectively committed) or experience a sense of obligation (normatively committed) towards the residential online activity community on Facebook, the members might be prone to perform online community citizenship behaviours directed towards the administrators and towards the members of the online community. Also, as indicated in section 1.4, based on the principle of the social exchange theory (Blau, 1964), when members are committed towards the residential online activity community on Facebook and have experienced the benefits associated with the relationship, the members may want to repay the received benefits by engaging in online community citizenship behaviours directed towards administrators and towards members. Verification is also required of the antecedents relevant within a residential online activity community environment and that may contribute to greater normative and affective commitment and which may ultimately result in online community citizenship behaviours and a more effective community.

Following the background and problem discussion as well as the literature investigation that was conducted in Chapter 1, it was then decided that the aim of this study is to address the stated research gap and as the primary objective of this study, develop a commitment and online community citizenship behaviour model for residential online activity communities on Facebook (section 1.6.1). Furthermore, various secondary objectives were formulated to assist in the realisation of the primary research objective of this study (section 1.6.2) and to explore the conceptual model further as presented in Figure 1-1.

The following section presents the conclusions, implications and recommendations concerning the research findings and secondary objectives formulated for the study.

7.3 CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The secondary objectives relating to the literature study will be discussed first.

7.3.1 Secondary objectives 1a to 1c

The secondary objectives 1a to 1c are presented in Table 7-1.

Table 7-1: Secondary objective 1

Secondary objective 1
To provide an overview of extant literature related to: 1a) the relationship marketing theory and social exchange theory. 1b) the main constructs of this research study, namely, affective commitment, normative commitment, online community citizenship behaviours and the identified factors that may contribute towards commitment in an online community environment. 1c) the interrelationships between the constructs of this research study

The secondary objectives 1a to 1c, presented in Table 7-1 were realised as follows:

- Secondary objective 1a that involves the grounding theories of the research constructs namely relationship marketing theory and social exchange theory was addressed in Chapter 1 (sections 1.3.1 and 1.3.2), Chapter 2 (sections 2.2.2 and 2.2.3) and Chapter 3 (section 3.3.1).

- Secondary objective 1b that is concerned with the main constructs of this study was presented in Chapter 1, 2 and 3. In Chapter 1, citizenship behaviours (section 1.2.1) and commitment (section 1.3.3) are discussed. In Chapter 2, a better understanding of commitment (section 2.2.3) and the types of commitment identified for this study namely affective commitment (section 2.2.3.3.1) and normative commitment (section 2.2.3.3.2) was provided. More insight in the antecedents of affective and normative commitment was also provided in Chapter 2 and included emotional support (section 2.2.3.4.1), social switching costs (section 2.2.3.4.2), position involvement (section 2.2.3.4.3), subjective norm (section 2.2.3.4.4) and perceive critical mass (section 2.2.3.4.5). An overview of the online community citizenship behaviour construct was provided in Chapter 3 where citizenship behaviour was discussed in section 3.3 and online community citizenship behaviour in section 3.4. Also, more insight was provided regarding the online community citizenship behaviours relevant to this study (section 3.4.2) and online community citizenship behaviours directed towards administrators and members (section 3.4.3).

- Secondary objective 1c which relates to the interrelationships between the constructs were attended to in Chapter 1 (sections 1.3.3.1 to 1.3.3.3) and Chapter 4 (sections 4.2.1 to 4.2.7). The conceptual model of the study was presented in section 4.3 and .

Concerning secondary objectives 1a to 1c, no main findings are presented. The insights obtained from these objectives were used to assist with the formulating and realisation of the remaining secondary objectives and also contributed to developing relevant conclusions and recommendations for the main findings of this study.

7.3.2 Secondary objective 2

Table 7-2 presents the secondary objective 2 for this study.

Table 7-2: Secondary objective 2

Secondary objective 2
To develop a sample profile of the residential online activity community members on Facebook who participated in this research study.

To achieve secondary objective 2, the demographic information of the respondents was obtained in Section C of the questionnaire. The respondent's gender, age, employment status, marital status, ethnicity and their highest level of education were established in this particular section.

The main findings about the demographic profile of the respondents who participated in this study are presented in section 6.3 (main findings 1, 2, 3, 4 and 5). Main finding 1 specifies that the realised sample are all current and active members of residential online activity communities on Facebook which are situated across the nine provinces of South Africa. Main finding 2 indicates that both male and female members participated in this study with the majority of the respondents being female (85.0%). Main finding 3 reveals that all the respondents who participated in this study are older than 18 years of age, with the majority (64.0%) being older than 36 years. Main finding 4 states that a total of 30.6% of the respondents are between the ages of 36 to 47 years and 29.5% of the respondents are between the ages of 48 to 66 years. Main finding 5 concludes that the respondents who participated in this study are mainly white (92.0%) and employed (76.4%), almost two thirds of them are married (64.2%) and the majority of the respondents (59.9%) have either a diploma (29.4%) or matric/grade 12 (30.5%) whereas little over one third (35.0%) of the respondents are graduated, with a degree (19.4%) or a postgraduate degree (15.6%) as their highest level of qualification.

Following the main findings from section 6.3, the main conclusion, implication and recommendation pertaining to secondary objective 2 can be stated as:

Main conclusion 1: The typical respondent that took part in this study is white, married females who are currently employed and are older than 36 years of age with either matric/grade 12 or a diploma as their highest level of education. Furthermore, all of the respondents who participated in this study are older than 18 years of age, are current and active members of a residential online activity community on Facebook and are situated across the nine provinces in South Africa. It can, therefore, be concluded that the respondents who participated in this study form part of the sample population presented in section 1.7.3.1 and section 5.2.8.1.

Implication 1: It seems that the respondents who participated in this study are in a position to perform citizenship behaviours as they are current and active members of a residential online activity community and can, therefore, assist fellow members to correctly use the services of the online community based on their own experience. Also, since these respondents are current and active members, they have the first-hand experience in the operational and functional problems occurring on the residential online activity community. Hence they can provide constructive feedback to the administrators relating to operational or functional problems experienced. Most of the respondents are furthermore married, employed, and the respondents can also be viewed as matured since they are older than the age of 36. These respondents can consequently use their own experience to help fellow members when they experience personal problems by commenting on posts made in the residential online activity community on Facebook. Being educated, these respondents are furthermore literate and can communicate and actively participate in discussions taking place in the online community and also provide constructive feedback to the administrators on how they can improve the online community to better serve the needs of its members. Also, it also seems that the respondents share a common interest, in this case being a resident of a particular city and enjoys the benefits associated with being a residential online activity community member such as access to extensive information relating to the city and the receiving of social support and participation in social interactions. These respondents, therefore, have good reason to engage in citizenship behaviours in appreciation of the benefits received.

Recommendation 1: As discussed in section 1.2.2.1, international studies have established that members can play an active or passive role in online communities. Considering that all the respondents who participated in this study indicated that they are active members of the community, this study's findings then offers the starting point for insight into the citizenship behaviours of active members of residential online activity communities on Facebook. To continue

the theoretical discussion, future studies could further contrast the behaviours of active members with members performing a more passive role within the residential online activity community. It is further important for administrators to acknowledge that some members of the community may be more willing to perform an active role on Facebook and strategies should be employed to encourage these members to more actively contribute to the community.

Additionally, the respondent profile of this study offers valuable guidance to administrators on the perceptions and behaviour of respondents that are more mature and can be contrasted in future studies with the behaviours of younger members of the online community to obtain a better understanding of their unique differences.

The demographic profile also highlights the fact that administrators and researchers should recognise the different types of members according to their demographic profile relating to their age, level of education, marriage and employment and should segment the members of the residential online activity community on Facebook accordingly. Targeted strategies could then be developed to address the needs of each segment individually and to obtain greater participation. Further research should also be conducted to obtain a greater understanding of the unique needs, perceptions and behaviour of each segment and that may motive them in engaging in further online citizenship behaviours.

7.3.3 Secondary objective 3

The secondary objective 3 of this study is presented in Table 7-3.

Table 7-3: Secondary objective 3

Secondary objective 3
To measure the level of emotional support perceived by active members of the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

Sections 1.3.3.2.1 and 2.2.3.4.1 noted that emotional support is regarded as a key motivation for individuals to join and visit an online community since individuals have the need for support from members who have been faced with similar problems and can assist them in solving their problems (Johnson & Lowe, 2015:3). Initially introduced within an offline environment, emotional support is concerned with individuals listening, caring and sympathising with other individuals (Helgeson, 2003:25). When applied to an online community, emotional support refers to the concern, understanding and empathy being exchanged between online community members through the sending and replying to messages (Liang *et al*., 2011:72; Taylor *et al*., 2004).

The main findings from the literature study relating to emotional support can, therefore, be summarised as follows:

- Emotional support includes aspects such as love, care, empathy and concern (Dalgard, 2010).
- Emotional support is concerned with the support between members to solve problems (Liang *et al*., 2011:72).
- Emotional support is regarded as a key motivator for members to join and visit an online community.

The empirical results relating to emotional support has indicated that the respondents agreed the most that when they are faced with difficulties in general, some members of the residential Facebook group are on their side and comforted and encouraged them (main finding 6, Chapter 6, section 6.4.1). Therefore, online community members recognise the emotional support received from fellow residential online activity communities on Facebook. The respondents agreed the least that when they are faced with difficulties in general, some members of the residential Facebook group read their posts about their personal feelings (main finding 7, Chapter 6, section 6.4.1. It is further noted in Table 6-, that the majority of the mean scores were greater than 3 and leaned towards the strong end of the agreement scale, which means that the respondents tend to agree with the statements measuring emotional support. It can, therefore, be concluded that the matters raised in the literature study concerning emotional support are relevant to members of an online community. The respondents of this study experienced emotional support from fellow members of the online community who were empathetic and showed that they care for them and are concerned about them.

Based on the discussion above, the following main conclusion, implication and recommendation can be noted:

Main conclusion 2: Concerning the agreement with the statements measuring emotional support, it appears that the measurement items used by Chen *et al*. (2013) within a social network environment are relevant within residential online activity communities on Facebook. Specifically, the active members of a residential online activity community are of the opinion that when they are faced with difficulties in general, some members of the online group were on their side and comforted and encouraged them. Also, the online community members perceive that when facing difficulties, some members expressed interest and were concerned with their well-being. It furthermore seems that in difficult times, the members also received support and reassurance

from some members of the residential online activity community on Facebook and believed that some members read their posts about their personal feelings.

Implication 2: The empirical findings relating to emotional support, provides a further confirmation that Chen *et al.*'s (2013) measurement items for the construct are relevant within residential online activity communities on Facebook. Some studies have investigated emotional support within an online environment (Chen & Shen, 2015; Chen *et al*., 2013) but no study has investigated the construct amongst residents who are members of a particular city's Facebook group and therefore this study makes a valuable theoretical contribution in this regard.

It is furthermore implicated that members seem to be aware of the emotional support from fellow members within an online community and therefore it is important that administrators acknowledge this construct. Administrators should subsequently, delve deeper into the construct and the measurement statements so that they fully understand the meaning of comfort and encouragement expected of the members.

Recommendation 2: Considering the relevance of emotional support to the online community environment (being residential or other types of communities), future research should be conducted with the aim to improve the measurement scales and make them even more applicable to specific online communities. Further research should be conducted to identify additional measurement items that may also be relevant and reflect members' perceptions of emotional support received. Additional research should also be conducted to gain a better understanding of the meaning of support and reassurance from the member's perspective. Administrators of online communities, should further implement strategies to improve the emotional support provided by members. Favourable environments, for example, should be created where members feel safe and have the opportunity to ask for support without being harassed or judged by fellow members. In turn, administrators should also encourage members to provide emotional support when fellow members are faced with difficulties.

7.3.4 Secondary objective 4

The secondary objective 4 of this study is presented in Table 7-4.

Table 7-4: Secondary objective 4

Secondary objective 4
To measure the level of social switching costs perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

As discussed in sections 1.3.3.2.2 and 2.2.3.4.2, social switching costs relate to the potential loss of the personal friendship which was developed between the offline organisation and customer should the customer decide to switch to another organisation (Jones *et al*., 2007:338). Social switching costs form part of the switching cost construct and refer to positive switching costs since the costs result from a loss of positive benefits (friendship) (Jones *et al*., 2007:336; Meng & Elliot, 2009). Although limited studies have examined social switching costs within an online community, Chen (2012:5668) did examine the factor as part of the switching cost construct and defined social switching costs within a social network environment as the loss of friendships which have been developed with the social network site. Section 2.2.3.4.2 further argued that social switching costs in an online environment occur when members lose the friendships which were developed with the residential online activity community when they decided to switch to another community.

Consequently, the main findings from the literature study relating to social switching costs can, therefore, be summarised as follows:

- Social switching costs are viewed as a type of switching costs.
- Social switching costs are viewed as a positive switching cost in the sense that an individual would prefer to remain in the relationship to avoid the social switching cost incurred.
- In an online community environment, social switching costs are concerned with the personal friendship developed with the online community.
- Social switching costs also may also concern the difficulty of members to tell other members and the administrators of the online community that they have decided to switch to another online community.

It was empirically found, that the respondents agreed the most that if they switch to another residential Facebook group, they will lose the friendships which they have developed with the current online community (main finding 11, Chapter 6, section 6.4.1). This finding indicates that friendships are developed within online communities, and the loss of these friendships should make the member switch to another group can be viewed as a social switching cost to them. The respondents agreed the least that if they switch to another residential Facebook group, they might find it very difficult to tell the members of the current group that they are switching to another group (main finding 12, Chapter 6, section 6.4.1). It is further notable from Table 6- that the respondents generally were in low agreement with the items measuring the social switching cost construct as the mean scores of all measurement items were less than 2 (main finding 10, Chapter 6, section 6.4.1). Table 6-, however, further indicates that the standard deviations of the items

measured range between 1.12 and 1.20, thereby indicating that not all respondents in this study were reluctant to agree with the items measured. Considering these findings and the fact that an unlabelled continuous Likert scale was employed where a measure of 1 or 2 did not reflect complete disagreement, the decision was made to retain the factor for further analysis in the study.

Subsequently, given the discussion above, the main conclusion, implication and recommendation relating to social switching costs are presented next.

Main conclusion 3: As argued above, although the measurement items of the social switching cost scored low values, there still appears to be some level of agreement with the statements measured. Furthermore, considering that good model fit and regression values were obtained when the construct was included in the structural model (refer to section 6.7.1), the decision was made to retain the social switching cost factor, as it appears to be relevant in this study. Hence, when switching to another residential online activity community on Facebook, some members might lose their friends and important personal relationships which they have developed with the current online community. It also seems that some members might feel a little uncomfortable to tell fellow members of the group or administrators that they are switching to another residential online activity community on Facebook. Furthermore, when some respondents switch to another residential online activity community, it will be difficult for them to tell the administrators and members of the current group that they are going to switch to another group.

Implication 3: Overall it appears that social switching cost is a factor relevant to an online community environment and should be acknowledged by administrators when designing their online community strategies. The results indicated that some residential online activity community members seem to experience social switching costs when they decide to switch to another group. Extending the offline measurement items by Shukla *et al.* (2016) to a residential online activity community on Facebook, this study, therefore, provided a starting point for future studies to investigate the influence of social switching costs within residential online communities. Further research, however, is required to refine the social switching cost measurement scale and explore additional measurement items that may be more relevant to the broader residential online community.

Recommendation 3: Social switching cost has received limited attention in the online community environment and should be further explored to determine its relevance to other types of online community environments. For administrators of online communities, it is recommended that they gain a better understanding of the social switching costs which may be experienced by online community members, as to develop appropriate strategies for retention within the residential

online activity community. Specifically, administrators of online communities could ensure that members develop friendships and personal relationships with the online community, to avoid defection to another community. To promote the building of friendships and personal relationships, administrators must create an open and friendly environment where these types of relationships can be formed between members. This type of environment can be created when administrators actively manage the interactions by deleting offensive comments and intervening when fights between members occurs. Administrators should also implement strict rules to ensure that a type of environment is created where friendships and personal relationships can be formed.

7.3.5 Secondary objective 5

Table 7-5 presents the secondary objective 5 of this study.

Table 7-5: Secondary objective 5

Secondary objective 5
To measure the level of position involvement perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

Extant literature regarding the position involvement of an online community is presented in sections 1.3.3.2.3 and 2.2.3.4.3. The literature study revealed that position involvement within an offline environment refers to the extent to which an individual's public association with the service is in line with the individual's own value and self-image (Bloemer & Odekerken-Schröder, 2007:25; Freedman, 1964:293). Position involvement is grounded in the identification theory, where an individual identify themselves with the values and image of the brand or product (Pritchard *et al*., 1999:335). When applied to online communities, position involvement is also grounded in the social identity theory where online community members develop a self-awareness of the online community membership due to the similarities which are established with fellow members and dissimilarities with non-members of the group (Ashforth & Mael, 1989:26; Dholakia *et al*., 2004:245). Position involvement of online community members is therefore defined as the impression of one's self regarding the defining features of the online group (Bagozzi & Dholakia, 2002:11). Therefore, when members experience an online community to be a reflection of their self-image, they tend to be more satisfied with the online community and believe that the online community can satisfy their needs.

The main findings from the literature study relating to position involvement can, therefore, be summarised as follows:

- Position involvement can be evaluated by determining if an individual's internal values and self-image is consistent with the image of a specific brand (Chang & Gibson, 2015:41).

- Position involvement is concerned with the identification process of an individual (Bhattacharya & Sen, 2003; King *et al*., 2016; Tajfel, 1978).

- Position involvement of the online community is grounded in the social identity theory (Bhattacharya & Sen, 2003; King *et al*., 2016; Tajfel, 1978).

- Position involvement of an online community is concerned with the impression of the member's self, regarding the features of the online group (Bagozzi & Dholakia, 2012:11).

- When the position involvement of the online community is high, members tend to be more satisfied and have higher levels of participation in the community (Ma & Agarwal, 2007:52).

Empirically it was established in this study, that the respondents agreed the most that they prefer to be a member of this residential online activity community because the image of the community comes the closest to reflect their lifestyle (main finding 8, Chapter 6, section 6.4.1). The respondents agreed the least that they prefer to be a member of the residential online activity community because the persona of the group comes the closest to reflect their personal image (main finding 9, Chapter 6, section 6.4.1). Table 6- furthermore indicates that the two statements referring to the persona of the group were scored lower than 3. This might be due to some of the members that did not acknowledge that a residential online activity community has a specific character or persona. Overall, however, the mean scores for 3 of the 5 statements were greater than 3, leaning towards the strong end of the agreement scale. Also, since an unlabelled continuous Likert scale was used where a measure of 1 or 2 did not reflect complete disagreement, it can be concluded that the matters raised in the literature concerning position involvement are relevant to residential online activity communities on Facebook.

Consequently, given the discussion presented above, the main conclusion, implication and recommendation concerning position involvement can be noted as:

Main conclusion 4: Considering the relevance of position involvement within a residential online activity community, it can be concluded that the extent to which the image of the online community reflects the lifestyle of the member might influence the member's preference to belong to the specific group. Also, members seem to prefer residential online activity communities on Facebook when the interaction and communication taking place between members reflects the kind of person they are. Therefore, the image of this residential online activity community on Facebook should correspond with the self-image, lifestyle and type of person of its members. Some

members, however, are reluctant to agree that the persona of the group comes the closest to reflecting their personal image and lifestyle. This viewpoint though was not shared by all respondents who participated in the study, as reflected by the standard deviation of 1.17 and the fact that an unlabelled continuous Likert scale was employed and specific categories of agreement and disagreement were not measured.

Implication 4: Position involvement has not yet been investigated within an online community environment, and therefore this research provided a valuable contribution by extending the measurement items used by Bloemer and Odekerken-Schröder (2007) within an offline context to residential online activity communities on Facebook. Also, this study provided a valuable contribution by confirming that position involvement is relevant to residential online communities on Facebook. Administrators of online communities should, therefore, be able to gain a better understanding of the extent to which the online community is aligned to the self-image and lifestyle of its members.

Recommendation 4: Since this study was the first to investigate the relevance of position involvement within an online community, it is recommended that additional research be conducted to refine and improve the measurement items employed in this study. Also, the relevancy of position involvement should also be examined within different types of online communities as to develop a thorough measurement set of items which can be used for online communities in general. It is also imperative that administrators of online communities have a clear understanding of the image portrayed to the community and ensure it is aligned with the image of its members. Members should furthermore clearly be able to identify the image of the residential online activity through the communication stipulated by the administrators of this community. For example, administrators could communicate this information in the description section of the Facebook group and manage the conversations and interactions taking place in the online community so that it reflects the image of the residential online activity community.

7.3.6 Secondary objective 6

The secondary objective 6 for this study, is presented in Table 7-6.

Table 7-6: Secondary objective 6

Secondary objective 6
To measure the level of the subjective norm perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

The literature review presented in sections 1.3.3.3.1 and 2.2.3.4.4, indicated that subjective norm within an offline environment is grounded in the theory of planned behaviour which anticipates and explains individual's behaviour according to their beliefs and attitudes (Ajzen, 1991:182). Subjective norm is defined as the perception of the individual that most of the people who are important to them believe that they should perform the specific behaviour in question. Subjective norm is, therefore, the assessment of social pressure to perform or not to perform a specific behaviour (Ajzen, 1991:188; Rhodes & Courneya, 2003:130). Within an online community, it has been noted that subjective norm is often presented by compliance which refers to the acceptance of social influences to obtain support or approval from significant other regarding the performance of a behaviour (Shen *et al*., 2010:159). Hence, the subjective norm of an online community member indicates the effect of the opinion of individuals important to the member on their behaviours within the online community (Zhou *et al*., 2011:70). Literature indicated that when people who are important to an individual feel that they should perform a specific action the individual will do so based on subjective norm being presented.

The main findings from literature relating to the subjective norm, can, therefore, be summarised as follows:

- Subjective norm is grounded in the theory of planned behaviour (Ajzen, 1991:182).
- Subjective norm is established through the individual's belief concerning the outcomes or results derived from performing the behaviour (Montaňo & Kasprzyk, 2015:98).
- Subjective norm creates the perceived pressure to perform or not to perform a particular behaviour (Courneya *et al*., 2000:203).
- Within an online community, the subjective norm of the community is often portrayed when the member comply and accept the social influenced from people who are important to them (Shen *et al*., 2010:159).
- Subjective norm is only influenced by people who the member regard as significant and important, thus not by any person.

The empirical investigation of this study revealed that the respondents agreed the most that in general, their friends are the people who think that they should frequently post content on the residential online Facebook group (main finding 15, Chapter 6, section 6.4.2). Friends of the members can, therefore, be viewed as individuals who might influence members to post content in the online group. The respondents agreed the least that in general, the people who influence their behaviour are the people who think that they should frequently post content on this

residential Facebook group (main finding 16, Chapter 6, section 6.4.2). As further noted from Table 6-, all the mean scores of the statements measuring subjective norm were less than 3. However, the standardised deviation scores for these items range between 1.12 and 1.28, thereby indicating that not all respondents in this study were reluctant to agree with the items measured. Hence, considering these findings and the fact that an unlabelled continuous Likert scale was employed where a measure of 1 or 2 did not reflect complete disagreement, the decision was made to retain the factor for further analysis in the study.

Consequently, based on the above discussion, the next main conclusion, implication and recommendation can be noted:

Main conclusion 5: As argued above, although the measurement items of the subjective norm factor scored lower values there still appears to be some level of agreement with the statements measured. Furthermore, considering that good model fit and regression values were obtained when the construct was included in the structural model (refer to section 6.7.1), the decision was made to retain the subjective norm factor, as it appears to be relevant in this study. Hence, it seems that when the friends of some online community members' are of the opinion that they should post content on the residential online activity on Facebook, the member will do so. Also, it seems that when people who are valuable and important approve of them frequently posting content on the residential online activity community on Facebook, the members will perform this behaviour. To some extent, influential people and people who influenced their behaviour will also impact on the members' posting behaviour in online communities.

Implication 5: Based on the findings it seems that certain important people seem to influence the posting behaviour of online community members. Specifically, the measurement scale of Chen *et al.* (2013:2535), as applied to the residential online activity community environment reflects that friends, people who are valuable and important to the members and influential people may impact on some members' posting behaviour. To the knowledge of the researcher, only a limited number of studies have investigated the relevance of subjective norm within an online community environment, thus this study makes a further contribution in this regard. Furthermore, it is advised that administrators gain a better understanding of who these important, valuable and influential people are that may impact the posting behaviour of members of residential online activity communities.

Recommendation 5: Various groups of people seem to influence the posting behaviour of online community members. However, since limited research has been conducted on this topic, it is suggested that the construct is further investigated within an online community environment. The lower level of agreement with the measurement items used in this study might indicate that the

items did not fully capture the essence of the construct, and therefore it is strongly advised that in future research, the measurement items are refined and additional items are developed and empirically tested. Since subjective norm involves the social pressure to perform or not to perform a specific behaviour, it might be beneficial that future research clarifies the concept of social pressure and the extent to which it contributes to members' participation on the residential online activity community on Facebook. Additionally, administrators should also develop targeted strategies to enhance the social pressure on the online community members, resulting in the members to frequently post on the residential online activity community on Facebook. Administrators should also perform additional marketing research initiatives, with the aim to establish who the important, valuable and influential people are that may impact the posting behaviour of members of residential online activity communities.

7.3.7 Secondary objective 7

The secondary objective 7 of this study is presented in Table 7-7.

Table 7-7: Secondary objective 7

Secondary objective 7
To measure the level of the perceive critical mass perceived by active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

In sections 1.3.3.3.2 and 2.2.3.4.5, it was noted that the concept of critical mass was initially defined within the science discipline where critical mass refers to the number of radioactive material which needs to be present for a nuclear explosion to take place. This concept was then applied by Oliver *et al.* (1985:523) to the social science and Rodgers (1995:313) to technology where critical mass refers to the minimum number of users which needs to adopt the technology before the speed of the adaption increase. As further noted from section 2.2.3.4.5, critical mass forms the foundation of the collective action theory (Lim, 2014:272; Lou *et al*., 2000:93) since the behaviours of a group of individuals working together to reach a common goal will not take place until the critical mass of participants have not been reached (Shen *et al*., 2009:710). Additionally, it was mentioned that since it is difficult to determine the exact point of critical mass, researchers such as Lou *et al.* (2000:94) and Zou and Wang (2012:293) suggested to refer to perceive critical mass as the perception of individuals relating to when the point of critical mass has been reached. Section 2.2.3.4.5 then further proposed that when the perceive critical mass of online community members have been reached, non-members will be more motivated to join the online community and current members will be motivated to participate more frequently. The perceive critical mass of the online community is, therefore, the number of members who are needed for the online

community to be adopted by non-members and to benefit from more frequent interaction by members (Sledgianowski & Kulviwat, 2009:80).

Consequently, the main findings from the literature concerning perceived critical mass can be summarised as follows:

- Perceive critical mass is relevant to the technology adoption behaviour of individuals (Rodgers *et al*., 1985:523).
- Perceive critical mass is the foundation of collection action (Lim, 2014:272; Lou *et al*., 2000:93). Therefore, the perceive critical mass must be reached for a group of individuals to work together to reach a common goal.
- Perceive critical mass refers to the perception of the individual when the point of critical mass has been reached (Lou *et al*., 2000:94; Zou & Wang, 2012:293).
- Perceive critical mass is of value in technology acceptance environments such as online communities.
- The perceive critical mass of the online community is, therefore, the number of members who are needed for the online community to be adopted by non-members and to benefit from more frequent interaction by members.

The empirical results indicate that the highest response rate was obtained for the statement indicating that most people in the respondents' society frequently post contents on their residential Facebook group (main finding 17, Chapter 6, section 6.4.2). The respondents agreed the least that most people in their work environment frequently post contents on their residential Facebook group (main finding 18, Chapter 6, section 6.4.2). As noted in Table 6-, only one statement had a mean score of greater than 3. However, the standardised deviation scores for the items in Table 6- range between 1.11 and 1.23, thereby indicating that not all respondents in this study were reluctant to agree with the items measured. Hence, considering these findings and the fact that an unlabelled continuous Likert scale was employed where a measure of 1 or 2 did not reflect complete disagreement, the decision was made to retain the factor for further analysis in the study.

Subsequently, given the discussion above, the main conclusion, implication and recommendation relating to social switching costs are presented next.

Main conclusion 6: As argued above, although the measurement items of the perceive critical mass factor scored lower values, there still appears to be some level of agreement with the statements measured. Furthermore, considering that good model fit and regression values were obtained when the construct was included in the structural model (refer to section 6.7), the decision was made to retain the perceive critical mass factor, as it appears to be relevant in this study. Hence, based on the measurement items of Chen *et al.* (2013) scale, as adapted for the purpose of this study, it seems that there is some level of agreement that frequent posts are made on the residential Facebook group by most people in the respondents' society, social group, work environment, friends and peers who contribute to the perceived level of critical mass.

Implication 6: This study contributed to the knowledge of perceive critical mass within residential online communities, by adapting the identified measurement items in a social network environment (Chen *et al*., 2013) to a residential online activity community on Facebook. Since limited studies have investigated the concept of perceive critical mass within an online environment, this study made a valuable contribution by establishing the groups of people who might contribute to residential online activity communities reaching the perceive critical mass which will result in members and non-members adopting the technology. Administrators of online communities should, therefore, gain more in-depth information about the society in which the members are located as to develop strategies that will motivate the people in the society of the members to belong and participate in the online communities, as it will lead to non-members joining the online community and current members being more actively involved in discussions. Administrators should also gain more insight into these groups as it might provide strategic direction and will prevent them from wasting time and resources managing and interacting with groups of people which will not affect the perceive critical mass of the online community.

Recommendation 6: Since limited studies have investigated the perceive critical mass of residential online activity communities on Facebook, it is suggested that future research investigate the possibility of alternative groups which may also influence the perceive critical mass of residential online activity communities. It is furthermore advised that the current measurement items used for this research are refined by investigating the concept in different types of online community environments. When an online community reach perceive critical mass, the size of the community and level of participation might increase. Therefore, it is imperative that administrators acknowledge the groups of people who can contribute to reaching the perceive critical mass. Administrators should furthermore, develop and manage strategies which motivate the relevant groups of people to join the online community as to reach the desired level of perceive critical mass.

7.3.8 Secondary objective 8

Secondary objective 8 of this study is presented in Table 7-8.

Table 7-8: Secondary objective 8

Secondary objective 8
To measure the levels of commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. Most specifically, by investigating the: 8a) level of affective commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. 8b) level of normative commitment of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months.

It was noted in section 1.3.2 that commitment is viewed as a key construct of the relationship marketing theory (Hunt *et al*., 2006:77; Lewin & Johnson, 1997:28; Morgan & Hunt, 1994:22). Section 2.2.2 further states that relationship marketing refers to attracting, maintaining and enhancing customer relationships with the organisation (Barry, 1983:25). Based on the identified generic elements of the relationship marketing discussed in section 2.2.2.1, this study defined relationship marketing as a long-term continuous process of attracting, maintaining and enhancing of customer relationships using a network orientated approach, where the relational exchange is focussed on value creation which ultimately leads to greater profitability. Section 2.2.2.2 further suggest that relationship marketing is also relevant within an online community and based on the key elements identified within an offline environment, this study define online community relationship marketing as a long-term continuous process of attracting, building, maintaining and enhancing member relationships through relational exchanges and a network orientated approach which focuses on value creation that may ultimately lead to profitability.

As further mentioned in section 2.2.3 and above, commitment is viewed as a key underpinning of relationship marketing and is viewed as the desire to maintain and continue with the relations and involve the constant notion and intention of the parties to maintain the relationship between them (Dalziel *et al*., 2011:404; Geyskens, 1996:30). Within an online community, commitment refers to online community members joining the online community and maintaining the membership while receiving benefits for being a member and participating in the online community (Kim *et al*., 2008:415). Commitment is furthermore viewed as a multi-dimensional construct and consists of affective-, continuous- and normative commitment (Bateman *et al*., 2011; Chen *et al*., 2013; Meyer & Allen, 1991). As motivated in section 1.2.1, this study only further investigates affective-

and normative commitment within an online community environment, since continuous commitment has been proved to influence citizenship behaviours negatively.

Affective commitment refers to the identification with, involvement in and the emotional attachment towards an organisation (Allen & Meyer, 1990:3; Meyer & Allen, 1991:64). Affective commitment is, therefore, the psychological position which connects the customer with the marketing partner and is grounded in identification and attachment (Fullerton, 2011:93). Affective commitment is also relevant to online community environments and refers to the connection between the member and the specific online community which is grounded in the strong emotional attachment towards the community (Bateman, 2011:843). Feelings of attachment and identification with the online community can be formed due to the affective ties between members and the online community. Affectively committed members may show interest in the online community and might participate and contribute to discussions taking place on the online community (Liu *et al*., 2016:694; Sun *et al*., 2014:114).

As noted from section 2.2.3.3.2, normative commitment refers to the sense of obligation to continue with the relationship (Bansal *et al*., 2004:236). Normative commitment has been founded to be relevant to online community environments, and refer to the feeling of obligation to continue to be a member of the online community (Sun *et al*., 2014:114). The sense of obligation results from online community members receiving benefits and then feeling obligated to repay the benefits by supporting the online community (Liu *et al*., 2016:695).

Therefore, for the purpose of this study, affective commitment refers to the strong emotional feeling of being attached to and being able to identify with the residential online activity community where as normative commitment refers to the sense of obligation to stay with the residential online activity community due to the benefits received by the online community members.

The main findings from the literature study concerning affective- and normative commitment can, therefore, be summarised as follows:

- Affective- and normative commitment is grounded on the relationship marketing theory.
- Affective- and normative commitment are both sub-dimensions of commitment.
- Affective commitment is an emotional attachment which involves feelings of identification and involvement with the online community.

- Normative beliefs can be developed due to the strong correspondence between the values of the organisation/online community and that of the customers/online community members (Arnold *et al*., 2001:246; Fullerton, 2014:660).

- Normative commitment refers to a sense of obligation to continue being a member of the online community.

As indicated by the literature study, affective commitment is concerned with the feelings of identification and involvement with the online community. The empirical results about the level of affective commitment towards the residential online activity community indicated that the respondents agreed most that they would be happy to stay with their residential Facebook group when they consider all things (main finding 13, Chapter 6, section 6.4.1). The respondents seemed to be more reluctant to agree that they feel emotionally attached to the residential Facebook group. The respondent agreed the least with this statement (main finding 14, Chapter 6, section 6.4.1) and a mean score of 2.40 was obtained.

As further noted in Table 6-, only two statements had a mean score of greater than 3. However, the standardised deviation scores for the items in Table 6- range between 1.00 and 1.29, thereby indicating that not all respondents in this study were reluctant to agree with the items measured. Hence, considering these findings and the fact that an unlabelled continuous Likert scale was employed where a measure of 1 or 2 did not reflect complete disagreement, the decision was made to retain the factor for further analysis in the study.

Furthermore, as indicated in the literature, normative commitment is concerned with the obligation of the online community members to continue participating in the online community due to the benefits they have received from being a member of the online community. It was found that the respondents agreed the most that in general, they would feel obligated to continue posting content on this residential Facebook group (main finding 20, Chapter 6, section 6.4.2). The respondents agreed the least that in general, they would feel guilty if they stop posting content on this residential Facebook group (main finding 21, Chapter 6, section 6.4.2). Overall, the respondents were in low agreement with the items that measuring normative commitment (main finding 19, Chapter 6, section 6.4.2). However, the standardised deviation scores for the items in Table 6- range between 1.07 and 1.27, thereby indicating that not all respondents in this study were reluctant to agree with the items measured. Hence, considering these findings and the fact that an unlabelled continuous Likert scale was employed where a measure of 1 or 2 did not reflect complete disagreement, the decision was made to retain the factor for further analysis in the study.

Main conclusion 7: As argued above, although the measurement items of the affective and normative commitment factors scored lower values, there still appears to be some level of agreement with the statements measured. Furthermore, considering that good model fit and regression values were obtained when the constructs were included in the structural model (refer to section 6.7), the decision was made to retain the affective and normative commitment factors, as it appears to be relevant in this study.

Specifically, it seems that some residential online activity community members have a sense of identification and attachment towards the residential online community as they indicated that they would be happy to stay with the online community and have a strong sense of belonging and identification towards the residential online activity community on Facebook. The residential online activity community on Facebook furthermore appears to have a great deal of personal meaning to the online community members and they seem to be emotionally attached to the residential online activity community. Concerning normative commitment, it appears that some members feel obligated to continue posting on the residential online activity community on Facebook. Also, some online community members also seem to feel obligated to continue taking part in conversations as they feel, responsible to continue taking part in conversations.

Implication 7: The findings make a valuable contribution to the field of residential online activity communities on Facebook by extending the measurement items identified by Bloemer and Odekerken-Schröder (2007) within an offline environment and Chen *et al.* (2013) within a social network site environment to the context of residential online activity communities on Facebook. Therefore, it seems that online community members who have identification with and an attachment towards the online community are the ideal targets for relationship marketing initiatives and retention strategies. Administrators should, therefore, understand the reasons why some online community members identify themselves with the residential online activity community on Facebook, are happy to stay with the group and have a strong sense of belonging to the online community. Administrators should be sensitive and considerate to the emotions of the online community members and should ensure that the relationship is well-handled.

To the knowledge of the researcher, limited studies have investigated the effect of normative commitment within a residential online activity community on Facebook, and therefore this study also provides a novel and valuable contribution in this regard. This study extended the measurement items identified by Chen *et al.* (2013) to a residential online activity community environment and established that although the respondents were conservative with their scoring of the items, the construct seems to be relevant to this environment. Therefore, it seems that the norms of the residential online activity community on Facebook correspond to the norms of some

of the online community members and should be acknowledged by administrators. Administrators should, furthermore, aim to gain more insight into the sense of obligation of the online community members to continue posting on the online community and take part in the conversations as the knowledge can assist them to promote the normative commitment towards the online community.

Recommendation 7: Researchers should take note that online community members might develop an attachment for and an identification with the residential online activity community, and future research should investigate this form of commitment within in different types of online communities as the extent of the attachment and identification might differ between contexts. Insight into these matters may then further assist in enhancing and improving the affective commitment measurement scale, to more effectively measure members' affective commitment towards residential online activity communities. It is furthermore advised, that future research establishes which type of commitment are the most important within a residential online activity community on Facebook as this information contribute to current theory and can also assist administrators to develop targeted commitment related strategies. Administrators of online communities can positively increase the members' level of affective commitment when they develop and implement strategies which encourage members to provide emotional support to fellow members and should, therefore, aim to develop opportunities where the members can comfort fellow members (Chen *et al*., 2013:2534) in a friendly environment where members can comment and reply to posts freely.

Since limited studies have investigated the impact of normative commitment within online communities, it is recommended that the measurement items which was used in this study is further researched and additional measurement items are investigated within a residential online activity community and online communities in general to more effectively measure normative commitment. Based on the low agreement with the measurement items, it is also possible that some online community members may not yet realise the benefits they are receiving from the online community and are therefore to a lower extent, normative committed towards the online community. It is therefore imperative that future research provides more insight into the benefits received by members and should determine the extent to which residential online activity community members acknowledge these benefits. It is, therefore, also very important for the administrators to promote and communicate the benefits of the online community, which might result in online community members feeling obligated to repay the benefits by participating in the online community.

7.3.9 Secondary objective 9

Secondary objective 9 of this study, is presented in Table 7-9.

Table 7-9: Secondary objective 9

Secondary objective 9
To measure the levels of online community citizenship behaviours of active members towards the residential online activity community on Facebook of selected cities in South Africa in which they have most often participated during the last 12 months. More specifically to measure the extent to which active members of the residential online activity community on Facebook, have the intention to: 9a) provide feedback to administrators relating to the general improvement of the residential online activity community on Facebook. 9b) provide feedback to administrators relating to operational problems experienced on the residential online activity community on Facebook. 9c) perform policing behaviours towards administrators of the residential online activity community on Facebook. 9d) perform helping behaviours towards fellow members relating to the use of service of the residential online activity community on Facebook. 9e) perform helping behaviours towards fellow members of the residential online activity community on Facebook relating to personal problems they are experiencing.

In Chapter 3, section 3.2 it was noted that customer value co-creation take place during consumption in the form of customer participation and after consumption in the form of customer citizenship behaviour (Lurch & Vargo, 2006; McColl-Kennedy *et al*., 2012; Yi & Gong, 2013). Indicated in section 3.3.2, customer citizenship behaviour has previously been investigated within both the offline- and online retail environments, and more recently within online community environments (section 3.3.3). Following the literature review presented in section 3.3.3, online community citizenship behaviour is defined as the voluntary behaviours of online community members which are helpful to the online community, the administrators and members, but are not required for the online community to exist. It was furthermore indicated in Chapter 3, section 3.3.1 that citizenship behaviours are grounded in the social exchange theory (Blau, 1964). When customers have received benefits from the organisation, they may want to repay or respond by performing citizenship behaviours (Bove *et al*., 2009:703). The same exchange might also occur within an online community environment, that when members of an online community receive benefits due to the committed relationship with the online community, the members would want to reciprocate by performing online citizenship behaviours.

Concerning the dimensions of citizenship behaviour, section 3.4.1 noted that feedback intention, policing and helping intention are deemed to be relevant to residential online activity communities on Facebook and are subsequently further investigated in this study. As discussed in section 3.4.2, the concept of feedback and participation (as a dimension of citizenship behaviour) has been used interchangeably. Yi and Gong (2013) used the concept of feedback whereas Bettencourt (1997) and Rosenbaum and Massiah (2007) used the concept of participation.

However, based on the similarity of the measurement items for these two concepts, it can be assumed that in essence, the concepts are actually the same. Therefore as stated by Chou *et al.* (2016:92), feedback as a dimension of online community citizenship behaviour refers to the additional, voluntary information provided to assist the online community in the long-term. Section 3.4.3 furthermore indicate that based on the research of Rosenbaum and Massiah (2007) and Yi and Gong (2013), feedback intentions can relate to general improvement suggestions and operational problems experienced on the residential online activity community. Since the feedback is provided to the administrators of the online community, this type of online community citizenship behaviour is classified as online community citizenship behaviours directed towards administrators of the residential online activity community. It is further indicated in section 3.4.2, that no study has as yet investigated the policing behaviour of citizenship within a residential online activity community. Adapted from Bove *et al.* (2003:335) the policing of members include the actions that members take to prevent fellow members from causing problems. Members, therefore, can offer suggestions, answers and remedies to issues of inappropriate behaviour which make other members of the online community unhappy (Bove *et al*., 2009:704; Mpinganjira, 2016:6). These suggestions are made to the administrator of the residential online activity community and are therefore also classified as online community citizenship behaviours directed towards administrators. Concerning the helping intention of online community members, section 3.4.2 noted that helping behaviours are aimed to assist fellow customers (Yi & Gong, 2013:1281). Owning to the established helping intention scales founded in literature, section 3.4.3 established that the helping behaviour between online community members can relate to personal problems experienced (Yong *et al*., 2011:690) or to the use of service (Yi & Gong, 2013:1281). These helping behaviours are subsequently classified as online community citizenship behaviours directed towards members of residential online activity communities on Facebook since the behaviour is performed between online community members.

The main findings from the literature relating to online community citizenship behaviour can, therefore, be summarised as follows:

- Online community citizenship behaviour is defined as the voluntary behaviours of online community members which are helpful to the online community, the administrators and members, but are not required for the online community to exist.
- Online community citizenship behaviour is grounded in the social exchange theory (Blau, 1964).
- The customer citizenship behaviour dimensions of feedback intention, policing and helping intention are relevant to residential online activity communities on Facebook.

- Feedback intention relates to online community members making general improvement suggestions or providing feedback relating to operational problems experienced.
- Feedback intention is a citizenship behaviour directed towards administrators of an online community.
- Policing intention refers to online community members policing the behaviours of fellow members and informing the administrators should fellow members perform inappropriately.
- Policing intention is a citizenship behaviour directed towards administrators of an online community.
- Helping intentions of online community members relate to assistance provided to fellow members concerning personal problems experienced and the use of the online community services.
- Helping intentions is a citizenship behaviour directed towards members of an online community.

Based on the literature review, it was argued that within an online community, members might engage in providing feedback to administrators which include suggestions related to the general improvement of the community. The empirical results subsequently indicated that concerning the *feedback intentions relating to general improvement*, the respondents agreed the most that if they were provided with the opportunity, they would share a useful idea with the administrators who will assist them to enhance the experience on the online community (main finding 27, Chapter 6, section 6.5.2). The respondents least agreed that if they were provided with the opportunity, they would inform the administrators of ways to better service the needs of the group's members (main finding 28, Chapter 6, section 6.5.2). It is furthermore evident from Table 6-, that the overall mean scores of the statements measuring feedback intentions relating to general improvement range between 3.32 and 3.41, therefore, leaning towards the strong end of the agreement scale. Therefore it can be confirmed that feedback intentions relating to general improvement are relevant to residential online activity communities on Facebook.

Also, based on the literature review presented in Chapter 3, members of an online community might also provide feedback to administrators which relate to operational problems experienced on the residential online activity community. The empirical results concerning *feedback intentions relating to operational problems* then indicated that the respondents agreed the most that when they notice a functional/operational problem on the residential Facebook group, they will let the administrators know about it, even if the problem does not involve them directly (main finding 29,

Chapter 6, section 6.5.2). The respondents will therefore voluntary provide feedback even if they are not directly involved in the problem experienced. The respondents agreed the least that they will inform the administrators when they notice a functional/operational problem on the residential Facebook group, even if the problem does not concern them directly (main finding 30, Chapter 6, section 6.5.2). As noted from Table 6-, all the mean scores of the statements measuring the feedback intention relating to operational problems are greater than 3, therefore leaning towards the strong end of the agreement scale. Therefore it can be concluded that this factor is relevant to the residential online activity community context.

Policing intentions of online community members have received limited attention, although it was argued that members are in the position to assist administrators by voluntary offering solutions to administrators concerning member's inappropriate behaviour on the residential online activity community of Facebook. The empirical findings concerning the *policing intention* of members corresponded with the literature review and indicated that respondents agreed the most that if they were provided with the opportunity, they would suggest solutions to issues of inappropriate member behaviour that may make other members of the group unhappy (main finding 31, Chapter 6, section 6.5.2). The respondents agreed the least that if they were provided with the opportunity, they would suggest remedies to problems of inappropriate member behaviour that may upset other members of the group (main finding 32, Chapter 6, section 6.5.2). Table 6- further indicates that the mean scores of the statements measuring the policing intention range between 3.36 and 3.41 which indicate that the respondents lean towards the strong end of the agreement scale. Subsequently, these findings confirm that the policing intention of members provided to administrators is present within the online community environment.

Literature revealed that helping intentions, as a dimension of online community citizenship behaviour can relate to help provided to fellow members when they experience a personal problem or when they experience problems with the use of the online community services. The empirical research subsequently established that with regards to the *helping intentions relating to the use of service,* the respondents agreed the most that if they were provided with the opportunity, they would assist other members of the residential Facebook group to correctly using the group (main finding 33, Chapter 6, section 6.5.2). The online community members will, therefore, perform voluntary behaviours when they assist fellow members in the use of the online community. The respondents agreed the least that when they are provided with the opportunity, they will teach other members of the residential Facebook group in properly utilising the group (main finding 34, Chapter 6, section 6.5.2). Also, Table 6- indicates that the mean scores of the statements measuring the helping intention relating to the use of service were all greater than 3, therefore leaning towards the stronger end of the agreement scale. Therefore, overall the

respondents tend to agree with the statements and it can be concluded that the helping intention of members relating to the use of service is relevant to the online community environment.

Literature furthermore indicated that members of an online community could perform helping intentions towards fellow members by assisting them when they experience personal problems. The empirical results then revealed that concerning the *helping intentions relating to personal problems experienced*, the respondents agree the most that when they are provided with the opportunity to reply to posts on the residential Facebook group, they will assist other members who need their help with a personal matter (main finding 35, Chapter 6, section 6.5.2). The respondents agreed the least that when they are provided with the opportunity to reply to posts on the residential Facebook group, they will help other members who need guidance with a personal issue (main finding 36, Chapter 6, section 6.5.2). Overall, the mean ratings of the statements measuring helping intentions relating to personal problems experienced range between 3.53 and 6.62. The respondents, therefore, seem to agree with the statements, since the scores lean towards the stronger end of the agreement scale. Subsequently, the presence of helping intentions relating to personal problems within the online community environment can be confirmed.

Accordingly, given the above discussion, the following main conclusion, implication and recommendation can be noted:

Main conclusion 8: Online community citizenship behaviour seems to be relevant to residential online activity communities on Facebook. It can be concluded that online community citizenship behaviours performed by active online community members seemed to be directed towards administrators and directed towards members of the residential online activity community. Concerning the online community citizenship behaviours towards administrators, it seems that active online community members have the intention to provide feedback to administrators relating to the general improvement of the community by making constructive suggestions to the administrators which will assist them to improve the group's experience. Also, it appears that active online community members also have the intention to provide feedback relating to general improvement by informing the administrators of ways to better service the needs of the online community members and share useful ideas with them which enhance the experience of the group. Active online community members also seem to have the intention to provide feedback to the administrators relating to operational problems experienced and will let the administrators know when they notice a functional/operation problem on the online community, even if the problem does not involve them directly. Also, online community members will notify and inform the administrators of operational/functional problems, even if the problem does not directly affect

or concern them. Also, it seems that residential online activity community members also have the intention to engage in policing behaviours where they assist administrators to monitor the behaviours of the fellow online community members. About the online community citizenship behaviours towards members, it seems that active members have the intention to perform helping behaviours relating to the use of service by assisting, helping, teaching and giving advice to fellow residential online activity community members to correctly, accurately and properly use the services provided by the online community. Also, it seems that active online community members have the intention to perform helping behaviours relating to personal problems experienced by fellow members through assisting them, giving them advice, helping them and supporting them when they need assistance and guidance with a personal matter and problem.

Implication 8: The above-mentioned findings denote that after members have joined the residential online activity community, it seems that online community members can perform voluntary behaviours in the form of online community citizenship towards the online community. Although citizenship behaviour directed towards organisations and members have been previously researched (Bove *et al.* 2009; Curth *et al*., 2014; Yi *et al*., 2013), the types of citizenship behaviours pertaining to online communities have not yet received much attention in academic research and therefore the finding that different types of online community citizenship behaviours can be directed towards administrators and towards members, provide a valuable theoretical contribution. In addition, this research extend the feedback dimension as identified by Rosenbaum and Massiah (2007) and Yi and Gong (2013) within an offline environment, by investigating the dimension within a residential online activity community environment and establishing that the feedback dimension is directed towards administrators of an online community and relate to the general improvement and operational problems experienced on the residential online activity community. Furthermore, to the knowledge of the researcher, limited studies have investigated the policing dimension within a residential online activity community. Therefore, this research makes a valuable contribution in this regard as it offers confirmation that Bove's (2003:335) policing dimension may also be relevant to residential online activity communities on Facebook. Also, this research provides a better understanding of the policing dimension by verifying that this type of online community citizenship behaviour is directed towards the administrators of residential online activity communities on Facebook. Although studies have investigated the helping intention of citizenship behaviour to the knowledge of the researcher, no studies have classified this type of behaviour within a residential online activity community environment as representative of helping behaviour regarding operational problems experienced and helping behaviour relating to personal problems experienced. This research, therefore, offers a theoretical contribution by extending the current research and classifying the different types of online community citizenship behaviours relating to helping behaviour.

Since online community members can perform online citizenship behaviours directed towards administrators and towards members, administrators should delve deeper to gain a better understanding of how these two types of behaviours differ from each other and what the benefits are provided to the administrator and the online community member. Also, it is imperative for administrators to understand how and why online community members provide feedback to administrators since the feedback provided by the members can assist them to improve the group's experience and better serve the needs of the members. Although the administrators are normally the people who limit harmful and inappropriate behaviours in the online community (Uridge *et al*., 2010:231), it appears that members can assist them with this task by performing policing behaviours. Administrators should, therefore, conduct additional research concerning this behaviour to determine the strategies which they need to implement to encourage members to perform policing behaviour and fully capitalise on this behaviour. Helping intention is viewed as a prominent dimension of citizenship behaviour (Yi & Gong, 2013:1281) accordingly, it is important that administrators further establish to what extent they can be of assistance to members providing help to fellow members.

Recommendation 8: Online community members who actively participate in an online community seem to voluntary perform behaviours which are directed towards the administrators and towards the members of the online community. It may, therefore, be beneficial to gain a better understanding of these behaviours by investigating the extent to which these behaviours contribute to value co-creation in online communities. Also, the classification of these behaviours should be investigated within different types of online communities as to develop a universal classification which can apply to any form of online community. Active online community members seem to have the intention to provide feedback to administrators and therefore it will be of value to further investigate the extent to which the member intends to perform the behaviour. General improvement and problems experienced have been identified as two matters regarding which online community members provide feedback about to administrators. Hence it is recommended that future research explore additional related matters about which members might possibly also provided feedback about to the administrators. Since this research is the first to investigate policing intentions of members within an online community, it may be beneficial to extend and replicate this research as to refine the measurement items. Active online community members seem to have the intention to help fellow members relating to personal problems experienced and how to use the services of the online community. Accordingly, future research might provide more insight into the characteristics of active community members who perform these behaviours and to which extent the behaviours are performed within an online community.

Finally, since online communities can directly benefit from online community citizenship behaviours, it is important that the administrators of online communities implement strategies to encourage members to provide constructive feedback to them and also to assist the administrators to police the behaviours of fellow members. For example, administrators can complement members who actively help fellow members or even give a prize of the "Helper of the month". Also, it is imperative that administrators create an environment where members can with confidence assist fellow members. Administrators should furthermore pay attention to members who are hesitant to help fellow members and develop and manage strategies that can motivate them to perform helping behaviours. Administrations should take the lead in helping members, this being one of the first members to provide possible solutions when fellow members are experiencing a problem.

7.3.10 Secondary objective 10

Table 7-10 presents the secondary objective 10 of this study.

Table 7-10: Secondary objective 10

Secondary objective 10
To examine the interrelationships among the identified research constructs of this study.

Chapter 4 provided more insight into the potential interrelationships between the research constructs examined in this study. They are emotional support, social switching cost, position involvement, affective commitment, subjective norm, perceive critical mass, normative commitment, online community citizenship behaviours directed towards administrators concerning general improvement feedback, online community citizenship behaviours directed towards administrators concerning operational problem feedback, online community citizenship behaviours directed towards administrators concerning the policing of fellow members, online community citizenship behaviours directed towards members concerning helping behaviours relating to the use of service and online community citizenship behaviours directed towards members concerning helping behaviours relating to personal problems experienced.

The following main findings were obtained from the literature review presented in Chapter 4:

- Affective commitment might have a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.

- Affective commitment might have a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.

- Affective commitment might have a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.

- Affective commitment might have a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.

- Affective commitment might have a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.

- Normative commitment might have a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook.

- Normative commitment might have a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook.

- Normative commitment might have a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook.

- Normative commitment might have a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook.

- Normative commitment might have a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook.

- Emotional support might have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

- Social switching costs might have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

- Position involvement might have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook.

- Subjective norm might have a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

- Perceive critical mass might have a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook.

Following the literature review, the empirical investigation provided further important main findings worth mentioning. Main findings 22 to 26 and 37 to 61 are associated with objective 8.

Concerning the exploratory factor analysis performed to investigate the five citizenship behaviour factors, it was found that the sample obtained from the field study is adequate for exploratory factor analysis as the KMO measurement of sampling adequacy is 0.921 and the Bartlett's test of sphericity is significant at $p < 0.05$ (main finding 22, Chapter 6, section 6.5.1). Also, it was established that the Geomin rotated factor loadings of the EFA confirmed that a total of five online community citizenship behaviour factors could be extracted (main finding 23, Chapter 6, section 6.5.1). It was also noted that based on the scree plot and eigenvalues computed by an EFA, a total of five online community citizenship behaviour factors should be retained (main finding 24, Chapter 6, section 6.5.1). It was furthermore established that the measurement items assessed can be grouped into the same five citizenship factors as was initially identified in the commerce environment (main finding 25, Chapter 6, section 6.5.1).Therefore, applied to the context of this study, the five extracted factors are labelled as 1) feedback intention relating to general improvement; 2) feedback intention relating to operational problems; 3) policing intention; 4) helping intention relating to the use of service; and 5) helping intention relating to personal problems experienced (main finding 26, Chapter 6, section 6.5.1). Also, section 7.3.8 confirmed that based on the mean scores obtained for these factors, all extracted factors are relevant to residential online activity communities on Facebook.

Regarding the reliability and validity assessment of the measurement mode, it was also noted that all the measurement scales assessed in this study have good internal consistency as the Cronbach's alpha values are above the suggested cut off value of 0.70 (main finding 37, Chapter 6, section 6.6.1). Concerning the model fit statistics of the measurement model, it was established through a confirmatory factor analysis that the measurement model indicated acceptable model fit (main finding 38. Chapter 6, section 6.6.2.1). With respect to convergent validity of the measurement model, it was found that all standardised factor loadings of the measurement model loaded significantly onto their respective latent constructs and thus should be retained (main

finding 39, Chapter 6, section 6.6.2.2), the average variance extracted (AVE) values of the measurement constructs are all above 0.50 which indicate adequate convergence of the measurement items (main finding 40, Chapter 6, section 6.6.2.2) and that the construct reliability (CR) values of the measurement constructs are all above 0.70 which suggest that internal consistency exists for all constructs measured (main finding 41, Chapter 6, section 6.6.2.2). Therefore it was confirmed that all twelfth constructs of the measurement model have convergent validity (main finding 42, Chapter 6, section 6.6.2.2). Also, it was founded that the results obtained from the covariance matrix which include the AVE and correlation values of the constructs indicate that all constructs presented in the measurement model have discriminant validity (main finding 43, Chapter 6, section 6.6.2.3).

Therefore, subsequent to assessing the validity of the measurement model, it could be concluded that content validity was achieved since the measurement items measured what they were supposed to measure (main finding 44, Chapter 6, section 6.6.2.4) and that the measurement model proved to have construct validity since both convergent- and discriminant validity was achieved (main finding 45, Chapter 6, section 6.6.2.4).

Relating to the structural model of this study, the fit indices indicated that the structural model fits the observed data reasonability well (main finding 46, Chapter 4, section 6.7.1). Furthermore, the affective commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook (main finding 47, Chapter 6, section 6.7.2). Affective commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on Facebook (main finding 48, Chapter 6, section 6.7.2) and affective commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook (main finding 49, Chapter 6, section 6.7.2). Additionally it was also established that affective commitment has a positive and significant effect on helping intention relating to the use of service, as directed towards members of residential online activity communities on Facebook (main finding 50, Chapter 6, section 6.7.2) and also that affective commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook (main finding 51, Chapter 6, section 6.7.2). Normative commitment has a positive and significant effect on feedback intention relating to general improvement, as directed towards administrators of residential online activity communities on Facebook (main finding 52, Chapter 6, section 6.7.2). Normative commitment has a positive and significant effect on feedback intention relating to operational problems, as directed towards administrators of residential online activity communities on

Facebook (main finding 53, Chapter 6, section 6.7.2) and normative commitment has a positive and significant effect on policing intention, as directed towards administrators of residential online activity communities on Facebook (main finding 54, Chapter 6, section 6.7.2). In addition, it was also confirmed that normative commitment has a positive and significant effect on helping intention relating to the use of the service, as directed towards members of residential online activity communities on Facebook (main finding 55, Chapter 6, section 6.7.2) also that Normative commitment has a positive and significant effect on helping intention relating to personal problems experienced, as directed towards members of residential online activity communities on Facebook (main finding 56, Chapter 6, section 6.7.2).

Concerning the antecedents of commitment, it was confirmed that emotional support has a positive and significant effect on affective commitment of members of residential online activity communities on Facebook (main finding 57, Chapter 6, section 6.7.2). Social switching costs have a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook (main finding 58, Chapter 6, section 6.7.2). Position involvement has a positive and significant effect on the affective commitment of members of residential online activity communities on Facebook (main finding 59, Chapter 6, section 6.7.2) and subjective norm has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook (main finding 60. Chapter 6, section 6.7.2). Lastly, it was established that perceive critical mass has a positive and significant effect on the normative commitment of members of residential online activity communities on Facebook (main finding 61, Chapter 6, section 6.7.2).

Main conclusion 9: Taking into consideration the main findings from the empirical investigation, it is plausible to conclude that all the hypotheses formulated for this study can be accepted. Within a residential online activity community, it seems that emotional support, social switching cost and position involvement have a positive effect on the affective commitment of members of such online communities. Furthermore, subjective norm and perceive critical mass seem to have a significant impact on normative commitment within a residential online activity community environment. Additionally, affective commitment may contribute to the feedback intentions towards administrators relating to general improvement of the online community and operational problems experienced by the members. Similarly, affective commitment may also have a positive effect on the policing intentions towards administrators. Also, within a residential online community, the affective commitment of members may positively impact the helping intentions of members relating to the use of service and personal problems experienced which are directed towards fellow members of the online community. Normative commitment may furthermore contribute to the feedback intentions towards administrators relating to general improvement of

the online community and operational problems experienced. Likewise, normative commitment may also positively and significantly impact the policing intentions of online community members directed towards administrators. Also, normative commitment may also contribute to the helping intentions directed towards members relating to the use of service and personal problems experienced. Therefore, the research findings offer insight into the interrelationship between affective commitment and normative commitment and their antecedents which may contribute to online community citizenship behaviours directed towards administrators and towards members within residential online activity communities on Facebook.

Implication 9: The research findings provide more insight into the effect of relationship marketing on online community citizenship behaviours through the social exchange theory.

Commitment is viewed as a multi-dimension construct (Meyer & Allen, 1991) and has been established as important constructs which facilitate citizenship behaviours (Hashim & Tan, 2015; Kim *et al*., 2004; Yong *et al*., 2011). This research, therefore, makes a valuable contribution to a very relevant topic within the field of marketing by providing more insight into the impact of affective and normative commitment, as relationship marketing dimensions, on online community citizenships behaviours directed towards administrators and members of residential online activity communities on Facebook. Also, this research also provides a novel contribution, since the impact of these two forms of commitment has not yet been empirically tested within a residential online activity community on Facebook. This study also extends the findings of Bettencourt (1997), Kang (2007) and Yong *et al.* (2011) by investigating the effect of affective commitment on the different types online community citizenship behaviour directed towards administrators and towards members of residential online activity communities. Similarly, this research made a theoretical contribution by adding knowledge to the limited research available concerning the impact of normative commitment within an online community environment and moreover extending the research of Bateman *et al.* (2006) by examining the effect of normative commitment on the types of online community citizenship behaviour directed towards administrators and towards members of residential online activity communities on Facebook. Moreover, this study offers an original contribution by investigating the combination of affective and normative commitment in one model within the residential online activity community environment.

Second, the study also identified a novel group of factors which contribute towards normative and affective commitment and which have not yet been investigated within a residential online activity community context. Specifically, switching costs and position involvement has not yet been investigated as antecedents of affective commitment within an online community, hence this study provides a novel contribution as it is verified for the first time, that both these factors can be viewed

as antecedents of affective commitment within an online community environment. Further insight is also provided into the emotional support construct, which has previously been examined as a factor of social support (Mpinganjira, 2016:4) by establishing that emotional support as a construct has a positive and significant impact on affective commitment. In addition, normative commitment and its antecedents have previously received little attention within the online community environment, hence this study makes a valuable contribution to the theory of relationship marketing theory since it is confirmed that within a residential online activity community environment, both subjective norm and perceive critical mass can be viewed as antecedents of normative commitment.

Third, the study provides more insight into the online community citizenship behaviours directed towards administrators and members of a residential online activity community. Administrators and members of online communities are regarded as key role players within an online activity community and therefore this classification of online community citizenship behaviour add to the theoretical foundation of residential online activity communities on Facebook and online communities in general. As discussed in sections 3.4.1 and 1.2.1, customer citizenship behaviours within the offline- and online retail environment has previously been classified as behaviours directed towards organisations and towards customers. However, this classification has not yet be investigated within an online community environment, concerning different forms of citizenship behaviours directed towards administrators and members of online communities. Concerning the online community citizenship behaviours directed to administrators, this study make a theoretical contribution by extending the studies by Bettencourt (1997), Rosenbaum and Massiah (2007) and Yi and Gong (2013), to a residential online activity community and investigating the feedback dimension of citizenship behaviour as feedback intentions relating to general improvement and feedback intentions relating to operational problems experienced as discussed in section 3.4.3. Also, this study provides a better understanding of the policing dimension of citizenship behaviour (Bove *et al.*, 2003) within a residential online activity community. Although helping behaviour as a dimension of citizenship behaviour has previously been investigated, this study provided more insight into the helping behaviour dimensions and contributed to theory by investigating the dimension as an online community citizenship behaviour directed towards members relating to personal problems experienced to the use of service of residential online activity communities on Facebook as well as personal problems experienced.

Considering the various theories grounding the research concepts as discussed in Chapter 1, Chapter 2 and Chapter 3, this research furthermore provides valuable insights into the relationship marketing theory and how relationship marketing positively impact on online community citizenship behaviours through the social exchange theory.

In addition, this research also provides valuable strategic information to administrators of online communities who are experiencing low participation levels of online community members. This research implies that administrators should first acknowledge the effect of affective- and normative commitment on online community citizenship behaviours. Also, it is imperative for administrators to realise that different factors impact on different forms of commitment towards the online community. Furthermore, when members are affectively- or normatively committed, they are prone to perform online community citizenship behaviours which can either be directed towards the administrators or towards the members of the online community. Importantly, administrators should acknowledge that both these behaviours are helpful and valuable to the administrator and member (as discussed in section 3.3.3) and increase participation of the members as they post and reply to comments on the group. The research finding may also equip city marketers to develop and utilise residential online activity communities to build relationships with residents, share knowledge with them, and increase social interactions amongst residents, which might improve the social welfare of the city's residents.

Recommendation 9: The research findings presented provide a starting point to understand the relationship between commitment and online community citizenship behaviours within a residential online activity community. From a theoretical perspective, it is suggested that the identified model be further explored and re-tested within different types of online communities to verify its application within other research contexts.

From a practical perspective, administrators of residential online activity communities should realise that affective commitment and normative commitment must be managed as it may contribute to members performing online community citizenship behaviours towards administrators and towards members of an online community. Furthermore, to improve the level of affective commitment, it is recommended that administrators improve the opinions of the online community members concerning the emotional support the members are receiving, the social switching costs they are experiencing and their belief relating to the position involvement of the online community. Furthermore, administrators should also develop strategies to improve the subjective norm and perceive critical mass levels of this online community as the management of these concepts should increase the online community member's level of normative commitment. It is suggested that administrators consider various strategies regarding the level of affective and normative commitment as was provided under recommendation 1 to 6. Ultimately, these strategies may contribute to higher levels of commitment and enable administrators and online communities to benefit from online community citizenship behaviours and increase level of participation of online community members.

7.4 LINKS BETWEEN THE RESEARCH OBJECTIVES, THEORETICAL BACKGROUND, QUESTIONNAIRE SECTIONS, HYPOTHESES, MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Table 7-11 provides a summary of the linkages between the research objectives developed for this study, the chapters in which the theoretical background is presented and the sections in the questionnaires where the results were obtained from. Table 7-11 furthermore presents the links between the hypotheses formulated, main findings, main conclusion and recommendation about each secondary objective of this study.

Table 7-11: Links between the research objectives, theoretical background, questionnaire sections, hypotheses, main findings, conclusions and recommendations

Primary objective						
Objective	**Theoretical background**	**Questionnaire sections**	**Hypothesis**	**Main findings**	**Main conclusion**	**Recommendation**
Secondary objective 1a	Chapter 1 Section 1.2 Section 1.3 (1.3.1, 1.3.2) Chapter 2 Section 2.2 (2.2.2) Chapter 3 Section 3.3 (3.3.1)				The conclusions and recommendations concerning secondary objectives 2 to 10 are informed by the theoretical background presented in Chapters 1, 2, 3 and 4	
Secondary objective 1b	Chapter 1 Section 1.2 (1.2.1) Section 1.2.2 (1.2.2.3) Section 1.3 (1.3.3) Section 1.3.3 (1.3.3.1, 1.3.3.2, 1.3.3.3) Chapter 2 Section 2.2.3 (2.2.3.1, 2.2.3.2, 2.2.3.3, 2.2.3.4) Chapter 3 Section 3.3 (3.3.2, 3.3.3) Section 3.4 (3.4.1, 3.4.2, 3.4.3)					
Secondary objective 1c	Chapter 1 Section 1.3.3 Chapter 4 Section 4.2 (4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7 Section 4.3		The formulation of hypothesis 1 to 9 was based on the theoretical background presented in Chapter 4.			

Table 7-11: Links between the research objectives, theoretical background, questionnaire sections, hypotheses, main findings, conclusions and recommendations (cont.)

	Objective	Theoretical background	Questionnaire sections	Hypothesis	Main findings	Main conclusion	Recommendation
Primary objective	Secondary objective 2		Section C Questions 5 to 10		Chapter 6 Section 6.2 and 6.3 Main finding 1 to 5	Main conclusion 1	Recommendation 1
	Secondary objective 3	Chapter 1 Section 1.3.3.2 (1.3.3.2.1) Chapter 2 Section 2.2.3.4 (2.2.3.4.1)	Section A Questions 3.1 to 3.5		Chapter 6 Section 6.4.1 Main finding 6 and 7	Main conclusion 2	Recommendation 2
	Secondary objective 4	Chapter 1 Section 1.3.3.2 (1.3.3.2.2) Chapter 2 Section 2.2.3.4 (2.2.3.4.2)	Section A Questions 3.31 to 3.36		Chapter 6 Section 6.4.1 Main finding 8, 9, 10	Main conclusion 3	Recommendation 3
	Secondary objective 5	Chapter 1 Section 1.3.3.2 (1.3.3.2.3) Chapter 2 Section 2.2.3.4 (2.2.3.4.3)	Section A Questions 3.6 to 3.10		Chapter 6 Section 6.4.1 Main finding 11 and 12	Main conclusion 4	Recommendation 4
	Secondary objective 6	Chapter 1 Section 1.3.3.3 (1.3.3.3.1) Chapter 2 Section 2.2.3.4. (2.2.3.4.4)	Section A Questions 3.16 to 3.20		Chapter 6 Section 6.4.2 Main finding 15 and 16	Main conclusion 5	Recommendation 5
	Secondary objective 7	Chapter 1 Section 1.3.3.3 (1.3.3.3.2) Chapter 2 Section 2.2.3.4 (2.2.3.4.5)	Section A Questions 3.21 to 3.25		Chapter 6 Section 6.4.2 Main finding 17 and 18	Main conclusion 6	Recommendation 6

Table 7-11: Links between the research objectives, theoretical background, questionnaire sections, hypotheses, main findings, conclusions and recommendations (cont.)

	Objective	Theoretical background	Questionnaire sections	Hypothesis	Main findings	Main conclusion	Recommendation
Primary objective	Secondary objective 8	Chapter 1 Section 1.3.3 (1.3.3.1) Chapter 2 Section 2.2.3.3 (2.2.3.3.1, 2.2.3.3.2)	Section A Questions 3.11 to 3.15 and questions 3. 26 to 3.30		Chapter 6 Section 6.4.1 Main finding 13 and 14 Section 6.4.2 Main findings 19 to 21	Main conclusion 7	Recommendation 7
	Secondary objective 9	Chapter 1 Section 1.2.1 Chapter 3 Section 3.3 (3.3.2, 3.3.3) Section 3.4 (3.4.1, 3.4.2, 3.4.3)	Section B Questions 4.1 to 4.17		Chapter 6 Section 6.5.2 Main findings 27 to 36	Main conclusion 8	Recommendation 8
	Secondary objective 10	Chapter 1 Section 1.3.3 (1.3.3.1, 1.3.3.2, 1.3.3.3) Chapter 4 Section 4.2 (4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7) Section 4.3	Section A Questions 3.1 to 3.36 Section B Questions 4.1 to 4.17	Hypotheses 1 to 8	Chapter 6 Section 6.5.1 Main finding 22 to 26 Section 6.6 Main finding 37 to 45 Section 6.7 Main finding 46 to 61	Main conclusion 9	Recommendation 9

7.5 LIMITATIONS

Although this study made valuable contributions to relationship marketing and citizenship behaviour theory, the theoretical and empirical limitations should be noted in this section.

7.5.1 Limitations of the theoretical background

- To the best knowledge of the researcher, no studies have been performed with the specific aim to investigate the interrelationships between affective commitment, normative commitment and online community citizenship behaviours directed towards administrators and towards members in a residential online activity community on Facebook in South Africa. The researcher depended predominantly on related literature as investigated in other offline and online contexts.

- Concerning commitment, the researcher did not focus on all three types of commitment as presented by Allen & Meyer (1991). The focus of this study was on the types of commitment which contributes to citizenship behaviour, namely affective- and normative commitment as it was noted by Fullerton (2003:336) that continuous commitment negatively impacts on citizenship behaviours.

- Only feedback-, policing- and helping behaviours were examined as forms of online community citizenship behaviours as they were established to be relevant within an online community context.

7.5.2 Limitations of the empirical research

- Since the contact details of the Facebook group members were not available to the researcher, non-probability sampling had to be used which might limit the representativeness of the study to other online communities.

- Because convenience sampling was used, the gender representation of the data was skewed towards female members.

- The measurement scales employed for this study to measure social switching costs, and normative commitment, were adapted from various offline and online contexts which could have resulted in the lower level scores obtained in some instances, as the adapted items may not have provided a comprehensive account of the matters relevant to a residential online community environment.

- This study made use of cross-section data. It is therefore not certain if the interrelationships of the constructs examined in this study would remain unchanged under different circumstances and within different time periods.

7.6 RECOMMENDATIONS FOR FUTURE RESEARCH

The following recommendations are suggested for future research:

- Since only a limited number of studies have investigated the relationship between relationship marketing and online community citizenship behaviours, it is recommended that more research be conducted to investigate the impact of the two forms of commitment on online community citizenship behaviours among different types of online communities.

- It is recommended that future research also investigate other forms of online community citizenship behaviours relevant to online community environments to obtain a more comprehensive account of the constructs within an online community environment.

- It is suggested that the measurement items for all constructs investigated in this study are refined and retested to obtain a more comprehensive account of the matters relevant within a residential online activity community environment. A similar study could be performed to investigate and verify the identified structural model in different online community contexts.

- Future research studies should aim to obtain members' contact details through interaction with Facebook as to provide more representative results by making use of probability sampling.

- Stricter quota sampling or screening questions to only include male members should be employed as to ensure that an equal amount of male and female respondents are included in future studies.

- Future research could make use of longitudinal data to investigate the interrelationships of the constructs in different circumstances and within different time periods.

- A qualitative research study could be performed to define further online community citizenship behaviours directed towards administrators and towards members of an online community.

7.7 CONCLUSION

Chapter 7 provides the conclusions about the empirical results and literature findings of this study. The chapter commenced with an overview of the study, followed by the main conclusion, implication and recommendation for each secondary objective of this study. Table 7-11 is then presented and which displays the links between the secondary objectives, chapters which provides the theoretical background, sections in the questionnaire, hypotheses, main findings, conclusions and recommendations. The chapter concluded with the literature and empirical limitations of the study and recommendations for future research.

Overall, this study made novel and valuable contributions to the field of relationship marketing and citizenship behaviour since this study shed more light on the types of online community citizenship behaviours directed towards administrators and members of online communities. This study furthermore extends existing literature by establishing that feedback towards administrators of an online community can relate to making suggestions for general improvement and solving operational problems, while helping may involve assisting fellow members in using the service and to solve their personal problems experienced. In addition, this study also contributes to relationship marketing theory by providing a better understanding of the effect of different forms of commitment (affective and normative) on online community citizenship and also by identifying a novel group of factors that contribute to the different forms of commitment of residential online activity community members on Facebook. Lastly, the study provides more insight into the extent to which relationship marketing theory contribute towards online community citizenship behaviour as explained by the social exchange theory.

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APPENDIX A

FINAL QUESTIONNAIRE

A MODEL FOR COMMITMENT AND ONLINE COMMUNITY CITIZENSHIP BEHAVIOUR INTENTION ON FACEBOOK

This survey forms part of a Doctoral study in Marketing Management at the North-West University (Potchefstroom Campus), with a specific focus on residential online activity communities on Facebook.

Objective:
The objective of this study is to obtain your views pertaining to residential online activity communities on Facebook. A residential online activity community is considered a group of residents of a particular town/city, which in the context of this study communicate on Facebook. For the purpose of this questionnaire, these communities will be referred to as '*residential Facebook groups'*.

Confidentiality and anonymity:
Taking part in this survey is completely voluntary, and you may withdraw from the process at any time. All information provided by you will be completely anonymous and will be treated with the utmost standard of privacy and confidentiality. The data obtained from this survey will be stored in a secure location, and destroyed within the next five years. No information will be disclosed to any other parties, and no information will be reported on an individual basis.

Ethics number: NWU-00600-17-S4

Results:
The research results will be used empirically for the analysis of the research findings. All participants are welcome to request results upon completion of this study.

The questionnaire consists of three sections and 12 sets of short questions pertaining to the factors explored in this study. Some of the questions may appear to be similar than others. We need this information for statistical purposes and kindly request you to answer all questions in this survey as truthfully as possible. The questionnaire will take a maximum of 15-20 minutes to complete. When evaluating a question, please answer from your own perspective, by marking or completing where required.

Please accept my thanks, in anticipation of your willingness to participate in this research. Should you have any questions, please contact Mrs M Bothma at mia.bothma@nwu.ac.za.

Mia Bothma
PhD Candidate (North-West University)

Kindly note:

- The research data collected for this study formed part of a larger study on online community citizenship behaviour.
- Therefore, only the questions relevant for this study is presented in this section

SCREENING QUESTIONS:

1. During the past 12 months, on which one of the following residential Facebook groups have you written posts and/or replied to posts from other members of the group? (If more than one group, please indicate the one you most often use).

	x
“Amanzimtoti neighbours” Facebook group	
“Barberton/Lowveld/Mpumalanga”	
“Beautiful Bloemfontein”	
“Bellville, Kraaifontein, Brackenfell, Durbanville, Kuilsrivier, en alle areas”	
“Bethlehem nuus”	
“Brits, Ons Land En Sy Mense Praat Saam”	
“Concerned Community of Vryburg (CCV)”	
“Ek is van die ooste”	
“Ellisras saampraat”	
“Everything Musgrave”	
“Friends of King Williams Town”	
“Grahamstown”	
“Heibron Herald nuus”	
“Hoedspruit town, South Africa”	
“Hopetown nuus”	
“Jeffreys Bay”	
“Kathu”	
“Klerksdorp, ons stad”	
“Kuruman, Kathu, Postmansburg and Upington social network”	
“Middelburg Belfast Dullstroom Lydenburg Wall”	
“Mosselbaai op sy BESTE!”	
“Naboomspruit”	
“Nelspruit / Witrivier / Barberton”	
“Nelspruit!”	
“Not just another group in Midrand”	
“Odendalsrus”	
“Oudtshoorniete staan saam”	
“paarl pals”	

“People who live in Marble-Hall”	
“People who live in Midrand”	
“Potchefstroom”	
“Richards bay”	
“Saam Staan Kimberley!”	
“Sandton community”	
“St Francis Bay- The Official Facebook Group”	
“Staan saam Clanwilliam”	
“Staan Saam Rustenburg”	
“Upington mense”	
“Vaalwater - hart van die Waterberge”	
“Virginia, my dorp, my trots”	
“Wat gebeur in Fochville”	
“Westville info group”	
“Durban North Community + Neighbours”	
“Nylstroom Dorp / Town”	
“What is happening in East London, South Africa”	
I have not written posts or replied to posts on any of the abovementioned groups	

If the respondent selected any of the listed residential Facebook groups, they will continue with Question 2.

If the respondent selected the option “I have not written posts or replied to posts on any of the abovementioned groups”, they will receive a message thanking them for their willingness to participate but indicating that they do not qualify to continue with the questionnaire.

2. Are you over 18 years of age?

	x
Yes	
No	

If the respondent selected “Yes” for Question 2, they will continue with Question 3.

If the respondent selected “No” for Question 2, they will receive a message thanking them for their willingness to participate but indicating that they do not qualify to continue with the questionnaire.

SECTION A (Commitment)

3. Thinking about your overall experience as a member of the residential Facebook group you mentioned in Question 1, indicate on a scale of 1-5 the extent to which you agree with each of the following statements:

Statements	Strongly disagree → Strongly agree				
	1	**2**	**3**	**4**	**5**
When faced with difficulties in general, some members of this residential Facebook group:					
3.1 Were on my side	1	2	3	4	5
3.2 Comforted and encouraged me	1	2	3	4	5
3.3 Read my posts about my personal feelings	1	2	3	4	5
3.4 Expressed interest and concern in my well-being	1	2	3	4	5
3.5 Supported and reassured me	1	2	3	4	5
I prefer to be a member of this residential Facebook group because:					
3.6 The image of this group comes the closest to reflecting my lifestyle	1	2	3	4	5
3.7 When interacting with the members of this group, it reflects the kind of person I am	1	2	3	4	5
3.8 The persona of this group comes the closest to reflecting my personal image	1	2	3	4	5
3.9 The persona of this group comes the closest to reflecting my lifestyle	1	2	3	4	5
3.10 When having conversations with the members of this group, it reflects the kind of person I am	1	2	3	4	5
All things considered:					
3.11 I feel emotionally attached to this residential Facebook group	1	2	3	4	5
3.12 This residential Facebook group has a great deal of personal meaning to me	1	2	3	4	5
3.13 I feel a strong sense of identification with this residential Facebook group	1	2	3	4	5
3.14 I would be very happy to stay with this residential Facebook group	1	2	3	4	5
3.15 I feel a strong sense of belonging to this residential Facebook group	1	2	3	4	5
In general, the following people think that I should frequently post content on this residential Facebook group:					
3.16 People who influence my behaviour	1	2	3	4	5
3.17 People who are important to me	1	2	3	4	5
3.18 My friends	1	2	3	4	5
3.19 People who are valuable to me	1	2	3	4	5
3.20 Influential people	1	2	3	4	5

The following people frequently post contents on this residential Facebook group:					
3.21 Most people in my social group	1	2	3	4	5
3.22 Most people in my society	1	2	3	4	5
3.23 Most people in my work environment	1	2	3	4	5
3.24 Most of my friends	1	2	3	4	5
3.25 Most of my peers	1	2	3	4	5
In general, I would feel:					
3.26 Obligated to continue posting content on this residential Facebook group	1	2	3	4	5
3.27 Guilty if I stop posting content on this residential Facebook group	1	2	3	4	5
3.28 Obligated to continue taking part in conversations on this residential Facebook group	1	2	3	4	5
3.29 A sense of duty to continue posting content on this residential Facebook group	1	2	3	4	5
3.30 Responsible to continue taking part in conversations on this residential Facebook group	1	2	3	4	5
If I switch to another residential Facebook group, I might:					
3.31 Lose the friendships I have developed with the current group	1	2	3	4	5
3.32 Lose important personal relationships which I have developed with my current group	1	2	3	4	5
3.33 Feel very uncomfortable to tell the **members** of my current group that I am switching to another group	1	2	3	4	5
3.34 Find it very difficult to tell the **administrator(s)** of my current group that I am switching to another group	1	2	3	4	5
3.35 Feel very uncomfortable to tell the **administrator(s)** of my current group that I am switching to another group	1	2	3	4	5
3.36 Find it very difficult to tell the **members** of the current group that I am switching to another group	1	2	3	4	5

SECTION B (Online community citizenship behaviour)

4. The statements in this section concern your intended behaviour towards administrators and members of the residential Facebook group mentioned in question 1. Kindly rate each of the statements in this section, using the scale of 1-5 provided.

Please indicate your level of agreement with the following statements:

Statements	Strongly disagree → Strongly agree				
	1	**2**	**3**	**4**	**5**
If provided with the opportunity, I will:					
4.1 Make constructive suggestions to the administrators of the residential Facebook group that will assist in improving the group's experience	1	2	3	4	5
4.2 Inform the administrators of the residential Facebook group of ways to better serve the needs of the group's members	1	2	3	4	5
4.3 Share a useful idea with the administrators of the residential Facebook group that will assist in enhancing the experience of the group	1	2	3	4	5
When noticing a functional/operational problem on the residential Facebook group, I will:					
4.4 Let the administrators know about it, even if the problem does not involve me directly	1	2	3	4	5
4.5 Notify the administrators, even if the problem does not affect me directly	1	2	3	4	5
4.6 Inform the administrators, even if the problem does not concern me directly	1	2	3	4	5
If provided with the opportunity, I will suggest to the administrators of the residential Facebook group:					
4.7 Solutions to issues of inappropriate member behaviour that may make other members of the group unhappy	1	2	3	4	5
4.8 Answers to issues of unfitting member behaviour that may concern other members of the group	1	2	3	4	5
4.9 Remedies to problems of inappropriate member behaviour that may upset other members of the group	1	2	3	4	5
If provided with the opportunity, I will:					
4.10 Assist other members of the residential Facebook group in correctly using the group	1	2	3	4	5
4.11 Help other members of the residential Facebook group to accurately operate the group	1	2	3	4	5
4.12 Teach other members of the residential Facebook group in properly utilising the group	1	2	3	4	5
4.13 Give advice to other members of the residential Facebook group in correctly using the group	1	2	3	4	5
When provided with the opportunity to reply to posts on the residential Facebook group, I will:					
4.14 Assist other members who need my help with a personal matter	1	2	3	4	5
4.15 Give advice to other members who need my help with a personal problem	1	2	3	4	5
4.16 Help other members who need guidance with a personal issue	1	2	3	4	5
4.17 Support other members who need my guidance with a personal matter	1	2	3	4	5

SECTION C (Demographic information)

5. Please indicate your gender.

	x
Male	
Female	

6. Please indicate your age group.

	x
18 to 26 years	
27 to 35 years	
36 to 47 years	
48 to 66 years	
67 years and older	

7. Which **ONE** of the following options best describes your employment status?

	x
Self-employed	
Full-time employed by an organisation	
Part-time employed by an organisation	
Full-time student	
Housewife or Househusband	
Retired	
Unemployed	
Other, please specify:	

8. Please indicate your marital status.

	x
Single	
Married	
Living with a partner	
Divorced or separated	
Widowed	

9. Please indicate your ethnicity.

	x
White	
Black	
Coloured	
Indian	
Asian	
Other, please specify:	

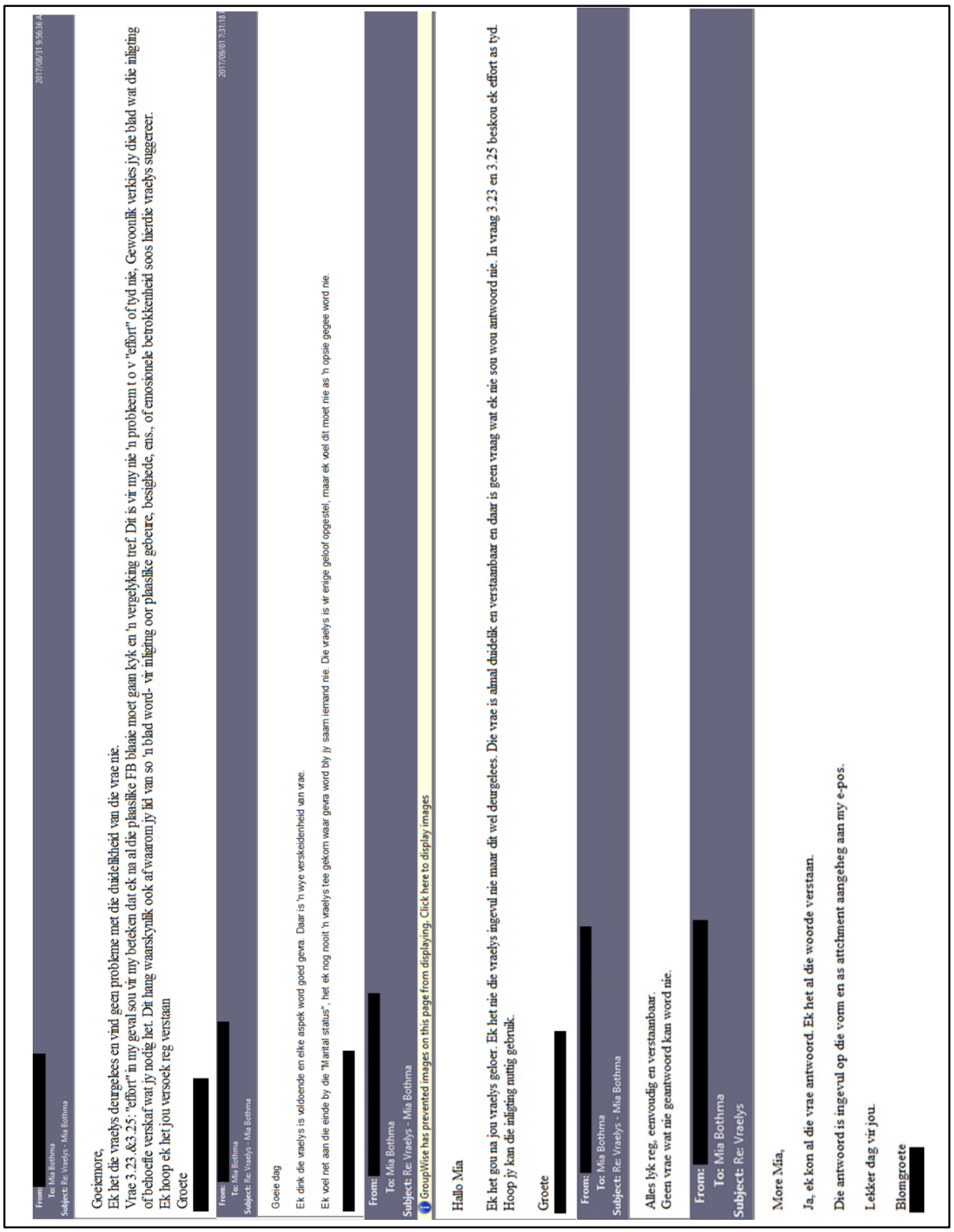
10. Please indicate your highest level of education.

	x
Primary school completed	
Some high school	
Matric / Grade 12	
Diploma	
Degree	
Postgraduate degree	

Thank you for taking the time to complete this survey!

APPENDIX B

MEMBER FEEDBACK



From: [redacted] 2017/08/31 9:56:26 A
To: Mia Bothma
Subject: Re: Vraelys - Mia Bothma

Goeiemore,
Ek het die vraelys deurgelees en vind geen probleme met die duidelikheid van die vrae nie.
Vrae 3.23 &3.25: "effort" in my geval sou vir my beteken dat ek na al die plaaslike FB blaaie moet gaan kyk en 'n vergelyking tref. Dit is vir my nie 'n probleem t o v "effort" of tyd nie. Gewoonlik verkies jy die blad wat die inligting of behoefte verskaf wat jy nodig het. Dit hang waarskynlik ook af waarom jy lid van so 'n blad word- vir inligting oor plaaslike gebeure, besighede, ens., of emosionele betrokkenheid soos hierdie vraelys suggereer.
Ek hoop ek het jou versoek reg verstaan
Groete
[redacted]

From: [redacted] 2017/09/01 7:31:18
To: Mia Bothma
Subject: Re: Vraelys - Mia Bothma

Goeie dag

Ek dink die vraelys is voldoende en elke aspek word goed gevra. Daar is 'n wye verskeidenheid van vrae.

Ek voel net aan die einde by die "Marital status" , het ek nog nooit 'n vraelys tee gekom waar gevra word bly jy saam iemand nie. Die vraelys is vir enige geloof opgestel, maar ek voel dit moet nie as 'n opsie gegee word nie.

[redacted]

From: [redacted]
To: Mia Bothma
Subject: Re: Vraelys - Mia Bothma

GroupWise has prevented images on this page from displaying. Click here to display images

Hallo Mia

Ek het gou na jou vraelys geloer. Ek het nie die vraelys ingevul nie maar dit wel deurgelees. Die vrae is almal duidelik en verstaanbaar en daar is geen vraag wat ek nie sou wou antwoord nie. In vraag 3.23 en 3.25 beskou ek effort as tyd. Hoop jy kan die inligting nuttig gebruik.

Groete
[redacted]

From: [redacted]
To: Mia Bothma
Subject: Re: Vraelys - Mia Bothma

Alles lyk reg, eenvoudig en verstaanbaar.
Geen vrae wat nie geantwoord kan word nie.

From: [redacted]
To: Mia Bothma
Subject: Re: Vraelys

More Mia,

Ja, ek kon al die vrae antwoord. Ek het al die woorde verstaan.

Die antwoord is ingevul op die vorm en as attchment aangeheg aan my e-pos.

Lekker dag vir jou.

Blomgroete
[redacted]

APPENDIX C

ETHICAL CLEARANCE CERTIFICATE

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Email : Ethics@nwu.ac.za

ETHICS APPROVAL CERTIFICATE OF PROJECT

Based on approval by the **Economic and Management Sciences Research Ethics Committee (EMS-REC) on 31/07/2017** after being reviewed at the meeting held on **21/07/2017**, the North-West University Research Ethics Regulatory Committee (NWU-RERC) hereby **approves** your project as indicated below. This implies that the NWU-RERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: A model for commitment and online community citizenship behaviour on Facebook

Project Leader/Supervisor: Prof E van Tonder
Student: M BOTHMA (25709232)

Ethics number: N W U - 0 0 6 0 0 - 1 7 - A 4
(Institution – Project Number – Year – Status)

Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Application Type: Single study

Commencement date: 2017-07-31 **Expiry date**: 2020-07-30 **Risk:** LOW

Special conditions of the approval (if applicable):

- Translation of the informed consent document to the languages applicable to the study participants should be submitted to the EMS-REC (if applicable).
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the EMS-REC. Ethics approval is required BEFORE approval can be obtained from these authorities.

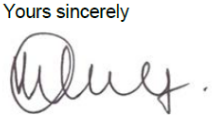
General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- *The project leader (principle investigator) must report in the prescribed format to the NWU-RERC via EMS-REC:*
  - *annually (or as otherwise requested) on the progress of the project, and upon completion of the project*
  - *without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.*
  - *Annually a number of projects may be randomly selected for an external audit.*
- *The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the EMS-REC. Would there be deviated from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.*
- *The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-RERC via EMS-REC and new approval received before or on the expiry date.*
- *In the interest of ethical responsibility the NWU-RERC and EMS-REC retains the right to:*
  - *request access to any information or data at any time during the course or after completion of the project;*
  - *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.*
  - *withdraw or postpone approval if:*
    - *any unethical principles or practices of the project are revealed or suspected,*
    - *it becomes apparent that any relevant information was withheld from the EMS-REC or that information has been false or misrepresented,*
    - *the required annual report and reporting of adverse events was not done timely and accurately,*
    - *new institutional rules, national legislation or international conventions deem it necessary.*

The RERC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the RERC or EMS-REC for any further enquiries or requests for assistance.

Yours sincerely



APPENDIX D

LETTER FROM STATISTICIAN

Privaat sak X6001, Potchefstroom
South Africa, 2520

Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

25 March 2018

RE: Statistical Analyses for Mia Bothma

To whom it may concern,

This is to confirm that I, the undersigned, acted as a statistical consultant for the above mentioned student's PhD thesis. A wide variety of techniques were implemented which included: Structural equation modelling methods (measurement and structural models) with latent and observed variables in the Mplus software package.

Kind regards,

Prof. Leon de Beer
Associate Professor
Industrial Psychologist
Research Psychologist
WorkWell Research Unit
DeBeer.Leon@nwu.ac.za

APPENDIX E

LETTER FROM LANGUAGE EDITOR

Dynamic Language & Translation Specialists

Antoinette Bisschoff
71 Esselen Street, Potchefstroom
Tel: 018 293 3046
Cell: 082 878 5183
antoinettebisschoff@mweb.co.za
CC No: 1995/017794/23

Thursday, 22 March 2018

To whom it may concern,

Re: Letter of confirmation of language editing

I have language edited the **A model for commitment and online community citizenship behaviour on Facebook** by **M Bothma**. The bibliography complies with NWU guidelines. Final corrections remain the responsibility of the author.

Antoinette Bisschoff

Officially approved language editor of the NWU since 1998
Member of SA Translators Institute (no. 100181)

Precision ... to the last letter