Involvement of Gen Y in online social networking media: Role in developing attitude towards brands

by

Sabreena Zoha Amin

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DEDICATION

"To my family with love and sincerity"-----

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STATEMENT OF AUTHENTICATION

I hereby declare that this thesis has not already been submitted for any degree and is not being submitted as part of candidature for any other degree.

I also declare that the thesis is my own work and that, to the best of my knowledge and belief, any help that I have received in preparing this thesis, and all sources used, have been acknowledged in this thesis.

Sabreena Zoha Amin

TABLE OF CONTENTS

DEDICATION	II
ACKNOWLEDGEMENTS	III
STATEMENT OF AUTHENTICATION	V
LIST OF TABLES	X
LIST OF FIGURES	XII
ABBREVIATIONS	XIII
	XIV
CHAPTER 1: INTRODUCTION	1
1.1 Research background	1
1.2 Research gaps	3
1.3 Research objectives	4
1.4 Justification of research	5
1.5 Research methodology	8
1.6 Structure of the thesis	9
1.7 Definitions	10
1.8 Delimitations of scope and key assumptions	11
1.9 Conclusion	12
CHAPTER 2: LITERATURE REVIEW	
2.1 Introduction:	
2.2 Review of primary and supporting theories	
2.3 The marketing concent – consumer orientation	15
2.5 The marketing concept – consumer orientation	16
2.5 Socialization theories	10
2.5 Socialization theories	/ 10
2.6 Consumer socialization theories	18
2.7 Learning and social learning theories	21
2.8 Agents of consumer socialisation	22
2.8.1 Family (Parents)	23
2.8.2 Peers and menus	24 26
2.8.4 Other socialisation agents	
2.8.4.1 Community	27
2.8.4.2 Religious institutions	27
2.8.5 Media	
2.9 Media type	29
2.9.1 Internet	30
2.9.2 Media vehicles	30
2.9.3 Internet vehicle: Online social networking media (OSNM)	32
2.10 Situated cognition theory and activity theory	
2.11 Communication theories	41
2.11.1 Social exchange theory	41
2.11.2 Theories of persuasion	42
2.12 Attitude towards brands	44

2.12.1 Attitude	44
2.12.2 Brand meaning	47
2.13 Conclusion	
CHAPTER 3: CONCEPTUAL FRAMEWORK AND HYPOTHESES	
3.1 Introduction	
3.2 Gen Y and social media usage	56
3.2.1 Gen Y	
3.2.2 Social media usage	
3.3 Involvement with media	
3.3.1 Involvement with online social networking media (OSNM)	60
3.4 Electronic word of mouth (e-WOM)	62
3.5 Tie strength	67
3.6 Trust	71
3.7 Informational influence	74
3.8 Subjective norm	80
3.9 Attitude towards brands	83
3.9.1 Electronic word of mouth and attitude towards brands	84
3.9.2 Subjective norm and attitude towards brands	86
3.10 Gender differences and Gen Y	88
3.11 Age group differences of Gen Y	91
3.12 Conclusion	92
CHAPTER 4: RESEARCH METHODOLOGY	
4.1 Introduction	98
4.2 Research paradigm	98
4.3 Outline of the research plan	102
4.3.1 Stage 1: Oualitative research	103
4.3.2 Stage 2: Quantitative research	108
4.4 Ethical considerations	125
4.5 Conclusion	126
CHAPTER 5: REFINEMENT OF MEASUREMENT SCALES BY	
QUALITATIVE MEASURES	127
5.1 Introduction	127
5.2 Data collection method and sample	127
5.3 Findings from in-depth interviews	128
5.3.1 Involvement in online social networking media (OSNM)	128
5.3.2 Electronic word of mouth (e-WOM)	130
5.3.3 Tie strength	133
5.3.4 Trust	
5.3.5 Informational influence	135
5.3.7 Attitude towards brands	137
5.4 Conclusion	130 1/1

CHAP	TER 6:	ASSESSMENT AND REFINEMENT OF MEASUREM	MENT
		SCALES BY QUANTITATIVE MEASURES	
6.1	Introdu	ction	145
6.2	Data pr	eparation	145
6.3	Sample	characteristics	146
6.4	Assessm	nent of measurement scales	148
6.4	4.1 Res	ults of exploratory factor analysis	149
6.5	Specific	ation and measurement model evaluation	157
6.:	5.1 Dec	iding goodness of fit criteria	157
6.:	5.2 Test	ting the measurement model fit	159
6.:	5.3 Ass	essment of measurement scales using CFA	160
6.6	CFA fin	ndings on constructs	163
6.	6.1 CFA	A results of involvement in OSNM	163
6.	6.2 CFA	A results of electronic word of mouth (e-WOM)	168
6.	6.3 CFA	A results of tie strength	
6.0	6.4 CFA	A results of trust	1/2
0. 6	0.3 CFA	A results of subjective norm	173
6.0	6.7 CFA	A results of attitude towards brands	
6.7	Reliabil	ity and validity of constructs	
6	7.1 Reli	ability	183
6. 6.	7.2 Reli	ability of constructs	
6.	7.3 Reli	ability of items	
6.	7.4 Vali	idity	186
6.8	Conclus	sion	187
CHAP	TER 7:	THEORETICAL MODEL AND HYPOTHESES TES	ГING 188
7.1	Introdu	ction	188
7.2	Structu	ral model evaluation	
7.	2.1 Data	a normality and assessment of distribution	
7.	2.2 Esti	mating the proposed model	191
7.	2.3 Mod	dification of model	194
7.	2.4 Esti	mation of the main model	
7.	2.5 Test	ting the hypotheses of the main model	198
7.3	Interpre	etation/discussion of empirical results	199
7.4	Multi gi	roup analysis	205
7.	4.1 Mul	ti-group analysis of gender differences	206
7.4	4.2 Mul	ti-group analysis of age group differences	208
7.5	Conclus	sion	210
CHAP	TER 8:	CONCLUSION	
8.1	Overvie	W	213
8.2	Contrib	ution of this research	217
8.	2.1 Imp	lications for theory	219
8.	2.2 Imp	lications for methodology	224
8.	2.3 Imp	lications for policy and practice	
8.3	Limitati	ions	

8.4 Implications for future research	230
8.5 Specific conclusions drawn from this research based on objectives and	ł
hypotheses	232
8.6 Conclusion	233
REFERENCES	235
APPENDIX 1	285
Ethics Approval	285
APPENDIX 2	286
Record of Candidature	286
APPENDIX 3	
Questionnaire	287
APPENDIX 4	295
Flyer for volunteers	295
APPENDIX 5	296
Research protocol	296
APPENDIX 6	298
Participant consent form	298
APPENDIX 7	300
In-depth interview discussion script	300
APPENDIX 8	302
The SEM output of the proposed model for this research	302
APPENDIX 9	303
Computer output of the SEM analysis of the empirically tested main model.	303
Standard regression weights (main model)	304
APPENDIX 10	305
Multi-Group analysis output	305
APPENDIX 11	307
List of constructs and variables	307

LIST OF TABLES

Table 2:1: Classification of media	.29
Table 2:2: Features of various media	.29
Table 2:3: Media consumption by Australian generations	.31
Table 2:4: Advertising by media sector: Australia	.32
Table 2:5: Classification of social media by social presence/media richness and self-presentation self-disclosure	.34
Table 2:6: Interpretations of 'brand'	.48
Table 3:1: Constructs, previous research & adapted scale items – involvement in OSNM	.61
Table 3:2: Constructs, previous research and adapted scale items - electronic word of mouth	.67
Table 3:3: Constructs, previous research and adapted scale items - tie strength	.71
Table 3:4: Constructs, previous research and adapted scale items – trust	.74
Table 3:5: Constructs, previous research and adapted scale items – information influence	.79
Table 3:6: Constructs, previous research and adapted scale items – subjective norm	.82
Table 3:7: Constructs, previous research and adapted scale items – attitude towards brands	.85
Table 3:8: Measurement items	.94
Table 5:1: List of constructs and scale items1	42
Table 6:1: Response information from data commission agent 'Research Now'1	46
Table 6:2: Distribution of respondents by gender1	46
Table 6:3: Distribution of respondents by age group1	46
Table 6:4: Facebook (most common social networking site) used by	47
respondents	.47
Table 6:5: Membership period in a social networking site	47
Table 6:6: Time spent on social networking site	.47
Table 6: /: Frequency of checking social networking site	.48
Table 6:8: Activities on social networking sites	48
Table 6:9: Factors, variables and factor loadings	.50
Table 6:10: Retained factors, variables and factor loadings	.33
Table 6:11: Summary of reliability, weights and fit indices used in this research 1	.58
Table 6:12: Summary of standarised estimates and value criteria used for CFA models	59
Table 6:13: Measurement items (variables) used for CFA1	61
Table 6:14: Regression weights of involvement in OSNM	64
Table 6:15: Standard regression weights, goodness-of-fit estimates and composite reliability of involvement in OSNM	e 65
Table 6:16: Revised regression weights of involvement in OSNM1	66
Table 6:17: Revised standard regression weights, goodness-of-fit estimates and composite reliability of involvement in OSNM	67
Table 6:18: Regression weights of electronic word of Mouth (e-WOM)1	69

Table 6:19: Standard regression weights, goodness-of-fit estimates and	
composite reliability of electronic word of mouth (e-WOM)	170
Table 6:20: Regression weights of tie strength	171
Table 6:21: Standard regression weights, goodness-of-fit estimates and	
composite reliability of tie strength	171
Table 6:22: Regression weights of trust	173
Table 6:23: Standard regression weights, goodness-of-fit estimates and	
composite reliability of 'trust'	174
Table 6:24: Regression weights of informational influence	176
Table 6:25: Standard regression weights, goodness-of-fit estimates and	
composite reliability of informational influence	176
Table 6:26: Regression weights of subjective norm	178
Table 6:27: Standard regression weights, goodness-of-fits estimates and	
composite reliability of subjective norm	178
Table 6:28: Regression weights of attitude towards brands	181
Table 6:29: Standard regression weights, goodness-of-fit estimates and	
composite reliability of attitude towards brands	182
Table 6:30: Construct reliability of scale items	184
Table 6:31: Multiple correlation coefficients	185
Table 7:1: Assessment of normality	189
Table 7:2: Fitness measures of the proposed model	193
Table 7:3: Fitness statistics of the main model	195
Table 7:4: Comparisons of fit measures for proposed and main model	196
Table 7:5: Standard estimates of the main model	199
Table 7:6: Standard coefficients and significance level of the model (pre	
mediation stage)	201
Table 7:7: Standard coefficients and significance level of the model (post	
mediation stage)	201
Table 7:8: Goodness-of-fit estimates of male and female	206
Table 7:9: Goodness-of-fit statistics for tests of invariance across male and	
female	207
Table 7:10: Multi-group analysis of gender differences on development of	• • •
attitude towards brands	207
Table 7:11: Goodness-of-fit estimates of different age groups	209
Table 7:12: Goodness-of-fit statistics for tests of invariance across different age	e 210
groups	210
Table 7:13: Multi-group analysis of age group differences on development of	210
attitude towards brands	
Table 7:14: summary of research findings	
Table 8:1: List of research objectives for this research	213
Table 8:2: Contribution to the extant theory from findings of this research	223
Table 8:3: Results similar to/different from/unique to the past research	234

LIST OF FIGURES

Figure 2.1: Relationship of primary and supporting theories1	4
Figure 2.2: Representation of activity theory	59
Figure 2.3: Activity theory applied to online social networks	0
Figure 3.1: Research framework)3
Figure 4.1: An outline of the research design for the current research project10)2
Figure 4.2: Qualitative data analysis process10)7
Figure 6.1: CFA model of involvement in OSNM16	54
Figure 6.2: Revised CFA model of invovement in OSNM16	6
Figure 6.3: CFA model of electronic world of mouth (e-WOM)16	59
Figure 6.4: CFA model of tie strength17	'1
Figure 6.5: CFA model of trust	'3
Figure 6.6: CFA model of informational influence17	'5
Figure 6.7: CFA model of subjective norm17	'7
Figure 6.8: CFA model of attitude towards brands	60
Figure 7.1a: Proposed Model	2
Figure 7.1b: Proposed model of Gen Y's development of attitude towards brands	
through OSNM (SEM output)19	13
Figure 7.2: Main model of Gen Y's development of attitude towards brands	
through OSNM19	15
Figure 7.3: The empirically tested model of development of attitude towards	
brands through OSNM involvement	.1

ABBREVIATIONS

А	Coefficient Alpha
AMOS	A SEM Software
AGFI	Adjusted Goodness-of-Fit Index
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Critical Ratio
DF	Degrees of Freedom
E	Error
EFA	Exploratory Factor Analysis
ELM	Elaboration Likelihood Model
EWOM	Electronic Word of Mouth
F	Factor
GFI	Goodness-of-Fit Index
ML	Maximum Likelihood
NFI	Normed Fit Index
OSNM	Online Social Networking Media
Р	Probability Level
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modelling
SET	Social Exchange Theory
SMC	Square Multiple Co-relation
SNS	Social Networking Sites
SPSS	Statistical Package for Social science
SRMR	Standardized Root Mean Square Residual
SRW (Beta)	Standard Regression Weight
TLI	Tucker Lewis Fit Index
TORA	Theory of Reasoned action
TPB	Theory of Planned Behaviour
UGT	Uses and gratification theory
WOM	Word of Mouth
$X^{2}(df,p)$	Chi-square
$X^{2/df}$	Normed Chi-square

ABSTRACT

Attitude is often seen as a precursor of behaviour, including of consumer behaviour regarding brands. Understanding the underlying elements of attitude is crucial for anyone who wants to learn about behaviour or induce desired behaviours. Though, so far, extensive research has been carried out on attitudes and brands, no research has focused on Gen Y's attitude formation towards brands, particularly in relation to Gen Y's involvement in online social networking media. In view of this gap in the literature, this research addressed the following research problem: **How does Gen Y's involvement in online social networking media facilitate the development of their attitudes towards brands through their online friends?**

By analysing relevant current literature, a framework was developed to investigate the effects of involvement in online social networking media, electronic word of mouth and subjective norms on the formation of attitudes towards brands. Informational influence, trust and tie strength were introduced as mediating variables between involvement in online social networking media and electronic word of mouth.

A two-stage methodological approach involving qualitative and quantitative techniques was followed to investigate the research problem. The first stage involved 12 in-depth interviews to confirm and/or refine measurement variables identified from the current literature. In the second stage, an online survey was conducted on a total of 319 respondents in the 18-24 and 25-29 age groups representing Gen Y, with equal representations of both genders. Because a sampling frame was not available, a convenience sampling method was used. Data was collected using an online panel supplied by a research commission agent. Survey data was analysed using both exploratory and confirmatory factors analysis to validate the measurement variables of the research framework constructs before testing all the hypotheses specified in the main model using the structural equation modelling technique.

Results indicate that there is a positive influence of Gen Y's involvement in online social networking media on the electronic word of mouth they receive. It was also found that informational influence is a catalyst (partial mediator) between involvement in online social networking media and word of mouth that Gen Y receive from their online social network friends. Electronic word of mouth has a positive effect on subjective norms and attitudes towards brands. Subjective norms also have a positive

xiv

effect on attitudes towards brands. Although both male and female Gen Y groups share similar beliefs, female attitudes towards brands are more likely to be affected by the electronic word of mouth they receive than are male attitudes towards brands. On the contrary, males are more affected by the subjective norms to develop attitudes towards brands than are females. Results also indicate that there are intra-generational differences on developing attitudes towards brands: the older group of Gen Y is more affected by electronic word of mouth and subjective norms than the younger group of Gen Y.

The main contribution of this research is the development and confirmation of the final theoretical framework, which explains how Gen Y's involvement in online social networking media influences attitude formation towards brands through online friends. The contribution of this model is noteworthy because variables from different studies in the relevant field were premeditated and incorporated into a single study to address issues that had not been focused upon in past studies. The thesis has both theoretical and practical implications in the area of consumer behaviour involving online social networking media. The framework used in this research was constructed from theory and empirical research utilised in relevant studies, and thus provides a foundation for future research.

CHAPTER 1: INTRODUCTION

1.1 Research background

Attitude is often seen as a precursor of behaviour, including of consumer behaviour regarding brand. To know underlying elements of attitude is clearly crucial for anyone wanting to learn about behaviour or how to induce desired behaviour. 'A brand is a promise of satisfaction. It is a sign, a metaphor operating as an unwritten contract between a manufacturer and a consumer, a seller and a buyer, a performer and an audience, an environment and those who inhabit it, an event and those who experience it' (Healey 2008, p. 3). Brands act as symbols that serve as a means of communication between the individual and his or her referents (Grubb & Grathwohl, 1967). Attitudes towards brands and how they formed are, therefore, important to study in the context of understanding consumer behaviour. Attitude towards brands pertains to 'individual's internal evaluation of the brand' (Mitchell & Olson 1981, p. 318). Because branding and attitudes towards brands are perceived as vital by marketers, understanding how consumers develop attitudes towards brands is also critical.

The advent of the Internet, and the ways consumers communicate with each other and exchange information have been changing rapidly over the last decade. Recent years have witnessed the rise of Internet based new media which enable customers to take more active roles as market players and reach almost everyone anywhere and anytime (Hennig-Thurau et al. 2010). Social media is one form of new media. Online social networking media represents an ideal tool for electronic word of mouth because members of social networking media freely create and disseminate brand-related information in their established social networks, which are composed of friends, classmates and other acquaintances (Vollmer & Precourt 2008). Among the various types of social media, social networking sites (SNS) have received mounting attention from researchers, educators, practitioners and policy makers (Boyd & Ellison 2010; Ellison, Steinfield & Lampe 2007; Thelwall 2008, 2009; Valenzuela, Park & Kee 2009). Social networking enables consumers to create and share content, communicate with one another, and build relationships with other consumers (Gordon 2010; Libai et al. 2010). Because this is a new form of communication, it is important to know how it influences the attitudes development of consumers.

One age segment that has grown up with the Internet and embedded it in their daily life is Gen Y (generation Y); that is, people who were born between the years1980 and 1994. Over the past decade, the communication uses of the Internet have become a very important part of this age group's lives (see, e.g., Gemmill & Peterson 2006; Jones 2008; Lenhart & Madden 2007; Subrahmanyam & Greenfield 2008). According to a report by the Pew Internet & American Life Project (Lenhart et al. 2010), more than 70% of online users who are between 18 and 29 years old use social networking sites. Although research on young people's use of social networking sites is emerging (see, e.g., Boyd & Ellison 2010; Ellison, Steinfield & Lampe 2007; Valkenburg, Peter & Schouten 2006), questions remain regarding young people's involvement in online social networking media (OSNM) in a consumer behaviour setting.

One way online social networking media is influencing consumer behaviour is through facilitating dissemination of electronic word of mouth (e-WOM). The significance of word of mouth (WOM) in influencing consumer decision making has been well recognized in the marketing and advertising literature (Cheung & Thadani 2012). WOM is defined as the act of exchanging marketing information among consumers, and plays an essential role in changing consumer attitudes and behaviour towards products and services (Katz & Lazarsfeld 1955). The emergence of internet-based media has facilitated the development of WOM online – that is, e-WOM. Research has shown that tie strength, trust and informational influence are important constructs in social science studies and are related to WOM. These factors should also be considered when investigating the use of the online social networking media platform.

Subjective norm refers to an individual's 'belief about whether significant others feel that he or she should engage in the targeted behaviour' (Fishbein & Ajzen 1975, p. 6). Subjective norm also refers to the motivation to comply with the specific referents (Ajzen & Fishbein, 1980). Research has established that subjective norm is a form of social influence and a core determinant of behaviour (Ajzen & Fishbein 1980). In the consumer behaviour literature, however, little has

2

been reported on subjective norm and the online social networking media platform. Because OSNM is a platform to meet and maintain social relationships, the presence of subjective norm cannot be ignored as part of understanding consumer behaviour. No existing studies have considered the socializing aspects of social networking (Batra & Ahtola 1991; Voss, Spangenberg & Grohmann 2003) and how they influence attitudes toward brands.

This research will contribute to the existing literature by specifically addressing the following research problem:

How does Gen Y's involvement in online social networking media facilitate the development of their attitudes towards brands through their online friends?

1.2 Research gaps

As already noted, the invention of the Internet has significantly changed the way people live. Gen Y is the first generation to grow up with and embrace the Internet in their daily lives. OSNM is a comparatively new interactive addition to this communication facility. Thus far, little attention has been given to how OSNM influences Gen Y in their development of attitudes towards brands. Apart from this major gap in current consumer socialization and behaviour research, other gaps concerning Gen Y are also evident and will be addressed in this research.

The first research gap addressed in this research is the lack of a tested empirical model of how OSNM influences Gen Y's attitudes towards brands. Consumer behaviourists seek to understand how consumer attitudes towards brands develop. The OSNM platform is, currently, an undeniable means of socialization, and, since attitude is one of the outcomes of the consumer socialization process, the role of OSNM as a platform for communicating with friends is relevant when seeking to understand the formation of attitudes towards brands. Gen Y is the first generation to grow up with OSNM, thus research on how this media impacts on that generation is highly relevant in the contemporary media context and addresses a clear gap in current consumer behaviour literature (Bolton et al., 2013).

The second research gap addressed in this thesis is gender and age group differences as social structural variables. These variables are currently are under researched in generational research (Bolton et al., 2013). Especially in the branding

context, it is important to know how age and gender influences the development of attitudes towards brands (Boneva, Kraut & Frohlich 2001; Fallows 2005; Jackson et al. 2001; Leung 2001). Gen Y is composed of different age groups; the question is whether there are different attitudes towards brands in a younger age group, when the likelihood of responsibility for family and job is less, then an older age group with likely more responsibilities.

A third research gap is in the area of differences in the cognitive processes and behaviours of male and female consumers. That there are differences is wellestablihsed (Fisher & Dubé 2005; Meyers-Levy 1989; Meyers-Levy & Maheswaran 1991; Meyers-Levy & Sternthal 1991) and are reflected in the widespread use of gender as a segmentation variable in marketing practice. In spite of acknowledging the differences in the consumer behaviour of different genders, little is known about the existence and nature of gender differences in developing attitude towards brands. This is surprising because if male and female behaviour and cognitive processes differ, men and women might also form attitudes towards brands differently, including differences that may accrue as a result of Gen Y's involvement in OSNM.

A fourth research gap in Australia is the establishment of measurement scale items of OSNM involvement, tie strength, trust, informational influence, e-WOM, subjective norm and attitude towards brand for Gen Y. In generational research for consumer behaviour it is vital to have a specific measurement scale for a particular generation. This research will focus on this gap and will examine the applicability of the measurement scale items for the above-mentioned constructs as they specifically apply to Gen Y in Australia. Establishing these measures can form the basis for further generational research in Australia of the OSNM platform.

1.3 Research objectives

As mentioned previously the problem addressed in this research is:

How does Gen Y's involvement in online social networking media facilitate the development of their attitudes towards brands through their online friends?

The broad aim of this research is to have a better understanding of Gen Y's development of attitudes towards brands through their involvement in OSNM.

Within this broad focus, e-WOM has been identified as a key construct between Gen Y's involvement in OSNM and development of their attitude towards brands. Tie strength, trust and informational influence have been identified as mediating variables of e-WOM. Moreover, 'subjective norm' (which refers on one hand to beliefs that specific referents dictate whether one should perform the behaviour or not, and on the other hand the motivation to comply with specific referents) has also been recognized as a dimension that relates with e-WOM and attitude formation towards brands. Using a framework that represents a sum of interrelated fields, such as consumer psychology, information technology, sociology and marketing, the following are the specific objectives of this research, which links to theory examined in chapter two.

- 1) To develop and test a model of Gen Y's attitude towards brands through their OSNM friends.
- To determine how Gen Y's involvement in OSNM affects the development of their attitudes towards brands in Australia.
- To determine the influence that Gen Y's involvement in OSNM has on the e-WOM they receive.
- To determine the mediating role of tie strength, trust and informational influence on e-WOM received by Gen Y through their involvement in OSNM.
- 5) To determine the influence that the e-WOM received by Gen Y through their involvement in OSNM has on their subjective norms.
- 6) To determine how Gen Y's involvement in OSNM influences the development of their attitudes towards brands through e-WOM and their subjective norm.
- To determine how Gen Y's age and gender influence the role that OSNM plays in the development of Gen Y's attitudes towards brands.

1.4 Justification of research

Justification of this proposed research lies in the likely theoretical and practical contributions of it. The role of media as a consumer socialization agent, particularly with regards to its facilitating role in the formation of consumer attitude towards different marketing constructs, is well established. Online social networking media

is a contemporary electronic media that is witnessing massive growth throughout the world. This growth is particularly evident among members of Gen Y, who have grown up with the rise of electronic media (Ellison, Steinfield & Lampe 2007; Lenhart et al. 2010). Lately, OSNM has been both credited and discredited for the quick spread of different issues by e-WOM and for the role it is playing in the formation of attitudes towards those issues, particularly among the young. It is a relatively new form of media and its interactive nature makes it very different from traditional media. Understanding its role in different aspects of consumer behaviour is critical for both marketing theory and practice. International literature also advocates the development of online marketing strategies using new media (Loken, Ahluwalia & Houston 2010; Hennig-Thurau et.al 2010; Safko 2010; Wood & Solomon 2009). Despite its rapid growth and recognition of its importance, research regarding OSNM and its role in different aspects of consumer behaviour are at early stages. Among other things, no research has been reported on the role this media is playing in the development of consumer attitude towards brands; it is well established that consumers' attitude towards an object is a precursor of their behaviour regarding the object. This lack of research is a critical gap in current consumer behaviour theory, which this research addressed.

This research is also important for addressing other gaps in the current research on consumer behaviour:

First, current literature lacks explanations of the way a person's involvement in OSNM may impact the development of attitudes towards brands through e-WOM and subjective norm. Also there is a gap in an understanding of Gen Y's attitudes towards brands as influenced by e-WOM and their subjective norm in the OSNM context.

Secondly, although e-WOM itself is increasingly becoming a focus of research, there are no reported studies on what role OSNM involvement plays in spreading the e-WOM. The body of theory explaining this connection is deficient, especially in relation to some of the possible mediators, such as tie strength, trust, informational influence of involvement in OSNM and e-WOM. In the social networking media context, e-WOM allows consumers to obtain information related to goods and services from a vast, geographically dispersed group of people connected within the network who have experience with relevant products or services in an interactive online environment. This study researches the influence of involvement in OSNM on the spread of e-WOM.

Third, this study researches the influence of subjective norm on developing attitudes towards brands in online social networking (OSN) platforms. Subjective norm refers to the perceived social pressure to perform or not to perform behaviour (Ajzen 1991) and motivation to comply with significant referents (Ajzen & Fishbein 1980). Its influence on developing attitudes towards brands in OSNM platforms is, however, a research issue that has not yet been addressed.

Fourth, Gen Y, as a market segment itself, is an important study field in consumer behaviour research. Researchers have found that members of Gen Y are prolific users of the Internet because they grew up with Internet (Ellison, Steinfield & Lampe 2007; Lenhart et al. 2010). Therefore, it is important to study Gen Y's attitudes, values and motivations in relation to their consumption behaviour that result from their involvement with OSN sites, specifically in relation to brand consumption. This form of research has, thus far, not been carried out. In particular, no research has been conducted on attitudes towards brands among 'Gen Y' that have been influenced by the e-WOM received and shared through their involvement in OSNM.

Fifth, this research has significance because of its Australian context. So far, research on OSNM has been mainly conducted in the US (Chu & Kim 2011; Gangadharbatla 2008; Hennig-Thurau et.al 2010; Shao 2009; Shin 2010), and only a few have been carried out in the Australian context. Findings of this research will contribute towards understanding the focal research issues from the Australian Gen Y's perspective.

Sixth, this research is important because it developed an empirically tested model of Gen Y's attitude towards brands because of their involvement in OSNM. Currently there is no such model of the role of involvement in OSNM,

Finally, the findings of this research validate and confirm measurement scales that may be used by future researchers in the field. Applicability of the measurement scale items of the involvement in OSNM, e-WOM, subjective norm and attitude towards brands in the context of Gen Y in Australia are not currently established. These measurement scale items have been mostly developed based on other media research overseas (Chan 2003; Cheung, Anitsal & Anitsal 2007; Chu & Kim 2011; Shu &Chuang 2011; Derbaix & Leheut 2008; Mascarenhas & Higby 1993; Oginanova 1998; Pavlou & Fygenson 2006; Schiffman et al. 2005; Shin 2010; Wetzer et al. 2007; Zaichkowsky 1985), and have not been tested in in the context of OSNM. OSNM is different from traditional media, particularly as it involves interactivity between participants, which is often live.

In sum, the findings of this research will shed light on attitude formation towards brands through involvement in OSNM with friends. This will help current and future marketing practitioners to develop strategies targeting OSNM for brands.

1.5 Research methodology

The objective of this research has been to identify how OSNM influences Gen Y's development of attitudes towards brands. In addition, the study aimed to assess the effects of gender differences and age group differences on the role that OSNM involvement has in developing attitudes towards brands. To achieve this objective, this research adopted a predominantly positivist approach but both qualitative and quantitative approaches were used. Qualitative research was adopted at the exploratory stage, using in-depth interviews of Gen Y participants in Australia. The purpose of the in-depth interviews was to refine constructs and their measurement scale items, making them relevant to Gen Y in Australia.

Based on finding reported in the existing literature and on the qualitative research findings, a survey instrument was developed. This instrument was administered among a representative sample of Gen Y from Sydney, Australia with proportional representation of both genders. The target population for the study was Gen Y in Australia (18-29 years). Using a consumer panel based survey; data was gathered from 320 respondents. The collected data was analysed using exploratory factor analysis followed by confirmatory factor analysis. Furthermore, the framework of the developing attitude towards brands through OSNM involvement was tested using a quantitative multivariate technique: structural equation modelling (SEM).

1.6 Structure of the thesis

This thesis is divided into eight chapters. This first chapter contains the introduction. The other chapters are: Chapter 2 is the literature review, Chapter 3 discusses the conceptual framework and hypotheses, Chapter 4 explains the research methodology, Chapter 5 presents the refinement of measurement scales by qualitative measures, Chapter 6 presents the assessments and refinement of measurement scales by quantitative measures, Chapter 7 presents the tests of the theoretical model and hypotheses and Chapter 8 is the conclusion.

Chapter 2 provides the theoretical foundation upon which the research is based (a review of the relevant literature). Chapter 3 draws upon the research and consolidates the knowledge from different related literature in order to develop a model of developing attitudes towards brand by Gen Y through their OSNM involvement. Chapter 3 also evaluates the affect of social structural variables (i.e., gender differences, age group differences) on OSNM involvement. A range of theories are analysed in that chapter to develop the research problem, objectives and hypotheses.

Chapter 4 describes the methodology that was used to collect and analyse the data to address the research problem, research objectives and hypotheses. In this research, both qualitative and quantitative methods were used, the rationale of which, along with other aspects of the methodology, is justified. This chapter describes the sampling, data gathering methods, research instruments, data management, and analysis and evaluation methods focused in the research. This chapter also describes the quantitative data analysis method, SEM and the SEM software, AMOS; that was used for quantitative data analysis. Chapter 4 includes a discussion of the ethical issues concerning the research.

As has been already mentioned, both qualitative and quantitative methods of research were used in this study. The measurement scale items, which were developed on the basis of literature review, were subjected to a qualitative study to determine their applicability to the population of interest, that is, Gen Y of Australia. Chapter 5 describes the findings of the qualitative research.

Qualitative research findings were further explored through quantitative techniques. Chapter 6 reports on assessments and refinement of measurement scale items by quantitative measures. Chapter 7 then reports on test results of the theoretical model and hypotheses.

Chapter 8 concludes and highlights the contribution of this research in both academic and practical terms, and identifies potential areas for future research.

1.7 Definitions

Definitions adopted by researchers are often not uniform. The following defines how concepts and key terms will be used in this report.

Social media: Social media is 'a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and allows the creation and exchange of User Generated Content' (Kaplan & Haenlein 2010, p. 61).

Social networking sites: SNS is a cyber-environment that allows the individual to construct his/her profile, sharing text, images, and photos, and to link other members of the site by applications and groups provided on the Internet (Boyd & Ellison 2010).

Word of mouth: WOM communication is 'all informal communications directed at other consumers about the ownership, usage or characteristics of particular goods or their sellers' (Westbrook 1987).

Electronic word-of-mouth (e-WOM): 'Any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet' (Hennig-Thurau et al. 2004, p. 39).

Subjective norm: 'An individual's belief about whether significant others feel that he or she should engage in the targeted behaviour' (Fishbein & Ajzen 1975, p. 6).

Brand: This research adopted the definition of 'brand' defined by American Marketing Association (AMA). AMA defines a brand as a 'name, term, sign, symbol or design, or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of other sellers' (cited in de Chernatony 2009).

Involvement: 'A person's perceived relevance to the object based on inherent needs, values, and interest' (Zaichkowsky 1985, p. 342).

Attitude: An individual preference (Bass & Talarzyk 1972) and a predisposition of the individual to evaluate some symbol or object of his world in a favourable or unfavourable manner (Katz 1960).

Construct: 'A hypothetical variable made up of a set of component responses or behaviours that are thought to be related' (Hair, Bush & Ortinau 2006, p.353)

Domain: 'The set of identifiable and measurable components associated with an abstract construct' (Hair, Bush & Ortinau 2006, p.354)

Model: 'A model is a representation of the most important elements of a perceived real world system' (Naert & Leflang 1978, p.9).

1.8 Delimitations of scope and key assumptions

Although this study, which is examining the influence of OSNM on attitude towards brands through e-WOM and subjective norm, is pioneering in nature, a few limitations should be noted. First, this research was carried out in Sydney, Australia. As a result, the findings may not be generalizable to all Gen Y in Australia. Future research may be conducted as a comparative study between Gen Y based in Sydney and in other areas of Australia. Further research needs to be carried out in other countries to test global generalizability.

Second, while age group 18-30 represent the majority of OSNM users, this group may not accurately reflect the perceptions and behaviour of the total OSN population. As older demographics account for the significant growth in social network users in recent years (*Social Network User Demographics* 2011), future research could investigate how the social networking media influence on attitudes towards brands through e-WOM and subjective norm varies across age groups.

Third, this research only studied developing attitudes towards brands through Gen Y's involvement on OSNM in the Sydney metropolitan area. A large number Gen Y live in outer metropolitan areas and in the countryside. However, this research does not represent Gen Y from such areas.

Fourth, this research also did not consider the large number of Sydney's population who have immigrated to Australia. A large portion of Gen Y are first and second generation Australians. This research did not examine the effect of acculturation and consumer socialization of this migrant generation.

Finally, there are a number of methodological limitations in this research. Data for this research has been collected using an online panel. Generally, in an opt-in panel approach, respondents have characteristics that skew toward affluence, higher education and under-representation of non-white population. Thus, a convenience sampling technique was used which is not statistically representative. There increases the possibilities of a 'coverage error' because of using of a nonprobability sampling approach. Further, due to time and resource constraint, data gathered was opinion based rather than experimental; the latter would have been ideal.

1.9 Conclusion

This chapter has laid the foundation for this report. In this chapter, the research objectives have been introduced and the need for this research justified. The chapter has also briefly described and justified the methodology used in this research. Definitions of the key terms have been presented, limitations described, and the report structure has been outlined.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction:

Gen Y is the largest generation after the Baby Boomers and one of the most coveted market segments (Loda, Coleman & Backman 2009). With 80 million members and huge spending power, understanding Gen Y's learning and response processes became crucial for marketing researchers and practitioners. Members of Gen Y are called digital natives, rather than digital immigrants (Prensky, 2001). They are the first generation to have spent their entire lives in the digital environment; information technology profoundly affects how they live and work (Bennett, Maton & Kervin 2008; Wesner & Miller, 2008). Gen Y actively contributes, shares, searches for and consumes content – plus works and plays – on social media platforms. Marketers and researchers are interested in Gen Y's social media usage because it may be a harbinger of how people will behave in the future. As the focus of our study is Gen Y, it is important to understand this generation's learning processes in context of OSNM and their development of skills, knowledge and attitudes in this modern era.

In this chapter, a review of the literature from several key areas will build a theoretical foundation for the research. The focus of this review is to draw and consolidate knowledge from different related literature in an effort to synthesise a model Gen Y's attitudes towards brands influenced by their involvement in OSNM. Theories from several disciplines will be examined in order to develop hypotheses for this research and to identify relevant constructs and their measurement items.

2.2 Review of primary and supporting theories

Given the large number of disciplinary literatures that have bearing in some ways on this research, only critical antecedents have been examined. This chapter introduces the major theories upon which this research is built; the research uses the perspective of marketing, particularly in relation to consumer behaviour. Figure 2.1 depicts the major theories and supporting theories underpinning this study, and their interrelationships.



Figure 2.1: Relationship of primary and supporting theories

2.3 The marketing concept – consumer orientation

The focus of the research carried out for this thesis is in the domain of 'marketing'. As defined by the American Marketing Association, 'marketing is 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' (Keefe 2008). There have been outcries for decades that marketing mistreats consumers. In the late 1950's, a marketing philosophy evolved that not only focuses on consumer requirements but also protects consumers' rights (Bell & Emory 1971).

Alternative marketing philosophies practices are: a) production concept, b) product concept, c) selling concept, d) marketing concept and e) societal marketing concept. The Marketing concept is crucial and contemporary. Marketing management philosophy holds that achieving organisational goals depends on determining the needs and wants of target markets and delivering desired satisfaction more effectively and efficiently than competitors. Broadly, the marketing concept (market orientation) is concerned with the processes and activities associated with creating and satisfying customers by continually assessing their needs and wants, and doing so in a way that there is a demonstrable and measurable impact on business performance (Ehrenberg & Uncles 2000).

Most contemporary literature promotes a marketing oriented concept that concentrates on explaining the need of companies to devote more time and effort to the requirements for their customers. There is general agreement that an adequate understanding of consumers' needs and wants by organisations could lead to better organizational performance, such as growth in resources, higher customer satisfaction, and growth in reputation (Gainer & Pandanyi 2005; McClymont, Ogunmokun & Akbari 2004).

Overall, the development of the marketing concept prevails over consumerism issues that also cover the point of consumers' preferences, rights, and above all, interest. Therefore, understanding consumer behaviour is pivotal for good marketing practice.

2.4 Consumer behaviour

The extant literature indicates that the marketing concept upholds the consumer benefit philosophy. Specifically, the classic feature of the marketing concept is its focus on the "benefit approach" to consumers (Evans, Jamal & Foxall 2006). Understanding consumer behaviour is a prerequisite for offering benefits to consumers.

Consumer behaviour is defined as 'the behaviour that consumers undertake in seeking, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their personal needs' (Schiffman 2008, p.7). In the extant literature, consumer behaviour is valued as multidisciplinary knowledge, which is also considered as an applied science drawing from economics (e.g., understanding consumers spending, product evaluation skills), psychology (e.g., studying consumer's motivation, perception, and learning patterns), sociology (e.g., consumers behaviour in group), anthropology (e.g., core beliefs, values, customs of consumers) and other disciplines (Blackwel, Miniard & Engel 2006; Schiffman 2014). Supporting this precedent, Hoyer and MacInnis (2007) proposed four domains of consumer behaviour: psychological core, process of decision making, consumer's culture and consumer behaviour outcome. To make purchasing decisions that affect outcomes, such as buying a new product or using a product for symbolic reasons, consumers must first engage in the process explained in the psychological core. Consumers need to be motivated, able, and have the opportunity to be exposed to a product or service to perceive and attend to information. Moreover, consumers need to think about the information in order to develop attitudes and form memories about any response. Similarly, the cultural environment also motivates consumers about how they process information and the kind of decisions they make.

Overall, the study of consumer behaviour is mainly based on two models: a) cognitive development models; and b) a social learning model. In general, traditional consumer behaviour theories incorporate the examination, analysis and application of perceptual theory of marketing stimuli. Therefore, theories of consumer behaviour can be broadly categorised into three areas (Richardson Bareham 2004):

16

- Consumers are information processors who engage in a rational, scientific, deliberate and cognitive process leading to a purchase choice.
- Consumer behaviour is learned and, as a result, much is the result of habit.
- After the post-modern perspective, it is assumed the consumer does not follow rules, is unlikely to be predictable, and may change their purchase strategy from occasion to occasion.

In reality, consumer behaviour reflects the totality of consumers' decisions with respect to the acquisition, consumption and disposition of goods, services, activities, and ideas by (human) decision-making units. The issues of consumer behaviour are the sequence of acquisition (referring to the activities leading up to and including the purchase or receipt of a product), consumption (refers to how, where, when and under what circumstances consumers use the product) and disposition (how do consumers dispose the product?) for the marketers (Blackwell, Miniard & Engel 2006).

Furthermore, from the marketers' point of view, understanding consumer behaviour is like understanding the problem. Marketers keep in mind that consumer behaviour also varies in terms of different generation. Gen Y is the largest generation, after the Baby Boomers, with 80 million "millennials". Gen X, the generation before Gen Y, consisted of 40 million individuals (Deloitte Consulting 2005). Loda, Coleman and Backman (2009) state that the millennials are one of today's most coveted markets, not only because it numbers 80 million but also because this generation has a greater spending power than previous generations. Therefore, it is appropriate to learn about Gen Y's consumer behaviour.

2.5 Socialization theories

Socialization has been described as a process that begins at birth by which an individual learns the expectations of society, acquires sensitivity to the pressures and obligations of group life, as well as learns how to get along with others (Maccoby 2014). Being social creatures, consumers are involved with environmental learning. Prominently, Brim and Wheeler (1966) named this learning, 'socialization process', by which a person acquires knowledge and skills that make him or her more or less able member of the society. Further, Goslin (1971) noted socialization as a process which helps human beings to learn from the

environment and change their behaviour accordingly. Elkin and Handel (1972) pointed to two issues relevant to the concept of the socialization process: it helps to explain how a person becomes capable of participating in society; and socialization helps to explain how society teaches human beings to learn from society and the environment through a complex process. As a consumer, a person learns basic knowledge, ideas and skills from the environment and socialization agents (Cram & Ng 1999) and processes their acquired knowledge to negotiate the market place (John 1999; Mortimer & Simmons 1978).

Berns (1997) proposed a method of socialization that follows a specific sequence: a) affective (effect emerges from feeling-attachment); b) operant (effect emerges from acting-reinforcement, extinction, punishment, feedback, learning by doing); c) observational (effect emerges from imitating-modelling); d) cognitive (effect emerges from thinking – instructions, setting standards, reasoning); e) sociocultural (effect emerges from conforming – group pressure, tradition, rites and rituals, symbols); f) apprenticeship (effect emerges from guided participation – structuring, collaborating, transferring).

Therefore, learning is a fundamental in the socialization process and underpin the focus of social learning theories on the role of socialization agents and influences on the socialization process.

2.6 Consumer socialization theories

Brown (1976) noted that, historically, the systematic study of socialization is rooted in several fields; namely psychology, sociology and anthropology. Consumer behaviourists have introduced a number of relevant issues of consumer behaviour to the discipline (Bakewell & Mitchell 2003; Cram & Ng 1999; Granhaug & Venkatesh 1986). As a leading consumer socialization researcher, John (1999) noted that the use of the socialization approach in consumer research only began in the 1960s, and has only recently been proposed as a vehicle for the study of consumer behaviour (Bakewell & Mitchell 2003, Cram & Ng 1999).

Definitions of consumer socialization tend to view consumer behaviour as a sub-set of the total socialization process that take place in a person's life. Moschis (1987) explained the concept of consumer socialization as consumer behaviour that is acquired through interactions between the person and various agents in a specific social setting. Ward (1974, p. 4), somewhat differently, defined what the widely accepted definition of socialization is 'consumer socialization a process by which young people acquire skills, knowledge, and attitudes relevant to their functioning as a consumer in the market place'. Essentially, the framework provides a means of analysing the influences on and sources of how people learn to perform their roles as consumers in society. While childhood is a key formative period in the development, reinforcement, and modification of consumption-related thoughts and behaviours, the process continues during the adult life cycle (Dion 1985, Moschis 1987) and into the elderly years (Moschis 1994) as adults modify existing consumption behaviours and adapt to new/changing consumer roles.

It was Berger and Luckmann (1967), who first distinguished between primary and secondary socialization. Primary socialization takes place as a child, while secondary socialization takes place after childhood (e.g. shame of nudity comes from primary socialization, adequate dress code depends on secondary). Consumer socialization of children can, thus, be seen as primary because it involves children's initial development of skills, knowledge and attitudes to function in the marketplace (Ward 1980). Further, consumer socialization of adults is concerned with the adjustment of these initial skills, knowledge and attitudes in order to adapt to new situations and can, therefore, be seen as secondary (Mathur 1999; Pettersson, Olsson & Fjellström 2004).

Secondary socialization is not concerned with necessities of consumption because necessities reflect rudimental aspects of simple survival in the marketplace. Effectiveness of consumption on the other hand, will naturally have to do with styles and moods of consumption and is, therefore, at the core of secondary socialization. Secondary socialization involves processes that induct an already (primarily) socialized individual into new sectors of the objective world of his or her society (Berger & Luckmann 1967). According to Grusec (2002), socialization is how 'individuals are assisted in the acquisition of skills necessary to function as members of their social group' (p. 143). Grusec (2002) further proposes that socialization involves three specific outcomes: 1) the development of self-regulation of emotion, thinking, and behaviour; 2) the acquisition of a culture's standards, attitudes, and values, including appropriate and willing conformity with

the direction of authority figures; and 3) the development of role-taking skills, strategies for resolving conflicts, and ways of viewing relationships. This view applies especially well to socialization in emerging adulthood. Emerging adulthood is a period of life that has, in recent decades in industrialized societies, been recognized as a distinct period in a person's life; it lasts from the late teens through most of the 20s (Arnett, 2014). This research focuses on this period of life, labelled as Gen Y, using the context of generational research.

Secondary socialization occurs in, usually, formal situations, which are not personal. Secondary socialization generally takes over when agents of primary socialization seem to decrease in their influence. Some major powerful agents of secondary socialization are school, mass media and the workplace. Sometimes, this form of socialization is also referred to as adult socialization, since the individual can discard old ways for new ideas, attitudes, perceptions, priorities and objectives. This is because individual adults have more choices over the activities they are engaged in and can definitely control the content and direction of their socialization. New roles and positions involve adaptation to them, such as when one is getting married, having his/her first child, getting into a job for the first time, and so on.

So far consumer socialization studies are typically based on two models of human learning: a) the cognitive developmental model, and b) the social learning model (John 1999; Lueg & Finney 2007). The cognitive developmental model attempts to explain the formation of consumer knowledge, skills, and behaviours as a function of interactions between socialization agents and individuals in different social settings (Moschis & Moore 1979).

Schiffman et al. (2005) also highlight that consumer socialization has two distinct components: socialization as directly related to consumption, such as the acquisition of skills, knowledge, and attitude concerned with budgeting, pricing, and brand attitudes; and socialization as indirectly related to consumption, such as the underlying motivation that spurs consumer to buy their desired product. Usually, the direct component of consumer socialization is the research area for consumer behaviourists who have broad goals to understand all aspects of consumer behaviour. The indirect component of consumer socialization, which is specific to individual product categories, is of more interest to marketers, who want to understand why people buy their offerings.

The acknowledgement and exploration of a new sizable market segment, Gen Y, (Newborne & Kerwin, 1999) has been stimulated by a recognition that this group has been socialized into consuming earlier than previous generations and have greater disposable income (Tomkins, 1999). As consumer attitudes, behaviour and skills are acquired via socialization agents, such as family, peers, school and the mass media (Moschis, 1987), the proliferation of media choices, including television, internet and magazines, has resulted in greater diversity of product and lifestyle choices for Gen Y, and this cohort requires a different approach (Barber 2013; Phelps 1999) to be understood.

2.7 Learning and social learning theories

Being social creatures, consumers are involved with environmental learning. Most leading socialization research is grounded by learning theories (Cram & NG 1999; Moschis & Moore 1979). Social learning theory is a stem from several theories, including neo-skin-nerian, neo-hullian, and learning theory (Moschis & Churchill 1978). Social learning is part and parcel of the socialization process, incorporating basic explanatory concepts of learning theories: operant and classical conditioning, negative and positive reinforcement, punishment, extinction, suppression, generalisation, discrimination and others (Windmiller, Lamber & Turie 1980). Most of these learning processes were investigated experimentally either by 'stimulus-response' or 'trial and error' methods. Bandura (1977), a pioneer learning theorist, proposed that learning could also be transferred by imitation or observation. Pope, Brennan and Voges (2007) analysed prior research and noted that the content of consumer learning can be divided into two categories: a) directly relevant learning (directly relevant aspects of consumer learning are those that are necessary if purchase and use are actually to take place); and b) indirectly relevant learning (which means everything that has been learned that motivates purchase and use behaviour).

Windmiller, Lamber and Turie (1980) note that social learning theory is a product of learning theory, which in turn developed out of the behaviouristic movement in psychology. They also observe that learning theories consist of empirical laws that
relate the properties of observable events (stimuli) to those of subsequent observable behavioural responses. Before the advent social learning theory, most of theories of social learning were laboratory based and, in particular, and derived from experiments on animals and were, therefore, inadequate for explaining human social behaviour properly.

Social learning theories attempt to explain why and how a child learns to become like other members of their society. Most theories propose that the initial motivation to learn is triggered by stimulus-response and tension-reduction approach; this basic orientation is, at times, integrated with a more cognitive approach (Lueg & Finney 2007). Learning to become consumers does not only occur through modelling, reinforcement and social interaction, as posited by social learning theory, but also through participatory learning when engaged in discovery and construction, bricolage and play (Lee and Conroy 2005). Krugman (1962) proposed passive learning occurs, that is, consumers' involvement with media and exposure to media promotes consumers' indirect learning process. Dotson and Hyatt (2005) also noted that this passive type of learning is transmitted through repeated exposure of socialization agents or certain behaviours shown by role models both in low and high involvement situations.

2.8 Agents of consumer socialisation

Already mentioned is that consumer learning takes place in society and the environment. Consumers learn basic consumption-related knowledge, skills and ideas from different socialization agents that influence their consumer socialization process (Grusec & Hastings 2014; Kamaruddin & Mokhlis 2003). A socialization agent may be a person or an organisation directly involved in socialization because of frequency of contact with the individual, primacy over the individual, control over rewards, and punishment given to the individual (Moschis & Churchill 1978). Socialization agents inevitably transmit norms, attitudes, motivations and behaviour to the learner and socialization is assumed to be taking place during the course of the person's interaction with different agents in various social settings.

Moschis (1987) posits that a socialization agent may communicate certain information to the learner through various mechanisms: Firstly, by performing certain acts, an agent may consciously or subconsciously communicate certain norms and expectations. Secondly, a socialization agent may influence the consumption behaviour of others by using various reinforcement mechanisms, both positive and negative. Finally, socialization agents may affect the consumption behaviour of the learner through overt communication processes, often referred to as the 'social interaction' mechanism.

Generally, most researchers agree on which socialization agents influence the behaviour as consumers. Various researchers (Dotson & Hyatt 2005; Lueg & Finney 2007; Martin & Bush 2000; Moschis & Churchill 1978; Moschis & Moore 1979) identified family (parents), peer groups, schools, and mass media as the four major consumer socialization agents. Other researchers add religious institutions and community as consumer socialization agents (Berns 1997; Grusec & Hastings 2014). Research has also shown that socialization is not limited to traditional sources, such as family, friends and media, but extends to the virtual community on the Internet (Barber 2013, Lee & Conroy 2005); this will be discussed later in this chapter. Socialization agents act to develop a human being into a mature person. Similarly, consumer socialization agents bring basic knowledge about consumption that helps consumers to develop analytical abilities that assist them to act as a consumer in the market place (Bakewell & Mitchell 2003; Granhaug & Venkatesh 1986; Vandell 2000). However, the role of various consumer socialization agents may vary in different cultural and social settings.

2.8.1 Family (Parents)

In the extant literature, family is considered as an important agent in the socialization process (Moschis & Moore 1979; Neeley 2005). Particularly, parents as an integral part of family are the most important role players in this process (Dotson & Hyatt 2005). Research shows that the role of parents in the socialization process diminishes from adolescence to emerging adulthood.

Adults are even less influenced by parents. Typically, upon reaching adulthood, people move out of their parents' household. Once they move out, their exposure to socialization from parents becomes largely voluntary (Arnett 2014). Nevertheless, the continuing influence of parents is evident in emerging adulthood, which complies with Grusec's (2002) three socialization outcomes, discussed earlier (see section 2.6) (Arnett, 2014). Most parents of emerging adults support the

development of emerging adults towards greater self-regulation (Arnett & Schwab, 2012) and self-sufficiency, expectations that reflects cultural values of independence and individualism (Arnett 2013).

Independence and individualism are the common underlying values of the three criteria of adulthood; accepting responsibility for one self, making independent decision, and becoming financially independent (Arnett 2011). Socialisation with respect to relationships between parents and emerging adults appears to be bidirectional, with both changing and both responding to the changes in the other (Arnett 2014).

2.8.2 Peers and friends

According to Elkin and Handel (1972), the peer group, as a socialization agent, has certain distinctive characteristics: a) it is made up of members who have about the same age status; b) within the peer group the members have varying degrees of prestige and power; c) the peer group is centred on its own concerns; and d) in peer the group, long-run socializing implications are largely unintentional. However, Lloyd (1985) identified the following functions of peers and friends in the socialization process:

- Replacement for family support in the absence of parents, friends provide certain supports to their peers.
- Stabilising influence in the midst of the many changes during different stages in life, the peer group provides an anchor (as do parents).
- Social status group membership confers social status. Not being a member may be associated with social stigma.
- Source of self–esteem group membership is a sign of peer acceptance.
- Source of behavioural standards peers influence in decision making.
- Opportunities for role-taking and feedback participation in group activities about life, sex, etc., provide opportunities for trying out different roles, practicing skills important in adulthood, and getting feedback about how one's ideas, feelings, and behaviour appears to others.
- Opportunity for modelling: Peers can serve as important models of behaviour.

According to different researchers of consumer socialization, friends are considered as the most powerful and important aspect of the peer group (French, Pidada & Victor 2005; Strong & Eftychia 2006). The significance of friendship is measured by different dimensions, such as: a) friendship closeness; b) instrumental aid; c) enhancement of worth; and d) exclusivity and extensivity of social contact (French, Pidada & Victor 2005). According to French, Pidada and Victor (2005), friendship is viewed on the basis of individualism/collectivism or interdependence/independence from the various cultural points of view. from a theoretical perspective, the oldest arguments about the effects of peer relations can be found in psychoanalytic models (Bukowski, Brendgen & Vitaro 2007). The type of learning involved in explaining how peers communicate through social interaction mechanisms is less specified.

What kind of role do peers and friends play in the socialization of emerging adult? Research on peers and friends in emerging adulthood is sparse (Barry et al. 2009). Nevertheless, based on what is known, a picture can be drawn to understand the role of peers and friends on socialization. First, as emerging adults leave the peercentered context of secondary school, so that they are no longer part of a peer culture on a daily basis and are no longer guaranteed to see their friends at least five days a week, the number of people in the emerging adults' social support networks drops sharply (Barry et al. 2009). Emerging adults spend more time alone than any group except older adults (Luong, Charles & Fingerman 2010). Furthermore, emerging adults are more likely to be involved with a romantic partner, which typically leads to a selective withdrawal from friendships with peripheral friends, while retaining close friends (Barry et al. 2009). Overall, it seems clear that the opportunities for socialization influence by peers and friends decreases from adolescence to emerging adulthood. With peers and friends, as with parents, emerging adults' relationships become more volitional; that is, emerging adults have more control over the extent to which they are exposed to the socialization influences of others.

Second, selective association in friendships is more pronounced in emerging adulthood than in adolescence. Emerging adults are less responsive to the influence of their friends because they see their friends less often and become intent on learning to make their own decisions as part of becoming an adult (Arnett 2014). This phase even makes them even less responsive to the socialization attempts of their friends.

Third, intimacy in friendships increases in emerging adulthood (Collins & van Dulmen 2006). Friendships at this stage have greater emotional depth and complexity, and greater communication about topics of personal importance. With respect to the socialization goal of learning role-taking skills, strategies for resolving conflicts and ways of viewing relationships, friendships may rise in importance in this stage of life (Arnett 2014).

Even a romantic relationship is a source of socialization at this stage (Hatfield & Rapson, 2006). Although it is rarely framed in terms of socialization effects, such socialization pertain to the third goal of socialization, which is learning role taking, conflict resolution skills and ways of viewing relationships (Collins & van Dulmen, 2006).

Peers have been found to exert influence on consumption related behaviour (Andrews et al., 2002). Social learning theory suggests that peer groups and friends are instrumental in shaping an individual's behaviour (Bush, Smith & Martin 1999). Williams and Burns (2011) note that peers have been found to influence affective or expressive aspects of consumption. On the contrary, Moore and Bowman (2006) found that peer groups and friends also influence the deceptive expenditure and bad cash management forces that are associated with materialism and antisocial behaviour.

2.8.3 School and work

Lloyd (1985) notes that schools have the following general functions in a society: a) caretaking and managing students; b) teaching required skills and knowledge; c) transmitting cultural values, beliefs, and tradition; and d) sorting, classifying, and evaluating students. In many respects schools provide social experiences that are highly similar to, and overlap with, those provided by families, the broader community and peer groups. In a person's adult phase, the main context of daily experience becomes college, work or some combination of the two (Hamilton & Hamilton, 2006). The nature of school experience changes during this stage of life, broadening considerably; adults are no longer monitored by teachers and instructors. Thus, formal schooling (college, university) in this period requires greater capacities for self-regulation in order to succeed.

Earning an income (work) takes place in this adult period of life with higher stakes because the work is not just to provide money for the moment (which occurred at the adolescent stage), but is used to build a foundation for the work in adulthood. Research has shown most people gain in responsibility, future orientation, and planful competence over the course of this period (Masten, Obradovic & Burt 2006; Roisman et al. 2004). The workplace rewards these qualities, so emerging adults have a strong incentive to respond to the socialization requirements of the workplace in order to succeed.

2.8.4 Other socialisation agents

2.8.4.1 Community

The term 'community' derives from the Latin word for fellowship. Berns (1997) noted that community is more than a group of people living in the same neighbourhood, city or town under some common laws; it is also a group of people having fellowship, friendly association, mutual sharing and common interests. Berns (1997) also added that the need for community is psychological, practical and economic, which also serves the following functions: a) production, distribution, and consumption; b) socialization; c) social control; d) social participation; and e) mutual support, which all play a significant role in the socialization of teenaged children. Community critically socialises human beings in terms of cultural and social exchange relationships. Community can also have an informal social support system of family-relatives, friends and neighbours, who can be counted upon to help in crises. Communication with friends in an online community is seen at a growing rate. A study conducted by Pempek, Yermolayeva and Calvert (2009) discovered that a majority of college-aged students utilized Facebook as a communication tool to reach their friends from different geographical areas.

2.8.4.2 Religious institutions

Various socialization agents such as, family, school, peers and media have been given the maximum attention of consumer socialization researchers (Dotson & Hyatt 2005; Kamaruddin & Mokhlis 2003). Every religion influences the pattern of

gender roles, marriage, divorce, sexual behaviour, and childrearing. Lloyd (1985 p. 128) defined religion as a "unified system of beliefs and practices relative to sacred things, uniting into a single moral community all those that adhere to those beliefs and practices". Most importantly, basic beliefs and attitudes towards society are formed by religion (Lam & Shi 2008). Moreover, religious codes affect one's dress, dietary habits, including alcohol consumption, health care, and social interaction (Berns 1997). Research also shows that religious beliefs influence fair business practices (Lam & Shi 2008). Berns (1997) also notes that religion helps people to have an identity and gives meaning to their lives. Many religious activities reflect pride and celebration. A code of religious belief also serves to discourage excessive wastage of resources and helps people not to get involved with undesirable materialistic practices (Flouri 1999). Groome (2007) also suggested that a coalition between family and school concerning religious education provides better socialisation results.

2.8.5 Media

For today's emerging adults, the media environment is more diverse and complex than it has ever been before. They are the 'new media generation' (Brown & Bobkowski 2011), the first to grow up with the Internet, social media, virtual games, virtual friends, and make-your-own CDs, in addition to the traditional media of radio, television, recorded music, movies, newspapers and magazines. The effects of media on emerging adults may be different due to different ways of thinking, which is more complex, reflective and insightful (Labouvie-Vief, 2006). Media selection is less constrained by social influences than at any other period, and its effects have been reported by a diverse number of commentators and researchers (Brown & Bobkowski 2011).

Potter (2004, p. 16) defined media as 'technological means of disseminating the message'. Katz (2014) states that media is a means to convey a specific kind of information. He added that media mainly fulfils two basic purposes: a) entertainment; and b) information that eventually socialises consumers. Media helps in the socialization through entertainment, information, identity formation, and cultural identification (Arnett 1995). In spite of its acknowledged ubiquity, research on socialization of emerging adults with respect to media is sparse (Grusec & Hastings 2014).

2.9 Media type

Various researchers have studied mainstream electronic and printed media (McQuail 2005; Potter 2004).

Recently, electronic media has received more attention from researchers than other forms of media (Buckingham & Willett 2013).

See Table 2.1 for a classification of the various types of media, and Table 2.3 for features of different types of media.

Print Media	Electronic Media
Magazines-consumer, farm, business	Television, broadcast, cable, syndication spot
Newspapers: national, local	Radio: network, local
Outdoor bill board	Internet
Direct mail	
Yellow page	

Table 2:1: Classification of media

Source: Rahman 2006

Medium	Advantages	Limitations
Newspapers	Flexibility, timeliness, good local market coverage, broad acceptance, high believability	Short life, poor reproduction quality, small 'pass-along' audience
Television (TV)	Combines sight, sound and motion, appealing to the senses, high attention, and high reach.	High absolute cost, high clutter, fleeting exposure, less audience selectivity.
Radio	Mass use, high geographic and demographic selectivity, low cost.	Audience presentations only, lower attention than television, non-standardised rate structure, fleeting exposure.
Magazines	High geographic and demographic selectivity, credibility and prestige, high quality reproduction, long life, good 'pass-long' readership.	Long ad purchase lead times some waste circulation, no guarantee of position.
Online	High selectivity, immediacy, interactive capabilities, easy to measure number of exposures.	Demographically skewed audience, audience controls exposure, less effective at conveying emotional message.

Table 2:2: Features of various media

Source: Armstrong et al. 2015

2.9.1 Internet

In current research on media, the Internet is a primary topic among media types. The increasing use of the Internet as a communication tool makes this an important agent of socialization in the consumer socialization process (Barber 2013; La Ferle, Edwards & Lee 2000). This relatively new form of media is different to other mass media because of its interactive ability, that is, the possibility of users interacting with a machine, virtual communities and individuals, globally (Sherman, Michikyan & Greenfeld 2013). The Internet has overtaken the television as a powerful agent of socialization because of its ubiquity. Net generation has integrated the Internet into their daily existence and to a much higher intensity than previous generation (Tapscott 2008). On the same note, Gen Y are the first generation to have spent their entire lives in the digital environment; information technology profoundly affects how they live and work (Barber 2013; Bennett, Maton, K & Kervin., 2008; Wesner & Miller, 2008). The Internet, inevitably, is playing a vital role in their socialization process, although this area of research has not been addressed adequately.

2.9.2 Media vehicles

Media vehicles are specific media within each general media type, such as specific magazines, TV shows or radio programs (Armstrong et al. 2015). Katz (2014) explains that media vehicles socialise consumers, either by providing information or entertainment, which are the most common features for any media vehicle.

The internet is like no other communication medium because of its ability to combine several of the unique qualities of each medium (that is, print, sound and visual) into one, while allowing for two-way communication. This vast array of attributes makes the Internet appealing as the new communication tool. Most traditional communications media, including telephone, music, film and television are being reshaped or redefined by the Internet, giving birth to new services such as voice over Internet Protocol (VoIP) and Internet Protocol television (IPTV). Newspapers, books and other print publishing are adapting to website technology, or are reshaped into blogging and web feeds. The Internet has enabled and accelerated new forms of human interactions through instant messaging, Internet forums, and social networking. Online shopping has boomed both for major retail

outlets and small artisans and traders. Business-to-business and financial services on the Internet affect supply chains across entire industries.

Australia is called a digital media nation and Australians devote over half of their waking hours to interacting with digital media channels. Technology is changing faster than ever and, with that, daily electronic media consumption is changing. The growth of these new technologies has had a fragmentation effect on media consumption as well as an accumulation effect. McCrindle Research (2013) (on their blog/article, 12 August 2013) found that the average Australian now spends 10 hours and 19 minutes each day on electronic media. It is of little surprise that Australians spend the largest proportion of their media consumption on Internet usage. In fact for Gen Y, television is not even second in time use, as they spend more time on mobile media platforms (tablets and smartphones) than television.

	All generations	Gen Y	Gen X	Baby Boomers	Builder Generation
Overall media consumption per day	10 hours 19 mins	10 hrs 21 mins	9 hrs 47 mins	10 hrs 13 mins	10 hrs 15 mins
Primary electronic media by generation (by total hrs per day)		Internet via computer	Internet via computer	Television	Television
Internet usage via PC's per day	3 hrs 49 mins	3 hrs 39 mins	3 hrs 27 mins	3 hrs 58 mins	3 hrs 50 mins
Television viewing per day	3 hrs 14 mins	2 hrs 16 mins	2 hrs 47 mins	4 hrs 2 mins	4 hrs 16 mins
Smartphone usage per day	1 hr 12 mins	2 hrs 0 mins	1 hr 17 mins	39 mins	35 mins
DVD and movie watching per day	34 mins	39 mins	33 mins	31 mins	25 mins
Computer gaming per day	32 mins	36 mins	31 mins	28 mins	35 mins
Video gaming via portable game consoles per day	11 mins	20 mins	9 mins	2 mins	14 secs
Tablet usage per day	29 mins	33 mins	36 mins	20 mins	22 mins

 Table 2:3: Media consumption by Australian generations

Source: McCrindle Research 2013

Marketers are utilising this new media by advertising their products/services on the Internet. Table 2.4 shows a breakdown of advertising by media sector in Australia.

Sector	Percentage
Internet	28.6
Free-to-air TV	26.9
Metropolitan/national daily newspapers (including inserted magazines)	21.9
Radio	7.9
Magazines	7.1
Outdoor	3.8
Pay TV	3.2
Cinema	0.6

Table 2:4: Advertising by media sector: Australia

Source: Ruthven 2013

2.9.3 Internet vehicle: Online social networking media (OSNM)

In today's modern world, the Internet is a relatively a new form of media. It is different to mass media because of its interactive ability. In late 1972, Kahn introduced the idea of open architecture networking. Later, Vincent Cerf teamed up with Kahn and spelt out the details of what became the Transmission Control Protocol/Internet Protocol (TCP/IP). After years of research and development, by 1985, the Internet was established as a technology and introduced to communities for daily computer communication (Leiner et al. 1997).

Social media are 'a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content' (Kaplan & Haenlein 2010, p. 61). For the purpose of this research, Web 2.0 is considered as the platform for the evolution of social media.

For their research, Kaplan and Haenlein (2010) relied on a set of theories in the field of media research (social presence, media richness) and social processes (self-presentation, self-disclosure), the two key elements of social media. With regard to the media-related component of social media, social presence theory (Short, Williams & Christie, 1976) states that media differ in the degree of 'social presence' (defined as the acoustic, visual, and physical contact that can be achieved) they allow to emerge between two communication partners. Social presence is influenced by the intimacy (interpersonal vs. mediated) and immediacy (asynchronous vs. synchronous) of the medium, and can be expected to be lower

for mediated (e.g., telephone conversation) than interpersonal (e.g., face-to-face discussion) and for asynchronous (e.g., e-mail) than synchronous (e.g., live chat) communications. The higher the social presence, the larger the social influence that the communication partners have on each other's behaviour.

The idea of social presence is closely related to the concept of media richness. Media richness theory (Daft & Lengel 1986) is based on the assumption that the goal of any communication is the resolution of ambiguity and the reduction of uncertainty. It states that media differ in the degree of richness they possess – that is, the amount of information they allow to be transmitted in a given time interval – and that, therefore, some media are more effective than others in resolving ambiguity and uncertainty.

Applied to the context of social media, an assumption in this research is that a first classification can be made based on the richness of the medium and the degree of social presence it allows.

With respect to the social dimension of social media, the concept of selfpresentation states that in any type of social interaction people have a desire to control the impressions other people form of them (Goffman 1959). On the one hand, this is done with the objective of influencing others to gain rewards (e.g., make a positive impression on your future in-laws); on the other hand, it is driven by a wish to create an image that is consistent with one's personal identity (e.g., wearing a fashionable outfit in order to be perceived as young and trendy). The key reason why people decide to create a personal webpage is, for example, the wish to present them in cyberspace (Schau & Gilly 2003). Usually, such a presentation is done through self-disclosure; that is, the conscious or unconscious revelation of personal information (e.g., thoughts, feelings, likes, dislikes) that is consistent with the image one would like to give.

Self-disclosure is a critical step in the development of close relationships (e.g., during dating) but can also occur between complete strangers; for example, when speaking about personal problems with the person seated next to you on an airplane. Applied to the context of social media, Kaplan and Haenlein (2010) assumed that a second classification can be made based on the degree of self-disclosure it requires and the type of self-presentation it allows. Combining both

dimensions leads to a classification of Social Media which is represented in Table 2.5.

		Social presence / Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative Projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

 Table 2:5: Classification of social media by social presence/media richness and self-presentation self-disclosure

Source: Kaplan & Haenlein 2010

With respect to social presence and media richness, applications such as collaborative projects (e.g., Wikipedia) and blogs score lowest, as they are often text-based and hence only allow for a relatively simple exchange. On the next level are content communities (e.g., YouTube) and social networking sites (e.g., Facebook) which, in addition to text-based communication, enable the sharing of pictures, videos, and other forms of media. On the highest level are virtual games and social worlds (e.g., World of Warcraft, Second Life), which try to replicate all dimensions of face-to-face interactions in a virtual environment. Regarding self-presentation and self-disclosure, blogs usually score higher than collaborative projects, as the latter tend to be focused on specific content domains. In a similar spirit, social networking sites allow for more self-disclosure than content communication – not electronic communication – can maximize the development of social skills and the experience of bonding with friends (Sherman, Michikyan & Greenfeld 2013).

Finally, virtual social worlds require a higher level of self-disclosure than virtual game worlds, as the latter are ruled by strict guidelines that force users to behave in a certain way (e.g., as warriors in an imaginary fantasy land).

In this research, social media is considered in the broadest sense of the term and defined as any online service through which users can create and share a variety of content.

At the moment, there is no formal classification of the types of Internet-based applications included in social media. However, Constantinides and Fountain (2008) suggest classifying social media into five categories: (i) blogs; (ii) social network sites (for example, Facebook, twitter etc.); (iii) content communities (for example, YouTube and Wikipedia); (iv) e-Forums; and (v) content aggregators. Amongst these five categories of Internet-based applications in social media, social network sites (SNSs) are currently the most popular. The most successful SNS is Facebook, which has a market value of around \$250 billion as at 14 July 2015 (Davis 2015). Hence the focus of this research is mainly on Gen Y's OSNM involvement in social networking sites where self-presentation/self-disclosure is high and social presence/media richness is the medium, and the research considers relatively broad categories of usage: contributing, sharing, consuming or searching for content and participation.

Social networking is as old as humanity. As with every other social species, humans have an instinctive need to be with, communicate with, and share thoughts, ideas, and feelings about their daily lives (Safko 2010). Well-known scholars, such as Aguste Comte and Emile Durkheim, discussed how social actors are connected to one another and how these interconnections shape society (Kadushin 2005). Social researchers applied the term social network to describe various interpersonal dynamics that take place within the immediate environment of people (Cohen & Syme 1985; Fischer 1982; Wellman 1979). The basic need to connect with each other hasn't changed in thousands of years, only the technology we use to make that connection have changed over the millennia. Social network theorists hold that individuals, groups and organizational behaviour are influenced more by the kinds of ties and networks in which actors are involved than by the individual attributes of the actors themselves (Haythornthwaite 1999).

Online social networking, by definition, provides a new method of communicating, employing computers as a collaborative tool to accelerate group formation and escalate group scope and influence (Kane et al. 2009; Pfeil, Arjan & Zaphiris 2009; Ross et al. 2009). This online media focuses on building and reflecting social networks or social relationships among people who share interests and/or activities (Boyd & Ellison 2010).

In 1978, computer scientists Murray Turoff and S Roxanne Hiltz first established the Electronic Information Exchange System. It allowed users to email each other, utilize the list server and see the bulletin board at the New Jersey Institute of Technology for the US Office of Civilian Defense. Online social networks developed from this initiative (Hiltz & Turoff 1978; Hiltz & Turoff 1993; Wasserman & Faust 1994). In 1995, Al Vezza and Tim Berners-Lee, the web's inventor, formed a new coordination organisation, the World-Wide Web Consortium (W3C). The Internet and the World-Wide Web have caused radical changes to communication sectors and widely used media ever since (Leiner et al. 1997).

In 1997, sixdegrees.com became the very first widely known website to allow its users to set up an online social network (Freierman 1998). This was followed by the online business network of Ryze.com (2001) and then Friendster.com (2003), an OSN service that was very popular all around the world (Boyd & Donath 2004). Today, the top 15 social media sites (ranked by unique worldwide visitors eBizMBA, April, 2016) are Facebook, twitter, LinkedIn, Pinterest, Google Plus+, Tumblr, Instagram, VK, Flickr, Vine, Meetup, Tagged, Ask.fm, MeetMe and ClassMates.

A study in 2015 found that average usage times for social media sites rose from 1.66 hours per day in 2013 to 1.72 hours per day in 2015 on social platforms; this represents about 28 per cent of all online activity (Bennett 2015). Taking advantage of this phenomenon, by the end of 2015, the social advertising market was expected to grow to \$19.8 billion and \$24.2 by 2016. With 75 per cent of the ad spend going to Facebook, which continues to be a dominant global force (Morrison 2015). The big three social networks are Facebook with 1.5 billion members, Instagram with 400 million users, and Twitter with 320 million users (Guest 2016). OSNM usage behaviour is developing and transforming at a rapid rate, with more and more Internet users are becoming involved.

Social networking sites are applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other. These personal profiles can include any type of information, including photos, video,

audio files, and blogs. Social networking sites are of such high popularity, specifically among younger users, that the term 'Facebook addict' has been included in the Urban Dictionary, a collaborative project focused on developing a slang dictionary for the English language. Several companies are already using social networking sites to support the creation of brand communities (Muniz Jr & O'Guinn 2001) or for marketing research in the context of netnography (Kozinets 2002).

A broad description of Gen Y starts with the observation that many members grew up with access to a computer; they have mastered its use for many aspects of their lives, particularly communication. These digital natives, who are now either students or relatively recent entrants to the workforce, are often described as technologically savvy and the most visually sophisticated of any generation. A need to interact with others is a key reason for Gen Y's use of social media (Palfrey & Gasser 2008). Social media users 18 to 34 years old are more likely than older age groups to prefer social media for interactions with acquaintances, friends and family. They are also more likely to value others' opinions in social media and to feel important when they provide feedback about the brands or products they use (eMarketer 2011). Some studies suggest that Gen Y: actively contributes content, creating and mashing (i.e., combining of content from multiple sources); gravitate toward social media sites where they can participate (Dye 2007); and that they prefer to stay connected and multitask through technology (Rawlins et al., 2008). On the other hand, studies of college students (a subset of Gen Y) suggest that they spend a considerable amount of time simply consuming content (Pempek et al., 2009), just like other generations. Moreover, Gen Y uses social media for the same purposes as other cohorts: for information, leisure or entertainment (Park, Kee & Valenzuela 2009), for socializing and experiencing a sense of community (Valkenburg et al. 2006), and for staying in touch with friends (Lenhart & Madden, 2007).

It is already noted, research shows that one primary reason Gen Y uses social media is to socialize and experience a sense of community (Valkenburg et al., 2006). As such, a positive outcome of Gen Y's social media use is the formation and maintenance of social capital (Berthon, Pitt & Desautels 2011; Ellison, Steinfield & lampe 2007; Valenzuela, Park & Kee 2009). Social networks such as Facebook can boost young people's social capital because their identities are shaped by what they share about themselves and, in turn, what others share and say about them (Christofides, Muise & Desmarais 2009). Social media use may have additional salutary effects on Gen Y's psychological and emotional wellbeing (Bolton et al., 2013). For example, a beneficial consequence is that social media, such as YouTube, Facebook and Twitter, have been used effectively to disseminate healthcare information to communities at large, especially teens and young adults (Vance, Howe & Dellavalle 2009).

On the contrary, there is evidence of negative long-term consequences for society arising from Gen Y's social media use, such as a deterioration of civic engagement, a loss of privacy and public safety, and an increase in cyber-crime (Bolton et al. 2013).

2.10 Situated cognition theory and activity theory

Socio-cultural theories of learning value the communication of knowledge through social practices and the opportunity to engage in various communities to learn with and from others. The link between online identity and socio-cultural theories of learning arises from widespread use of a culturally valued tool (in this case social networking websites) which provides a context for the individual to learn how to construct an online identity that engages him/her with the collective OSN community. Amongst other key principles, situated cognition is concerned with the notion of 'communities of practice' whereby learning is tied to one's desire to engage with and become an active member of society (Lave & Wenger 1991). This could be viewed as a process of enculturation where, from an early age, people adopt the behaviour and belief systems of their social groups and eventually start acting in accordance with their norms (Brown, Collins & Duguid 1989). To a certain extent this learning occurs as more capable individuals (masters) expose their practices to novice learners (apprentices) (Brown, Collins & Duguid 1989). Learning occurs as a result of participation in real-life contexts and so engagement in authentic activity is heralded as a fundamental component in any investigation of human experience (Brown, Collins & Duguid 1989; Herrington & Oliver 2000).

Taking account of principles underpinning situated cognition, research into OSN must relate directly to experience as it occurs in the daily lives of SNS users. From

this perspective, OSN can be explored as a process of enculturation, where the user actively engages in the practices of a global online community – learning from this community and subsequently contributing to the community.

Building upon the situated cognition view of learning, the modern interpretation of activity theory posits that human cognition occurs as individuals engage in motivated, goal directed activity. This activity is mediated by tools, which are culturally developed and valued (Engeström 1989; 1993; 1999; Kaptelinin 1992). From this perspective competence is required with external (technical) tools, that is, the manipulation of physical objects (for example, a hammer, calculator or computer) and also mastery of internal (psychological) tools (for instance, language, calendar, icons) which enable humans to communicate, interact and influence each other (Lim 2002). Mastery of these two forms of 'tool' provides a means for sharing knowledge which reflects the social and cultural context in which the tools are used (Blanton, Moorman & Woodrow 1997; Riva 2001). Under activity theory technical and psychological tools are considered the means by which humans change how they interpret and transform their external world and this is a key aspect of learning (Hedegaard 2001). Importantly, because individuals and groups are shaped by the cognitive tools available to them, commonalities begin to emerge among members of society (Hatano & Wertsch 2001). This concept relates to situated cognition; specifically, 'communities of practice' and learning as a form of enculturation within a given community. Figure 2.2 shows the relationships between the concepts that make up activity theory.



Figure 2.2: Representation of activity theory (source: Young 2009)

The upper part of the triangle in Figure 2.2 shows that human activity is a process which involves the subject using tools to achieve a specific objective. The theory recognises that this activity does not occur in a vacuum and so the lower component of the triangle in Figure 2.2 acknowledges the context in which the activity occurs. Here the impact of rules governing any activity is recognized and it is understood these rules are co-constructed by members of the relevant community. The community also contributes the skills, knowledge and understanding (Division of Labour) which underpin any human activity. These interrelated components contribute to the intended (or at times unintended) outcome of an activity. With respect to OSN the application of activity theory is shown in Figure 2.3.



Figure 2.3: Activity theory applied to online social networks (Source: Young 2009)

Figure 2.3 firstly acknowledges the activity of creating individual profiles using the Internet (specifically social networking sites) to engage in social interaction. Again, this activity does not occur in isolation but is determined by the context in which it occurs. OSN activity is controlled by site regulations, which are a result of both design/platform constraints and unspoken rules imposed by SNS users as a collective. In a Web 2.0 environment, the collaboration between site designers and site users results in a collective knowledge to produce the applications which contribute to evolution of the site. The six elements work together to enable creation of each online identity which is an outcome beyond the originally stated role of social networking, which was to 'get in contact' and 'stay in contact' with others.

The application of situated cognition and activity theory to OSN suggests SNSs can be viewed as culturally valued cognitive tools which facilitate engagement with the world through goal-driven activity which enables new forms of identity creation, communication and socialization. Hence, these two socio-cultural theories of learning underpin the research in this field, placing particular emphasis on the need for holistic investigation of the phenomenon of OSN. The use of SNS should not be viewed in isolation of device and user; rather this interaction should be explored in the context of the users' whole life (online and offline).

Overall, the concepts of learning and social learning theories have been applied to the analysis of many aspects of human behaviour and adopted to better understand consumer behaviour.

2.11 Communication theories

2.11.1 Social exchange theory

Social exchange theory (SET) is a broad approach used to explain and predict relationship maintenance. Developed by Thibaut and Kelley (1959), SET clarifies when and why individuals continue and develop some personal relationships while ending others. Additionally, the theory takes into account how satisfied one will be with the relationships that one chooses to maintain.

As the name of the theory suggests, an exchange approach to social relationships is much like an economic theory based on the comparison of rewards and costs. Thibaut and Kelley's (1959) theory therefore looks at personal relationships in terms of costs versus benefits.

SET predicts that individuals initiate and maintain relationships so as to maximize personal outcomes; at the same time, however, expectations and alternatives play a role in individuals' ultimate satisfaction and whether they stay in the relationship.

SET was initially developed for analysing human behaviour (Homans 1958) and was later applied to understanding organizational behaviour (Blau 1964; Emerson 1962). For example, SET was extended to the organizational context with an emphasis on the significance of norms, specifically social institutions and formal inter-organizational exchange behaviour. Individuals typically expect reciprocal benefits, such as personal affection, trust, gratitude, and economic return when they

act according to social norms. Therefore, interpersonal interactions from a costbenefit perspective are an exchange where actors acquire benefits (Blau 1964). The social exchange model states that people and organizations interact to maximize their rewards and minimize their costs (Salam, Rao & Pegels, 1998). Related theories of exchange continued to emerge after the advent of SET, including exchange behaviourism (Homans 1958), the exchange network theory (Emerson 1962), exchange structuralism (Blau 1964), and the exchange outcome matrix (Tsai, Cheng & Chen 2011).

SET is used to explain one of the construct of 'trust' in this research.

2.11.2 Theories of persuasion

Persuasion is typically defined as 'human communication that is designed to influence others by modifying their beliefs, values, or attitudes' (Simons 1976, p. 21). O'Keefe (2015) argued that there are requirements for the sender, the means and the recipient to consider something persuasive. First, persuasion involves a goal and the intent to achieve that goal on the part of the message sender. Second, communication is the means to achieve that goal. Third, the message recipient must have free will.

Four theories explore aspects of persuasive communication: social judgment theory; elaboration likelihood model; cognitive dissonance theory; and narrative paradigm. This research will employ two of these theories: social judgment theory and elaboration likelihood model. Although portrayed as theories of persuasion, each of the models can be applied to a wide variety of communication contexts.

Social judgment theory

Social judgment theory proposes that people make evaluations (judgments) about the content of messages based on their anchors, or stance, on a particular topic messages (Sherif & Hovland 1961; Sherif, Sherif & Nebergall 1965). In addition to an individual's anchor, each person's attitudes can be placed into three categories. First, there is the latitude of acceptance, which includes all those ideas that a person finds acceptable. Second, there is the latitude of rejection, which includes all those ideas that a person finds unacceptable. Third, there is the latitude of noncommitment, which includes ideas for which a person has no opinion – neither accepting nor rejecting the ideas. A person's reaction to a persuasive message depends on his or her position on the topic (Sherif & Hovland 1961).

Elaboration likelihood model (ELM)

The ELM explains why a given influence process may lead to different outcomes and impacts on human perceptions and behaviour. ELM, proposed by Petty and Cacioppo (1986), has been widely applied in the field of socio-psychology and marketing to describe how individuals process information (Jones, Shultz & Chapman 2006; Petty & Cacioppo 1986). It describes the conditions under which a person may tend to think carefully and critically about a message, or whether the person may be unduly influenced by unrelated factors. In brief, this theory suggests that when people are sufficiently motivated, have the ability and are not distracted they will think more elaborately about an argument. When they are not motivated, have less ability, or are distracted they may take the easy way out by being influenced by unrelated factors, such as the attractiveness and confidence of the presenter, rate of speech, and other associations. The theory is based on the idea that attitudes are important because attitudes guide decisions and other behaviours.

The model features two routes of persuasive influence: central and peripheral. The ELM accounts for the differences in persuasive impact produced by arguments that contain ample information and logical reasons as compared to messages that rely on simplistic associations of negative and positive attributes to some object, action or situation – also known as cues. The key variable in this process is involvement, the extent to which an individual is willing and able to think about the position materials. When people are motivated and able to think about the content of the message, elaboration is high. Elaboration involves cognitive processes such as evaluation, recall, critical judgment and inferential judgment. When elaboration is high, the central persuasive route is likely to occur; conversely, the peripheral route is the likely result of low elaboration. Persuasion may also occur with low elaboration. The receiver is not guided by his or her assessment of the message, as in the case of the central route, but the receiver decides to follow a principle or make a decision based on cues (Bhattacherjee & Sanford, 2006; Petty & Cacioppo, 1986).

Attitude towards different objects is an important issue in consumer behaviour. In this research, attitude towards brands is pivotal for assessing the outcome of involvement in OSNM. In the next section, relevant attitude theories will be discussed, followed by, specifically, attitude towards brands.

2.12 Attitude towards brands

The following sections, discuss the separate concepts of 'attitude' and 'brands' and the theories that form the basis of this research.

2.12.1 Attitude

In psychology, attitude is defined as a 'psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour' (Eagly & Chaiken 2007 p. 1). Eagly and Chaiken (2007, p. 5) added that attitude is: 'an evaluative judgement or affective or evaluative response'. Current definitions of attitude possess key features, such as evaluation, attitude to object, and tendency (Eagly & Chaiken 2007).

Attitude is a popular research topic in advertising/ marketing studies because attitude can predict consumer behaviour (Mitchell & Olson 1981). Studies have investigated how attitudes are developed, established and, most importantly, influence human behaviour since the early 1960s (Katz 1960; Smith et al. 2008). Attitude is commonly defined as an individual preference (Bass & Talarzyk 1972), and a predisposition of the individual to evaluate some symbol or object of his world in a favourable or unfavourable manner (Katz 1960). Attitudes are important for marketing studies because they represent efforts to predict an individual's behaviour and intentions (Ajzen 1991).

Scholars suggest that attitude formation is a result of learning. Despite the central role that the attitude concept has occupied in social psychology, relatively little attention has focused on the processes involved in attitude formation per se. The field as a whole has attended more to questions regarding attitude change, attitude structure and function, and influences of attitudes on judgments and behaviour than it has to attitude formation (Eagly & Chaiken 1993; Olson & Zanna 1993). For example, in discussing future directions in the study of attitudes, Eagly & Chaiken (1993) referred to the field's current 'lack of attention to the developmental issue of

how attitudes are formed and become strong' as a 'serious omission and limitation' (p. 681).

This is not to say that the question of how attitudes form has been ignored. On the contrary, a number of mechanisms have been implicated as means of attitude formation. In the extant literature, attitude formation is described as the consequences of mere exposure (Winkielman et al. 2003; Zajonc 2001), conditioning of attitudes (De Houwer, Thomas & Baevens 2001) and the inferring of attitudes from observation of one's own behaviour and the conditions under which the behaviour occurred (Bem 1972; Fazio 1989). In general, such formation mechanisms are examples of attitude formation on the basis of what Fazio and Zanna (1981) referred to as direct experience, which can be contrasted with the development of attitudes through indirect experience, that is, on the basis of information that one receives from others about a given attitude object. In the latter case, individuals may form their attitudes vicariously, whether it be through general socialization (Bush, Smith & Martin 1999), inferential reasoning about the communicated attributes of the object (e.g., Petty & Brinol 2010; Fishbein & Middlestadt 1995) or consideration of the value with which others regard the object (Fazio, Eiser & Shook 2004).

This means that attitudes relevant to purchase behaviour are formed as a result of direct experience with the product, word-of-mouth information acquired from others, or exposure to mass-media advertising, the Internet, and various forms of direct marketing (e.g., a retailer's catalogue). In general, the more information consumers have about a product or service, the more likely they are to form attitudes about it, either positive or negative (Schiffman 2014). Overall, consumption related attitudes can be conceptualised as an enduring combination of motivational, emotional, perceptual and cognitive processes with respect to exposure, information dissemination, diffusion, imitation, fashion, inspiration and product placement (Batra et al. 2014; Hirschman & Thompson 1997; Russell, Norman & Heckler 2004; Schiffman 2014).

Studies have found that consumers' attitudes in general are multidimensional. According to multicomponent model of attitudes (Eagly & Chaiken, 1993; Haddock & Zanna 1999), attitudes are overall evaluations of stimuli that are

45

derived from the favourability of individual's affects (a consumers' feelings or emotional reaction to an object), cognitions (an attitude consists of a consumer's beliefs and knowledge about an object), and behaviours or conation (the tendency of the attitude holder to respond in a certain manner towards an object or activity).

The focus of this research; involvement of OSN media and the effect of e-WOM and subjective norm on developing attitudes towards brands have been conceptualized as affective, cognitive and conative effect. Affective response and cognitive response are two important determinants for an individual's acceptance behaviour (Huskinson & Haddock, 2006). Affective response is a general feeling state, while cognitive response comprises specific beliefs related to the object (Breu, Hemingway & Ashurst 2005). Affective response is composed of not only a powerful source of motivation, but also a major influence on information processing and choice. The cognitive component captures a consumer's 'knowledge and perceptions that are acquired by a combination of direct experience with the attitude object and related information from various sources' (Schiffman 2008, p. 229).

Cognitive response is related to beliefs salient to the target behaviour. Because an individual's emotional state influences behaviour (Koufaris, 2002), Peck and Wiggins (2006) argued that creating positive affective responses is likely to lead to stronger behaviour intention. Huskinson and Haddock (2006) further suggested that attitudes lacking affective and cognitive consistency are weaker than attitudes with strong support.

The conative or behavioural component is concerned with the likelihood that a consumer will act in a specific fashion with respect to the attitude object. Giner-Sorolla (2001) proposed that attitude objects were selected on the basis of being affect-based, cognition-based and behaviour-based. In marketing and consumer research, the conative or behavioural component is frequently treated as an expression of the consumer's intention to buy that leads to actual behaviour. (Schiffman 2014), and has been added to research as a contributing factor of attitude formation. However, the formation of attitude through affective, cognitive or conative components establishes associations that are linked to the attitude object and can become part of the mental residue that is attitude.

To explain attitude formation, this research used the elaboration likelihood model (ELM) (discussed in section 2.10) because it offers a way to understand how attitudes are formed and changed. Since this research focuses on developing attitudes towards brand, ELM can be a model that will guide understanding of the information influencing and processing route of members of a social network regarding a brand. In applying ELM to attitude towards brands, this study expands attitudes in ELM and includes three related components: cognitive response, affective response, and conative response. It is essential to remember that attitudes tend to change as cohort effects occur where members of a particular generation tend to share certain outlooks. This research will focus on the formation of attitudes toward brands among Gen Y through their involvement on online social media.

2.12.2 Brand meaning

The American Marketing Association (AMA) defines a brand as a 'name, term, sign, symbol or design, or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of other sellers' (cited in De Chernatony 2009). The problem with this definition, noted De Chernatony: 'this is similar to the definition of a trademark'. De Chernatony (2009) defined brand:

as a cluster of values that enables a promise to be made about a unique and welcomed experience. This captures the way that emphasis may initially be placed on functionally oriented values, which then become augmented with emotionally oriented values, as brand management sophistication increases, driving a visionary promise that adds value to all stakeholders.

The evolutionary brand spectrum led managers to have diverse interpretation of brand. De Chernatony (2010) summarizes different interpretations of 'brand' as shown in Table 2.6.

Franzen and Bouwman (2001) state that consumers develop a brand concept on the basis of core meanings of a brand. These meanings are: one product, one product category, product attribute, domain, provenance, people, design, emotion, personality, value system, ideology, low price, luxury and organisation.

Given that a brand says something about the buyer's values, it is important to understand consumers whose values coincide with the brand's delivered benefit package. This theory of brands links closely to means-end theory.

Input perspective	Output perspective
Logo	Image
Legal instrument	Relationship
Company	Time perspective
Shorthand	Evolving entity
Risk reducer	
Positioning	
Personality	
Cluster of values	
Vision	
Adding value	
Identity	

Table 2:6: Interpretations of 'brand'

Means-end theory

In the domain of marketing and, in particular, consumer buyer behaviour, Gutman's (1982) interpretation of approaches to understanding cognition is known as meansend theory. In essence, the means-end model provides researchers with a theoretical framework that can be used to assess how product or brand choice (at the subordinate level) can lead to the satisfaction of certain personal values for consumers (at the superordinate level). It shows simple, associative links between three levels: product attributes leading to consequences or benefits, which, in turn, satisfy personal values (Zanoli & Naspetti 2002).

The means-end model asserts, therefore, that a close relationship exists between the product or brand choices a consumer makes and the values they seek to satisfy. The model can be used to uncover the cognitive path between product choice and meaning for the consumer, and, in this way, can reveal insights into consumer behaviour.

This study uses means-end theory to uncover how Gen Y, by being involved in social networking platform, finds information regarding brand. Laddering (see later for explanation) is fundamental to the means-end approach because laddering's ability to cause respondents to think critically about connections between a

product's attributes and their own personal motivations (Reynolds & Gutman 1988) helps researchers to develop an understanding of how consumers translate the attributes of products into meaningful associations and into development of an attitude towards a brand. Each unique pathway from attributes to values represents a possible line of psychological movement, a perceptual orientation, with regard to a person's view of the product/brand, which helps to form attitude (Brunsø, Scholderer & Grunert 2004; Fotopoulos, Krystallis & Ness 2003).

To form an attitude toward a brand, people have to search their memory for all sorts of core meanings, emotions and experiences related to the brand in order to construct an attitude on that basis.

Since a brand resides within the hearts and minds of customers, clients and prospects, it is the sum total of their experiences and perceptions. The 'abstract' of brand, therefore, has a wide range of different aspects. In this research, to limit the scope of brand, only few of the aspects will be discussed

Brand equity

This research deals with consumer behaviour and tries to find a causal path for how Gen Y's attitude forms toward brands as a result of their involvement in OSN s. Although this research does not consider brand equity per se, it is important to discuss brand equity to clarify the concept of brand.

The concept of 'brand equity' emerged in the 1980s as a label for the capacity of brands to influence purchasing behaviour and generate stable sales. The concept of equity is borrowed from accountancy, where it means 'net worth', or assets after deduction of liabilities. It is clear that the concept functions as a metaphor when it comes to brands. In countless definitions of the phenomenon of brand equity formulated by various researchers, four components can be distinguished (Franzen, 1999):

- 1. The presence of a brand in the psyche of consumers.
- 2. Its influence on their purchasing behaviour.
- 3. Its effects on the market positions and financial results of a brand.

4. The financial value of a brand as an important asset of a company, which can be included in the balance sheet and is expressed in a sale of the company (or of the brand itself).

The various components of the equity concept can be defined as follows:

- 1. Consumer equity:
 - Mental brand equity: the inclusion of a brand in the consideration set of consumers, or the conscious and active preference for it, based on their perceptions and feelings.
 - Behavioural equity: the habit-related or conscious loyal purchase of a brand by consumers to supply an important part of their category needs.
- 2. Financial-economic brand equity: the influence of consumer equity on the financial-economic performance of the brand in the market, expressed by the degree of distribution, sales, market share, price-premium, margin and profits that it realises.

Here the concept of equity represents the quantitative component – that is, the degree to which a brand succeeds in accomplishing positive consumer and market responses. It also can be called as the strength of a brand. Strong brands have a high equity, weak brands a low equity. Brand loyalty is one of the key drivers of brand equity (Aaker 1991).

Brand image

Franzen and Bouwman (2001) propose that a brand image is equal to the associative brand network, brand attitude, a global total impression of memory, and the symbolic meanings of a brand.

On the same note, image is the theoretical and operational equivalent of attitude, as defined earlier by Ajzen & Fishbein (1980), which is: an acquired tendency to consistently evaluate an object or a person positively or negatively. Fishbein claims that an attitude is made up of 'beliefs' – associations between the objects and various attributes (Eagly & Chaiken 1993). An attitude is the multiplication of

behavioural beliefs (the perceived consequences of behaviour) and the valuation of these consequences (the value that is allocated to the consequences). In other words, a brand image is the tendency an individual has of evaluating a brand positively or negatively at first sight. This tendency is always formed out of associations related to a brand that an individual has stored.

Bhat and Reddy (1998) argued that what a brand symbolises is a significant component of consumer buying behaviours because brand image is significant in consumer decision making. Keller (1993) defined brand image as the summation of brand associations in the memory of a consumer which leads him/her towards brand perception and brand association, including brand attributes, brand benefits and brand attitude. Hsieh, Pan and Setiono (2004) argued that brand image helps consumer in recognizing their needs and satisfaction regarding the brand; image also distinguishes the brand from other rivals, thus motivating customers to buy the brand. Kotler and Gertner (2002) defined image as the attitude, thought and feelings of a person for a particular thing or object. Image communicates expectations. It is a filter influencing perceptions of the performance of the firm and also a function of expectations and experiences. Hence, the essential part of a company's marketing program is to sustain brand image (Roth, 1995) and strategy of the brand (Aaker 1991; Keller, 1993). Image can create importance and it helps consumers to gather information, distinguish the brand, create a reason to purchase and create constructive feelings, as well as provide a basis for brand extension (Aaker, 1991).

People do not react to reality but to what they perceive to be reality. This perspective encourages a more consumer-centred approach to brands as the set of associations perceived by an individual, over time, as a result of direct or indirect experience of a brand. These may be associations with functional qualities, or with individual people or events.

Evaluating a brand's image needs to take into consideration customers' levels of involvement with the category (Poiesz 1989). For those categories where customers are actively involved in spending time and effort seeking out and processing brand information, it has been argued that brand image relates to a network of information stored in the memory that helps the customers to define their self (Reynolds &

Gutman 1984). Because customers are so involved in the brand selection process, it is appropriate to use an involved procedure when measuring brand image, for example, the laddering technique within means-end theory.

In the laddering approach, customers are first asked what they see as being the difference between the brand in question and a couple of competing brands into the category. Having elicited a functional attribute, which acts as the anchor point, customers are asked why this reason is important and, through repeatedly probing about why the reason is important, a value emerges. While this approach takes time to administer, it provides a rich insight into the brand's image. For low involvement categories, such as in situations in which customers habitually buy the brand or undertake minimal information searching, a low involvement evaluation procedure, such as mental mapping, would be appropriate to identify brand image. This probing part may occur in a social networking site between friends through online WOM to seek information and make an image regarding brands and may form an attitude towards the brands. This idea has been adopted into this research because the study is concerned with Gen Y's development of attitude towards brands through their involvement in the social networking media.

Brand awareness

Brand awareness is a precondition for the existence of brands. Three important aspects are distinguished when it comes to brand awareness: a) the total extent of brand awareness; b) the intensity of brand awareness; and c) the breadth of brand awareness. There is a large amount of marketing literature that suggests that well-known brands have various advantages over those that are less well known. They achieve higher levels of appreciation and preference by consumers and retailers alike. This connection between awareness and attitude is one of the most robust empirical generalisations within marketing science. Three plausible theoretical explanations are given for this (Rindfleisch & Inman 1998):

1. The 'mere exposure' hypothesis: repeated exposure to a stimulus leads to an increase of positive affect.

- 'Accessibility of information' hypothesis: less well-known brands are usually connected to fewer meanings because they have shortcomings as sources of inner information.
- 3. The 'social desirability' hypothesis: most people tend to behave according to the expectations of their social environment, even when it goes against their own opinion. Because of this, many people have a tendency to buy the large, well known brands, especially when the brand is socially visible.

Of these three hypotheses, that of social desirability seems to provide the strongest theoretical explanation for the relationship between brand awareness and brand attitude (Rindfleisch &Inman 1998).

Brand awareness also functions as a heuristic, especially with consumers who have little or no experience with a product category and who do not have relevant product schemes (Hoyer & Brown 1990; Macdonald & Sharp 2000). They tend to choose a brand that they know, involving no or fewer 'unknown' brands in their choice process. The presence of a brand name in long-term memory, therefore, has an important influence on the structure of the consideration set.

In this research, brand image and brand awareness approach have been taken into consideration to explain 'brand' in the context of OSNM. Researchers believe that consumers engage in extensive problem-solving behaviour involving brand and attribute comparisons, which leads to a strong brand preference and repeat purchase behaviour. A study by Chadwick Martin Bailey and iModerate Research Technologies cited in a press release, 'People who become a fan of a brand are more likely to buy and recommend their products. People will more likely buy a product of a brand they get socially involved with. In that study it has been shown that more than 51% of the Facebook users would recommend or buy a product of a brand they are fan of' (cited in Dunlap 2010).

From the extant literature of brand concept, this research developed the construct; attitude towards brands, and explains how attitudes develops towards brand through the OSNM in the presence of WOM and subjective norm. Based on that perspective, the concept of attitude towards brands is as follows:

Attitude towards brands

Mitchell and Olson (1981, p. 318) define attitude towards a brand as an 'individual's internal evaluation of the brand'. This is an excellent definition, in that it incorporates two characteristics of attitude that, according to Giner-Sorolla (1999) are: 1) Attitude is centred or directed at an object, in this case a brand; and 2) attitude is evaluative in nature, that is, there is 'imputation of some degree of goodness or badness' to the attitudinal object (Eagly & Chaiken 1993, p. 3).

The third component of Mitchell and Olson's definition of internal evaluation is also noteworthy. It suggests that an attitude is an internal state. However, following Eagly and Chaiken (1993), Spears and Singh (2004) added that an attitude is an enduring state that endures for at least a short period of time and, presumably, energizes and directs behaviour. Thus, it is conceptualized that attitude towards a brand is a relatively enduring, unidimensional summary evaluation of the brand that, presumably, energizes behaviour. In the above definition, following Machleit, Allen and Madden (1993), Spears and Singh (2004) conceived brand attitude as unidimensional and, like Zanna and Rempel (1988), they treat attitude as a 'summary evaluation' to distinguish it from the evaluation which is 'implicit in beliefs, feelings, behaviours and other components and expressions of attitudes' (Giner-Sorolla 1999, p. 443).

There is general agreement in the extant literature that consumption related cognition, attitudes and values are the common outcome components of the consumer socialization process (Chan 2003; Granhaug & Venkatesh 1986; Moschis & Moore 1979). From theoretical perspectives, consumer socialization through the media, particularly Internet, is predominantly explained by social learning theory. According to social learning theory, socialization agents are instrumental in shaping an individual's attitude and behaviour (Barber 2013, Cram & Ng 1999; Moschis & Churchill 1978).

Overall, the extant literature and consumer socialization research identifies three elements of the consumer socialization process: socialization agents (e.g., family, media); social structural variables (e.g., gender, age group); and outcomes (e.g., cognition, attitude, values) (Bakewell & Mitchell 2003, Moschis & Churchill 1978). Based on these theoretical and conceptual findings, OSNM is a socialization

agent and other social structural variables, such as gender differences and age group differences are instrumental is shaping an individual's consumption related attitude (Bakewell & Mitchell 2003; John 1999; Lueg & Finney 2007). So, in this research, attitudes formation towards brands has been identified as an outcome construct of the consumer socialization process of Gen Y.

2.13 Conclusion

In this chapter, critical background theories from multiple disciplines that will have bearing on this research have been reviewed. This review helped establish the research gaps that includes lack of tested empirical model of how OSNM influence Gen Y's attitude towards brands; the lack of understanding regarding social structural variables like gender and age influences on attitude formation towards brands, lack of established measurement items of various constructs used in this research in Australian context. Based on this review the key relevant constructs have been identified which includes involvement in OSNM, Trust, Tie Strength, Informational Influence, eWOM, Subjective Norm and Attitude towards Brands.

In the next chapter, a conceptual model of Gen Y towards brands and how it affects the development of attitudes towards brands through eWOM and subjective norms will be discussed.

CHAPTER 3: CONCEPTUAL FRAMEWORK AND HYPOTHESES

3.1 Introduction

In Chapter 2, the principle and associated disciplines relevant to the focal research topic **'Involvement of Gen Y in online social networking media: Role in developing attitude towards brands'** were discussed and analysed. The key focus of this chapter will be to develop a conceptual model of Gen Y's attitude towards brands and how OSNM affects the development of attitudes towards brands through e-WOM and subjective norm. The role of tie strength, trust and informational influence will also be addressed to explain their role in the formation of Gen Y's attitudes towards brands.

3.2 Gen Y and social media usage

Research on generational groupings is grounded in generational cohort theory, which was proposed by Mannheim in 1928 (Smelser 2001). Generational cohorts within populations coalesce around shared experiences or events, which are interpreted through a common lens based on life stage (Sessa et al. 2007) rather than conventional groupings based on social class and geography. Each generation forever shares a common perspective (Mannheim 1952; Simirenko 1966). As a generation matures, it develops characteristics that differentiate it from previous generations: personality traits, work values, attitudes, and motivations (Smola & Sutton 2002).

3.2.1 Gen Y

Beldona, Nusair and Demicco (2009) define a generational cohort as a group of individuals sharing similar experiences and common characteristics unique only to them. Brosdahl and Carpenter's (2011) categorized generations using the following birth years for each cohort: the Silent Generation (1925-45), the Baby Boomers (1946-60), Gen X (1961-81) and Gen Y (born sometime between 1981-1994) has been followed in this research. There is not (as yet) general agreement on the start and end years for Gen Y. The scope of this research is primarily based on studies of Gen Y members born between 1981 and 1994 – regardless of their circumstances. Other categorization schemes have been proposed because researchers do not agree

on precisely what life events distinguish one generational group from another (Zemke, Raines & Filipczak 2000), plus there are within generation differences. Hence, Gen Y's characteristics are sometimes discussed in overly broad, even sweeping, terms, ignoring intra-generational differences. Nevertheless, it is useful to briefly summarize the characteristics usually ascribed to Gen Y.

A key formative characteristic for Gen Y is early and frequent exposure to technology, which has advantages and disadvantages in terms of cognitive, emotional and social outcomes (Immordino-Yang, Christodoulou & Singh 2012). For example, they rely heavily on technology for entertainment, to interact with others – and even for emotion regulation. Gen Y has experienced long periods of economic prosperity (until the past few years) and a rapid advance in instant communication technologies, social networking and globalization (Park & Gursoy 2012). This characteristic allows us to examine differences in social media usage across diverse members of Gen Y living in Sydney, Australia.

3.2.2 Social media usage

Although social media have existed from the birth of Gen Y (1981), social media was really only widely adopted after 2003 (Boyd & Ellison 2010). Social media encompasses user-generated services (such as blogs), social networking sites, online review/rating sites, virtual game worlds, video sharing sites and online communities, whereby consumers produce, design, publish or edit content (Krishnamurthy & Dou, 2008). Research on social media broadly classifies consumer activities as either contribution (posting) or consumption (lurking or observing) activities (Schlosser 2005; Shao 2009); it suggests that most users consume rather than contribute to social media (e.g., Jones, Ravid & Rafaeli 2004). For example, about 53 per cent of active social media users follow a brand (Nielsen 2009) rather than actively contribute content about the brand. A minority of users usually accounts for a large proportion of generated content (e.g., Bughin 2007). However, over time, some less active consumers do become active (e.g., Hanna Rohm & Crittenden 2011). Shao (2009) has noted that some social media activities, which are conceptually distinct, may be difficult to differentiate due to interdependencies as they unfold over time. In a survey of ten global markets, social networks and blogs are the top online destinations in each country,
accounting for the majority of time online and reaching 60 per cent or more of active Internet users (Nielsen 2009).

Gen Y's social media use affects consumers': identity formation; their expectations regarding service; formation of habits; engagement with brands and firms; participation in value co-creation; brand loyalty; purchase behaviour and lifetime value; and (ultimately) the value of the firm (Bolton et al. 2013). The following sections will describe all the constructs used in this research to make the conceptual framework and hypotheses to shed lights on Gen Y's development of attitudes towards brands through their involvement with OSNM.

3.3 Involvement with media

In this research, the impact of online social networking media on the development of Gen Y's attitude towards brands has been measured by Gen Y's involvement with it.

According to Zaichkowsky, (1985, p. 342), involvement is 'a person's perceived relevance to the object based on inherent needs, values, and interest'. Schiffman (2008, p. 204) describes involvement 'as the extent to which consumers view the focal object as a central part of their lives, a meaningful and engaging object in their lives and important to them'. Fundamentally, consumers become involved in a particular object or stimulus when they perceive its potential for satisfying salient higher-order psychological needs (O'Cass 2000). Peter and Olson (1996, p. 101) observed: 'Involvement refers to consumers' perceptions of importance or personal relevance for an object, event, or activity'. Consumers who perceive that a product has personally relevant consequences are said to be involved with the product and to have a personal relationship with it (Peter & Olson 1996).

Involvement theory recognises that people become attached in differing degrees to consuming products, services or brands. The theory also identifies that in situations of low importance or relevance to consumers, they engage in limited information processing and in situations of high relevance they engage in extensive information processing (Schiffman 2014).

In this research, OSNM will be the focus and OSN the focal activity in which Gen Y's involvement will be addressed. In other words, to assess the extent to which Gen Y view social networking media 'as a central part of their lives, a meaningful and engaging object in their lives, and important to them'.

In media research, involvement pertains to media users' relationships with the message conveyed by media or with media (Levy & Windahl 1984), media personalities (Rubin & Perse 1987), or other media users (Rubin & Step 1997). Rubin and Perse (1987) conceptualised media involvement as 'cognitive, affective and behavioural perceptions during and because of exposure' (p. 247). To understand involvement, one needs to understand the audience and the role of involvement between media motive and media effects (Perse 1998).

Lin (1993) explained that audience activity is a construct describing an audience's involvement when using a media. Activity is mostly manifested in people's media motives, selectivity and involvement with the message provided by media (Blumer 1979). Levy and Windhal (1984) focused on three types of activity: a) selective before exposure; b) involvement during exposure; c) and use after exposure, Diagram 3.1 shows the links between 'Media Motives, Involvement and Media Use and Effects.

Diagram 3.1: Links between media motives, involvement and media use and effects

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(Source: Perse 1990a, 1990b)

Media involvement as a mediator: Several researchers have investigated relationships between media motives, involvement and effects. Perse (1990a) found instrumental viewing motivation positively related to elaboration, whereas ritualistic viewing motivation positively related to engaging in distracting behaviour. Perse (1998) also found instrumental motivation predicted cognitive and affective involvement (e.g., positive reactions) with television viewing. In line with this thinking and research, the relationship between media motives, cognitive and affective involvement, and media use and outcomes can be linked and illustrated as shown in Diagram 3.2 (Perse 1990a. 1990b).

Diagram 3.2: Links between media motives, cognitive and affective involvement, media use/effects

Media motives — Cognitive and affective involvement — Media use/effects Source: Perse 1990a, 1990b

3.3.1 Involvement with online social networking media (OSNM)

The idea of OSNM originated from the current growth of social media. However, OSNM has attracted the significant attention of Gen Y because of its characteristics. Gen Y are the first generation to have spent their entire lives in the digital environment; information technology profoundly affects how they live and work (Bennett et al. 2008; Wesner & Miller 2008). Gen Y actively contributes, shares, searches for and consumes content – plus works and plays – on social media platforms. Furthermore, the interactivity and social identity makes OSNM different and exclusive from other social media.

Research on Internet usage (e.g. Cuillier & Piotrowski 2009) suggests that Internet usage is driven by different drivers. A theory that supports this proposition is the uses and gratification theory (UGT) (Blumler & Katz 1974). Employing the UGT in an Internet context is not new. In fact, from its early days, researchers have applied UGT to explain Internet usage (Flanagin & Metzger 2001; LaRose & Eastin 2004; Morris & Ogan 1996; Newhagen & Rafaeli 1996). The UGT builds upon three basic principles (Blumler 1979): first, individuals are goal directed in their behaviour; second, they are active media users; and third, these active users are aware of their needs and select media to gratify them.

Scholars have long recognised the importance of individual differences in determining behaviours. Furthermore, research has shown that individual desires as influenced by personality affects how a person seeks gratification (Conway & Rubin 1991). An individual's values, beliefs, needs and motives affect his or her behaviours, such as media usage and selection, in order to satisfy a set of psychological needs. As such, the use of a medium such as the Internet and, through the Internet vehicle, OSNM, is aligned with the three principles of the UGT.

UGT postulates that an individuals use SNSs not only because they are goal directed but also to gratify their needs. Therefore, it is assumed that individuals become involved in SNS because they can gratify their needs by using SNS. Research has also found one of the biggest social impacts of using the Internet medium is socialization (James, Wotring & Forrest 1995). Cultivation theory, however, suggests that the consumer socialization process takes place because of

involvement with the media (Brown & Steele 1995). Higher consumption of media brings greater changes in values, beliefs and resulting behaviour.

So far, research on consumer socialization in the context of OSNM has rarely been examined. This research will focus on how involvement in OSNM leads to the socialization process and on the outcome of socialization: formation of attitudes. In the existing literature, measurement items of Gen Y's involvement in OSNM have not been established. However, various researchers have validated measurement items for young people's involvement in media; these have been adapted for this study. Table 3.1 shows the various domain and measurement items of involvement.

Involvement in OSNM					
Zaichkowsky 1985	Oginanova 1998	Shin 2010	Shu & Chuang 2011	Scale items adopted for this research	
Important	Enjoyable	I get	SNS can	OSNMis important to me	
		emotionally	help me get	OSNM is interesting	
Of concern to	Entertaining	SNSs.	people more	OSNM means a lot to me	
inc	Important	I can	easily in real	I think OSNM is essential	
Means a lot to	Important	participate in	life	I find using OSNM entertaining	
me	Relevant to me	the activities in SNSs.	SNS can	I do customise the content and services in OSNM	
Useful		I can	escape	I have a compulsive need to	
Significant	Appealing	customise the content and	loneliness	know more about what my friends are putting on OSNM	
Essential		services in SNSs.		I like to engage in conversation about OSNM	
Listential		I have a great	increase my	I think OSNM is involving	
		interest in SNS	social involvement	OSNM can help me get along with people more easily in real	
		SNS are	a) 10	life.	
		fascinating I have a compulsive need to know more about	SNS can help me	OSNM can help me escape loneliness.	
			compulsive peopl	people in	OSNM is exciting.
			real life	OSNM is significant	
SNS	SNS		Using OSNM is appealing to me		
		I'm crazy		OSNM is fascinating	
al I I	about SNS		I can participate in the activities in OSNM		
		I like to		OSNM provides me lot of information	
		engage in conversation about SNS		I am active on OSNM for certain hours of a day.	

Table 3:1: Constructs, previous research & adapted scale items – involvement in OSNM

As noted earlier, attitude formation is one of the outcomes of the consumer socialization process. In the following sections, Gen Y's formation of attitudes towards brands is discussed in relation to their involvement with OSNM through e-WOM, tie strength, trust, informational influence and subjective norm.

3.4 Electronic word of mouth (e-WOM)

Social networks are a defining feature of today's electronic landscape (De Bruyn & Lilien 2008). Within these social networks, it is common for individuals to provide and receive information and informal advice on products and services (Chu & Kim 2011). This is usually referred to as electronic word-of-mouth (e-WOM), which is conceptualized as any positive or negative statement made by an individual which is made available to a multitude of people and institutions via the Internet (Hennig-Thurau et al. 2004). In contrast, word-of-mouth (WOM), the precursor to e-WOM, may be defined as person-to-person oral communication between a receiver and a sender (Lee & Youn 2009). In this communication, the source is perceived as a non-commercial message that relates to a brand, product or service (Alon & Brunel 2006; Arndt, 1967).

WOM has been recognised as a key force in the marketplace because it influences overall consumer attitudes, beliefs and behaviour patterns (Bansal & Voyer 2000; Hennig-Thurau & Walsh, 2004; see also Mazzarol, Sweeney & Soutar 2007; Sweeney, Soutar & Mazzarol 2014) and, specifically, consumers' product judgements (Bone 1995) and purchase decisions (Bansal & Voyer, 2000; Lau & Ng 2001).

While most traditional WOM occurs among individuals who know and trust each other (Gupta & Harris 2010), the Internet facilitates not only communication with family, friends and co-workers but also unknown people (Kavanaugh et al. 2005). Indeed, most e-WOM occurs with individuals who are strangers (Gupta & Harris 2010). Given the dissimilar tie strengths among individuals, two different types of e-WOM develop, namely e-WOM in-group (eWOM with close friends or family), and e-WOM out-of-group (e-WOM with individuals beyond a person's social, familial and collegial circles) (see Brown & Reingen 1987; Matsumoto 2000). Given the 'ease of eWOM generation and dissemination' (Gupta & Harris 2010, p. 1042) and its impact on consumer buying behaviour (Hennig-Thurau et al. 2004),

researchers have been calling for more research into e-WOM for a number of years (Gupta & Harris, 2010; Hennig-Thurau et al. 2004; Valck 2006; Zhang, Craciun & Shin 2010). Thus far, scholars have examined a wide range of e-WOM issues, including the value of e-WOM to organisations (e.g. Liu 2006), its links with purchase decisions and purchase intentions (e.g. Lee & Lee 2009), its ability to persuade consumers (e.g. Zhang, Craciun & Shin. 2010), its antecedents (e.g. Jayawardhena & Wright, 2009; Gruen, Osmonbekov & Czaplewski 2006; Mazzarol, Sweeney & Soutar, 2007; Sweeney, Soutar & Mazzarol 2008), and its consequences (e.g. Chih et al. 2013; Park & Lee 2009). Despite the considerable volume of studies on e- WOM, it is important to acknowledge that eWOM still remains a very under-researched area (Zhang, Craciun & Shin 2010).

WOM in virtual communities is a key marketing issue because, within these groups, information can reach millions of individuals (Brown, Broderick, AJ & Lee 2007). Community is defined as a set of interlinked relationships that meets members' needs (Mohammed et al. 2003). Virtual communities can resemble traditional primary reference groups, such as friends and family members (Jepsen, 2006), as well as secondary reference groups, such as colleagues and co-workers. Virtual community members consider those communities as 'places' for contact with people who share their interests (Maignan & Lukas 1997; Wellman & Gulia 1999). These virtual communities offer many opportunities for developing friendships and nurturing close relationships as a consequence of shared interests, values and beliefs (Tonteri et al. 2011).

Membership and participation in a relevant virtual group may indeed become a central part of an individuals' social life (Bargh & Mckenna 2004). The fact that virtual community members tend to engage in substantial WOM exchanges (Alon & Brunel 2006) justifies e-WOM's importance from a marketing perspective. Based on the social network paradigm, following Brown and Reingen (1987) and Matsumoto (2000), it is possible to observe that e-WOM in-group occurs in groups characterised by close relationships or strong ties, while e-WOM out-of-group generally occurs between people with weaker ties, such as in social networking groups aimed at reaching the mass public. Since e-WOM is a social phenomenon that occurs in group settings (see Alon & Brunel 2006; Brown & Reingen, 1987), the more consumers interact in a group, the more likely they will be to use e-WOM

to reflect their knowledge and enhance their reputation as experts about specific products (Wu & Wang 2011).

One likely effect of Gen Y's growing involvement in OSNM is the increasing e-WOM they receive and share with the members of their network. Although research shows that the significance, impacts, causes and effects of e-WOM are similar to WOM (Buttle 1998; Phelps et al. 2004; Thomas 2004), e-WOM has been studied as a concept different from typical WOM (Brown, Broderick & Lee 2007; Hennig-Thurau et al. 2004; Yoon & Han 2012) for four reasons:

First, the medium used for e-WOM is different: WOM communication occurred directly, without any physical communication channel, but the Internet is the main communication channel for e-WOM. Second, the reach of e-WOM is more pervasive than WOM. With countless numbers of internet users, e-WOM can be seen around the world with one click. Third, the form of e-WOM messages appear to be diverse. Instead of voice, e-WOM can supplement words with pictures, scanned documents and supporting comments by other consumers. Fourth, the ways to disseminate e-WOM is greater than WOM. Many platforms for e-WOM have been explored since the early 2000s, such as promotional chat (Mayzlin 2006), forward mails (Phelps et al. 2004), virtual opinion platforms (Hennig-Thurau & Walsh 2003), electronic discussion board (Fong & Burton 2006) and online product preview (Feinberg et al. 2002).

Studies suggest that e-WOM in online social networking media is a unique phenomenon (Chu & Kim 2011). E-WOM in OSNM occurs when users provide or search for informal advice through the unique applications of these sites. For example, consumers can associate themselves with brands by becoming a friend or fan, which enables truly interactive e-WOM. With the connectivity among users of OSN sites, the need for psychological involvement with significant contacts (e.g. close friends) leads to users' acquisition of information regarding products and brands through e-WOM activities (Chu & Kim 2011). The information exchange process assists users' of OSN sites to grow their interconnected social relationships and increases their social interactions and engagement in e-WOM. Moreover, the tendency to gather valuable information from others and share knowledge may also encourage users' e-WOM behaviour on OSNS.

Another important issue that makes the social networking media unique from other e-WOM media is that users' social networks are readily available on these sites. So, involvement in OSNM may be perceived as more trustworthy and credible than unknown strangers, which leads OSNM to become an important source of product information for consumers, and significantly facilitates and accelerates e-WOM (Chu & Kim 2011). Lee, Park and Han (2007) agreed that there is a strong relationship between involvement and information processing.

The connection between member participation and technology readiness is suggested in Rogers' book, *Diffusion of Innovations* (2003). Rogers said that people who recognize innovations early have a stronger tendency toward social participation than others. This theory of diffusion is connected with e-WOM through being a participant in OSNM. Social cognitive theory analyses social diffusion of new behaviour patterns in terms of three constituent processes and the psychosocial factors that govern them. These are: the acquisition of knowledge about innovative behaviours, the adoption of these behaviours in practice, and the social networks through which they spread and are supported (Bandura 2001).

Conceptually, e-WOM in OSN is examined through three dimensions: opinion receiving, opinion giving and opinion passing. When making a purchase decision, consumers with a high level of opinion seeking behaviour tend to search for information and advice from others (Flynn, Goldsmith & Eastman 1996). Individuals with a high level of opinion-giving behaviour, known as opinion leaders, may wield great influence on others' attitudes and behaviour (Feick & Price 1987). However, this will not have any effect on their attitude formation or behaviour. As such, only 'opinion receiving' dimension of e-WOM will be relevant for this study. In ISN, a single person can take on the multiple roles of opinion provider, seeker and transmitter where interactivity enables vibrant and interactive e-WOM.

In the elaboration likelihood model (ELM), discussed in Chapter 2 (section 2.11.2), involvement is associated with willingness or motivation to process information (Petty & Cacioppo 1986). By involvement in OSNM, opinion seekers may consider their friend list as reliable and trustworthy sources to evaluate the value of information. Because trust plays a vital role in information exchange and

knowledge integration, it has a critical influence on e-WOM received (e.g. Jarvenpaa, Knoll & Leidner 1998; Pigg & Crank 2004; Ridings, Gefen & Arinze 2002). Opinion leaders can also share information widely because of a socially extensive environment that includes both strong and weak ties (Chu & Kim 2011). Moreover, interpersonal influence, with both normative (Burnkrant & Cousineau 1975) and informational influence (Bearden, Sharma & Teel 1989; Deutsch & Gerard 1955), plays a vital role in OSNM through interactive e-WOM (Tsao et al. 2015). Another important dimension of e-WOM is opinion-passing behaviour (Norman & Russell 2006; Sun et al. 2006). Sun et al. (2006) suggest that online forwarding/passing that facilitates the flow of information is an important behavioural consequence of e-WOM. Utilising the OSN platform, which facilitates multidirectional communication with a few clicks, e-WOM can take place and consumers can spread their opinions on a global scale (Dellarocas 2003; He & Bond 2015; Norman & Russell 2006).

The above discussion gives rise to hypothesis one (H1) to be tested in this research:

H1. Gen Y's involvement in OSNM positively influences the e-WOM they receive.

Researchers have not yet established the measurement items for e-WOM as they relate specifically through involvement in OSNM. However, researchers (Chu & Kim 2011; Cheung Anitsal & Anitsal 2007; Wetzer, Zeelenberg & Pieters 2007) have validated various domains and measurement items for e-WOM that may be adapted for this research. Table 3.2 shows various measurement variables of WOM.

Does involvement in OSNM directly influence the level of e-WOM received? Studies (Bearden, Netemeyer & Teel 1989; Chu & Kim 2011; Brown & Reingen, 1987; Mortenson 2009; Norman & Russell 2006; Reingen & Kernan 1986; Smith, Menon & Sivakumar 2005) suggest that the level of 'tie strength' and 'trust' between network members as well as 'informational influence' may affect the e-WOM received. In this research, 'tie strength', 'trust' and 'informational influence' are taken as related but separate constructs. As such, these three variables may be considered as mediating variables between 'Gen Y's involvement in OSNM' and the e-WOM they receive through this involvement. A mediator variable conceptually occurs 'between' two variables (Bennett 2000). 'A mediator is a variable that specifies how the association occurs between an independent variable and an outcome variable' (Bennett 2000).

Electronic word of mouth				
Chu & Kim	Cheung et al.	Wetzer et al.	Scale items adopted for this	
2011	2007	2007	research	
When I consider new products, I ask my contacts on the SNS for advice	Want more information about a certain product to make better	Want to gain clarity on negative WOM	When I consider buying a new brand, I ask my friends on the OSNM for their advice I like to get my OSNM friends'	
I like to get my contacts' opinions on the SNS before I buy new products	purchase decision		opinions before I buy new brands I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them	
I feel more comfortable choosing products when I have gotten my contacts' opinions on them on the SNS			Often I like to get information about new brands from my OSNM friends Often I want to gain further clarity on negative comments I receive from my OSNM friends	

 Table 3:2: Constructs, previous research and adapted scale items - electronic word of mouth

3.5 Tie strength

Brown and Reingen (1987) examined tie activation in social networks and demonstrated the impact of social tie strength on dissemination of WOM by using a network analysis framework. Tie strength refers to 'the potency of the bond between members of a network' (Mittal, Huppertz & Khare 2008 p. 196). It can be argued that the social network paradigm provides a strong theoretical basis for explaining e-WOM. A social network is a social structure representation in which people are points connected by lines that represent relationships (Granovetter 1976). This paradigm assumes these ties link 'social actors' (Freeman 2004, p. 3) in a network formed by one or more 'nodes' of individuals in social networks or using websites (Wellman & Haythornthwaite 2008). Information is exchanged among people who have interpersonal ties that differ in strength.

Granovetter (1973) examined the strength of ties among individuals in social networks. The ties' strength results from a 'combination of the amount of time, the

emotional intensity, the intimacy and the reciprocal services which characterise the tie' (Granovetter 1973, p. 1361). Granovetter (1973) classifies social ties as strong or weak. Strong ties, such as family and friends, constitute closer relationships within an individual's personal network and are able to provide substantive and emotional support (Pigg & Crank 2004; Palka, Pousttchi & Wiedemann 2009). Weak ties are often among less personal social relationships and are with a wide set of acquaintances and colleagues; such ties facilitate information seeking on diverse topics (Pigg & Crank 2004; Palka, Pousttchi & Wiedemann 2009).

The social network paradigm is important in the e-WOM context since tie strength tends to connect members of different groups causing in-group and out-of-group communication to emerge (Granovetter 1973; Matsumoto 2000). Both strong and weak ties are important for promoting e-WOM because, in combination, they allow widespread information diffusion from one tightly knit group to a bigger, cohesive social segment (Brown & Reingen 1987; Granovetter 1973).

However, there is very limited research on the social effects on information valuation, with the noted exception of foundational research on social ties on WOM behaviour conducted by Brown and Reingen (1987). Despite the considerable volume of studies on e-WOM, it is still an v under-researched area (Zhang, Craciun & Shin 2010). Specifically, there is little exploration of what causes individuals to engage in different types of e-WOM and how diverse tie strengths impact such engagement. Social effects, such as how well a person knows the source of the information, can have a profound influence on the value that consumers place on various pieces of information gathered in their information search. Bansal and Voyer (2000) found a relationship between tie strength and WOM within a service purchase decision context. Similarly, Steffes and Burgee (2009) found that tie strength of information sources affects students' decisions about which professor to choose for tuition.

Gen Y have wide online social networks available to them when they search for information, which includes both strong tie members, such as immediate family members or close friends, and weak tie members, such as acquaintances. In OSNM, consumers' product choices may be influenced by both stable and intimate 'strong tie' interactions and randomly or remotely connected 'weak ties'. Although strong ties wield a more significant impact at the individual and small group level, the asynchronous and connective characteristics of OSNM allows weak ties to expand their potential influence by extending consumers' personal networks to external communities or groups. This accelerates e-WOM conversations throughout a large-scale network.

However, it is unlikely that members would seek information from all sources with equal frequency. Strong tie relationships are typically more readily available as sources of information since they interact with their strong tie members more frequently than weak or non-existent tie members. The existing literature on social ties and WOM communication finds that active information seeking is more likely to occur from strong tie than from weak tie sources (Brown & Reingen 1987). In line with existing WOM theory, the presumption is that members in a social group pair in a strong tie relationship are likely to know more about each other than in weak tie relationships. Underlying the power and influence of WOM over other sources of information, members in strong tie relationships are likely to have an understanding about how likely a product offering would be to satisfy the other strong tie person's needs given the level of intimacy of the strong tie relationship. Therefore, strong tie relationships should more frequently result in WOM referrals of information that is well-aligned with the recipient's wants and needs. The WOM information which is passed between strong tie links is, therefore, likely to be more influential over the recipient's choice as compared to information passed through weak tie links where the level of interpersonal knowledge is far lower.

In line with the findings of Roger (2003) and Weimann (1983), Brown and Reingen (1987) find that, at the micro level (e.g. flows within dyads or small groups), strong ties were more likely to be set off for the flow of referral behaviour. Frenzen and Nakamoto (1993) found that individuals are more likely to pass marketing information through strong ties than weak ties, especially when the information is highly valuable. De Bruyn and Lilien (2008) found that strong ties are more likely to generate awareness in the information recipient than weak ties.

The few consumer behaviour studies on communication flows that have been carried out focus primarily on strong tie relationships, virtually overlooking the impact of weak tie relationships (e.g., Arndt, 1967; Leonard-Barton, 1985).

Granovetter (1973) argues that weak ties are very important for information dissemination in a network at the macro level. The notion has been supported by Goldenberg, Libai and Muller's (2001) and Friedkin's (1982) studies. Goldenberg, libai and Muller's (2001) study simulated the information dissemination process in networks in which strong ties only exist within an individual's 'personal networks' and weak ties only exist between 'personal networks'. The study found that the influence of weak ties on the speed of information dissemination is at least as strong as that of the strong ties. Granovetter (1973) also suggests that weak ties can play a critical role in explaining a wide range of social network linking behaviours, particularly between micro and macro levels. Brown and Reingen (1987, p. 350) found that at the macro level (e.g., flows of communication across groups), weak ties performed a crucial bridging function by allowing information to disseminate and spread among distinct groups. As applied to WOM behaviour, weak ties are often critical to the dissemination of information between tightly woven strong tie clusters, as evidenced when weak tie acquaintances share restaurant opinions gathered from consumption experiences with their family; that is, their strong tie network. Sohn (2009) found that people tend to pass positive and negative information equally likely to their families and close friends through strong ties, but are more likely to pass positive rather than negative information to their acquaintances (weak ties) because they think positive information is more valuable to recipients.

Hossain and de Silva (2009) found that tie strength has a positive relationship with perceived usefulness, attitude towards use, behavioral intention, and actual use of new technologies. Friedkin (1982) found that a combination of strong and weak ties lead to the highest possibilities of information flow. A mediating role was found for weak ties between interpersonal/computer-mediated networks and civic participation (de Zúñiga & Valenzuela 2011). Considering tie strength and treating the two types of ties – strong and weak – differently is especially important for e-WOM on OSNM because of the large number of connections users typically have on OSN. For example, according to information from the Pew Research Center, among adult Facebook users, the average (mean) number of friends is 338, and the median (midpoint) number of friends is 200 (Smith 2014). Apparently, only a small fraction of these connections can be strong ties because of the time and energy

required to maintain strong ties (the average time spent on Facebook per user per day is 20+ minutes) while the vast majority of friends will be weak ties. In the OSNM platform, the perceived tie strength based on both strong and weak ties stimulates members to communicate with each other and disseminate information, thereby mediating e-WOM behaviour. Therefore, it is hypothesised that:

H2: Tie strength plays a mediating role in Gen Y's involvement in OSNM and the e-WOM they receive through this involvement.

Researchers (Chu & Kim 2011: Brown & Reingen 1987; Norman & Russell 2006; Reingen & Kernan 1986) have validated various measurement items for tie strength. Table 3.3 shows measurement variables of tie strength adapted for this research.

Tie strength			
Chu & Kim 2011	Scale items adopted for this		
	research		
Approximately how frequently do you communicate with the contacts on your 'friends' list on this SNS?	I communicate frequently with my close friends on OSNM		
Overall, how important do you feel about the contacts on your 'friends' list on this SNS?	The friends I have on OSNM are important to me		
Overall, how close do you feel to the contacts on your 'friends' list on thisSNS?	I feel close to my OSNM friends		

Table 3:3: Cor	nstructs, previous	s research and ad	lapted scale items	- tie strength
14010010100	not acto, previou	i cocai chi anta aa	aprea scare reems	the bellength

3.6 Trust

In this research, trust has been considered in relation to fellow online community members, which should be salient with regard to how users communicate and interact in the community. Trust has long been a focus in social science studies.

With the recent rise of OSNSs, community websites have placed greater emphasis on the exchange of information, interaction and sharing. People interacting with each other frequently believe they obtain benefits from sharing and exchange (Hsu & Lin 2008). SET (discussed in Chapter 2, section 2.10.1) has recently been adopted in social networking research, although its applicability has not yet been fully examined (Shiau & Luo 2012). Using SET, 'trust' has been studied in disciplines such as: electronic commerce transactions (e.g., Salam, Rao & Pegels 1998), information technology alliances (e.g., Young-Ybarra & Wiersema 1999), acceptance of blog usage (e.g., Hsu & Lin 2008), strategic behaviour and sales performance (e.g., Pappas & Flaherty 2008), B2B exchanges (e.g., Bunduchi 2008), buyer-supplier relationships (e.g., Hald, Cordon & Vollmann 2009), selling performance of sales professionals (e.g., Flaherty & Pappas 2009), Sales professionals' organisational commitment (e.g., Fu, Bolander & Jones 2009), and online group buying acceptance (e.g., Tsai, Cheng & Chen 2011).

As discussed in Chapter 2, SET presents a cost benefit analysis with respect to social interaction. For example, if an online exchange is perceived to be beneficial, the individual is likely to enter an exchange relationship with other online users. In this case, trust is believed to be used in calculating the perceived cost. Previous studies on interpersonal exchange have also suggested that trust is a precondition for self-disclosure because it reduces the perceived risks involved in revealing personal information (Metzger 2004).

Under SET in the OSNM context trust has been incorporated as an important factor in this research. Trust in contacts in OSNs is another related construct that is worth consideration as a mediator in the conceptualisation of receiving information in e-WOM. Trust is defined as 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party' (Mayer, Davis & Schoorman 1995). High trust indicates feelings of connectedness to one another in a community and a 'standing decision' to give most people – even acquaintances or complete strangers – the benefit of the doubt (Carpini, Cook & Jacobs 2004). Individuals with higher trust expect others to follow the same rules or beliefs and are more likely to belong to community groups, socialize with others informally, volunteer, and cooperate with others to solve community problems (Levi 1996; Orbell & Dawes 1991).

Tsai and Ghoshal (1998) found that strong relationships are more likely to be effective because they tend to be trusting ones. On the contrary, Dwyer, Hiltz and Passerini (2007) found that, in online interactions, trust is not as necessary in the building of new relationships as it is in face-to-face encounters; in an online site, the existence of trust and the willingness to share information does not automatically translate into new social interaction.

The finding of studies have suggested that trust plays a vital role in information exchange and knowledge integration because it allows individuals to justify and evaluate their decision to offer or achieve more useful information (e.g. Pigg & Crank 2004; Ridings, Gefen & Arinze 2002). When consumers generate information based on their personal experiences, this information tends to exert more impact on others' attitudes and holds more credibility than if it were generated by advertising companies and corporate marketing departments (Bickart & Schindler 2002; Kempf & Smith 1998; Walsh, White & Young 2009;). For experience goods and credential goods, either positive or negative online messages will be perceived as credible as long as the messages are posted by those perceived to have close social relationships (Pan & Chiou 2011). Moreover, e-WOM's credibility is justified by the fact that other 'consumers are perceived to have no vested interest in the product and no intentions to manipulate the reader' (Bickart & Schindler 2002, p. 428). Hence, consumers find the information exchanged on Internet social networks more relevant and trustworthy because the information reflects product consumption in real-world settings by other consumers and is free from marketeers' interests (Bickart & Schindler 2002; Jepsen 2006). As Granovetter (1973) noted in his exposition of the social network paradigm, this information exchange may depend on a combination of the amount of time, the emotional intensity, and the intimacy of the networks.

As Mangold and Faulds (2009) suggested, consumers perceive social media as a more reliable source of information about brands than marketer- generated content communicated via the traditional promotional mix comprising advertising, sales promotion and public relations (p. 360). In the same way, compared to comments from anonymous or unfamiliar sources via other e-WOM formats (e.g., product review sites and forums), connections in OSNM are embedded in consumers' existing networks and may, therefore, be perceived as more credible and trustworthy than unknown sources. With consumers' mutual agreement to become friends and join each other's social networks in social networking sites, this 'friending' procedure requires consumers to go through profiles, which may increase the credibility of their contacts and inspire high levels of social trust.

The Mediating role of trust was also observed in effective knowledge transfer through weak ties (Levin & Cross 2004). Further, since OSNM enable the users to

articulate and maintain real world relationships (e.g. friends and family) and easily exchange information with them, the established trust may extend to the other contacts in networks in general, thereby improving the overall sense of trust in the environment. Such enhanced trust in OSNM contacts may substantially mediate consumers' willingness to receive e-WOM through involvement in OSNM. Hence, the following hypothesis is tested in this research:

H3: Trust plays a mediating role in Gen Y's involvement in OSNM and the eWOM they receive through this involvement.

Researchers (Chu & Kim 2011; Mortenson 2009; Smith, Menon & Sivakumar 2005) have validated various measurement items for trust in members of online social networks. To measure trust in online social networking media, Table 3.4 shows measurement variables of trust adapted for this research.

Trust			
Chu & Kim 2011	Scale items adopted for this research		
I trust most contacts on my	I find most of my OSNM friends dependable		
'friends' list on the SNS	I think most of my OSNM friends are honest		
I have confidence in the contacts on my 'friends' list on the SNS	I trust comments made by my OSNM friends		
	I think most of my OSNM friends are reliable		
I can believe in the contacts on	I have confidence in my OSNM friends		
my 'friends' list on the SNS	I can believe in my OSNM friends		

Table 3:4: Constructs, previous research and adapted scale items – trust

3.7 Informational influence

In social influence theory, social influence refers to how an individual in a social network is influenced by the behaviour of others to conform to community behaviour patterns (Venkatesh & Brown, 2001). Deutsch and Gerard (1955) distinguish between two types of social influence: informational and normative. Informational influence refers to the tendency to accept information from knowledgeable others as an indicator of reality and be guided in product, brand and store search (Deutsch & Gerard 1955; Bearden, Netemeyer, RG & Teel 1989).

In the information processing literature, the heuristic–systematic model propose that two strategies are available for individuals when they need to process information (Chaiken, 1980). The first strategy is heuristic processing, in which 'people consider a few informational cues – or even a single informational cue –and form a judgment based on these cues" (Todorov, Chaiken & Henderson 2002, p. 196). The second strategy is systematic processing, in which 'people consider all relevant pieces of information, elaborate on these pieces of information, and form a judgment based on these elaborations (Todorov, Chaiken & Henderson 2002 p. 196). Since heuristic processing requires less cognitive effort than systematic processing, individuals tend to adopt the first strategy and will adopt the second later in certain situations (Chaiken & Ledgerwood 2011).

The sufficiency principle of the heuristic–systematic model suggests two forms of judgmental confidence: actual confidence and desired confidence (Chen & Chaiken 1999; Davis & Tuttle 2013). The level of actual confidence is generally lower than that of desired confidence. Systematic cognitive processing occurs because individuals want to improve their actual confidence, thus, meeting the level of desired confidence (Chaiken & Ledgerwood 2011; Todoroy, Chaiken & Henderson 2002). In this regard, individuals may have to perform systematic processing when the disparity between actual and desired confidence grows. The disparity grows when individuals are under the situation of requiring a high level of desired confidence, or when they encounter a low level of actual confidence.

A study by Todorov, Chaiken and Henderson (2002) shows that motivational factors and inconsistent information may engender individuals to perform systematic processing. Motivational factors, such as task importance, may increase the disparity of the two confidences by improving desired confidence whereas ambiguous or inconsistent information may increase the disparity by reducing actual confidence. When individuals encounter inconsistent information, they may find that heuristic information processing alone is insufficient to reach their desired confidence. Thus, it may become necessary to perform a high level of elaboration on such information to make judgments (Davis & Tuttle 2013), as explained by the elaboration likelihood model as proposed by Petty and Cacioppo (1986) (discussed in section 3.9.2 of this chapter).

Spreng and Page (2001) suggested that if an individual acquires more information, he/she possesses greater confidence to guide later behaviour or attitude formation. Informational social influence occurs when people make decisions to reach the best possible decision through collecting information (Henningsen & Henningsen 2003). An individual following persuasive messages with argument quality prefers to evaluate messages by attending to messages and expanding cognitive thoughts, leading to the facilitation of information collection and sharing (Lee et al. 2006). Through information collection and evaluation, an individual confronts or adds to what an individual already believes (Burnkrant & Cousineau 1975). Shared information in discussion exerts an informational social influence (Henningsen & Henningsen 2003). In addition, Kaplan (1989) proposed informational social influence can be connected to central processing because it results from critical thinking about the decision set. An individual following persuasive messages with higher levels of argument quality tends to have higher levels of informational social influence.

Informational social influence is a desire to make a good decision (Henningsen & Henningsen 2003). External information influences people in the direction of new possibilities so that they can re-examine their beliefs and attitudes and consequently change extant behaviours. Lee et al. (2006) suggested that information from external sources can enhance an individual's confidence in beliefs or attitudes toward some object. Thus, informational social influence enhances the tendency to actively seek and consider information, leading to a more cognitive response. Informational influence is either the search for information from others or the observation of the behaviour of others, where trusted information is obtained (Kaplan 1989). An individual relies on the information of others to make decisions or reduce uncertainty (Clark & Goldsmith 2006). Hence, it is assumed, when individuals have cognitive responses toward an object, informational influence helps confirm and strengthen their thinking.

Lee et al. (2006) proposed that information social influence is a learning process in which people observe the successful experiences of their social groups with an innovation before deciding whether to adopt it. In other words, when individuals have more cognitive responses toward an object and they acquire more confirmed information or knowledge about the object their perceptions of the desirability of the object will be strengthened. However, other studies have found that information from social groups only serves as a supplementary function: the potential user may or may not follow what was suggested. Thus, positive informational social influence would exert a moderating impact on innovation adoption decisions (Lee et al. 2011). Kaplan & Miller (1987) proposed that informational influence causes group members to re-evaluate their positions when facts, evidence or other forms of information pertinent to the decision are discussed by group members because members want to make high quality decisions. Informational influence is based on the acceptance of information from others as evidence about reality. Shifts are attributed to the sharing of relevant arguments and factual information about the judged issue.

Social psychology teaches that an individual's opinion in a social network is, to a large extent, determined by the opinions of neighbours who influence the individual (Myers 2009). After the advent of Web 2.0, online social networks have grown in importance as the means of spreading opinions that influence actions of the users. Social media spaces include SNS, discussion forums and blogs, where individuals meet, share and discuss a wide range of issues and exchange information across socially integrated online communities (Kaplan & Haenlein 2010). Whereas social media spaces can be exclusively used for unidirectional information flow, studies show they also serve social interaction needs which require some level of information or opinion interaction (Papacharissi & Mendelson 2008; Sweetser & Lariscy 2007).

Someone outside the network or inside it may try to change the opinions of a few key users in popular OSNs (e.g., Facebook, Twitter) and thus spread opinion changes throughout the whole networks. It should be acknowledged that small deviations in decisions may lead to huge cascade changes depending on the structure of the network (who trusts whom) (Watts & Dodds 2007).

Based on the UGT framework, Abelman, Atkin and Rand (1997) observed the information seeking behaviour of Internet users. They found that during the experiential learning process, Internet users also experience pleasure. This is because 'the primary use of computer-mediated forms of communication and the Web involves entertainment' (Eighmey & McCord 1998, p. 189), that is users gain gratification (such as mood enhancement) through an electronic communication

medium, such as the Internet, through informational learning and socialization (James, Wotring & Forrest 1995).

Altogether, e-communication enables people to share information and opinions with others more easily than ever before (Hennig-Thurau et al. 2004). The Internet has extended consumers' options for gathering assumedly unbiased product information from their peers (Hennig-Thurau et al. 2004). Furthermore, the Internet provides consumers with the opportunity to offer their unique consumption-related advice by engaging in e-WOM on message boards, internet forums, chat rooms and social networking sites. Consumer theorists have long recognized the influence that friends and reference groups have on consumer decision making. It is also possible that members of the networks have interpersonal influence on their friends and reference groups' WOM into OSNM.

In consumer behaviour theory, interpersonal influence manifests in three forms: utilitarian, value-expressive and informational (Mourali, Laroche & Pons 2005). In the pre-purchase information search stage of a consumer's decision making, there are eight sources of information (Beatty & Smith 1987; Moore & Lehman 1980): friends' opinions, family members' suggestions, colleagues' advice, one's own prior knowledge, web sites, consumer reports, media advertisements and salespeople. When information flow takes place online, large volumes of information about a particular topic from friends who have recent experience with it is easily accessible.

A considerable number of studies have suggested that WOM may become the most powerful source of information when consumers are susceptible to informational influence (Bearden, Netemeyer & Steel 1989). Bagozzi (2008) argued that 'Much of human behaviour is not best characterized by an individual acting in isolation' (p. 247). Thus, to understand the influence of e-WOM on Gen Y's involvement in OSNM, there is a need to incorporate social factors. That is, users of OSNM who are subject to informational influence are predicted to display a higher need to obtain information and guidance from knowledgeable contacts when searching for and contemplating purchase options, which will facilitate the e-WOM they receive through their involvement in OSNM. Individuals who are more amenable to informational influence emphasise the value of the information transmitted (Laroche et al. 2005). SNS users' tendency to gather valuable information about products, from others with knowledge of those products may encourage users' e-WOM behaviour on these sites. It is noticeable that interpersonal informational influence was not found to significantly relate to opinion giving (Chu & Kim 2011). This finding might suggest that the nature of informational influence focuses on obtaining information from others rather than giving (Bearden, Netemeyer & Teel 1989). That is, when SNS users are susceptible to informational social influence, they are less likely to give information to others. Thus, the linkage between SNS users' susceptibility to informational influence and opinion giving was not confirmed. From this perspective, it is reasonable to argue that, by being involved in OSNM, Gen Y's susceptibility to informational influence will mediate the e-WOM they receive. Thus, the following hypothesis has been tested in this research:

H4: Informational influences play a mediating role in Gen Y's involvement in OSNM and the e-WOM they receive through this involvement.

Researchers (Chu & Kim 2011; Bearden, Netemeye & Teel 1989) have validated various measurement items for informational influence on members of online social networks. Table 3.5 shows various measurement variables of informational influence and their adaptation for this research.

Informational influence			
Chu & Kim 2011	Scale items adopted for this research		
If I have little experience with a product, I often ask my friends about the product I often consult other people to help choose the best alternative available from a product class I frequently gather information from friends or family about a product before I buy	If I have little experience with a brand, I often ask my OSNM friends about the brand before buying I often consult my OSNM friends to help choose the best alternative available from different brands I frequently gather information from my OSNM friends about brands before I buy I rarely purchase any brand until I am sure my OSNM friends approve of that		
•			

 Table 3:5: Constructs, previous research and adapted scale items – information influence

3.8 Subjective norm

In social influence theory, normative social influence has been identified as one type of social influence; it refers to the need of an individual to conform to the expectations of another person to group (Deutsch & Gerard 1955). Normative influence occurs in groups based on a desire to maintain group harmony or to elicit positive evaluations from others, and where discussion content presents the positions favoured by other group members (Kaplan & Miller 1987).

The theory of reasoned action (TORA) (Fishbein & Ajzen 1975) is a wellresearched and empirically validated model that has been successful in predicting behaviour in a variety of domains. According to TORA, subjective norm, as a form of social influence, is a core determinant of behaviour. Subjective norm is defined as 'a person's perception that most people who are important to him think he should or should not perform the behaviour in question (Fishbein & Ajzen 1975).

When individuals are under normative influence, they perceive higher levels of social pressure to perform or not to perform behaviour, regardless of their beliefs and attitudes toward the behaviour. It refers, on the one hand, to beliefs that specific referents dictate whether one should perform the behaviour or not, and on the other hand the motivation to comply with specific referents (Ajzen & Fishbein 1980).



Diagram 3.3: Construct of subjective norm

Source: Adopted from the model of 'Theory of Reasoned Action' (Fishbein & Ajzen 1975)

The question is: who are the specific referents? Possible sources are family members, teachers, peers, co-workers, and acquaintance who are connected in a social network. Members may follow others' opinion as a result of overt conformity pressures from peer groups and in response to concerns about what others might think of them (Bearden & Rose 1990). Behaviour is often defined by interpersonal relationships and perceptions of social norms – both factors are an inherent part of the social web.

Huang and Chen (2006) studied group behaviour on the Internet. They found that consumers monitor the comments of others regarding specific topics and use them as a basis for their own choices and behaviour. Other researchers have focused on informational influence rather than normative influence on decision making in the online environment and argued that, in the Internet environmental, informational rather than normative influence plays a central role in influencing consumers, because individuals do not need to conform to the expectations of others when making a purchase, and they all have informational motives to make good decisions (Dholakia, Basuroy & Soltysinski, 2002).

In the extant literature, subjective norm in the online environment is found to influence users' intention to make online purchases (Pavlou & Fygenson 2006), play online games (Hsu & Lu 2004), adopt a blog (Hsu & Lin 2008), and use advanced mobile services (López-Nicolás, Molina-Castillo & Bouwman 2008). To investigate the determinants of user acceptance of online social networks, attention given to the effects of social influence (Qin et al. 2011).

Early research regarding social influence on consumer behaviour (Venkatesan 1966) concluded that normative pressures were operative in public/group settings and individuals tended to conform to group opinions. In the OSN platform, the members of the network engage in providing comments, suggestions or opinions that may influence perceptions regarding specific products, services or brands. Because OSNs are socially anchored rather than 'personal and individual', they are naturally expected to be more driven by social influences. Consumers who are susceptible to normative influences are more likely to adhere to the expectations of significant others, and seek social approval through the acquisition and use of the products and brands their significant others view as acceptable. Consequently, they may actively seek opinions from their contacts in social networks. Such behaviours are associated with eWOM. From this perspective, it is reasonable to argue that, in today's modern technology-oriented environment, in which Gen Y are heavy users of OSNM, it is imperative for Gen Y to comply with the reference group who influenced by e-WOM. There should, therefore, be a relationship between e-WOM and subjective norm. The hypothesised tested in this research is:

H5. There is a positive influence of e-WOM received by members of Gen Y through their involvement in OSNM on their subjective norm.

Researchers have not established measurement items for subjective norm that are specific to involvement in OSNM context. However, researchers (Hsu & Lin 2008; Mascarenhas & Higby 1993; Pavlou & Fygenson 2006; Schiffman et al. 2005) have validated various measurement items for subjective norm. Table 3.6 shows measurement variables of subjective norm adapted for and used in this research.

I	Pavlou &		
Schiffman et al. 2005	Fygenson 2006	Mascarenhas and Higby 1993	Scale items adopted for this research
Most personsMowho arewhimportant toimpme think Imeshould/shoulda gnotgetinfaI should buyabomyself aproBulova watchthisduring thenext sixmonths.whimpTypically, Imelike to doinfawhat myabofriendsprosuggest that Ithis	ost people ho are portant to e think it is good idea to it formation out this oduct from is website ost people ho are portant to e would get formation out this oduct from is website	I rarely purchase the latest products until I am sure my peers approve of them. It is important that my peers approve of the store where I buy Am very loyal to stores where my peers shop If I want to be like my peers, I always buy the brands they buy. I work long hours and save to afford the things my friends buy. I achieve a sense of belonging by buying the same brands my peers buy. My peers very much influence the choice of my shopping friends.	Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM Typically, I like to do what my OSNM friends suggest that I do It is important that my OSNM friends approve of the brands I buy I am very loyal to brands that my OSNM friends buy If I want to be like my OSNM friends, I always buy the brands they buy I work long hours to save so that I can afford the brands my OSNM friends buy I feel a sense of belonging by buying the same brands that my OSNM friends very much influence the choice of my brands.

Table 3:6: Constructs, previous research and adapted scale items – subjective norm

3.9 Attitude towards brands

A generation is defined as 'an identifiable group that shares birth year, age location, and significant life events at critical development stages, divided by five-seven years into the first wave, core group, and last wave' (Kupperschmidt 2000, p. 364). Although the labels for the generations of the twentieth century have been agreed to, the years they represent are not always consistent among authors (Smola & Sutton 2002). People tend to classify themselves into generations such as X, Y or Z, and which group they belong to has special significance for them at around age 15 to 25. It is probably also the most important period for the development of brand relations. Around the age of 30, people's personalities, elementary knowledge skills and views of the world have taken on fairly stable forms. Brand knowledge goes on developing during life because learning processes continue throughout lives, but the associative networks of the brands that have significance remain fairly stable. This research focused mainly on this 15 to 25 year old stage of life of Gen Y in relation to how they develop attitudes towards brands.

In recent years, consumers see information about a brand they glean from blogs, social networking sites and the like as more relevant and more important than information provided by companies about their own brand (Christodoulides 2008). It is not surprising that almost two-thirds of marketers and advertising agency managers now believe that the strategic use of the Internet can help develop strong customer relationships with their brand (Foster, Francescucci & West 2010).

The motivation for this shift is the increasing penetration of the Internet into households across the globe. According to a recent international study (Zamaria & Fletcher 2008), over 90 per cent of 18 to 29 year olds use this technology in Australia, Canada, New Zealand, Sweden and the United States. The question for marketers is whether this uptake of technology has reached the 'tipping point' where fundamental change ensue because a critical mass of people are engaged and convert to a new idea (Kim & Mauborgne 2003). Given its increasing importance and rapidly evolving nature, social media research provides both scholars and practitioners with the opportunity to better understand and leverage the benefits of online behaviour. As such, it is likely to become the most important component of the marketer's toolkit in the foreseeable future. This particular study contributes to an emerging area of inquiry by exploring the adoption of online social network

technologies among young adults, providing implications for brand management and proposing a roadmap for future research. In the following section, attitude towards brands is discussed in relation to Gen Y's involvement with OSNM through e-WOM and subjective norm.

3.9.1 Electronic word of mouth and attitude towards brands

Generally, e-WOM is recognized as an efficient and credible form of marketing that can informally but effectively influence consumers' brand awareness (Ferguson 2008), brand attitudes (Herr, Kardes & Kim, 1991), brand loyalty (Sung, Kim & Moon 2008), purchase intention, and decision (Riegner 2007; Söderlund & Rosengren 2007).

Advertising spending has undergone tremendous growth on SNSs. According to a press release by eMarketer (2015), advertisers worldwide expected to spend \$25.14 billion on paid media to reach consumers on social networks in 2015. According to eMarketer, this is a 40.8% increase from 2014 numbers. By 2017, social network advertising spending will reach \$41.00 billion, representing over 18% of all digital advertising spending globally.

SNSs represent an ideal tool for e-WOM, as consumers freely create and disseminate brand-related information in their established social networks composed of friends, classmates and other acquaintances (Vollmer & Precourt 2008). As Mangold and Faulds (2009, p. 360) suggested, consumers perceive social media as a more reliable source of information about brands than marketer-generated content communicated via the traditional promotional mix comprising advertising, sales promotion and public relations.

Past research on the effect of WOM on consumer attitudes was conceptualized as a cognitive effect (Gelb & Johnson 1995) and face-to-face WOM have proved to be positively related to consumer attitudes (Arndt 1967; Buttle 1998; Gelb & Johnson 1995). Research on e-WOM suggests that valence and extremity of e-WOM have a greater impact on attitude toward the brand (Lee, Rodgers & Kim 2009) and e-WOM messages have a relationship to brand attitude (Wu & Wang 2011). The online SNSs form of virtual communities represent places where people connect and interact concerning shared interests, support, sociability and identity (Wellman et al. 2001). It also allows users to express some degree of emotion or feelings

through posts of sharing information, comments, photos, videos, writing in walls, liking a brand or web page and discussion in a group between ties of the network; these may impact on users through e-WOM and refer to the affective component of the attitude model, contributing to the formation of attitudes toward brands. Furthermore, information in online social network media through WOM can enhance member's confidence in their beliefs and attitudes; the more confidence an individual has in a belief, the more likely it is that the belief will influence attitude formation. Attitudes with regard to a brand arise mainly from user experience with that brand. In OSNs, when friends talk about brands and their experience associated with that brand, it is more likely that members of that network will have some degree of confidence on the message and will be influenced in attitude formation.

Therefore, it is hypothesised that:

H6. There is a positive influence of e-WOM received by Gen Y through their involvement in OSNM on their attitude towards brands.

So far researchers have not established the measurement items for attitude towards brands for the OSNM context. However, Derbaix and Leheut (2008) and Holbrook and Batra (1987) have validated various measurement items for attitude towards a brand. To measure attitude towards brands through members of online social networking media, Table 3.7 shows the measurement variables adapted for this research.

Attitude towards brands			
Derbaix and Leheut 2008	Scale items adopted for this research		
I like very much	I like very much the brands my Online Social Networking Media		
I appreciate	(OSNM) friends positively talk about.		
It's cool	I appreciate the brands my OSNM friends suggest me to buy		
It's useful	I think the brands that my OSNM friends talk about are cool		
It's necessary	I find the brands that my OSNM friends like are good		
It's practical	I find the brands that my OSNM friends suggest to me are good		
It's efficient	When my OSNM friends provide positive information about a brand, the brand becomes a necessity		
It helps you			

 Table 3:7: Constructs, previous research and adapted scale items – attitude towards brands

Attitude towards brands		
Derbaix and Leheut 2008	Scale items adopted for this research	
become part of	The brands that my OSNM friends like and suggest are practical	
a group It allows you	The information that my OSNM friends provide on brands is effective	
not to go unnoticed	When I buy a brand that my OSNM friends also buy it helps me to become part of a group	
It allows you to get more respect	When I seek information about brands from my OSNM friends, it allows me not to go unnoticed	
	When I talk about brands in OSNM, it allows me to get more respect	

3.9.2 Subjective norm and attitude towards brands

Lee, Cheung, Sia and Lim (2006) indicated that social group influence is a learning process. Before deciding whether to accept an service, product or idea, individuals observe successful experiences acquired by their social groups. Through information processing, normative and informational influence can be created (Chen, Schechter & Chaiken, 1996; Lundgren & Prishlin, 1998; Wood, 2000). When individuals perceive higher levels of normative social influence, they tend to conform to others in order to maintain their self-defining relationship with the group, receive rewards or avoid punishment (Clark & Goldsmith, 2006).

Normative social influence is motivated by a desire to maintain harmony, leading people to conform to the positive expectation of others in order to be liked and accepted by other group members (Aronson, Wilson & Akert 2013). Normative influence occurs when individuals make decisions to gain approval from other group members (Henningsen & Henningsen 2003). Normative social influence is positively related to an individual's tendency to conform and to be obedient to authority (Higgins 2001). Normative social influence is stronger in consensus groups than in groups without initial consensus (Henningsen & Henningsen 2003). It is assumed that SNS group members experiencing persuasive messages with higher levels of source credibility from the social network sites are included to follow the rules in groups, and thus have correspondingly higher amounts of normative social influence. In addition, as proposed by the elaboration likelihood model, since normative influence is the outcome of only a small amount of information-relevant thinking, it occurs through the peripheral route to persuasion

rather than the central route (Dennis 1996; Kaplan, 1989). Therefore, an individual with a peripheral-route decision process tends to perceive higher levels of normative social influence.

Normative social influence corresponds to affiliation-disaffiliation of social interaction between group members (Kaplan 1989). The affective commitment can be regarded as affective responses. To sum up, normative social influence drives group members to align their thinking to that of the majority. The social interaction process of fitting in with the group stimulates affective responses. Silvera, Lavack and Kropp (2008) further proposed that higher levels of normative social influence represent a willingness to submit to forces within the social environment. The submission to forces could be viewed as the affective components of attitude towards brand. With little cognitive scrutiny of information processing, an individual following peripheral cues relies on the credible person's cues to make decisions. When people identify with the credible sources, and possibly those sources are their specific referents, they tend to follow credible person's suggestions and acquire recognition from the credible source or reference group. With the same impression, when an individual has affective responses towards brands and if friends in a social network provide more affirmative opinions, the individual may feel that the idea has been confirmed, leading to a strengthening of attitude towards that particular brand.

In the previous section of this chapter (see section 3.8), subjective norm was discussed as one of the constructs for this research. The TORA (Fishbein & Ajzen 1975) proposes that subjective norm is a construct of TORA. The theory of planned behaviour (TPB) is an extension of TORA made necessary by the original model's limitations in dealing with behaviours over which people have incomplete volitional control (Ajzen 1991). The central factor in the TPB is the individual's intention to perform a given behaviour. The TPB links behavioural intentions with attitudes, subjective norms and perceived behavioural control. In earlier studies of TORA (Fishbein & Ajzen 1975) and its extension, TPB (Ajzen 1991) was found to be useful in predicting a wide range of behaviour.

Previous research also suggests that normative influence, which refers to the tendency to conform to the expectations of others, affects attitudes, norms and

values (Burnkrant & Cousineau 1975). Though theory of reasoned action and the theory of planned behaviour explain subjective norm and attitudes as independent domains, researchers have found evidence that there is a significant causal path from subjective norms to attitudes (Chang 1998; Shepherd & O'Keefe 1984; Shimp & Kavas 1984; Tarkiainen & Sundqvist 2005; Vallerand et al. 1992) that was neglected in prior studies. All former research, in which subjective norms and attitudes were related to each other, dealt with some kind of ethical or moral decision-making, as well as personal benefit. As Chang (1998, p. 1832) noted: 'if this relationship exists, the effect of the significant other on attitude formation cannot be ignored'. Chang (1998) examined the correlation between subjective norms and attitudes towards behaviour more thoroughly, and tested the causal link from norms to attitudes. In Chang's (1998) study, the path from subjective norms to attitudes towards behaviour was significant. Chang (1998) suggested that the link could be explained by the influence of the social environmente on an individual's attitude formation. For example, in the organic food-buying context, the role of subjective norms differs from the original theory of planned behaviour. In buying organic food, subjective norms affected buying intention indirectly through attitude formation (Tarkiainen & Sundqvist 2005). In addition, results showed that the modified TPB model predicts intention to buy organic food better than the original model. Based on the results, Tarkiainen & Sundqvist (2005) found that consumers' intentions to buy organic food can be predicted from their attitudes, which can further be predicted by subjective norms.

It will be interesting to research this issue in the context of OSNM; that is, how does social pressure influence Gen Y's attitude formation. In this research, the modified theory of planned behaviour approach has been used to formulate the hypothesis:

H7. There is a positive influence of Gen Y's subjective norm on their attitude towards brands.

3.10 Gender differences and Gen Y

Gender schema theory (Bem 1981) proposes that individuals learn how culture and society define the roles of males and females. Based on this internalized knowledge, individuals assume traits they deem suitable for their gender. Because

of these socially constructed roles, gendered communication styles and behaviours found offline tended to also appear online (Gefen & Ridings 2005). However, with the introduction of the web and graphical browsers, the gender balance on the Internet began to shift. By 2000, the Internet population was evenly divided (Fallows 2005).

More recently, Herring et al. (2004) found that while the proportion of men and women who go online is similar, the type of use has been shown to vary. There was hope that the Internet would enable men and women to participate equally in discussions but the reality is that women were largely either not present or inactive. Research has found that participants in online forums were primarily adult, Caucasian males who spoke English and tech-savvy (Herring et al. 2004).

According to a Pew Internet and American Life report (Fallows 2005), men are more likely to participate in online community groups. Men are also more likely to use the Internet for entertainment and recreation (Leung 2001). In contrast, women are more likely to use the Web to communicate with others and to expand their social networks (Boneva, Kraut & Frohlich 2001; Fallows 2005; Jackson et al. 2001; Leung 2001). The overall number of Internet users is high and rapidly increasing, especially for young people (Madden, 2006).

Research has shown that the conversation styles of men and women differ (Tannen 1994). Also, gender is associated with online experiences and behaviour in these communities (Stefano & Lackaff 2009). Herring et al. (2004) found that content produced by adult males and circulated to members of online communities may be given preferential treatment by the community when compared to content produced by other demographic groups. While technologies and women's participation levels have changed, recent research shows that gender does not disappear when the interactions move online. Those who participate in that virtual community bring offline expectations and understandings that shape online interactions and gender influence in online interactions (Kendall 2010). Research supported that there is a gender difference in online purchase decision (Fan & Miao 2012), use and acceptance of e-WOM (Gefen & Ridings 2005) and online role-playing gamers (Cole & Griffiths 2007).

Scholars also posit that individuals' information processing patterns may differ across genders (e.g., Putrevu 2001). Heuristic-systematic and selectivity theory is an important perspective that explains why females and males respond differently when they process information (Richard et al 2010). This perspective refers to females as comprehensive processors and males as selective processors (Meyers-Levy & Sternthal 1991). Comprehensive processors are inclined to treat all pieces of information equally and integrate the information comprehensively. Selective processors process information selectively. Males prefer to process the information that they are most interested in and believe to be important. The selectivity hypothesis postulates that females may have a lower information elaboration threshold than males (Meyers-Levy & Sternthal 1991; Richard et al., 2010). Scholars have been applying the selectivity hypothesis to explain why females may more easily perform systematic processing than males under similar information processing circumstances (e.g., Kempf, Laczniak & Smith, 2006; Kim, Lehto & Morrison, 2007; Noseworthy, Cotte & Lee, 2011).

Study on social networking sites (such as Facebook) reveal that males are more engaged in expressing information than females, while females are more involved in privacy control than males (Kuo, Lee & Tian 2013). In addition, ethnic research indicated that females spend more time using YouTube, Twitter, and Hi5 than males. Moreover, females tended to use SNSs more than males to maintain their friendship (Pornsakulvanich & Dumrongsiri 2013).

Researchers who used gender identity theory in brand related research argued that gender is often used interchangeably with sex because such a dichotomous variable provides a comfort zone for researchers when measuring and interpreting the consumerist implications of gender (Ye & Robertson 2012). The criticism is that such an approach overlooks the important differences between sex and gender and leads to biased research and distorted representations of complex gender-related marketing phenomena (Hirchman 1993; Palan 2001). Since the 1960s some researchers have begun to investigate how gender identity (which includes a combination of sex, psychological gender and gender attitudes) contribute to a consumer's product- and brand-consumption (Fischer & Arnold 1994; Gould & Stern, 1989; Palan 2001). However, research results have been mixed. For example, individuals with a higher masculine-gender identity exhibit stronger information

processing (Kempf, Palan & Laczniak 1997; Palan 2001), while individuals with a higher feminine-gender identity develop more positive attitudes toward and get more personally engaged with products and brands (Gainer 1993; Jaffe & Berger 1988; Worth, Smith & Mackie, 1992).

In this research, to limit the scope, only male and female has been considered as gender differences. Because most of the extant literature shows that there are behavioural difference between males and females, the hypothesis tested is:

H8: There is a difference between male and female Gen Y's involvement in OSNM and its effect on their development of attitude towards brands.

3.11 Age group differences of Gen Y

The majority of authors studying Gen Y, focus predominantly on the demographic and attitudinal characteristics of this generation. For example, Wolburg and Pokrywczynski (2001) describe Gen Y as the best educated and most culturally diverse generation in history, a combination which others believe has made this generation tolerant and open minded toward different lifestyles, such as homosexuality, single parent households etc. (Morton 2002; Paul 2001).

Some researchers have explored Gen Y's attitudes toward advertising (Beard 2003), celebrity endorsers (Bush, Martin & Bush 2004; Stevens, Lathrop & Bradish 2003), corporate sponsorship (Bennett & Lachowetz 2004), ethical Internet related behaviours (Freestone & Mitchell 2004) and the media (Shearer 2002). Findings seem to paint a portrait of a generation that is media and technology savvy, and worldly enough to see through many advertising tactics.

Although these accounts of Gen Y are informative, several opportunities exist for a better understanding of this market. Considering the entire generation, the wide age range makes generalizing these findings across the entire generation very difficult. Gen Y's characteristics are often discussed in overly broad, even sweeping, terms – ignoring intra generational differences (Bolton et.al, 2013). This research will address this oversight by exploring differences in age group within Gen Y.

The scope of this research is primarily based on studies of Gen Y members born between 1981 and 1994. Gen Y's different age range from 18 to 30 years old as at 2013 for this study indicates a heterogeneous group. Research suggests that, in addition to uploading content, this age group is also the most active in posting ratings and comments on the Internet (Madden 2006). Considering this, an 18 year old will surely have different motivations for a particular behaviour than a 30 year old. It is also noteworthy that majority of the members of age group 25-30 have already have finished study and entered into a different phase of their lives in terms of a job, responsibility and family making. Hence, preferences will be different for this age group compared to the 18 to 24 year old age group. It can be assumed that older age groups will have more maturity in information processing, decision making and forming, and shaping attitudes compare to their younger cohort. Moreover, time spent in OSNM may vary due to engagement in other aspects of life for the older group; a factor that also may impact in e-WOM in OSNM and its affect on forming attitudes towards brand.

Considering these factors, the hypothesis tested in this research is:

H9: There is a difference between different Gen Y age groups involvement with OSNM and its effect on their development of attitudes towards brands.

3.12 Conclusion

Figure 31.1 illustrates the research framework summarised by the hypotheses developed in this chapter. Specifically:

- 1) The influence of involvement in OSNM on e-WOM;
- The mediating role of tie strength, trust and informational influence on e-WOM through involvement in OSNM;
- 3) The influence of e-WOM on subjective norm;
- The influence of e-WOM on developing attitude towards brands through the OSNM context; and
- 5) The influence of subjective norm on attitude towards brands through involvement in OSNM.

All measurement items identified in the literature review and their sources in this chapter are shown Table 3.8. In the next chapter, the research methodology will be discussed.



Figure 3.1: Research framework
Table 3:8: Measurement items

Constructs	Nature of Constru cts	Sources	Scale items adopted for this research	Nature of the items
Involvemen	Reflective	Zaichkowsk y 1985; Oginanova 1998; Shin 2010; Shu & Chuang 2011	OSNM is important to me	Reflective
t in OSNM			OSNM is interesting	
			OSNM means a lot to me	
			I think OSNM is essential	
			I find using OSNM entertaining	
			I do customise the content and services in OSNM	
			I have a compulsive need to know more about what my friends are putting on OSNM	
			I like to engage in conversation about OSNM	
			I think OSNM is involving	
			OSNM can help me get along with people more easily in real life.	
			OSNM can help me escape loneliness	
			OSNM is exciting	
			OSNM is significant	
			Using OSNM is appealing to me	
			OSNM is fascinating	
			I can participate in the activities in OSNM	
			OSNM provides me with a lot of information	
			I am active on OSNM for certain hours of a day	
Electronic F Word of Mouth	Formative	Wetzer et al. 2007; Cheung et al. 2007; Chu and Kim 2011	When I consider buying a new brand, I ask my friends on the OSNM for their advice	Reflective
			I like to get my OSNM friends' opinions before I buy new brands	
			I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinions on them	
			Often I like to get information about new brands from my	

Constructs	Nature of Constru cts	Sources	Scale items adopted for this research	Nature of the items
			OSNM friends	
			Often I want to gain further clarity on negative comments I receive from my OSNM friends	
Tie Strength	Formative	Chu and Kim 2011	I communicate frequently with my close friends on OSNM	Reflective
			The friends I have on OSNM are important to me	
			I feel close to my OSNM friends	
Trust	Formative	Chu and Kim 2011	I find most of my OSNM friends dependable	Reflective
			I think most of my OSNM friends are honest	
			I trust comments made by my OSNM friends	
			I think most of my OSNM friends are reliable	
			I have confidence in my OSNM friends	
			I can believe in my OSNM friends	
Information al Influence	Formative	Chu and Kim 2011	If I have little experience with a brand, I often ask my OSNM friends about the brand before buying	Reflective
			I often consult my OSNM friends to help choose the best alternative available from different brands	
			I frequently gather information from my OSNM friends about brands before I buy	
			I rarely purchase any brand until I am sure my OSNM friends approve of that	
Subjective Norm	Formative	Schiffman et al. 2005; Pavlou & Fygenson 2006;	Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM	Reflective
		Mascarenha s and Higby 1993	Typically, I like to do what my OSNM friends suggest that I do	
			It is important that my OSNM	

Constructs	Nature of Constru cts	Sources	Scale items adopted for this research	Nature of the items
			friends approve of the brands I buy	
			I am very loyal to brands that my OSNM friends buy	
			If I want to be like my OSNM friends, I always buy the brands they buy	
			I work long hours to save so that I can afford the brands my OSNM friends buy	
			I feel a sense of belonging by buying the same brands that my OSNM friends buy	
			My OSNM friends very much influence the choice of my brands.	
Attitude towards Brands	Formative	Derbaix and Leheut 2008	I like very much the brands my OSNM friends positively talk about.	Reflective
			I appreciate the brands my OSNM friends suggest me to buy	
			I think the brands that my OSNM friends talk about are cool	
			I find the brands that my OSNM friends like are good	
			I find the brands that my OSNM friends suggest to me are good	
			When my OSNM friends provide positive information about a brand, the brand becomes a necessity	
			The brands that my OSNM friends like and suggest are practical	
			The information that my OSNM friends provide on brands is effective	
			When I buy a brand that my OSNM friends also buy it helps me to become part of a group	
			When I seek information about brands from my OSNM friends,	

Constructs	Nature of Constru cts	Sources	Scale items adopted for this research	Nature of the items
			it allows me not to go unnoticed When I talk about brands in OSNM, it allows me to get more respect	

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

Chapter 3 was an extensive review of the literature involving the principle and related disciplines concerning attitude formation. The chapter also explained: the focus of this research; Gen Y's involvement in online social networking media (OSNM) and the role of OSNM in developing Gen Y's attitudes towards brands; and other relevant topics. The review helped to establish the importance of the research objectives for this study and provided the information for the development of specific hypotheses for testing. This chapter will describe and justify the research design selected to collect and analyse the data to address the research objectives and test the underlying hypotheses.

Both qualitative and quantitative methods were used in this study. Based on the literature review, constructs and respective measurement variables have been developed. Qualitative research was conducted to help refine those constructs and measurement variables. To test the constructs and confirm the model of Gen Y's attitudes towards brands through OSNM, the structural equation modelling (SEM) technique was used.

The methodological objective of this study was to examine how Gen Y's involvement in OSNM facilitates formulation of Gen Y's attitudes towards brands. Secondary objectives were to assess the mediating role of tie strength, trust and informational influence on receiving and sharing e-WOM through the Gen Y's involvement in OSNM and to assess the role of e-WOM and subjective norm on the development of Gen Y's attitude towards brands. Moreover, this research also assessed the effects of socio-structural variables: gender differences and intra generational differences, represented by age group differences, in developing attitude towards brands.

4.2 Research paradigm

This section justifies the paradigm used in this research and describes the approach taken to theory testing. This, in turn, will help to justify the research design.

A paradigm is a basic set of beliefs that guide action (Guba 1990, p. 17). It represents a worldview that defines, for its holder, the nature of the 'world', the individual's place in it, and the range of possible associations to that world and its parts. A paradigm comprises three elements: ontology, epistemology and methodology. Ontology raises basic questions about the nature of reality; epistemology asks how we know the world and what the association is between the inquirer and the known; and methodology focuses on how we gain knowledge about the world. Questions of methods are the secondary to questions of a paradigm, not only choices of method but in ontologically and epistemologically vital ways (Guba & Lincoln 1994). Guba and Lincoln (1994) identified four competing paradigms for informing and guiding inquiry: positivism, postpositivism, critical theory and constructivism. Post-positivism modified the pure objectivist view a little and, over time, a subjective epistemology emerged that involved a number of shifts in thinking and in assumptions about reality, which are closer to the critical theory and constructivist paradigms.

Conventional positivist social science applies four criteria to methodical inquiry: internal validity, the degree to which findings correctly map the phenomenon in question; external validity, the degree to which findings can be generalized to other settings similar to the one in which the study occurred; reliability, the extent to which findings can be simulated, or reproduced by another inquirer; and objectivity, the extent to which findings are free from predisposition.

Post-positivism represents efforts of the past few decades to respond, in a limited way, to the most problematic criticisms of positivism. The positivist and post-positivist views have recently come under considerable criticisms (Guba & Lincoln 1994), which argue that these paradigms are unable to deal satisfactorily with the issues surrounding the etic, emic, nomothetic and idiographic dimensions of investigation. Too many local (emic), case-based (idiographic) meanings are excluded by the generalising (etic) nomothetic (Denzin & Lincoln 2011), positivist locus. At the same time, the nomothetic, etic approaches fail to address satisfactorily the theory and value-laden nature of facts, the interactive nature of inquiry, and the fact that the same set of 'facts' can support more than one theory.

Constructivism (Guba & Lincoln 1994) or interpretivism (Perry 1995; Schwandt 2015) adopts relativist ontology, a transactional epistemology, and a hermeneutic, dialectical methodology. The investigation aims of this paradigm are concerned with the production of reconstructed considerations, wherein the traditional positivist principles of internal and external validity are substituted by the terms trustworthiness and authenticity. Proponents of positivism and post-positivism still dominate the prospect. However, over the past decade, critical theory and constructivism have achieved acceptance, with the growing shifts in thinking and assumptions about reality, which provides the growing acceptability of qualitative dissertations.

From a historical perspective, there has been heavy emphasis on quantification in science. Scientific development is commonly believed to emerge as the degree of quantification found within a given field increases. This view of science places an emphasis on efforts to validate (positivism) or counterfeit (post-positivism) a priori hypotheses, most usefully specified as mathematical (quantitative) propositions or propositions that can easily converted into precise mathematical formulas expressing functional connections. There exists a widespread verdict that only quantitative data are ultimately valid or high superior (Schrest 1992). From goodness or quality criteria, the objectivist paradigm refers to 'conventional benchmarks of "rigor": internal and external validity, reliability, and objectivity" (Guba & Lincoln 2008).

The intra-paradigm problems offer a weighty challenge to conventional methodology, but could be eliminated or at least ameliorated, by greater use of qualitative data because the subjectivist paradigm aspire trustworthiness and authenticity including catalyst for action (Guba & Lincoln 2008). However, the findings of qualitative research are misused when they are regarded as conclusive and are used to make generalisation to the population of interest (Colwell 1990; Gabriel 1990). In the contemporary research realm, it is sound to view qualitative and quantitative research as complementary rather than in competition with each other. It is more than simply collecting both kinds of data; it also involves the use of both paradigms so that the overall strength of research is more than just qualitative or quantitative research in a single study (McDaniel & Gates 2010).

'Because different "lenses" or perspectives result from the use of different methods, often more than one method may be used within a project so the researcher can gain a more holistic view of the setting' (Morse 1994, p. 224). In this context, a mixed methods design is useful when either the quantitative or qualitative approach by itself is insufficient to best comprehend a research problem or the strengths of both quantitative and qualitative research can provide the best understanding (Creswell 2013).

For this research, it would be helpful to be able to generalise the findings to the population at large by using structured method but also useful to develop a detailed view of the meaning of a phenomenon. While some measurement items and constructs have been identified through the literature review, as discussed in Chapter 3, the constructs and their measurement items are not directly applicable to Gen Y in Australia without some refinement. Consequently, it is important to be mindful of the complexity of the research problem on hand and to identify likely methodological problems.

Creswell (2013) argued that integrating methodological approaches strengthens the overall research design, as the strengths of one approach offsets the weaknesses of the other, and can provide more comprehensive and convincing evidence than mono-method studies. Considering their argument, it would be the best way to fine-tune the measurement items according to the need of the study through indepth interviews. Results from these interviews can then be used as the basis for a structured study, which could yield representative and quantifiable results to solve the research problem in more depth.

Conducting an experiment is the main method to conduct causal research. However, external validity of an experimental technique is always a major concern for researchers (Zikmund 2003). Also, there would be difficulties in manipulating the different variables identified for this research. A survey method has the advantage of being able to be administered to a large sample size and to geographically dispersed locations at relatively low costs (Malhotra & Peterson 2009). Such quantitative data can be effectively used for advanced statistical analysis (Malhotra & Peterson 2009). Thus, at the quantitative stage, this research used a self-report, survey instrument to collect data. A pilot survey, with a sample of 30 Gen Y participants, was conducted using the draft survey instrument, to establish content validity of the survey instrument.

For increased validity of results, both qualitative and quantitative methods were used employing a variety of techniques (e.g., validation of survey questionnaire through in depth interviews conducted in the qualitative stage; verification of the quantitative findings based on the qualitative study) satisfying the mixed method research approach.

4.3 Outline of the research plan

This research has been based on a two-step approach, integrating the two basic types of research design: qualitative and quantitative research (Malhotra 2012). This section overviews the two stages (see Figure 4.1).

Stage 1 involved exploratory research, in which the aim was to gain insights and ideas on the main concepts of this research. In the previous chapter, seven relevant constructs were identified from current literature to develop a research framework for this study, and measurement scale items relating to the constructs were also have been identified. However, none of the measurement scale items adopted are based specifically on the OSNM research involving Gen Y's formation of attitude towards brands. Accordingly, it appropriate to validate and refine these measurement scale items before carrying out quantitative testing. Thus, in this 'non familiar' (Zikmund 2003, p 120) and unfamiliar context (Malhotra 2012), in-depth interviews with Gen Y who use SNSs were carried out.



Figure 4.1: An outline of the research design for the current research project

Stage 2 used quantitative methods based on an online survey. There are a number of reasons why results from an exploratory study would not be regarded as conclusive. Exploratory research is generally unstructured and carried out on a small, unrepresentative sample; findings are regarded as tentative only (Malhotra 2012). Quantitative research enables greater objectivity by using numbers and statistical methods to seek explanations and predictions which can be generalized to other persons and places (Glesne & Peshkin 1992; quantitative methods provide the ability to test causal hypothesis as well as the general description of the phenomena in such a way that it should be easily replicable by other researchers (King, Keohane & Verba 1994).

4.3.1 Stage 1: Qualitative research

A variety of qualitative methods can be used for exploratory purposes. These methods are less structured and more intensive than standardised questionnairebased interviews and result in context-specific information, which is directly relevant to attitudes, rather than remote from actual behaviour (Johansson & Nonaka 1987). In this research, an in-depth interview method was used for exploratory purposes.

4.3.1.1 Sampling for qualitative research

Sampling and data collection are critical for determining the quality of a study. Keeping in mind the nature of the exploratory research being undertaken it was necessary to conduct 'purposive sampling' (Patton 2002). The aim in such a sampling method is to identify key informants whose context-specific knowledge regarding the issues relevant to the research are significant and information rich. A good informant is one who has the knowledge and experience the researcher requires, has the ability to reflect, is articulate, has the time to be interviewed and is willing to participate in the study (Morse 1991). The conceptual framework for the study and existing literature on the topic guided the initial sample selection. Using Patton's (2002) guidelines for sample selection, two criterions were chosen:

- 1) Intensity information-rich cases that manifest the phenomenon intensely, but not extremely.
- Maximum Variation deliberately selecting a heterogeneous sample and identifying important common patterns that cut across variations.

Information was gathered from twelve individuals who were drawn from Gen Y. During the participant selection process, people who belong to Gen Y and involved in at least one SNS were considered for the study of developing attitude towards brand as an outcome of consumer socialization. Maximum variation was ensured by choosing participant from different age groups within the broad category of Gen Y and gender (i.e., male, female).

4.3.1.2 The in-depth interviews

The interview is the favourite methodological tool of the qualitative researcher. Interviewing has a wide variety of forms and a multiplicity of uses. In-depth interviews are optimal for collecting data on individuals' personal histories, perspectives, and experiences, particularly when sensitive topics are being explored. For in-depth interviews, the unit of observation is always the individual. The main purpose of the in-depth interview was to gain insights by listening to individuals from the appropriate respondents about issues of interest to the researcher. 'Unstructured interviewing provides a greater breadth than the other types, given its qualitative nature' (Fontana & Frey 1994, p. 365).

Malinowski (1989) captures the differences between structured and unstructured interviewing: the former aims at capturing precise data of a code-able nature in order to explain behaviour within pre stablished categories; the latter is used in an attempt to understand the complex behaviour of members of society without imposing any prior categorisation that may limit the field of investigation.

In this research, to gain further insight and understanding about the research problem, 12 members from Gen Y were chosen for in-depth interviews. There was no need to disguise the purpose of the research and so it was decided to conduct the qualitative research with a direct approach. A direct qualitative research approach is one in which 'the purposes of the project are disclosed to the respondent' (Malhotra 2012, p 182).

Most of the face-to-face meetings lasted for at least 45-minutes to an hour. All the respondents were located within Sydney. Appointments were made and personal interviews were conducted with the 12 people. A flyer for volunteers (Appendix 2) was circulated among potential participants and consent from participant was taken using a consent form (Appendix 4). During the time of respondent selection,

participants from 18-29 years, representing Gen Y and living in Sydney, were considered. The sample had an equal representation of gender.

A WSU Research Committee approved the research protocol that provided background information about the research (Appendix 3). This was provided to the participant at the beginning of the in-depth interview. During interviews, participants were encouraged to describe their involvement in OSNM, especially any SNSs they are members of. Particularly, respondents were asked to describe any information-seeking behaviour on OSN sites related to a brand and how they evaluate their friends' opinions or information provided on OSNM. Most importantly, how respondents connect different ideas, clues and information from OSNM for obtaining knowledge about recalling and usages brands or evaluative information about brands were the focus of the discussion. Similarly, how the importance of OSNM to Gen Y's brand-related attitude formation was explored.

All the in-depth interviews were conducted by this researcher. During the interview, a pre-developed discussion script (Appendix 5) was used. As the interview progressed, insights of the researcher about information or opinion-seeking and receiving behaviour in OSNM, and how the formation of attitudes towards brands takes place became clearer. All the interviews were audio recorded with prior approval from each interviewee and followed the ethics protocol (a discussion on ethical issues follows in section 4.4). Audio recording was used as a method of ensure increased accuracy of recall of the discussion. Using the recording freed the interviewer to listen and respond more rapidly and allowed for better voice modulation, which helped in the development of rapport between the interviewer and interviewee.

Hand written notes were also taken to record statements and non-verbal gestures, for example, nodding to indicate agreement or disagreement of issues during the session. The interviews were conducted in English, which is the main language in Sydney. So, no difficulties were faced while transcribing the interview sessions from the recordings.

Findings of the in-depth interviews were quite important to refine and further develop the constructs and to identify the variables, increasing their relevance to Gen Y. The findings also helped to properly identify the data that were useful for addressing the research problem, objectives and hypotheses appropriately.

4.3.1.3 Ensuring rigour

The major methods for ensuring rigour are intricately linked with issues of reliability and validity. In qualitative research, the main methods are criteria or adequacy and appropriateness of data and verification of data with informants (Morse et al. 2002).

In qualitative research, adequacy refers to the amount of data collected rather than to number of subjects, as is the case in quantitative research. Adequacy is attained in this research by ensuring that sufficient data have been collected and that saturation as well as variation are accounted for and understood. Appropriateness refers to selection of information according to the theoretical needs of the study (Morse et al. 2002). In this research, in-depth interview samples were purposefully drawn from only those Gen Y members who are users of OSNM and have involvement in it.

As a further test of validity, synthesized nuance, sometimes complex and ambiguous information discerned what was truly insightful and useful during the discussion with the interviewee. Outcomes of the discussions, as they were becoming evident, were presented to the participants and confirmed by the participants and sometimes they offered further information. Recording interviews comprehensibly, including the use of audio recorder further assisted the validity of the data.

4.3.1.4 Data management and analysis

Application of data management methods during the study is essential for the success of the study. In this research, recordings and hand notes were transcribed, corrected and edited before analysis. Transcripts and notes must be easily retrieved, easily cross-referenced, and easily separated from and linked with their original sources.

The data was analysed using content analysis method (Weber 1990). This method is often theory driven, that is, theory determines what to look for (Weber 1990). In this research, the conceptual model, its constructs and variables developed through the literature review were the basis for what to look for in the in-depth interview data. Looking at the transcripts, the themes and how these themes related to one another other were identified by analysing each sentence spoken by the participants. The themes were systematically assigned numeric codes. What respondents talked about most was noted.

How data are stored and retrieved is the heart of data management. In this research, coding of the data gathered at the qualitative stage was carried out immediately after each interview. The importance of such immediacy has been emphasised by Strauss (1987). Werner and Schoepfle (1987) noted that a system needs to be designed prior to actual data collection, and stressed the importance of a clear indexing system. In this research, male participants were coded 'M' and female 'F' followed by a unique identifying number to enable a record of discussions at interview sessions to be traced to relevant participants for reporting purposes.

Miles and Huberman's (1994) definition of data analysis contains three linked sub processes (see Figure 4.2): data reduction, data display and conclusion/verification. With data reduction, the potential universe of data is reduced in an anticipated way on the basis of research objectives and instruments (Miles & Huberman 1994).



Figure 4.2: Qualitative data analysis process Source: Miles & Huberman 1994

In this research, once actual field notes and interview tapes became available, data summaries, coding, finding themes, clustering and writing summaries were carried out manually for selection of data that was relevant to the conceptual model and the constructs developed earlier in the literature review. Data display, defined as an organised, compressed assembly of information that permits conclusion drawing, was the second part of analysis. This was carried out by summarising the findings and developing text matrices (Miles & Huberman 1994), in which each cell represented a construct and the cell contents their respective variables.

Conclusion drawing and verification involve the researcher in interpretation: drawing meaning from display data. The tactics used in this research ranged from the use of comparison/contrast, noting of patterns and themes, and clustering and checking results with respondents (Miles & Huberman 1994).

4.3.2 Stage 2: Quantitative research

In this research, qualitative methods were used to refine the measurement variables earlier identified through a literature review to increase their relevance to Gen Y in Australia. The limitations of the qualitative methods are: (1) The results are not necessarily representative of what would be found in the population, and hence are not generalizable, and (2) There is typically ambiguity in the results (Aakar & Day 1990). The second stage of the research design, the quantitative research stage, was used to test and validate the conceptual model and its constructs developed through literature review and qualitative research stage.

The quantitative research stage involved a pilot study and the implementation of the survey. This section of the chapter will present the steps followed and justify the use of the survey methodology. This will then be followed by a description of the process undertaken for questionnaire design for the main study. The questionnaire design section justifies the use of a web-based survey and the steps taken to ensure the integrity of the data collected from online panels.

4.3.2.1 Constructs and scale items

In this research, seven constructs are addressed, derived from the review of literature, to develop a model of the development of attitudes towards brands through OSNM involvement by Gen Y. Scale items relating to respective constructs were also identified to develop and test the model (See Figure 3.1).

4.3.2.2 Measurement scales

Most items used to measure the latent constructs in this study were previously used in marketing and Internet communication research. Since this study includes measure development of Gen Y's attitudes, a Likert scale was chosen as the most appropriate scale to use. A further advantage of the Likert scale is that it is preferred by survey respondents (Menezes & Elbert 1979).

It was decided to use a 7-point Likert scale for all items in the questionnaire. The Likert scale in this study had a neutral point (Lalla, Facchinetti & Mastroleo 2004) to encourage respondents to provide an opinion (Schuman & Presser 1996).

The scale for this study was a self-report measure. It can be argued that such a method can result in inflated scores as a result of social desirability bias creeping in but if a respondent is assured of the confidentiality of the survey results, he/she may be more likely to reveal the actual situation. A number of studies (e.g., Chu & Kim 2011; Steffes & Burgee 2009) have used self-reporting measures.

4.3.2.3 Questionnaire: The research instrument and pilot study

The first step in questionnaire design was to specify the information or plan what to measure. An extensive literature review and in-depth interviews were carried out to provide such information. The literature review and qualitative research helped to identify the constructs and variables to understand Gen Y's involvement in OSNM and their development of attitudes towards brands.

Special care was taken to translate the desired question content into words that respondents clearly and easily understand. Deciding on question wording is, perhaps, the most critical and difficult task in developing a questionnaire. If a question is worded poorly, respondents may refuse to answer it or answer it incorrectly. The first condition, known as item non-response, can increase the complexity of data analysis (Omura 1983). The second condition leads to response error. Unless the respondents and the researcher assign exactly the same meaning to the question, the results will be seriously biased (Morgan 1990). To avoid these problems, Malhotra (2012) recommends the importance of using 'ordinary' words that have clear meanings, expressing statements both in positive and negative terms and avoiding the inclusion of assumptions and estimates. In this research, a

structured survey instrument was developed to facilitate this. A pilot survey was then conducted, using the draft survey instrument, with a sample of 20 respondents from Gen Y to establish content validity of the survey instrument, and to evaluate and determine the applicability of the questionnaire in Australia. The questionnaire was revised and then finalised based on the findings from the pilot survey. Academic experts from the relevant discipline were also consulted before instrument finalisation. The final questionnaire was designed on the basis of the results of the pre-test and observations, comments, and recommendations of the academic experts. The instrument was developed in English.

4.3.2.4 Administration of questionnaire (survey method)

This section of the quantitative stage of the research project discusses and justifies the data collection method used for the main study. The pilot results were used to refine the questionnaire and to modify the survey implementation method for the second part of the quantitative research phase. Traditionally, the four basic survey methods were personal interviews, telephone interviews, mail surveys and fax surveys (Aaker et al. 2010). However, the use of the Internet in data collection also increasingly attracted researcher's attention (Hair, Bush & Ortinau 2006). An online survey panel was used for the final data collection of this research. As participants are willing, interested and motivated by online panels, the method is not only cost effective and fast but is likely to provide high-quality data (Aaker et al. 2010, p 176).

Justification for using the survey methodology

Data for this project was collected through the survey method, which has the advantage of being administered to large sample sizes in geographically dispersed locations at relatively low costs (Malhotra 2012). While the recommended method for conducting causal research is an experimental design, its lack of external validity is always a major concern for researchers (Zikmund 2003). It has been acknowledged by researchers (e.g., de Vaus 2002) that the use of experimental design becomes more problematic in social research. In many situations, it is not possible to obtain repeated measures for the same group of respondents at different times. At times, it is also difficult to obtain a control group; thus, practically speaking, it becomes impossible to introduce experimental interventions.

Data collection method

It was decided to use a web-based survey using an online respondent panel called Research Now. Each survey method comes with its own advantages and disadvantages and the ethical concerns in using a third party for data collection or analysis have been discussed by Ham (1999). Ottesen, Gronhaug and Johnsen (2002) argue that while commissioned research is costly, its production is timely and highly reliable; features which are in line with the experience of the present research.

Rationale for using a web-based survey

The literature identifies many benefits of using the Internet for research purposes. One such advantage is the access provided by this form of technology to previously 'hidden' or difficult-to-reach populations. The pilot study revealed difficulties faced in recruiting respondents. Gen Y have busy lifestyles. Juggling between work and study or family life have been identified as the most relevant explanations of their unwillingness to participate in any survey that could take 15-20 minutes of their valuable time. After facing that problem in conducting the pilot study, the decision was to use online participants.

Another advantage of online research is the absence of direct contact with the participants. This is particularly beneficial when exploring sensitive topics. Such a technique also helps to reduce social pressure on the participants to respond in a socially desirable manner. By the same token, because Gen Y is known as the 'tech savvy generation', it would be easier to conduct the research online as they are more comfortable with the use of that technology.

A web-based survey has the benefit of making use of radio-buttons, pull-down selection menus, and open-ended textboxes. The web-based survey makes it easy for the respondent to progress through the questionnaire. Depending on what the responses were for certain questions, respondents for this survey were able to be taken directly to the pages which applied to them. Similarly, screening out was also easier as respondents were thanked for their time and effort but were informed that they did not match particular criteria. Such an advantage cannot be gained through email surveys. Some programming costs need to be borne for web-based surveys,

as is the need to buy space on a server. However, the advantages of using a webbased survey outweighed the costs involved.

In the case of a web-based survey, direct importation of the text into a statistical package is possible (Granello & Wheaton 2004). This helps to reduce the workload and chances of error. Web-based surveys also make it easy for the researcher to obtain response-set information. Because of software developments, it is possible for researchers to identify the number of people who view the survey and compare it to the number who start taking survey or the ratio of those who actually complete the survey (Bosnjak & Tuten 2001).

The web-based survey was a feasible alternative for this study because the commissioned research agency (Research Now) had ample server space available. Granello and Wheaton (2004) used a university server for academic research but this was not used in this study. All data storage, collection and retrieval related tasks were the sole responsibility of the Research Now team. This ensured that the agency, itself, handled technical glitches and did not involve a third party.

Use of online panels

It was decided to make use of online panels, which are being increasingly used in market, social, psychological and medical research (Callegaro & Disogra 2008). An online panel is a pool of people who have agreed to repeatedly take part in web surveys (Goritz, Reinhold & Batinic 2002). This was the preferred method because online panels require short field times and have a high response rate (Goritz & Wolff 2007). Researchers usually have access to panelists' historical and profile data (Goritz, Wolff & Goldstein 2008). This makes targeting a specific segment of potential respondents more feasible. In the context of this research, Research Now had access to panellists' demographic information, such as age, gender, post code, state, occupation, marital status, size of the household, ages of children, annual income, level of education and ethnic background.

Validity of online panels

Chakrapani (2007) highlighted the need to evaluate the validity of online panels used for research purposes. Unfortunately, no study has approached this topic in a systematic manner. However, guidelines are scattered throughout the literature. For the purpose of assessing the validity and reliability of an online panel, a comprehensive search was undertaken of both academic studies and industrygenerated materials. Thus, the evaluation of the online panel was undertaken by carefully reviewing the four-stage panel-management process implemented by the research agencies. Issues related to these stages are also discussed in the section below:

The four stages of the panel-management process are:

- Recruitment of panelists and sampling
- Invitations, response rates and reminders
- Panel monitoring and maintenance
- Panel relations

Recruitment of panellists and sampling

The first step in the evaluation of an online panel is to investigate the recruitment methods employed by the panel operators because this has a direct impact on the quality of the sample derived for the research study.

The main recruitment method used to build a panel is referred to as the 'opt-in method' (Goritz 2007). With 'opt-in' or 'volunteer' panels, there is usually no restriction on who can participate. A range of methods is used (both online and offline) to recruit participants. Usually, interested individuals are directed towards the research organisation's website where panel-related terms and conditions can be found. Potential respondents are asked to fill in a registration form which automatically generates a socio-demographic database.

The chosen research agency for this study, 'Research Now', uses multiple sources for recruitment of their panels. All panels are almost exclusively recruited via online advertising channels. Research now works with over 300 diverse online recruitment partners and targeted websites. The channel mix across the panels consists of search engine optimization, email, search engine marketing, co-registration, affiliate networks, social media, and display-banner/text.

Research now uses open-sources panels; interested candidates can register themselves on their panels. However, their surveys are closed-sourced. Hence, only panelists who have been invited to a survey are allowed to participate. This strategy is in line with the recommendations made by researchers. Schillewaert, Langerak and Duhamel (1998) conclude that applying different recruitment methods within a non-random probability sampling procedure allows the researcher to make more stable and representative inferences and interpretations on the attitudes of the Internet users.

By using an opt-in panel approach, a convenience sampling technique is being used which is not statistically representative. However, it is recognized that a probability sample will require greater time and cost to generate (Malhotra, Agarwal & Peterson 1996). It is well-documented how academic researchers have frequently made use of convenience sampling techniques to compensate for limited resources (Collier & Bienstock 2007).

By using a non-probability sampling approach, the study is faced with the possibility of a 'coverage error' (McDevitt & Small 2002). Coverage error occurs when some people are omitted from the sampling frame used to identify members of the study population. A leading research organization, KnowledgeNetworks (2010), acknowledges that with the opt-in panel, respondents have characteristics that skew toward affluence and higher education. In addition, opt-in panels generally have a high percentage of female respondents and an under representation of non-white populations. However, McDevitt and Small (2002) argue that this kind of an error was most visible during the early days of Internet respondents and the overall population is shrinking as Internet coverage the world-over (McDevitt & Small 2002) and in Australia, in particular, improves.

Besides concern regarding a non-probability sampling approach, there is an issue of 'multiple registrations' where respondents may sign up a multiple number of times. The claim is that some of the duplicated registrations are undertaken as a result of confusion during registering, signing up and logging in (Goritz 2007). In order to reduce the number of such duplications, the panel-operator informs potential participants about the seriousness of a scientific study and reminds participants that their computer IP addresses can be tracked (Joinson et al. 2007). Thus, the issue of double-registration is handled automatically by the computing system.

Invitations and reminders

This is the second stage of the panel-management process, in which a sample is drawn from the recruited panellists and is invited to participate in a research study. Quota sampling was used because it involves lower costs and greater speed in the execution of the sample design (Hochstim & Smith 1984) in comparison to other probability-based sampling methods. A proportional quota sampling procedure (Cumming 1990; Walter 1989) ensured making the sample representative of the Australian population across Sydney metropolitan area. Another characteristic in this sampling plan was respondents must be a user of a SNS and they should represent Gen Y. The final 319 respondents were screened and included in the sample if they had an account in any SNS and fell in the age category for Gen Y.

E-mails were sent to the selected panel members to complete the web-based survey for this study. Gortiz (2007) assesses email invitations to be a quick and inexpensive option for inviting panellists. No issues were experienced with bouncing-back of emails invites (Joinson et al. 2007) as the panel-operator updates all contact details of panel members.

Since the survey response rate was 46 per cent during the first week of the online survey launch, reminder emails were sent (Brennan 1992) to improve the response rate.

Response errors can be made by both the interviewer and the respondent (Malhotra, Agarwal & Peterson 1996). However, in the case of online data collection, the physical presence of the interviewer is absent, which might result in questionnaire error, recording error or cheating error. Respondents can make two types of response errors:

- 1) Inability error occurs when the respondent is unable to provide an accurate answer due to topic unfamiliarity, fatigue, boredom, faulty recall, question format, or question content.
- Unwillingness error occurs when the respondent is unwilling to provide accurate information. Thus, there is a clear intention to misreport to avoid embarrassment or to provide a socially desirable answer (Malhotra et al. 1996).

In order to ensure the quality of responses obtained, two main steps were implemented in line with Barnett's (1998) recommendations.

Guarantee of anonymity

It is generally believed that anonymity increases the response rate as well as improving the quality of responses (Barnett 1998). In this study, respondents were asked to provide their responses regarding their involvement in OSNM. Respondents may perceive such questions to be of a 'sensitive' nature as these may lead to a feeling of uneasiness (see Bradburn & Sudman 1979). Thus, it was important to assure the confidentiality of information. All responses carried a response ID number. However, this number is of little use to the analyst because the person behind the ID remains hidden. Therefore, respondents are assured that no matter what their opinion is on the asked questions, their responses cannot be traced back to their identity.

Adjusting questionnaire format:

Questionnaire format may also be used to minimize response effects. While it was not feasible to undertake Bradburn and Sudaman's (1979) recommendation of inserting open-ended, longer questions into the final research instrument, it was decided to introduce a preface to a group of questions (e.g. 'While there are no right or wrong answers, your responses are important to this research and should reflect your own personal opinion. All information collected is confidential. We appreciate your cooperation in this regard'). Lee (1993) noted that such techniques reduce the apparent threat from the questions and leads to a better response rate.

Panel monitoring and maintenance

The third stage of the panel management process involved the active management of the panel to ensure that it complied with the ESOMAR (European Society for Opinion and Marketing Research) standards, which is a pre-requisite for any accredited panel provider. In many research organisations, individual participation by panel members is monitored. At Research Now, participation is monitored via a tiered, non-compliance system for tracking and communicating with panellists about their status. Panellists are removed if activity falls below a certain level within a twelve-month time frame. The commissioned research organization for this project, Research Now, also has its own set of prescribed guidelines. For example, to ensure that the panels remain reliable, panel managers and analysts monitor the behaviour of panel members. Identification of persistent non-response or patterned response by survey-takers is noted and such respondents are 'soft unsubscribed'. All survey offenders are flagged at the close of a survey. A respondent receives three 'strikes' (across three surveys), before being removed from the panel.

Demographic information of the respondents is updated by encouraging panellists to regularly update their profile online. This also helps in reducing panel attrition rates. According to Hill (1969), panel attrition does not just deal with losing a panel member but also with the problem of maintaining a high proportion of usable panel accounts. Over a period of time, panel-members may become inactive because of a loss of interest, a lack of appreciation for the amount of work involved, or a change in household circumstances. Other reasons, like natural mortality, invalid email addresses and member concerns with data security (Goritz 2007) are also handled as the panel operator remains in touch with the members.

In line with the recommendations made by Nancarrow and Cartwright (2007), the research agency ensures that the panellists are not over-used as it helps to minimize learning effects and reduce boredom from repetition. It also ensures that a sufficient number of 'new' respondents are always available. Members cannot participate in more than twelve surveys a year, more than two times a month and only for one survey at a time. Average panellists complete around six surveys in a year (Research Now 2013).

Research Now panelists are given incentives as a sign of respect and consideration for their time and effort. One of the major benefits of using incentives is achieving a mixed sample composition, because making a special offer may attract respondents who would otherwise not participate in research studies (Scherpenzeel & Toepoel 2012). However, to discourage 'incentive hunters' the agency has panel rules vis-à-vis frequency of participation as mentioned above. The incentive provided for this research project was \$11 per respondent.

Panel relations: Respondent engagement

This is the fourth and final stage in the panel-management process, which was used for this research. This stage seeks to ensure that panel members need to be seen as 'valued employees' who are rewarded for their carefully-considered responses (Sparrow 2007).

The commissioned agency has a 'respondent management' programme which manages panel members under the same principles that guide a company's customer relationship marketing (CRM) programme (Shearer 2008). While the respondents were provided with a financial incentive for this study, it is increasingly being recognized that strong respondent cooperation needed for data quality is something which cannot be paid for. According to Gene Ridgley (Director Panel Relations, Knowledge Networks 2007), research organisations need to manage panels by building trust and commitment through multi-channel levels of communication.

An off-line level of relationship is maintained through personal contact, newsletters and telephone calls. The agency also hires trained panel managers who respond to any panel member query and this ensures a 'friendly atmosphere' (Hill 1969) in panel-based research. Wansink and Sudman (2002) predict that, in future, due to increased interactivity, there will be an opportunity to have a greater level of personalized communications with panel members. This is important for the retention of panellists who may otherwise become inactive due to feeling anonymous or unimportant.

The research agency also tries to 'train' the respondents in good practice (Schlackman 1984) by clearly communicating the relevant instructions and the researcher's expectations.

4.3.2.5 Sampling strategy

This section explains the process for determining which subjects to survey in order to obtain the relevant information for the research problem. The four steps taken at this stage were in line with the recommendations by Malhotra (2012).

Step 1: Defining the target population

In order to be able to accurately select a sample, the target population had to be defined. In this research, the target population consisted of Gen Y who are members of an OSNM during the period in which the research was being carried

out. To be eligible to be included in the target population, respondents had to be active in OSNM.

Step 2: Determining the sampling frame

The sampling frame for this research study was the online panel made available by the commissioned research agency, Research Now, which solely specialises in online research. The online panel was one of the largest in the world with more than six million active panellists across 37 countries (Research Now 2012).

Step 3: Determining the sample size

The main quantitative study was based on a sample of 319 completed responses. A sample size of 319 was seen to be sufficient because of a number of reasons. Aaker et al. (2010, p. 364) quoted that, as a rule of thumb, 'the sample should be large enough so that when it is divided into groups, each group consists of a hundred or more respondents'. A comparison between groups usually makes the study more useful. This study was interested in not only testing the main model, but also in comparing the differences between two age groups within Gen Y. Other researchers have suggested n=100 is the lower limit for sample size, while others again advised the use of at least n=200 (Anderson & Gerbing 1984; Boomsma 1982). However, sample size remains a debatable point as Bollen (1989) concedes; there are no hard and fast rules and a useful suggestion would be to have several cases per free parameter. Thus, it was decided that a sample size of 300, which consisted of two age groups within Gen Y (at least 150 cases each age group) would be adequate for this social research analysis.

Step 4: Selecting a sampling technique

An initial email invitation was sent to selected panellists asking them to participate in the study. The survey web link was included in the email. This initial step was then followed by another invitation, which was effective in increasing the response rate. As a result, a response rate of 24.67 per cent was achieved, which was considered satisfactory – Malhotra et al. (1996) claims that surveys with no prior contact with respondents can typically have less than a 15 per cent rate of response.

4.3.2.6 Scale development and testing of the reflective measurement model

As recommended by Churchill Jr. (1979), a widely used process for developing measurement scales in marketing involves the following steps:

- 1) Defining theoretical constructs (Austin, Plouffe & Peters 2005);
- 2) Generating a list of items from literature and/or qualitative research that relate to these constucts (Austin, Plouffe & Peters 2005); and
- Purifying these measures using exploratory factor analysis (Sweeney & Soutar 2001) and coefficient alpha.

In this research all of the above steps were followed and the third step was supplemented with confirmatory factor analysis (CFA), which is recommended under some conditions (Henson & Roberts 2006). The use of multi-item scales to measure a construct is considered superior to single item scales because it increases reliability and decreases measurement error (Churchill Jr. 1979). These sets of items are generally reflective in that they all measure the same theoretical construct. Coefficient alpha was used to measure the reliability (Malhotra & Peterson 2006) of the scale at the EFA stage. While all the scales used in this research were derived from the literature and modified by qualitative analysis, they needed to be adapted to suit the specific requirements of the research study and tested for applicability to Gen Y. The standard procedure used in social research was followed in the conduct of an initial EFA.

Many of the marketing scales have been developed and tested only in the US (De Jong, Steenkamp & Veldkamp 2009). The psychometric properties of the US-developed and tested scales may not hold in a non-US setting. Thus, it was decided to use SPSS software to conduct an EFA which would help to reduce the constructs to clearer factor structures (Hair et al. 2010) and to identify items with common variance (Rossiter 2002).

EFA tests dimensionality with the aim of producing a set of items that reflect a single underlying factor or construct (Hair et al. 2010). Purifying the set of indicators is an iterative process whereby indicators with low factor loadings are dropped (Conway & Huffcutt 2003; Garver & Mentzer 1999; Hair et al. 2010).

The traditional approach has since been expanded with confirmatory factor analysis (CFA), a confirmatory technique which is theory driven (Schreiber et al. 2006) and requires that 'constructs' in a study be precisely defined rather than defined through a statistical technique which determines how a factor should be conceptualized (Muliak 1987). A CFA was undertaken as recommended by Cunningham (2008). The details of the testing of the measurement model are given in Chapter 6 on data analysis. CFA using AMOS software was carried out to provide a true estimation of reliability and to formally test the uni-dimensionality of the scale (Hoyle 1995). Therefore, a more rigorous scale development procedure twas followed. The AMOS software was also utilized because SEM analysis essentially combines both path analysis and measurement analysis.

4.3.2.7 Scale evaluation

Once the dimensionality of the construct items was assessed and acceptably established, the next measurement testing was for construct reliability and validity. Reliability refers to 'the degree to which measures are free from random error and therefore yield consistent results' (Zikmund 2003, p. 330). A multi-item scale should be evaluated for accuracy and applicability (Greenleaf 1992). This involves an assessment of reliability, validity and generalizability of the scale.

In formal terms, reliability is the degree to which a set of two or more indicators share their measurement of a construct. The indicators of highly reliable constructs are highly inter-correlated, indicating that they are all measuring the same latent construct. As reliability decreases, the indicators become less consistent and thus are poor indicators of the latent construct.

While a number of techniques have been recommended to measure reliability (Zikmund 2003), implementing them is not always feasible. Approaches for assessing reliability include the test-retest, alternative forms, and internal consistency methods. This research study employed the Cronbach's alpha for internal consistency method as a first step towards assessing the scales' psychometric properties in line with Churchill's (1979) recommendations at the EFA stage. Coefficient alpha is 'A measure of internal consistency reliability, which is the average of all possible split-half coefficients resulting from different splitting of the scale items' (Malhotra 2003, p. 282).

In spite of the criticism launched at it (e.g., Sijtsma 2009; Zinbarg et al. 2005), the alpha coefficient is still recognized as the most popular measure of reliability (Christmann & Van Aelst 2006). This is partly due to the ease with which researchers can use it (Aaker, Kumar & Day 2010). This measure has been the subject of considerable methodological and analytical attention by academic researchers (e.g. Cortina 1993; Zimmerman, Zumbo & Lalonde 1993). While there have been numerous attempts to present elegant alternative solutions (e.g. Sijtsma 2008), few of the 'new' coefficients are used by researchers, partly because these are not easily available and accessible (Revelle & Zinbarg 2009). When comparing the more recently developed Rasch Analysis with Cronbach's alpha, Erhart et al. (2010) concluded that neither of the two approaches was universally superior and that they should be accompanied with additional analysis.

Validity is the extent to which the indicators accurately measure what they are supposed to measure (Hair et al. 2010). Validity is measured to a great extent by the researcher, because the original definition of the construct or concept is proposed by the researcher and must be matched to the selected indicators or measures. The validity of a scale can also be defined as the extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured, rather than systematic or random error (Malhotra 2008). Perfect validity requires that there be no measurement error. Researchers may assess content validity, criterion validity or construct validity.

The main assessment of validity used here is construct validity, which has to do with the logic of items, which comprise the measures of social concepts. A good construct should have a theoretical basis, which is translated through clear, operational definitions involving measurable indicators. Therefore, it is important to assess the validity of the construct to ensure that the items used are suitable items for measuring what is intended to be measured. To assess construct validity, a convergent validity method was used. Convergent validity is the extent to which the scales correlate positively with other measures of the same construct. This research employed the CFA technique to assess the construct validity. Validity does not guarantee reliability and vice versa. A measure may be accurate (valid) but not consistent (reliable). Also, it may be quite consistent but not accurate. Thus validity and reliability are two separate but interrelated conditions.

Generalizability refers to the extent to which one can generalize from the observations at hand to a universe of generalizations. Traditionally, reliability methods can be viewed as single-facet generalizability studies. A test-retest correlation is concerned with whether scores obtained from a measurement scale are generalizable to the universe scores across all times and places of possible measurement. Even if the test-retest correlation is high, nothing can be said about the generalizability of the scale to other universes.

4.3.2.8 Analysis of data

This section describes the summary statistics initially used in data analysis and is followed by subsequent tests along with discussion of the reasons behind using a SEM technique.

Data Preparation, entry and screening

Prior to undertaking any statistical testing, it is important to run a quality check on the dataset (Pallant 2013). The quality of the statistical results obtained directly depend on how well the data is screened and explored before employing any of the statistical techniques (Aaker et al. 2010). Usually, the data is screened for missing values and out-of-range values (Aaker et al. 2010).

The data quality (Groves 1987) in this study may be a worry if there are instances of missing data, obsolete information and no updates on details changes (e.g. address and contact information). As the data for this research was collected through a web-based survey, it was possible to ensure that no survey was submitted incomplete. Data entry and analysis with online responses is much simpler (Evans & Mathur 2005) and reduces the need to separately code raw data (Aaker et al. 2010). In total, 319 questionnaires were completed by respondents in the online survey. All completed data was transferred into an SPSS file and variable names, labels and codes for category questions were rechecked. With online surveys, data storage and retrieval might be a big issue. In line with recommendations by Johnson and Albert (2006, p. 74), it was ensured that 'storage space allotted for returns, bandwidth load and server capacity' were satisfactory.

Summarising statistics and analysis

Descriptive statistics, such as frequencies, percentages and means, were used to summarise the respondents' demographic information. This helps to give the researcher a feel for the data (Sekaran 2006; Tull & Hawkins 1993) and provides guidance in undertaking multivariate analysis (Hair el al. 2010; Malhotra 2012). This exploration of data is highly recommended (Fields 2005).

EFA was conducted on the data set. Based on the results obtained, variables with low factor loadings were eliminated. The remaining data set was entered into AMOS for final analysis.

Structural Equation Modelling and Hypotheses Testing

SEM was used to analyse the data collected through the online survey. In this research, the conventional way of SEM involving evaluation of the measurement and structural models together in one stage or at a time was followed (Diamantopolous 1994). One factor measurement models were estimated first in order to assess the quality of the measurement items before the structural model was estimated. At this stage, this research used the CFA model to maximize the reliability of latent variables and to reduce the variables to a manageable level in order to fit the structural equation models to the data at the subsequent stage (Homes-Smith & Rowe 1994). SEM was preferred over other multivariate analytic methods for to several reasons.

First, the use of SEM requires the formal specification of a theoretically driven model which is to be estimated and empirically tested. This ensures that the researcher has to think carefully about the data and related hypotheses instead of simply relying on some default model specifications (Hoyle 1995). Thus, it is not just a matter of reading the data but ensuring that the theory specifies how the various constructs postulated are related (Bollen & Long 1993). Therefore, the researcher can test some paths and relationships between some constructs and not others. Moreover, SEM goes further than any of the other techniques in automatically and efficiently computing indirect, direct and total effects in complex models (Buhi, Goodson & Neilands 2007).

Secondly, SEM has the capacity to estimate and test the relationship between the observable indicators and the latent variables. SEM makes use of several indicator

variables per construct simultaneously, which leads to more valid conclusions on the construct level. Using other methods of analysis would result in less clear conclusions and would require several separate analyses. Furthermore, the older multivariate techniques (such as MANOVA and regression) assume zero measurement error in sample data, which is never the case (Buhi, Goodson & Neilands 2007). SEM controls for measurement error which ensures that the relationships between the constructs are 'more accurate and stronger' (p77) and not biased.

Another reason for preferring SEM is its ability to deal with incomplete datasets (Buhi, Goodson & Neilands 2007). Missing data can pose several problems during analyses. It is claimed that the SEM software developers have dealt well with the problem of missing data by incorporating techniques such as the full information maximum likelihood (FIML) function, unlike other statistical software programmes.

Finally, SEM allows the modelling and simultaneous testing of complex patterns of relationships including a range of hypotheses. Using other methods of analysis would frequently require several separate analyses (Werner & Schermelleh-Engel 2009).

4.4 Ethical considerations

This final section of Chapter 4 deals with the ethics of data collection. A research protocol was developed to cover the ethical aspects of both the exploratory phases and quantitative phases of the study. Formal research approval was obtained from the University of Western Sydney's Human Research Ethics Committee.

After gaining the approval (H 9464) from the Human Research Ethics Committee, data collection was undertaken. Accordingly, all respondents were promised anonymity and confidentiality of their responses. Special care was taken while reporting the research findings that none of the respondents are recognizable or identifiable. The results from the research have only been used for the stated purpose. The ethical guidelines of the University of Western Sydney were followed during all stages of the research. All relevant documents are attached in the appendix section.

4.5 Conclusion

This chapter described the research design for the project being undertaken. It outlined the research plan and gave details of the exploratory research phase as well as discussing the design and administration of the questionnaire. The chosen sampling strategy was justified. The rationale behind choosing structural equation modelling (SEM) as the method for analysis was described. Finally, ethical considerations undertaken during the data collection stage were identified.

The next chapter presents an analysis of the collected data through in-depth interviews. The findings through the qualitative part was used to refine the measurement scales and used in the quantitative part of this research, which will be discussed in subsequent chapters.

CHAPTER 5: REFINEMENT OF MEASUREMENT SCALES BY QUALITATIVE MEASURES

5.1 Introduction

As proposed in Chapter 4, both qualitative and quantitative methods have been applied in this research. As a broad generalisation, qualitative research is an essential pre requisite to most quantitative research because it helps clarify the issues to be addressed (Poggenpoel, Myburgh & Van der Linde 2001) A popular method is the use of in-depth interviews (Stokes & Bergin 2006) for the purpose of refining and pretesting measurement scales or other elements of a survey design; the in-depth interviews may be conducted to fully explore the factors that underpin participants' answers (Ritchie et al. 2013) and help overcome the problem that some items may not be directly related to the focal research topic.

5.2 Data collection method and sample

As explained in Chapter 4, the main aim of the qualitative component of this research is to use the results of in-depth interviews with members of Gen Y using OSNM to refine constructs and measurement scales identified from the literature review. Twelve in-depth interviews were conducted. The constructs and their measurement variables retained after incorporating the results of the analysis of the interview data is reported in Table 5.1. These refined measures were used in the quantitative stage of the research.

In this research, understanding the development of the attitudes of Gen Y towards brands through their involvement in OSNM is the pivotal issue. The variables: Gen Y's gender differences, intra generational differences, e-WOM, informational influence, trust, tie strength and subjective norm were considered while exploring the key research issues. In the qualitative study, a convenience sample (i.e. university student, people from the work force) was considered best for this stage of the research project. Respondents were approached if they represented Gen Y and used at least one SNS. Approaches to potential participants were either by message their Facebook inbox or in a university tutorial class and ensuring equal gender and age group representation. In general, participants belonging to the higher age group came from the work force and lower age group comprised university students. Once participants were selected, interviews were conducted.

All interviewees were informed about the research protocol, interview essentials and were required to sign a consent forms to reflect their voluntary participations. Research objectives were also discussed in order to enhance open and free discussions and confidentially were assured. Interviewees were then encouraged to discuss issues and incidents relating to participation in OSNM, informational influence, trust in network members, tie strength, important people in their online network and brand information. Questions were semi-structured. From time-totime interviewees were probed to provide more information, and were asked to use examples to further describe their experiences. All responses were recorded and later transcribed for qualitative analysis. Participants, males were coded 'M' (male) and 'F' (female), and then coded numerically.

In the following section, the key findings of the qualitative phase of the research are presented, focusing on the key constructs developed in Chapter 3.

5.3 Findings from in-depth interviews

In this section, findings related to each construct are discussed. Based on interactions, interview responses were examined to check their relevance to existing items used to measure respective constructs. Items were refined, dropped and new items were introduced based on relevant responses to better reflect constructs.

5.3.1 Involvement in online social networking media (OSNM)

Findings of this phase of the research show that within Gen Y, males and females both use OSNM on a regular basis. In their daily lives, they are somehow connected with their friends and family through social networking media. Sometimes, they do not even realise how much they are involved in OSNM because it has become part of their lives. For example, it was found that younger Gen Y (18-24) females are inclined to be more curious about their friends' activities in OSNM. When they do not participate in a conversation, they still like to watch what is going on between friends and they treat that as entertaining. Generally, most participants agreed that being active in OSNM helps them to escape loneliness because they sense themselves as part of a group. Participants also like the features to customise the content and service of SNSs. It gives them more freedom to use social networking media. As one of the respondents (F2) said:

it gives me peace of mind as I can delete or edit any post or comments I made, if I wish. Even if I want to share something with only selected friends, I can customise that post, photo or video. In that way it allows a bit of privacy which I don't want to share on my wall with all the contacts.

Because members are connected to their friends and family through SNSs and see regular updates of their contacts, it helps them to get along with people more easily in real life. Gen Y follow the posts of their contacts in OSNM and, because of the nature of online social media, any current topic goes viral, which help members to engage in conversations in real life. Generally, Gen Y admits OSNM is involving and essential to their lives. Interestingly, one female (F1) mentioned that she does not see regular update on social media and hardly makes any comment but she loves to check up on her account when she gets a chance. Sometimes she checks her account after 2-3 days. But she always uses the 'check in' application to let her friends know if she is in a cool restaurant or in a nice place for a holiday.

Overall, most of the participants include their family members in their social networking account in OSNM. One of the participants (M1) said that:

As I live far from my family, it is the best contact method I found to stay in touch with my family from wherever I go. I can see my family members' updates and chat to them and share my events or updates with them.

Another participant (F6) said:

I just moved from my parents. I miss them obviously and OSNM is the way I share my life with them apart from phone conversation in a busy life.

The interviews showed that participants do not believe the following items are necessary prerequisites for becoming involved in OSNM, even though these items are highlighted as important in the current literature (refer to Table 3.1); thus, these items have been removed from the scale:

1) Online Social Networking Media is important to Gen Y.
- 2) Online Social Networking Media is interesting.
- 3) Online Social Networking Media is exciting.
- 4) Online Social Networking Media is significant
- 5) Using Online Social Networking Media is appealing to me
- 6) Online Social Networking Media is fascinating
- 7) I can participate in the activities in Online Social Networking Media
- 8) Online Social Networking Media provides me lot of information
- I am active on Online Social Networking Media for certain hours of a day.

The following new scale item was added as a result of the findings of in-depth interviews of this research:

1) Gen Y use OSNM to stay in touch with their family.

As a result of the interview results, the following scale items of construct involvement in OSNM have been refined and retained from the current literature (refer to Chapter 3, Table 3.1):

- 1) OSNM means a lot to Gen Y.
- 2) Gen Y think OSNM is essential.
- 3) Gen Y find using OSNM entertaining.
- 4) Gen Y think OSNM is involving.
- 5) OSNM can help Gen Y get along with people more easily in real life.
- 6) OSNM can help Gen Y escape loneliness.
- 7) Gen Y do customise the content and services in OSNM.
- Gen Y has a compulsive need to know more about what their friends are putting on OSNM.
- 9) Gen Y like to engage in conversation about OSNM.

5.3.2 Electronic word of mouth (e-WOM)

Chapter 3 concluded that the e-WOM construct in this research will be analysed only on the basis of the 'opinion receiving' dimension because of the nature of this research.

Findings from the analysis of the interview data show that Gen Y generally display a high level of opinion and advice seeking behaviour, and tend to search for information from their OSN friends, especially in relation to brands. Both males and females reported such opinion-seeking behaviour, although females show a greater tendency to seek opinion and advice.

One of the participants (F5) noted that if she knows her OSNM friends are familiar with a brand, she always asks for information about that brand if she requires if she needs information. Often, before buying a particular branded product, Gen Y seeks an opinion about that brand from their OSNM friends. When it comes to a situation where a decision regarding a branded product is to be made, Gen Y gains a great deal of comfort from choosing brand alternatives if they have had their OSNM friends' opinion on the brand. One of the female participants' (F1) noted that she is comfortable about making decisions on her own regarding particular branded products, such as dress and accessories for herself. But when it involves questions about major purchases such as cars (e.g., between a BMW Mini Cooper S and Volkswagen GTI), she prefers to obtain the opinions of her OSNM friends. She posted a status on her Facebook account for opinions and advice regarding: 'Which one to choose: BMW, Mini Cooper S or Volkswagen GTI?' After posting that status, she has gained more information, opinions and advice about the brands and learnt from the experiences of others about the brands from her OSNM friends which made her decision making easier. Participant F1 also explained how she could make her decision comfortably because the opinions and advice came from those who happened to be her OSNM friends and not anonymous people.

Findings from the in-depth interviews also revealed that Gen Y like to collect information about new brands from their OSNM friends. For example, one of the female participants (F9) confirmed in the interview that if she is interested in new brands but does not know much about them, she often asks for more information about them from her OSNM friends. She gave, as an example, the ABBBC (Ashy Bines Bikini Body Challenge) brand. When she first noted it on her OSN, she did not know what ABBBC was. From her OSNM friends she came to know that it is a weight-loss challenge program and she was able to collect all the relevant information about the challenge and became involved in it; that is how it she became motivated to shred extra weight. She became excited as a result of the initial information she collected from her OSNM friends and grateful to her OSN friends. The interviews also revealed that Gen Y wants to gain further clarity regarding negative comments; if they receive negative comments regarding a post, they often ask for further clarification. For example, participant M12 mentioned that if he posts a picture or a status and receives negative comments, he often asks for more explanation so he can understand his friends' thoughts more clearly. It helps him to understand conversations between friends and thus to communicate in a better way.

The finding of the in-depth interviews also identified that Gen Y like to receive opinions from their close circle of friends on OSNM. They admitted that, although they have a long list of friends on social networking media, they only like to obtain opinions from their close circle before they buy any new brands. For example, one of the female participants (F11) noted that she does have a long list of friends in her social network but she only takes account of the opinions of close friends with whos she frequently communicates and has a better understanding of before purchasing new brands. She does not want to share all the bits and pieces of information of her own life with the whole friend list on OSNM.

On the basis of the findings from the in-depth interviews, the following new scale item was developed for this research:

1) I like to get only my close OSNM friends' opinions before I buy new brands.

The following measurement items of construct e-WOM have been retained (refer to Chapter 3, Table 3.1).

- When I consider buying a new brand, I ask my friends on the OSNM for their advice.
- 2) I like to get my OSNM friends' opinions before I buy new brands.
- I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them.
- 4) Often I like to get information about new brands from my OSNM friends.
- Often I want to gain further clarity on negative comments I receive from my OSNM friends.

5.3.3 Tie strength

Participants of in the depth interviews acknowledged the influence of tie strength while communicating in the OSNM. They are aware of weak and strong ties and communicate with their ties accordingly. Because of the nature of OSNM, participants can customise their friend lists as different groups and communicate accordingly. One of the participants (F11) noted that she customised her friends list according to the tie strength into: family members, school friends, university friends, own group, group project for university units, work and other. In that way, she manages to differentiate her tie strength in her friends list. Usually she communicates anytime anywhere with her own group because they are the friends she communicates with on a daily basis and is very close to. To share something in the family and cousin group, she uses the family list. In such a way, she can manage her friends list and it gives her peace of mind that she can communicate with all the important people in her life without disrupting different kinds of ties.

In general, Gen Y seems to be socially connected through online and they think OSNM friends are very important to them. Participant F7 noted that she is always in contacts with her close friends through OSNM and feels close to her friends even if she does not see them physically. It gives her a sense of closeness because of the availability to contact them any time of day and share her thoughts with them by posting a status or commenting on a friend's post.

Overall, all participants mentioned that they use OSNM to stay in touch with their friends. The nature of OSNM gives them a feeling of connectedness so that even if they are not talking to their friends all the time, the friends list is handy and enables them to 'knock on the door' of any friend, anytime, anywhere in the world. Because of that bond, the following new scale item of tie strength was developed based on the findings of the in-depth interviews:

1) I use OSNM to stay in touch with my friends.

The in-depth interviews data confirmed that the following items of the original construct for tie strength should be retained (refer to Chapter 3, Table 3.1)

- 1) I communicate frequently with my close friends on OSNM
- 2) The friends I have on OSNM are important to me

3) I feel close to my OSNM friends

5.3.4 Trust

Findings of this qualitative stage of the research show that Gen Y trust their OSNM friends. Generally, they think people would not lie when they make comments on some online post, status or picture. Because OSNM friends are mainly their family members, real life friends, colleagues, acquaintances or known ones, most Gen Y believe that their OSNM friends are honest. Gen Y can be selective in the befriending process because of the options available in OSNM. Overall, members of Gen Y attach strong credibility on the comments made by their online friends.

The interviews showed that there is a tendency to obtain reassurances from OSNM friends before making a new big purchase decision. This indicates the dependability of their OSNM friends. Seeking reassurances mainly occurs when there are options available and a need to make the right choice. However, Gen Y also realise that taste and choice vary depending upon individuals. Again, they like to evaluate their own choices by depending on their OSNM friends.

The interviews also revealed that Gen Y not only trust their OSNM friends but also develop attitudes towards brands resulting from this trust in their friends.. If Gen Y notes a liked post regarding a brand from their OSNM friends, they have a tendency to carry out some research regarding the brand, value the information and form an attitude towards the brand. Sometimes Gen Y also participates in events liked by their OSNM friends.

However, even though members of Gen Y trust their OSNM friends, they also like to research online and read blogs, online discussion boards and forums regarding product and brand reviews and make a quick comparison of information consistency. They are also aware of abuse of OSNM, cyber bullying, online theft, harassment, and stalking of online strangers; these are current concerns.

Based on the finding from analysis of the results of the in-depth interviews, the following new scale item concerning trust was developed:

 I trust opinions of my close OSNM friends about a brand more than opinions on electronic discussion board. A number of scale items on the trust construct adopted as a result of the literature review were supported by the findings of the in-depth interview (refer Chapter 3, Table 3.1) and, thus, retained:

- 1) I find most of my OSNM friends dependable
- 2) I think most of my OSNM friends are honest
- 3) I trust comments made by my OSNM friends

Members of Gen Y also expressed a strong need for information receiving/sharing on OSN because they think their OSNM friends are reliable. Gen Y also feel strong bonds with their OSNM friends and they believe in their OSNM friends. They show confidence in their OSNM friends as they consume information from OSNM communications. These bonds affect the spreading of information of interest in both the online and offline settings. One participant (F1) said:

Due to the availability of online information, one can easily cross check the piece of information. Spreading or sharing wrong information also affects their personal impression on other network friends in seconds due to the rapidness of social networking media. So, people are very much careful about sharing wrong information or deceptive information among friends. This is one of the reasons I trust my OSNM friends.

Supported by the responses in the in-depth interviews, the following items of the construct trust have also been retained (refer to Chapter 3, Table 3.1).

- 4) I think most of my OSNM friends are reliable
- 5) I have confidence in my OSNM friends
- 6) I can believe in my OSNM friends

5.3.5 Informational influence

From the in-depth interviews of this research, particularly with regard to informational influence, it became clear that members of Gen Y are influenced by information provided by knowledgeable friends when making decisions regarding brands. It is evident that participants of this study strongly agreed that they always ask their friends on OSNM regarding brands they have little knowledge of and gain information about that brand. They love to consult with their OSNM friends regarding brands when they are not sure about which brand to choose. It helps them to make decisions regarding brands when they get information from their

OSNM friends. They think that their trustworthy friends, who have knowledge about particular brand, will give them the right piece of information and overcome the difficulty of becoming confused as a result of information overload by researching the Web. Gen Y believe that shared information is always handy for enabling a quality decision if information comes from their friends who have knowledge about the particular brand.

Therefore, following items of construct informational influence have been retained (refer Chapter 3, Table 3.1).

- If I have little experience with a brand, I often ask my OSNM friends about the brand before buying
- I often consult my OSNM friends to help choose the best alternative available from different brands

It is also evident that need to obtain information and guidance from knowledgeable friends vary from person to person among Gen Y. For example, participant F1 does not feel a high need to obtain information from her OSNM friends over every little thing. She is confident enough in her own research to obtain information if things are not special purchases. However, if the purchase is big, she depends on knowledgeable guidance from OSNM friends. M12, however, shows a higher need to obtain information and guidance from knowledgeable contacts when searching for and contemplating purchase options and this need is facilitated by the information he receives through the involvement in OSNM. At the extreme, some Gen Y do not buy a particular brand if the brand is not accepted by their OSNM friends. If there is an argument regarding a brand, they often evaluate the situation and weight the positives and negatives with the source of information, before making the decision.

Hence, the following scale items of construct informational influence are also retained (refer Chapter 3, Table 3.1) because they are supported by the findings of the in-depth interviews of this research:

- I frequently gather information from my OSNM friends about brands, before I buy
- 4) I rarely purchase any brand until I am sure my OSNM friends approve of that.

5.3.6 Subjective norm

From in depth interview analysis it is evident that Gen Y try to maintain group harmony and elicit positive evaluations from others in the group where group denotes OSNM group. Participants revealed that, if they see a particular brand product that they intend to buy, they will, mostly, consult their friends and obtain opinions from them. To obtain an opinion, they usually post a status on their online social networking group by asking whether they should buy that particular brand or whether anyone has a suggestion regarding the brand. They usually evaluate their friends' opinions and value those opinions. Sometimes they even feel some level of social pressure to buy a particular branded product if it is suggested by their OSNM friends. Participants also admitted that they wish to follow their OSNM friends' suggestions if there is no obvious reason not to implement the suggestion. Again, it is important for members of Gen Y that they obtain the approval of OSNM friends before they buy a branded product. They are loyal to their OSNM friends' choice, knowledge and given information. They also look more closely at those branded products that their OSNM friends like. They will even try to obtain more information about those brands and carry out research and gain knowledge about them. Sometimes they follow a particular brand's web page and update news for the benefit of their OSNM friends.

The results of analysis of the in-depth interviews supported those found in the literature review. The adopted scale items of the construct subjective norm (refer to Chapter 3, Table 3.1) was refined and retained as follows:

- 1) Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM.
- 2) Typically, I like to do what my OSNM friends suggest that I do.
- 3) It is important that my OSNM friends approve of the brands I buy.
- 4) I am very loyal to brands that my OSNM friends buy.

In-depth interviews also showed the behavioural patterns demonstrated by Gen Y on OSNM. Participants explained that they monitor the comments of their friends on OSNM regarding specific brands and use them as a basis for their own choices and behaviour. They admit that, even though they focus on the information they obtain from different sources regarding any brand and they know that they do not need to conform to the expectations of their friends when making any decision and they all have enough information to make good decisions, occasionally they love to buy the brands their friends buy just to be on the same page. It gives them plenty of opportunity to discuss a common topic. Sometimes they even work long hours to save so that they can afford the brands their friends buy. Participant M4 mentioned that he was saving to buy a guitar that his friend bought. Initially he thought he would buy another brand, when he saw his friends' guitar, he wanted to buy the same brand which was a more expensive than the initial one he had chosen, so he started saving. By buying the same brands, he feels a sense of belonging.

Overall, results from the in-depth interviews showed that OSNM friends influence Gen Y in the choice of brands as found in the literature review. The following scale items, were, therefore, retained (refer Chapter 3, Table 3.1).

- 5) If I want to be like my OSNM friends, I always buy the brands they buy.
- I work long hours to save so that I can afford the brands my OSNM friends buy.
- I feel a sense of belonging by buying the same brands that my OSNM friends buy.
- 8) My OSNM friends very much influence the choice of my brands.

5.3.7 Attitude towards brands

Findings from the in-depth interviews regarding attitude toward brands are quite thought-provoking. Members of Gen Y believe that life is beautiful with friends. Because of the fast pace of life, it is not easy to meet friends all the time, but OSNM provides the access to stay connected with friends all over the world. In this way, the world has become much smaller and anyone can share their thoughts among friends. In that connection, members also value their friends' thoughts; brand appeal is not excluded from part of the sharing. If information or comments come from OSNM friends regarding a brand, Gen Y value that piece of information or comments.

Positive comments regarding a brand draw more attention to Gen Y on OSNM. Respondent M6 admitted that, in this fast growing business world, he would not know about so many brands if he could not see his OSNM friends click the 'like' button of the brand's official web page. When a close friend clicks the 'like' button on a brand Gen Y is curious to obtain more knowledge about those brands and browses the official brand pages and reads the comments on OSNM in their leisure time. Even, sometimes, they follow the arguments among friends regarding brands and thus gain access to much information concerning brands as well as the perspectives of friends.

The following new scale items have been developed based on the findings of the in-depth interviews:

- 1) If my OSNM friends find any brands appealing, I value that information.
- If I see any favourable comments from my OSNM friends regarding any brands, I value that comment.
- 3) If my OSNM friends find any brands pleasant, I notice that brand.
- My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page.

The in-depth interviews also revealed that Gen Y has their own opinion regarding brands they learn about and they are confident enough of their opinions. They think it is not necessary to agree on everything their OSNM friends talk about, especially when it comes to any brand.

For example respondent M3 noted:

It would be part of my research to agree or disagree on any opinions my OSNM friends' provide regarding a new brand.

They respect others' choice and value their suggestions regarding brands but they also think that they do not have to like brands all the time that their OSNM friend positively talks about. Even if they value their friends' suggestions, they found that it is not necessarily the case that all brands are good. They also disputed the idea that a brand becomes a necessity to them when they receive positive information about that particular brand. They consider information sensibly and realistically rather than following a friend's recommendations blindly. They love to make thoughtful decisions when it comes to a branded product, with due respect to their OSNM friends' opinions and suggestions.

On the basis of these findings, the following scale items adopted from the literature review (refer to Chapter 3, Table 3.1) were removed because they were not supported:

- 1) I like very much the brands my OSNM friends positively talk about.
- 2) I find the brands that my OSNM friends suggest to me are good.
- 3) When my OSNM friends provide positive information about a brand, the brand becomes a necessity.
- When I buy a brand that my OSNM friends also buy it helps me to become part of a group.

While attitude towards brands has been recognised as one's internal evaluation of a brand, it was found from the results of the in-depth interviews of the research that Gen Y appreciate, show interest in, inspect and evaluate their OSNM friends' suggestions regarding brands. They also value their friends' likings for a brand and follow their comments regarding a brand. In this way, they think they are gaining more knowledge about a brand than before. Even a friends' liked web page of a new brand gives them more access to information of that new brand. They can also share their OSNM friends' perspective to see a brand. To do more research on a particular brand, they even ask questions and expect expert opinions from their friends regarding that brand. Most of the time, Gen Y find that their friends' suggestions are practical and information provided by their OSNM friends are effective.

Gen Y appreciate brands that their OSNM friends' suggest. They also think that people have more opportunity to research and gather information in this 'tech savvy' times and online social media connects all the dots from gaining knowledge to sharing it all over in a click. It is obvious that they have leisure to choose a brand without spending much time and, in that case, they can count on their knowledgeable friends. Most of their OSNM friends are family, friends, colleagues and acquaintances in real life; they know them personally and value their opinions and suggestions.

The above findings were accorded with scale items of the construct attitude towards brands adopted from current literature and, thus, retained for further research (refer Chapter 3, Table 3.1).

- 1) I appreciate the brands my OSNM friends suggest me to buy.
- 2) I think the brands that my OSNM friends talk about are cool.
- 3) I find the brands that my OSNM friends like are good.
- 4) The brands that my OSNM friends like and suggest are practical.
- 5) The information that my OSNM friends provide on brands is effective.

It also appears, from the in-depth interviews, that members of Gen Y are conscious of the fact that, when they talk about a brand on OSNM, others, who are not participating in the discussion, may also be taking note. They also feel that when they talk about brands on OSNM, whether participating in a discussion or providing an opinion, they gain respect; although respondents were not sure whether this is from the brand image or some form of prestige issue.

Reviewing the results of the interviews, the following items of attitude towards brands were also retained for further research (refer to Chapter 3, Table 3.1)

- 6) When I seek information about brands from my OSNM friends, it allows me not to go unnoticed
- 7) When I talk about brands in OSNM, it allows me to get more respect

5.4 Conclusion

In earlier chapters, involvement in online social networking media (OSNM), electronic word of mouth (e-WOM) and subjective norm, along with various social structural variables (e.g., age group and gender differences) were analysed to understand their affect on developing attitudes towards brands. Furthermore, the mediating variables between OSNM and e-WOM: tie strength, trust and informational influence, were considered. Analysis of the results of the in-depth interviews enabled refinement of the measurement variables of these constructs. A number initially identified from a review of the literature were retained and others rejected. Because some of the scale items were neither developed for Gen Y nor for the Australian setting, there was a need for modification of this research. Table 5.1 shows the measurement variables of different constructs based on the current literature, and were refined and retained based on the findings of the qualitative stage of this research.

Constructs	Adapted scale items from literature and new scale items from in-depth interview	Code used for further analysis	
Involvement	1) OSNM means a lot to Gen Y.	Inv_OSNM_9	
in OSNM	2) Gen Y think OSNM is essential.	Inv_OSNM_11	
	3) Gen Y find using OSNM entertaining.	Inv_OSNM_12	
	4) Gen Y think OSNM is involving.	Inv_OSNM_15	
	5) OSNM can help Gen Y get along with people more easily in real life.	Inv_OSNM_16	
	6) OSNM can help Gen Y escape loneliness.	Inv_OSNM_17	
	7) Gen Y do customise the content and services in OSNM	Inv_OSNM_19	
	8) Gen Y has a compulsive need to know more about what their friends are putting on OSNM.	Inv_OSNM_20	
	9) Gen Y like to engage in conversation about OSNM.	Inv_OSNM_21	
	10) Gen Y use OSNM to stay in touch with their family (<i>New scale from in-depth interview</i>).	Inv_OSNM_2	
Electronic word of	1) When I consider buying a new brand, I ask my friends on the OSNM for their advice.	EWOM_1	
mouth (e- WOM)	2) I like to get my OSNM friends' opinions before I buy new brands.	EWOM_2	
	3) I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinions on them.	EWOM_4	
	4) Often I like to get information about new brands from my OSNM friends.	EWOM_5	
	5) Often I want to gain further clarity on negative comments I receive from my OSNM friends.	EWOM_6	
	6) I like to get only my close OSNM friends' opinions before I buy new brands (<i>New scale from in-depth interview</i>).	EWOM_3	
Tie strength	1) I communicate frequently with my close friends on OSNM.	Tie_Strength_1	
	2) The friends I have on OSNM are important to me.	Tie_Strength_2	
	3) I feel close to my OSNM friends.	Tie_Strength_3	
	4) I use OSNM to stay in touch with my friends (<i>New scale from in-depth interview</i>).	Tie_Strength_4	
Trust	1) I find most of my OSNM friends dependable.	Trust_1	
	2) I think most of my OSNM friends are honest.	Trust_2	
	3) I trust comments made by my OSNM friends.	Trust_4	
	4) I think most of my OSNM friends are reliable.	Trust_3	
	5) I have confidence in my OSNM friends.	Trust_5	
	6) I can believe in my OSNM friends.	Trust_6	
	7) I trust opinions of my close OSNM friends about a brand more than opinions on electronic discussion board (<i>New scale from in-depth interview</i>).	Trust_7	

Table 5:1: List of constructs and scale items

Constructs	Adapted scale items from literature and new scale items from in-depth interview	Code used for further analysis	
Informational influence	1) If I have little experience with a brand, I often ask my OSNM friends about the brand before buying.	Info_Influ_1	
	2) I often consult my OSNM friends to help choose the best alternative available from different brands.	Info_Influ_2	
	3) I frequently gather information from my OSNM friends about brands, before I buy.	Info_Influ_3	
	4) I rarely purchase any brand until I am sure my OSNM friends approve of that.	Info_Influ_4	
Subjective norm	1) Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM.	Sub_Norm_1	
	2) Typically, I like to do what my OSNM friends suggest that I do.	Sub_Norm_2	
	3) It is important that my OSNM friends approve of the brands I buy.	Sub_Norm_4	
	4) I am very loyal to brands that my OSNM friends buy.	Sub_Norm_5	
	5) If I want to be like my OSNM friends, I always buy the brands they buy.	Sub_Norm_6	
	6) I work long hours to save so that I can afford the brands my OSNM friends buy.	Sub_Norm_7	
	7) I feel a sense of belonging by buying the same brands that my OSNM friends buy.	Sub_Norm_8	
	8) My OSNM friends very much influence the choice of my brands.	Sub_Norm_9	
Attitude towards	1) I appreciate the brands my OSNM friends suggest me to buy.	Att_Br_2	
brands	2) I think the brands that my OSNM friends talk about are cool.	Att_Br_3	
	3) I find the brands that my OSNM friends like are good.	Att_Br_4	
	4) The brands that my OSNM friends like and suggest are practical.	Att_Br_7	
	5) The information that my OSNM friends provide on brands is effective.	Att_Br_8	
	6) When I seek information about brands from my OSNM friends, it allows me not to go unnoticed.	Att_Br_10	
	7) When I talk about brands in OSNM, it allows me to get more respect.	Att_Br_11	
	8) If my OSNM friends find any brands appealing, I value that information (<i>New scale from in-depth interview</i>).	Att_Br_12	
	9) If I see any favourable comments from my OSNM friends regarding any brands, I value that comment (<i>New scale from in-depth interview</i>).	Att_Br_13	

Constructs	Adapted scale items from literature and new scale items from in-depth interview	
	10) If my OSNM friends find any brands pleasant, I notice that brand (<i>New scale from in-depth interview</i>).	Att_Br_14
	11) My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page (<i>New scale from in-depth interview</i>).	Att_Br_15

CHAPTER 6: ASSESSMENT AND REFINEMENT OF MEASUREMENT SCALES BY QUANTITATIVE MEASURES

6.1 Introduction

This research incorporated both qualitative and quantitative methods to answer the main research question 'How does Gen Y's involvement in online social networking media facilitate the development of their attitudes towards brands through their online friends?' Qualitative research was conducted to help refine the key constructs and their multi-item measurement items. Quantitative methods were applied to validate and test the constructs and their relationships. Qualitative research results have been reported in Chapter 5; the resulting changes to the scales were subjected to further quantitative testing for model development of attitude towards brands through the involvement of Gen Y in OSNM. In this chapter, the results of the quantitative research are reported. This chapter discusses descriptive analysis, EFA, CFA, and the reliability and validity of items used in this study and results of the quantitative research are reported.

6.2 Data preparation

The data for this project was collected through a web-based survey. Because of the strengths of Internet-based technology (Evans & Mathur 2005), it was possible to exert controls to assure quality output. For instance, the chances of an incomplete survey or a partially completed survey were nil because the questionnaire software was designed in so that respondents could not proceed without completing all section.

As soon as a survey questionnaire was submitted by a respondent, the data were stored in a data base (Wilson & Laskey 2003), which greatly reduced the administrative burden of preparing data for analysis. In line with the requirement of the ethics committee of the researcher's university, it was ensured that all data was safely stored in the researcher's office with privacy and confidentiality of the respondents ensured.

Due to the direct transfer of raw data to a spreadsheet, the chances of a data entry error were also minimized (Evans & Mathur 2005). Similarly, the online survey

options made available to the research participant ensured that the respondent could not mistakenly insert an incorrect value that fell beyond the specified range.

In total, 319 responses were completed and 562 responses were rejected because of poor quality of data. As online panel was used for data collection, there was no error in data when it was transferred into SPSS. Table 6.1 shows the breakdown of responses.

Response	Total
Complete	319
Incomplete	191
Screened	83
QuotaFull	202
Error	0
Missing Subsid	36
Racer	21
Straightliner	29

Table 6:1: Response information from data commission agent 'Research Now'

6.3 Sample characteristics

The 319 respondents represented both genders, a factor of Gen Y considered as one of the social structural variables that influence their involvement in OSNM. During sample selection, proportional representation of both genders was ensured. Table 6.2 shows the distribution of respondents by gender differences.

Table 6:2: Distribution of respondents by gender

Gender	Frequency	Per cent
Male	158	49.5
Female	161	50.5
Total	319	100.0

Age groups that Gen Y members belong to was also considered an important factor influencing Gen Y's attitudes towards brands. For this research, members of Gen Y were divided into two groups, 18-24 and 25-29. Table 6.3 shows the distribution of respondents by age group.

 Table 6:3: Distribution of respondents by age group

Age Group	Frequency	Per cent	
18-24	159	49.8	
25-29	160	50.2	
Total	319	100.0	

To qualify to participate in the survey, respondents were required to have at least one account in a SNS, though there was no restriction on the number of OSN accounts. It was found that Facebook is the most common site used, representing 97.2% of the total respondents, as shown in Table 6.4.

Facebook	Frequency	Per cent
Do not use	9	2.8
Use	310	97.2
Total	319	100.0

Table 6:4: Facebook (most common social networking site) used by respondents

Most participants have been using OSNM for more than three years (Table 6.5) and, typically, on average, most of the participants spend up to two hours a day on online social media (Table 6.6). Due to the availability of smartphones, 22.9% of respondents reported being logged on into a social network all the time (Table 6.7). Table 6.5 shows length of time as members.

	Frequency	Per cent
A few weeks	2	.6
1-2 months	6	1.9
3-4 months	4	1.3
5-6 months	5	1.6
7-12 months	7	2.2
1-2 years	33	10.3
3-4 years	126	39.5
5 years or more	136	42.6
Total	319	100.0

Table 6:5: Membership period in a social networking site

Table 6:6: Time spent on social networking site

	Frequency	Per cent
< 1 hour	97	30.4
1-2 hours	113	35.4
2-3 hours	58	18.2
4-5 hours	23	7.2
>5 hours	28	8.8
Total	319	100.0

	Frequency	Per cent
Logged in all of the time	73	22.9
Every few minutes	11	3.4
Hourly	43	13.5
5-6 times daily	64	20.1
3-4 times daily	42	13.2
1-2 times daily	46	14.4
Few times per week	29	9.1
Few times per month	6	1.9
Monthly	4	1.3
< Monthly	1	.3
Total	319	100.0

 Table 6:7: Frequency of checking social networking site

Respondents perform a range of activities on SNSs. Start group, podcast, searching information for buying a particular brand, participating in a promotion or contest, clicking on advertisement and linking to a company's product or service were the most frequent activities performed by the respondents, as shown in Table 6.8.

Activities on SNS	Responses		
Activities of SNS	Ν	Per cent	
Posted pictures (other than a profile picture)	58	2.3	
Posted video/music	185	7.3	
Posted links to other web sites (including links to videos)	126	5.0	
Linked to a company, product, or service	213	8.5	
Told people about music/movies/games/TV shows I like	181	7.2	
Clicked a paid advertisement	237	9.4	
Participated in a promotion or contest	207	8.2	
Searched for information for buying particular brand purposes	234	9.3	
Updated activities/posted thoughts	117	4.6	
Responded to posts of others	79	3.1	
Started a group	273	10.8	
Included a podcast	303	12.0	
Other	306	12.1	
Total		100.0	

Table 6:8: Activities on social networking sites

6.4 Assessment of measurement scales

As has been discussed in Chapter 4, both exploratory and confirmatory factor analysis techniques have been used in this research. EFA was used to test the dimensionality of data with the aim of producing a set of scale items that reflect a single underlying factor or construct. Further CFA, using the SEM program AMOS, was used to gain a more precise estimation of reliability and to formally test the uni-dimensionality of the scales. SEM was also used to test a proposed model developed on the basis of a review of the literature review (Figure 3.1) and qualitative research findings (Table 5.1).

6.4.1 Results of exploratory factor analysis

A total of 42 variables were identified through the literature review and refined through qualitative research (Table 5.1). In addition, 8 new scale items were added from qualitative findings (Table 5.1). Overall, 50 variables were submitted for the EFA.

Factor analysis was applied using the principal component analysis extraction method. In this study all factor loadings of the relevant constructs were generated through a varimax rotation method after which they were reviewed for advanced analysis. The most common rule is to base the number of factors on the number of eigenvalues greater than 1 (Zikmund & Babin 2007). However, when a large number of variables are being factor analysed, many unimportant factors will be associated with eigenvalues as large as 1.0, making it especially crucial to consider other indicators of the 'correct' solution. Determining the correct number of factors is a matter of balancing comprehensiveness against parsimony. Further, variables to be included in the factor analysis should be specified based on past research, theory and judgments of the researcher (Malhotra 2008).

In practice, one is usually happy with a factor solution that explains 50-75% of the variance in the original variables (Diekhoff 1992). In this case, the cut-off point of eigenvalues of 1.0 gave factor solution that explained 66.358% of the overall variance for all the 50 indicators.

Another consideration in determining the cut-off point is interpretability of factors. Factors are interpreted by examining their correlations, called loading. Garver and Mentzer (1999) recommended that variables with poor factor loadings (less than .50) should be dropped from further analyses. Traditionally, to give a meaningful interpretation, at least two or three variables must load on a factor (Henson & Roberts 2006). This interpretation is often facilitated by factor rotation, the second stage of factor analysis, in which original factors are redefined. In this research, the

varimax rotation method was used. Factor loadings of all the underlying constructs were inspected after applying the varimax rotation method. Table 6.9 shows the factors extracted with the variables that explain each of the factors.

As suggested by Garver and Mentzer (1999), items with low factor loadings (<0.50) were eliminated because they do not converge properly with the latent constructs they were designed to measure. At this stage, two variables had poor factor loadings (less than .50) and were removed from further analysis. These variables were Ewom_6 (Further clarity on negative comments receive from OSNM friends) and Trust_7 (Trust opinions of close OSNM friends more than electronic discussion board). One item Info_Influ_3 (I frequently gather information from my OSNM friends about brands, before I buy) with loading .499 was retained at this stage, using the researcher's judgment, because its value was nearly .50. A further two variables, Att_Br_10, Att_Br_11 were removed at this stage because they cross loaded on factor 1. Because the SEM model should be based on theory and judgment rather than data collected from the survey (Tabachnick & Fidell 2001), items were removed for the purpose of this study in the anticipation that their exclusion would contribute to the overall model fit (Joreskog & Sorbom 1993).

	Component				
Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Gen Y use OSNM to stay in touch with their family (Inv_Osnm_2)			.535		
OSNM means a lot to Gen Y (Inv_Osnm_9)			.728		
Gen Y think OSNM is essential (Inv_Osnm_11)			.674		
Gen Y find using OSNM entertaining (Inv_Osnm_12)			.682		
Gen Y think OSNM is involving (Inv_Osnm_15)			.678		
OSNM can help Gen Y get along with people more easily in real life (Inv_Osnm_16)			.554		
OSNM can help Gen Y escape loneliness (Inv_Osnm_17)			.640		
Gen Y do customise the content and			.541		

	Component						
Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5		
services in OSNM (Inv_Osnm_19)							
Gen Y has a compulsive need to know more about what their friends are putting on OSNM (Inv_Osnm_20)			.602				
Gen Y like to engage in conversation about OSNM (Inv_Osnm_21)			.538				
When I consider buying a new brand, I ask my friends on the OSNM for their advice (Ewom_1)	.544						
I like to get my OSNM friends' opinions before I buy new brands (Ewom_2)	.591						
I like to get only my close OSNM friends' opinions before I buy new brands (New scale from in-depth interview). (Ewom_3)	.539						
I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them (Ewom_4)	.538						
Often I like to get information about new brands from my OSNM friends (Ewom_5)	.531						
Often I want to gain further clarity on negative comments I receive from my OSNM friends (Ewom_6)	.388						
I communicate frequently with my close friends on OSNM (Tie_Strength_1)			.627				
The friends I have on OSNM are important to me (Tie_Strength_2)				.667			
I feel close to my OSNM friends (Tie_Strength_3)				.591			
I use Online Social Networking Media (OSNM) to stay in touch with my friends (Tie_strength_4)			.687				
I find most of my OSNM friends dependable (Trust_1)				.673			
I think most of my OSNM friends are honest (Trust_2)				.716			
I think most of my OSNM friends are reliable (Trust_3)				.724			
I trust comments made by my OSNM friends (Trust_4)				.643			
I have confidence in my OSNM friends (Trust_5)				.760			
I can believe in my OSNM friends				.760			

	Component					
Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	
(Trust_6)						
I trust opinions of my close OSNM friends about a brand more than opinions on electronic discussion board (Trust_7)				.411		
If I have little experience with a brand, I often ask my OSNM friends about the brand before buying (Info_Influ_1)					.609	
I often consult my OSNM friends to help choose the best alternative available from different brands (Info_Influ_2)					.557	
I frequently gather information from my OSNM friends about brands, before I buy (Info_Influ_3)					.499	
I rarely purchase any brand until I am sure my OSNM friends approve of that (Info_Influ_4)	.818					
Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM (Sub_Norm_1)	.658					
Typically, I like to do what my OSNM friends suggest that I do (Sub_Norm_2)	.700					
It is important that my OSNM friends approve of the brands I buy (Sub_Norm_4)	.809					
I am very loyal to brands that my OSNM friends buy (Sub_Norm_5)	.746					
If I want to be like my OSNM friends, I always buy the brands they buy (Sub_Norm_6)	.857					
I work long hours to save so that I can afford the brands my OSNM friends buy (Sub_Norm_7)	.763					
I feel a sense of belonging by buying the same brands that my OSNM friends buy (Sub_Norm_8)	.777					
My OSNM friends very much influence the choice of my brands (Sub_Norm_9)	.712					
I appreciate the brands my OSNM friends suggest me to buy (Att_Br_2)		.646				
I think the brands that my OSNM friends talk about are cool (Att_Br_3)		.657				
I find the brands that my OSNM friends like are good (Att_Br_4)		.678				
The brands that my OSNM friends like		.701				

	Component					
Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	
and suggest are practical (Att_Br_7)						
The information that my OSNM friends provide on brands is effective (Att_Br_8)		.701				
If my OSNM friends find any brands appealing, I value that information (Att_Br_12)		.701				
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment (Att_Br_13)		.666				
If my OSNM friends find any brands pleasant, I notice that brand (Att_Br_14)		.763				
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page (Att_Br_15)		.723				
When I seek information about brands from my OSNM friends, it allows me not to go unnoticed (Att_Br_10)	.577					
When I talk about brands in OSNM, it allows me to get more respect (Att_Br_11)	.661					

Findings from the factor analysis showed that some variables had cross loadings between factors. It is possible for variables to load on many factors but usually they will load highest on one factor (Aron & Fraley 1999). In addition, factors with at least three variables were retained, as recommended by Henson and Roberts (2006).

Table 6.10 shows the retained 5 factors and their 46 measurement variables for further analysis.

Measurement Items	Factor Loading	% Variance Extracted	Eigen value	Co-efficient Alpha	Inter-item Correlation
e-WOM					
Ewom_1	.544				.789
Ewom_2	.591				.812
Ewom_3	.539				.687
Ewom_4	.538				.790
Ewom_5	.531				.724
InfoInflu_4	.818	21.526	10.763	.962	.808
Sub_Norm_1	.658				.784
Sub_Norm_2	.700				.781

Table 6:10: Retained factors, variables and factor loadings

Measurement	Factor	% Variance	Eigen	Co-efficient	Inter-item
Items	Loading	Extracted	value	Alpha	Correlation
Sub_Norm_4	.809				.824
Sub_Norm_5	.746				.840
Sub_Norm_6	.857				.800
Sub_Norm_7	.763				.739
Sub_Norm_8	.777				.810
Sub_Norm_9	.712				.836
Attitude towards					
brand	.646				.804
Att Br 2	.657				.814
Att Br 3	.678				.803
Att Br 4	.701				.784
Att Br 7	.701	13.595	6.798	.951	.822
Att Br 8	.701				.825
Att Br 12	.666				.816
Att Br 13	.763				.833
Att Br 14	.723				.763
Att Br 15					
Involvement					
OSNM	.535				.436
Inv_Osnm_2	.728				.782
Inv_Osnm_9	.674				.710
Inv_Osnm_11	.682				.655
Inv_Osnm_12	.678				.678
Inv_Osnm_15	.554				.629
Inv_Osnm_16	.640	13.505	6.753	.906	.696
Inv_Osnm_17	.541				.570
Inv_Osnm_19	.602				.640
Inv_Osnm_20	.538				.609
Inv_Osnm_21	.627				.639
Tie_strength_1	.687				.605
Tie_strength_4					
Trust					
Trust_1	.673				.751
Trust_2	.716				.708
Trust_3	.724				.780
Trust_4	.643	11.747	5.874	.930	.733
Trust_5	.760				.833
Trust_6	.760				.821
Tie_strength_2	.667				.732
Tie_strength_3	.591				.722
Informational					
Influence	.609				.790
Info_Influ_1	.557	5.985	2.992	.893	.794
Info_Influ_2	.499				.784
Info_Influ_3					

To test reliability of each set of factors, co-efficient alpha was used. Each retained factor achieved more than alpha .70 as recommended by Hair, Bush and Ortinau (2006).

Next, an EFA with eigenvalue ≥ 1 and a varimax rotation was applied separately to each of the 5 factors under investigation, as suggested by Conway and Huffcutt (2003). The main purpose of this step was to see whether the measurement items of each construct under investigation is uni-dimensional or multi-dimensional.

A total of 5 valid factors representing the 7 constructs identified through past research were under analysis at this stage. Among these, factor 1 indicated five measurement items of e-WOM each with factor loading of more than .687. However, factor 1 also indicated eight measurement items of subjective norms, each with a factor loading of more than .739 and one measurement item of information influence with a factor loading of .808. This is not surprising theoretically. In past research it was found that subjective norm has some effect of informational influence (Qin et al. 2011).

Again, within e-WOM, opinions have some relation with subjective norm (Bearden & Rose 1990). It was also noted that many psychological tests have multiple scales where the correlations between some scales can be quite high (e.g., .6 to .8 correlations). In such cases, there may not be a huge difference between models where all these items load on one factor versus a model where the items load on different factors. This is further compounded by various other issues: (1) imposing a varimax rotation may hide these inter-correlated factors; (2) other influences on the factor structure beyond the actual constructs of interest may be influencing the factor structure (e.g., item stems, whether an item is reversed, etc.). At this stage, all the items from different constructs were retained as a part of factor 1 for subsequent analysis. The co-efficient alpha is an acceptable .962 for factor 1 and the percentage of variance extracted was 21.526.

Factor 2 clearly indicates nine measurement items for attitude towards brand, each with factor loading of more than .763. Further, co-efficient alpha for this factor is an acceptable .951 and the percentage of variance extracted was 13.595.

Similar to factor 1, for factor 3, two of the tie strength variables 'Tie_Strength_1' (I communicate frequently with my close friends on OSNM) and 'Tie_Strength_4' (I use Online Social Networking Media (OSNM) to stay in touch with my friends) have loadings of more than .627 with the rest of the ten measurement items of Involvement in OSNM being retained for subsequent analysis. The co-efficient alpha for factor 3 is .906 with 13.505% variance extracted.

Again, for factor 4, two of the tie strength variables 'Tie_Strength_2' (The friends I have on OSNM are important to me) and 'Tie_Strength_3' (I feel close to my OSNM friends), have loading of more than .591 along with rest of the six measurement items of 'trust' loading more than .643 with the co-efficient alpha .93 with 11.747% variance extracted. This is also theoretically supported because tie strength and trust work as determinants of seeking and passing opinions in social media sites (Chu & Kim 2011).

Factor 5 clearly indicates three measurement items for informational influence with loadings of more than .499 and acceptable co-efficient alpha of .893 and 5.985% variance extracted.

Eigen value set as ≥ 1 resulted in a factor solution that explained a total variance of 66.358. Factor loadings are all above the threshold level, except one item, Info_Influ_3, which is .499. Extracted factors were found to be uni-dimensional except for tie strength. Tie strength was found to be multi-dimensional at the EFA stage as half of its measurement items were strongly related to involvement in OSNM and the rest of its measurement items were strongly related to trust.

The SEM model should be driven by theory rather than survey data (Tabachnick & Fidell 2001). However, the current literature on OSNM shows that all measurement items of tie strength are part of one single construct (Chu & Kim 2011) and, thus, retained for further analysis. Scales were assessed as unidimensional and a reliability check was carried out on the composite scores. Al coefficient alpha were above .70 and inter-item correlations above the .50 threshold, ranging from .570 to .840 except for one measurement item, Inv_Osnm_2 (Gen Y use OSNM to stay in touch with their family), which is .436. Although the majority of researchers agree that EFA is more appropriate for scale development/refinement and CFA for scale validation, Hurley et al. (1997) note:

EFA may be appropriate for scale development while CFA would be preferred where measurement models have a well-developed underlying theory for hypothesized patterns of loadings. A line of research would start out with studies utilizing EFA, while later work would show what can be confirmed. (p. 668)

This argument was taken into consideration and Inv_Osnm_2 was retained for subsequent analysis using the researcher's discretion.

6.5 Specification and measurement model evaluation

In this section, different measures for the SEM model evaluation will be discussed. To determine the robustness of the model, the activities were performed in two stages: a) deciding on the goodness-of-fit criteria, and b) testing the measurement model fit.

6.5.1 Deciding goodness of fit criteria

To evaluate both measurement models and structural models, two details were considered: the structural model should be uni-dimensional and the data should fit the model. In this research, to measure uni-dimensionality of the measurement models, both coefficient alpha and standardized regression weights were used. As there is no single or particular statistical test of significance that identifies a correct model from the sample data (Byrne 2001; Maruyama 1998), a variety of goodness-of-fit indices was used. Therefore, the assessment of model fit for this research was based on multiple criteria. All these criteria are summarized in Table 6.11.

The most commonly used coefficient for internal consistency reliability of test scores is co-efficient alpha (Almehrizi 2013). Scale items are split into different halves and coefficients computed for all possible split-halves in this process. The average of all these coefficients is then reflected by co-efficient alpha (Malhotra & Peterson 2009). The chi-square test forms the basis for many other goodness-of-fit measures and it is the only measure that has a direct statistical test as to its significance (Hair et al. 2006). Acceptable fit should be achieved between the hypothetical model and sample data (Carmines & McIver 1981). Normed chi-

square, which refers to Chi-square divided by degrees of freedom, evaluates such fitness; this indicates an acceptable fit between the hypothetical model and the sample data (Carmines & McIver 1981). According to Garson (2009), for a good model fit, the chi-square value should not be significant. However, chi-square P is considered as conservative measure of goodness of fit because it is prone to type II error. Researchers can also rely on relative/normed chi-square (x^2/df) in the case of such restrictions on model chi-square, and a value as high as 5.0 is considered acceptable (Wheaton et al. 1977). This is the reason many researchers who use SEM with a sample size of more than 200 determine acceptability of fit using goodness-of-fit measures such as the normed fit index (NFI), comparative fit index CFI and root mean square error of approximation (RMSEA) (Garson 2009).

Name	Abbreviation	Туре	Accepted level in this research
Coefficient Alpha	А	Uni-	$\alpha > 0.60$ adequate
Standard regression weight	Beta	dimensionality	β> 0.40
Chi-square (with associated degrees of freedom and probability of significant different)	$X^{2(df,p)}$	Model fit	P. 0.05 (at α equals to 0.05 level)
Normed-chi-square	X ^{2/df}	Absolute fit and model parsimony	1.0 <x<sup>2/df <5.0</x<sup>
Root mean square error of approximation	RMSEA	Absolute fit	<0.08
Goodness-of-fit index Adjusted Goodness-of-fit index	GFI AGFI	Absolute	Values close to 0.9 and above indicate satisfactory fit
Normed fit index Tucker Lewis fit index Comparative fit index	NFI TLI CFI	Incremental fit	Values above 0.8 and close 0.9 indicate acceptable fit
HOELTER			>200 critical value

Table 6:11: Summary of reliability, weights and fit indices used in this research

Source: Developed from (Baumgartner & Homburg 1996; Byrne 2001; Carmines & McIver 1981; Hair et al. 2006; Holmes-Smith 2002; Hulland, Chow & Lam 1996; Kline 2011)

RMSEA is considered to be an absolute fit indicator that attempts to correct the tendency of the goodness fit test statistics to reject models with a large samples or a large number of observed variables (Hair et al. 2006). Although GFI is an indicator of model fit, it is still known to be indirectly affected by the sample size because of the effect of N on the sampling distribution. The adjusted GFI tries to take sample size into account, generating better result while allowing different degrees of model flexibility. This indicator adjusts GFI by a ratio of the degrees of

freedom used in a model to the total degrees of freedom available (Hair et al. 2006).

The NFI is considered to be one of the original incremental fit indices and are computed by evaluating sample co-variances between theoretical and more restricted models. NFI is a ratio of the differences in the chi-square value for the hypothesised model and a null model divided by the chi-square value for the null model. The preferred value of NFI is closer to 1 (Bentler & Bonett 1980). The CFI is another incremental fit index that is an improved version of NFI. CFI is measured by comparing the hypothesised model with the baseline model, assuming that any pair of variables is not correlated and strictly bounded by 0 and 1. If a CFI index > .95, it reflects better fit (Tanaka 1993).

The Tucker Lewis Index (TLI) index mathematically compares the specified theoretical measurement model and a baseline null model. A higher value is the indication that the model fits sample data well (Dion 2008). An assessment of model fit in relation to a hypothetical model estimated with different sample size is referred as HOELTER's critical N. A critical N of \geq 200 at .05 significance level may ensure that a particular model reasonably reproduces observed co-variances (Hoelter 1983).

6.5.2 Testing the measurement model fit

In addition to the above mentioned criteria, other standard estimates associated with the evaluation of CFA models were also used. Table 6.12 provides a summary of these estimates and their value criteria.

Standardised estimates	Value criteria
Factor loading	>0.7 good, >0.5 acceptable
Critical Ratio (cr)	>1.96
Variable reliability	>0.3 good

 Table 6:12: Summary of standarised estimates and value criteria used for CFA models

Source: Holmes-Smith 2002

The association between factors and variables are tested in SEM. An association is measured using factor loadings. The strength of such relationships depends upon the weight of factor loadings. In SEM output, a standardized factor loading is described as a standard regression weight. A good association between the factor and variable should have a value > 0.5 (Churchill Jr. 1979; Holmes-Smith 2002). The estimate of amount of correlation between two variables is a measure of covariance and some unmeasured latent variable may influence those variables. Critical ratio (CR) is measured to assess the significance of the covariance (Schumacker & Lomax 2004). The CR of the measure should be greater than 1.96 for the factor loading or estimated variance (Byrne 2001; Holmes-Smith 2002). Therefore, to assess a covariance as significant, a CR estimate > 1.96 was set as the criteria. In SEM output, a variable reliability is the squared multiple correlation for the observed variables. It reflects how well the variable measures the underlying theoretical constructs. For this research, variable reliability was considered important to measure for convergent and discriminant validity and the value was set as acceptable if above 0.3 (Holmes-Smith 2002).

6.5.3 Assessment of measurement scales using CFA

This research involved a large data set which was reduced through EFA to assess and refine measurement scale items. Although EFA provides important analytical insights, it should be considered along with the results of CFA to judge scale and items (Hurley et al. 1997; Garver & Mentzer 1999). Specifically, for this research, fitting CFA models to large data sets served a few functions. Primarily, by reducing a large number of observed variables, the CFA model produced a few single composite scales. Therefore, CFA provided a reduced number of variables for subsequent analysis in SEM. In turn, fitting a CFA model allowed for an assessment of the individual contribution of each composite scale, comprising a number of variables, to the overall scale.

Data for this study were fitted into a CFA model and revealed the degree to which an individual measure was different from others in the scale. It also showed the individual contribution of measures to the overall scale. Thus, the CFA models provided a more realistic representation of the data (Fleishman & Benson 1987). Furthermore, to represent good measurement properties, CFA models are also considered to be sufficiently constrained. Hence, assessment and refinement of scales through CFA was considered appropriate for this study. Many criterion and measures in different stages were used to validate scales and the CFA fit statistics in this study provided the quasi test of validity. In this research, the one factor congeneric measurement model approach was applied. Therefore, to assess how well underlying latent constructs were represented by their measurement variables, a series of one factor CFA was run. The analysis included 46 measurement variables grouped under five latent factors which represented seven underlying constructs. In the structural model, seven constructs or composite scales were investigated to find the interrelationship between those constructs. The highest number of measurement variables in any one factor CFA was ten and lowest was four. However, the method of using a series of one factor CFA models to reduce large data sets to a manageable level is often criticized because of the potential for loss of information during the measurement part of the analysis. Based on one factor CFA, including a composite scale may compromise analysis efficacy, which might lead to poor findings (Holmes-Smith & Rowe 1994). In spite of such criticism, to keep a balance, the advantages of CFA modelling outweigh the disadvantages. The sample size of 319 was considered sufficient for parameter estimation and model fitting.

Specifically, 50 measurement items (Table 6.6) was submitted for EFA, which resulted in 46 pertinent items (Table 6.7). CFA was used to further to refine and check the internal consistency of these items. Table 6.13 shows all 46 measurement items subjected to CFA.

Measurement items (variables)
I use OSNM to stay in touch with my family
OSNM means a lot to me
I think OSNM is essential
I find using OSNM entertaining
I think OSNM is involving
OSNM can help me get along with people more easily in real life
OSNM can help me escape loneliness
I do customise the content and services in OSNM
I have a compulsive need to know more about what my friends are putting on OSNM
I like to engage in conversation about OSNM
When I consider buying a new brand, I ask my friends on the OSNM for their advice
I like to get my OSNM friends' opinions before I buy new brands
I like to get only my close OSNM friends' opinions before I buy new brands
I feel more comfortable choosing brand alternatives when I have got my OSNM friends'

Table 6:13: Measurement items (variables) used for CFA

Measurement items (variables)
opinion on them
Often I like to get information about new brands from my OSNM friends
I communicate frequently with my close friends on OSNM
The friends I have on OSNM are important to me
I feel close to my OSNM friends
I use OSNM to stay in touch with my friends
I find most of my OSNM friends dependable
I think most of my OSNM friends are honest
I think most of my OSNM friends are reliable
I trust comments made by my OSNM friends
I have confidence in my OSNM friends
I can believe in my OSNM friends
If I have little experience with a brand, I often ask my OSNM friends about the brand before buying
I often consult my OSNM friends to help choose the best alternative available from different brands
I frequently gather information from my OSNM friends about brands, before I buy
I rarely purchase any brand until I am sure my OSNM friends approve of that
Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM
Typically, I like to do what my OSNM friends suggest that I do
It is important that my OSNM friends approve of the brands I buy
I am very loyal to brands that my OSNM friends buy
If I want to be like my OSNM friends, I always buy the brands they buy
I work long hours to save so that I can afford the brands my OSNM friends buy
I feel a sense of belonging by buying the same brands that my OSNM friends buy
My OSNM friends very much influence the choice of my brands
I appreciate the brands my OSNM friends suggest me to buy
I think the brands that my OSNM friends talk about are cool
I find the brands that my OSNM friends like are good
The brands that my OSNM friends like and suggest are practical
The information that my OSNM friends provide on brands is effective
If my OSNM friends find any brands appealing, I value that information
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment
If my OSNM friends find any brands pleasant, I notice that brand
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page

6.6 CFA findings on constructs

This section will describe all CFA findings for all constructs used in this research followed by required modifications.

6.6.1 CFA results of involvement in OSNM

Involvement in OSNM was a latent construct used in this research model. The purpose of the construct was to measure Gen Y's dissemination of conversation over OSNM. The construct was measured by ten observed variables. The structure of this measurement model is presented in Figure 6.1. Scale items that measured involvement in OSNM were adopted from the current literature and refined through qualitative research. Only one scale item Inv_Osnm_2 (I use OSNM to stay in touch with my family) was added after qualitative research findings. Further, scales items were tested through EFA to confirm that they all carry the same meaning while representing or measuring the underlying construct 'involvement on OSNM'. A summary of CFA findings of the measurement items of 'involvement on OSNM' is shown in Table 6.14.

The regression weights shown in Table 6.14 refer to the un-standardised parameter estimates for factor loadings. To scale the latent variables, the factor loading for the first variable (I use OSNM to stay in touch with my family) was fixed to unity. That is the reason no critical ratios (t-values) were stated for the respective first factor loading. All remaining factor loadings were set to free and their values were estimated by the model. Factor loadings for other variables were significant except for Inv_Osnm_2 (I use OSNM to stay in touch with my family). Squared multiple correlation (SMC) for Inv_Osnm_2 was below the acceptable level at .206.



Figure 6.1: CFA model of involvement in OSNM

Regression weights		Estim ate	SE	CR	P value	S MC
I use OSNM to stay in touch with my family	<	1				.206
OSNM means a lot to me	<	1.692	.219	7.709	***	.624
I think OSNM is essential	<	1.602	.214	7.503	***	.538
I find using OSNM entertaining	<	1.246	.172	7.251	***	.471
I think OSNM is involving	<	1.198	.165	7.266	***	.458
OSNM can help me get along with people more easily in real life	<	1.353	.186	7.255	***	.468
OSNM can help me escape loneliness	<	1.637	.218	7.491	***	.539
I do customise the content and services in OSNM	<	1.028	.152	6.744	***	.343
I have a compulsive need to know more about what my friends are putting on OSNM	<	1.423	.197	7.204	***	.432
I like to engage in conversation about OSNM	<	1.220	.173	7.042	***	.399

	Table 6:	14: Reg	ression	weights	of invo	lvement in	OSNM
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Table 6.15 Shows that the coefficient alpha for the 'involvement on OSNM' of the CFA model is .891, which indicates that the variables represent the underlying construct, 'involvement on OSNM', well. Only one variable 'Inv_Osnm_2' (I use OSNM to stay in touch with my family) was dropped at this stage because of a poor factor loading, showing a regression weight of .432. This was implemented in spite of an overall good model fit because low item reliability causes problems later in the analysis (Garver & Mentzer 1999).

Standardized regression weights		Involvement in OSNM	Estimate	Composit e reliability
I use OSNM to stay in touch with my family	<		.432	
OSNM means a lot to me	<		.831	
I think OSNM is essential	<		.761	
I find using OSNM entertaining	<		.692	
I think OSNM is involving	<		.695	
OSNM can help me get along with people more easily in real life	<		.693	.90
OSNM can help me escape loneliness	<		.758	
I do customise the content and services in OSNM	<		.582	
I have a compulsive need to know more about what my friends are putting on OSNM	<		.680	
I like to engage in conversation about OSNM	<		.642	
Reliability-Co-efficient alpha α				.891
Chi-square				67.635
Degree of freedom				35
Р				.001
Normed Chi-square (CMIN/df)				1.932
Root mean square of error of estimation (RMSEA)				.054
Goodness of fit index (GFI)				.960
Adjusted of goodness-of-fit index (AGFI)				.936
Normed fit index (NFI)				.952
Tucker-Lewis Index (TLI)				.969
Comparative fit index (CFI)				.976

 Table 6:15: Standard regression weights, goodness-of-fit estimates and composite reliability of involvement in OSNM
The structure of the revised model is shown in Figure 6.2 and details of the CFA of the revised model are given in Table 6.16.



Figure 6.2: Revised CFA model of invovement in OSNM

Table 6.16 shows the revised CFA model for 'Involvement on OSNM' with regression weights referring to the un-standardised parameter estimates for the factor loadings. No critical ratios (t-values) are stated for the respective first factor loadings of 'involvement on OSNM' and 'OSNM means a lot to me' were fixed to unity to scale the latent variables. All remaining factor loadings were significant.

Regression weights		Estima te	SE	CR	P value	SM C
OSNM means a lot to me	<	1.000				.620
I think OSNM is essential	<	.948	.062	15.234	***	.535
I find using OSNM entertaining	<	.742	.055	13.514	***	.468
I think OSNM is involving	<	.709	.052	13.512	***	.455
OSNM can help me get along with people more easily in real life	<	.807	.059	13.578	***	.464
OSNM can help me escape loneliness	<	.971	.064	15.194	***	.537

Table 6:16: Revised regression weights of involvement in OSNM

I do customise the content and services in OSNM	<	.603	.056	10.705	***	.324
I have a compulsive need to know more about what my friends are putting on OSNM	<	.841	.064	13.100	***	.430
I like to engage in conversation about OSNM	<	.722	.059	12.205	***	.397

Table 6.17 shows that three of the variables have a standardized regression weight of more than 0.7 and others are more than 0.5, indicating a good model fit for all items. Goodness-of-fit indices also indicate that the model fitted data well, with the GFI, AGFI, NFI, TLI, RMSEA and CFI all within the acceptable limits. The reliability of the underlying variables of 'involvement on OSNM' measured through composite reliability with a score of .90 is also confirmed. However, chisquare P value .002 does not satisfy the criteria of good model fit as the threshold requirement was a value greater than .05. However, as noted earlier, chi-square P is considered a conservative measure of goodness-of-fit because it is prone to type II error, causing many researchers to prefer the goodness-of-fit measures NFI, CFI and RMSEA to determine acceptability of model fit to use SEM when dealing with a reasonable sample size (e.g., > 200) (Garson 2009). This research had taken this view considering that the sample size of this study was large, and thus focused more on other indices of model fit and less on Chi-square P value for rest of the CFA findings.

Standardized regression weights		Involvement in OSNM	Estimate	Composite reliability
OSNM means a lot to me	<		.829	
I think OSNM is essential	<		.760	
I find using OSNM entertaining	<		.695	
I think OSNM is involving	<		.695	
OSNM can help me get along with people more easily in real life	<		.698	
OSNM can help me escape loneliness	<		.759	.90
I do customise the content and services in OSNM	<		.576	

Table 6:17: Revised standard regression weights, goodness-of-fit estimates and composite reliability of involvement in OSNM

I have a compulsive need to know more about what my friends are putting on OSNM	<		.679	
I like to engage in conversation about OSNM	<		.642	
Reliability-Co-efficient alpha α	.898			
Chi-square	53.002			
Degree of freedom	27			
Р	.002			
Normed Chi-square (CMIN/df)	1.963			
Root mean square of error of est	timatior	n (RMSEA)		.055
Goodness of fit index (GFI)	.964		.964	
Adjusted of goodness-of-fit inde	.940			
Normed fit index (NFI)	.960			
Tucker-Lewis Index (TLI)	.973			
Comparative fit index (CFI)	.980			

6.6.2 CFA results of electronic word of mouth (e-WOM)

The latent construct 'e-WOM' was measured by five variables. All variables to measure e-WOM were adopted and refined from the current literature except for one variable 'EWOM_3' (I like to get only my close OSNM friends' opinions before I buy new brands). Variable 'EWOM_3' was included as a new scale item from the findings of the qualitative study. E-WOM was intended to measure the degree to which Gen Y seeks and receives information in OSN environment through their online friends that might help to form attitudes. The structure of this measurement model with associated measurement variables are presented in Figure 6.3. Since variables were adopted from different studies and a new item was included from in-depth interview findings, for the purpose of this research, a modification was carried out through EFA. In the next stage, items were tested using CFA to determine whether all items refer to the same meaning in measuring e-WOM. The CFA results of measurement items of e-WOM are summarized in Table 6.18.



Figure 6.3: CFA model of electronic world of mouth (e-WOM)

Regression weights in Table 6.18 refer to the un-standardised parameter estimates for the factor loadings. To scale the latent variable, the factor loading for the first variable (when I consider buying a new brand, I ask my friends on the OSNM for their advice) was fixed to unity. Hence, no critical ratios (t-values) are stated for the respective first factor loading of e-WOM. The other four variables were set to free and their values were estimated by the model. All factor loadings for other variables were significant.

Results compiled in Table 6.19 show that coefficient alpha for e-WOM is .906, which indicates that the variables are a reasonable measure of e-WOM. All of the variables have standard regression weights .70 or above, which indicates a good model fit for those items. Further, Goodness-of-fit indices indicate that the data fitted the model fitted well, with GFI, AGFI, NFI, TLI, RMSEA and CFI all within acceptable level of criteria. As for a good model fit, chi-square P value requires > .05, it also fulfils the criteria with a value of .809. A composite reliability score of .91 confirmed the reliability of the underlying variables of e-WOM.

Regression weights		Estima te	SE	CR	P value	SMC
When I consider buying a new brand, I ask my friends on the OSNM for their advice	<	1.000				.700
I like to get my OSNM friends' opinions before I buy new brands	<	1.001	.046	21.745	***	.699
I like to get only my close OSNM friends' opinions before I buy new brands	<	.786	.054	14.669	***	.449

 Table 6:18: Regression weights of electronic word of Mouth (e-WOM)

I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them	<	.905	.047	19.440	***	.627
Often I like to get information about new brands from my OSNM friends	<	.794	.048	16.488	***	.522

Table 6:19: Standard regression weights, goodness-of-fit estimates and composite reliability of electronic word of mouth (e-WOM)

Standardized regression weights		e-WOM	Estimate	Composite reliability		
When I consider buying a new brand, I ask my friends on the OSNM for their advice	<		.886			
I like to get my OSNM friends' opinions before I buy new brands	<		.885			
I like to get only my close OSNM friends' opinions before I buy new brands	<		.700	.91		
I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them	<		.831			
Often I like to get information about new brands from my OSNM friends	<		.755			
Reliability-Co-efficient alpha α						
Chi-square				2.28		
Degree of freedom				5		
Р				.809		
Normed Chi-square (CMIN/df)				.456		
Root mean square of error of estimation (RM	ASEA)			.000		
Goodness of fit index (GFI)						
Adjusted of goodness-of-fit index (AGFI)						
Normed fit index (NFI)						
Tucker-Lewis Index (TLI)				1.005		
Comparative fit index (CFI)				1.000		

6.6.3 CFA results of tie strength

The latent construct 'tie strength' was also used in this study. It was intended to measure the effect of WOM in relation to the degree of strength in Gen Y's friendship in the OSN environment. Tie strength was measured using four variables. All the variables were identified in the literature review except for 'Tie_Strength_4' (I use OSNM to stay in touch with my friends) which was included as a result of findings from the qualitative findings. The structure of this measurement model is presented in Figure 6.4. All measurement variables were refined and modified using results from the qualitative research. In the next stage, to confirm that all items carry the same meaning while representing or measuring

the underlying construct, 'Tie strength', the items were tested by applying an EFA. A summary of the findings from the CFA of this model is shown in Table 6.20.



Figure 6.4: CFA model of tie strength

Table 6.20 represents the regression weights of tie strength, which are unstandardized parameter estimates for factor loadings. To scale the latent variable, the factor loading for the first indicator (I communicate frequently with my close friends on OSNM) was set to unity. This is the reason no critical ratio (t-value) is stated for that factor loading. The other three factor loadings were set free and their values were estimated by the model. Factor loadings for other indicators were significant.

Regression weights		Estim ate	S E	CR	P value	SM C
I communicate frequently with my close friends on OSNM	< -	1.000				.477
The friends I have on OSNM are important to me	< -	.931	.077	12.049	***	.461
I feel close to my OSNM friends	< -	1.070	.084	12.709	***	.532
I use OSNM to stay in touch with my friends	< -	.694	.073	9.510	***	.326

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 Table 6:21: Standard regression weights, goodness-of-fit estimates and composite reliability of tie strength

Standardized regression weights		Tie strength	Estimate	Composite reliability
I communicate frequently with my close	<		.743	

friends on OSNM			
The friends I have on OSNM are important to me	<	.749	.82
I feel close to my OSNM friends	<	.828	
I use OSNM to stay in touch with my friends	<	.583	
Reliability-Co-efficient alpha α	.817		
Chi-square	25.876		
Degree of freedom	2		
Р	.000		
Normed Chi-square (CMIN/df)	12.938		
Root mean square of error of estimation (RMS	.194		
Goodness of fit index (GFI)	.960		
Adjusted of goodness-of-fit index (AGFI)	.800		
Normed fit index (NFI)	.944		
Tucker-Lewis Index (TLI)	.843		
Comparative fit index (CFI)	.948		

Table 6.21 shows that coefficient alpha for tie strength is .817, which indicates that the variables represent the underlying construct well. All the variables have regression weights of more than .50, which is within an acceptable threshold and indicates a good model fit for those items. The goodness-of-fit indices show that the model fits the data well and GFI, AGFI, NFI, TLI, RMSEA and CFI are within the acceptable limits. The reliability of the underlying variables of tie strength is confirmed through a composite reliability score of .82.

6.6.4 CFA results of trust

'Trust' was another latent construct used in this study. It measured the effect of WOM in relation to Gen Y's friendships in the OSN environment. The structure of this measurement model is presented in Figure 6.5.Trust was measured using six variables. All the variables were identified through a review of the literature and refined through the qualitative research to serve the purpose of this research. To confirm that all items carry the same meaning while representing or measuring the underlying construct 'trust', they were tested using EFA. A summary of the findings from the CFA of this model is shown in Table 6.22.



Figure 6.5: CFA model of trust

The regression weights of trust are shown in Table 6.22. Measures represent unstandardized parameter estimates for factor loadings. To scale the latent variable, the factor loading for the first indicator (I find most of my OSNM friends dependable) was set to unity. This is the reason no critical ratio (t-value) is stated for that factor loading. The other five factor loadings were set free and their values were estimated by the model. Factor loadings for other indicators were significant.

Table 6.23 shows that coefficient alpha for trust is .918, which indicates that the variables represent the underlying construct well. All the variables have regression weights of more than .70. In summary, all the items are well above the threshold of .50, which is the indication of a good model fit for those items. The goodness-of-fit indices show that the fata fitted the model well and GFI, AGFI, NFI, TLI, RMSEA and CFI are within the acceptable limit. The reliability of the underlying variables is confirmed through a composite reliability score of .92, which is within an acceptable threshold and indicates a good model fit for those items.

Regression weights		Estima te	SE	CR	P value	S MC
I find most of my OSNM friends dependable	<	1				.5 72
I think most of my OSNM friends are honest	<	.902	.063	14.253	***	.5 32
I think most of my OSNM friends are reliable	<	.969	.062	15.654	***	.6 02
I trust comments made by my	<	.935	.063	14.876	***	.5

	Table (6:22:	Regression	weights	of trust
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OSNM friends						71
I have confidence in my OSNM friends	<	1.031	.059	17.390	***	.6 95
I can believe in my OSNM friends	<	1.018	.060	17.018	***	.6 68

Table 6:23: Standard regression weights, goodness-of-fit estimates and composite reliability of 'trust'

Standardized Regression Weights		Trust	Estimate	Composite reliability
I find most of my OSNM friends dependable				
I think most of my OSNM friends are honest.	<		.747	
I think most of my OSNM friends are reliable	<		.805	.92
I trust comments made by my OSNM friends	<		.773	
I have confidence in my OSNM friends	<		.874	
I can believe in my OSNM friends				
Reliability-Co-efficient alpha α	.918			
Chi-square	23.75			
Degree of freedom	9			
Р	.005			
Normed Chi-square (CMIN/df)	2.639			
Root mean square of error of estimation (RMSE	.072			
Goodness of fit index (GFI)	.976			
Adjusted of goodness-of-fit index (AGFI)	.945			
Normed fit index (NFI)	.981			
Tucker-Lewis Index (TLI)	.980			
Comparative fit index (CFI)	.988			

6.6.5 CFA results of informational influence

Informational influence was included in this research as a latent construct. It was intended to measure the effect of WOM in an OSN environment. The structure of this measurement model is presented in Figure 6.6. Informational influence was measured by four observed variables. All the variables were identified through a review of the literature and refined using results from the qualitative research to serve the purpose of this research. To confirm that all items carry the same meaning while representing or measuring the underlying construct, 'informational influence', they were tested using EFA. A summary of the findings from the CFA of this model is shown in Table 6.24.



Figure 6.6: CFA model of informational influence

The regression weights of informational influence are shown in Table 6.24. Measures represent un-standardized parameter estimates for factor loadings. To scale the latent variable, the factor loading for the first indicator (If I have little experience with a brand, I often ask my OSNM friends about the brand before buying) was set to unity. This is the reason no critical ratio (t-value) is stated for that factor loading. The other three indicators were set free and their factor loadings were estimated by the model. All values for other indicators were significant.

The coefficient alpha for informational influence is .89, which indicates that the variables represent the underlying construct well (as show in Table 6.25). All the variables have regression weights of more than .70. In summary, all the items are well above the threshold of .50, which is the indication of a good model fit for

those items. The goodness-of-fit indices show that the model fitted data well and GFI, AGFI, NFI, TLI, RMSEA and CFI are within the acceptable limit. The reliability of the underlying variables is confirmed through a composite reliability score of .89, which is within the acceptable threshold and indicates a good model fit for those items.

Regression weights		Estim ate	S E	CR	P value	S MC
If I have little experience with a brand, I often ask my OSNM friends about the brand before buying	<	1.000				.626
I often consult my OSNM friends to help choose the best alternative available from different brands	<	1.003	.055	18.360	***	.649
I frequently gather information from my OSNM friends about brands, before I buy	<	1.054	.057	18.420	***	.654
I rarely purchase any brand until I am sure my OSNM friends approve of that	<	.836	.060	13.893	***	.458

Table 6:24: J	Regression	weights o	of informational	influence
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Table 6:25: Standard regression weights, goodness-of-fit estimates and composite reliability of informational influence

Standardized regression weights		Informational influence	Estimate	Composite reliability		
If I have little experience with a brand, I often ask my OSNM friends about the brand before buying	<		.841			
I often consult my OSNM friends to help choose the best alternative available from different brands	<		.864			
I frequently gather information from my OSNM friends about brands, before I buy	<		.866	.89		
I rarely purchase any brand until I am sure my OSNM friends approve of that	<		.706			
Reliability-Co-efficient alpha α		.890				
Chi-square				8.937		
Degree of freedom				2		
Р				.011		
Normed Chi-square (CMIN/df)						
Root mean square of error of estimation (RMSEA)						
Goodness of fit index (GFI)						
Adjusted of goodness-of-fit index (AGFI)						
Normed fit index (NFI)						
Tucker-Lewis Index (TLI)				.972		
Comparative fit index (CFI)				.991		

6.6.6 CFA results of subjective norm

'Subjective norm' is a latent construct used in this model and intended to measure the influence of important other people on the formation of attitudes towards brands through OSN friends. It was measured by eight observed variables. The structure of this measurement model is presented in Figure 6.7. Scale items that measured 'subjective norm' were adopted from the current literature and refined through qualitative research. In the next stage, all scales items were tested through EFA to confirm that all items carry the same meaning while representing or measuring the underlying construct 'subjective norm'. The results of the CFA of the measurement items of 'subjective norm' are summarized in Table 6.26.



Figure 6.7: CFA model of subjective norm

Regression weights in Table 6.26 show un-standardized parameter estimates for factor loadings. To scale the latent variable, the factor loading for the first indicator (Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM) was set to unity. That is why no critical ratio (t-value) is stated for that particular factor loading. The other seven factor loadings were set free and their values were estimated by the model. Factor loadings for other indicators were significant.

Regression weights		Estima te	SE	CR	P value	S MC
Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM	<	1.000				.594
Typically, I like to do what my OSNM friends suggest that I do	<	.992	.063	15.651	***	.617
It is important that my OSNM friends approve of the brands I buy	<	1.179	.069	17.033	***	.704
I am very loyal to brands that my OSNM friends buy	<	1.121	.065	17.179	***	.700
If I want to be like my OSNM friends, I always buy the brands they buy	<	1.131	.066	17.103	***	.708
I work long hours to save so that I can afford the brands my OSNM friends buy	<	1.055	.068	15.449	***	.599
I feel a sense of belonging by buying the same brands that my OSNM friends buy	<	1.139	.067	17.024	***	.693
My OSNM friends very much influence the choice of my brands	<	1.103	.066	16.592	***	.664

Table 6.27 reports that coefficient alpha for subjective norm is .945, which shows that variables represent the underlying construct well. All the variables have regression weights more than .70 and well above the acceptable level (>.50), which indicates a good model fit for those items. The goodness-of-fit indices show that the model fits the data well and GFI, AGFI, NFI, TLI, RMSEA and CFI are within acceptable limits. The reliability of underlying variables of Subjective norm is confirmed through a composite reliability score of .95.

 Table 6:27: Standard regression weights, goodness-of-fits estimates and composite reliability of subjective norm

Standardized regression weights		Subjective norm	Estimate	Composite reliability
Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM	<		.780	
Typically, I like to do what my OSNM friends suggest that I do	<		.798	

Standardized regression weights		Subjective norm	Estimate	Composite reliability
It is important that my OSNM friends approve of the brands I buy	<		.852	
I am very loyal to brands that my OSNM friends buy	<		.857	.95
If I want to be like my OSNM friends, I always buy the brands they buy	<		.854	
I work long hours to save so that I can afford the brands my OSNM friends buy	<		.790	
I feel a sense of belonging by buying the same brands that my OSNM friends buy	<		.851	
My OSNM friends very much influence the choice of my brands	<		.835	
Reliability-Co-efficient alpha α	.945			
Chi-square				53.120
Degree of freedom				20
Р	.000			
Normed Chi-square (CMIN/df)	2.656			
Root mean square of error of estimation (.072			
Goodness of fit index (GFI)	.960			
Adjusted of goodness-of-fit index (AGFI	.928			
Normed fit index (NFI)	.975			
Tucker-Lewis Index (TLI)				.977
Comparative fit index (CFI)				.984

6.6.7 CFA results of attitude towards brands

The latent construct 'attitude towards brands' measures whether Gen Y develop attitudes toward brands through their OSN friends. The construct was measured by nine variables. The structure of this measurement model is presented in Figure 6.8. Scale items that measured 'attitude towards brands' were adopted from current literature and refined through qualitative research, except for four scale items: Att_Br_12 (If my OSNM friends find any brands appealing, I value that information), Att_Br_13 (If I see any favourable comments from my OSNM friends regarding any brands, I value that comment), Att_Br_14 (If my OSNM friends find any brand) and Att_Br_15 (My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page). All mentioned scale items were included

after the qualitative findings. All measurement variables were modified and included through using results from the qualitative research to serve the purpose of this research. In the next stage, to confirm that all items carry the same meaning while representing or measuring the underlying construct 'attitude towards brands', they were tested using EFA. A summary of the findings from the CFA of this model is shown in Table 6.28.



Figure 6.8: CFA model of attitude towards brands

Regression weights show un-standardized parameter estimates for factor loadings (Table 6.28). To scale the latent variable, the factor loading for the first indicator (I appreciate the brands my OSNM friends suggest me to buy) was set to unity. That is why no critical ratio (t-value) is stated for that particular factor loading. The other eight factor loadings were set free and their values were estimated by the model. Factor loadings for other indicators were all significant.

Regression weights		Estima te	SE	CR	P value	SMC
I appreciate the brands my OSNM friends suggest me to buy	<	1				.65 6
I think the brands that my OSNM friends talk about are cool	<	1.046	.057	18.322	***	.679
I find the brands that my OSNM friends like are good	<	.935	.052	17.997	***	.667
The brands that my OSNM friends like and suggest are practical	<	.863	.050	17.292	***	.639
The information that my OSNM friends provide on brands is effective	<	1.008	.054	18.685	***	.692
If my OSNM friends find any brands appealing, I value that information	<	1.065	.057	18.751	***	.699
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment	<	1.005	.055	18.311	***	.680
If my OSNM friends find any brands pleasant, I notice that brand	<	1.038	.055	18.932	***	.708
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page	<	1.065	.064	16.603	***	.610

 Table 6:28: Regression weights of attitude towards brands

Table 6.29 shows that coefficient alpha for attitude towards brands is .951, which indicates that the variables represent the underlying construct well. All the variables have regression weights of more than .70 and are well above the acceptable level (>.50); it indicates a good model fit for those items. The goodness-of-fit indices show that the model fits the data well and GFI, AGFI, NFI, TLI, RMSEA and CFI are within acceptable limits. The reliability of underlying variables of subjective norm is confirmed through a composite reliability score of .95.

Standardized regression weights		Attitude towards brands	Estimate	Composite reliability	
I appreciate the brands my OSNM friends suggest me to buy	<		.827		
I think the brands that my OSNM friends talk about are cool	<		.837		
I find the brands that my OSNM friends like are good	<		.827		
The brands that my OSNM friends like and suggest are practical	<		.806		
The information that my OSNM friends provide on brands is effective	<		.847	.95	
If my OSNM friends find any brands appealing, I value that information	<		.849		
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment	<		.837		
If my OSNM friends find any brands pleasant, I notice that brand	<		.854		
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page	<		.785		
Reliability-Co-efficient alpha α				.951	
Chi-square				64.402	
Degree of freedom				27	
Р				.000	
Normed Chi-square (CMIN/df)					
Root mean square of error of estimation (RMSEA)					
Goodness of fit index (GFI)					
Adjusted of goodness-of-fit index (AGFI)				.929	
Normed fit index (NFI)				.974	
Tucker-Lewis Index (TLI)				.979	
Comparative fit index (CFI)				.985	

Table 6:29: Standard regression weights, goodness-of-fit estimates and composite reliability of attitude towards brands

6.7 Reliability and validity of constructs

Examining the theoretical constructs of the model for reliability and validity was the final step prior to testing the full model in relation to the research proposition. To check whether measures were free from random error, a reliability test was carried out. Systematic error implies on measurement in a consistent way, hence it does not affect reliability. Random error produces inconsistency in measurement and lower reliability (Malhotra 2008). It is important to check reliable measures of unobservable theoretical constructs to obtain a clear picture of true relationships between variables. Reliability checks assist researchers because random errors tend to minimize relationships.

It is also important to check whether a variable measures what it is supposed to measure. Indicators under each construct should measure the underlying theme only and this can be carried out through validity checking. Validity is the ability of a construct's to accurately measure through the use of respective indicators (Hair et al. 2006; Malhotra 2008). Both reliability and validity were considered in this research.

6.7.1 Reliability

To provide consistent results, reliability of this research's instrument was checked to ensure that it was free from random error (Malhotra 2008). In this research, different approaches were considered to perform the reliability check: split-half, test-retest, alternative forms, and the internal comparison method (Carmines & Zeller 1979).

Split-half and test-retest approaches require the same test to be performed in a different period using the same group of people. As there were complexities involved to reach the same group of people using an online panel, these two methods were not considered because of time and budget constraints. An alternative approach requires that the sample be divide in half and it examines the differences between correlations of items of the first and second halves, and then correlation of even and odd items (Zikmund 2003). This approach was also not chosen because it required a larger sample size than the sample size used in this research. The fourth approach, internal comparison method was chosen to fit with the purpose and the condition of this research because it administers a single test of scale and item reliability (Carmines & Zeller 1979).

Reliability was also evaluated using composite reliability of scale items, which was assessed during the CFA stage in this research. Researchers rely on composite reliability; it is a better indicator than co-efficient alpha because it is free from the assumption of equal item reliabilities (Anderson & Gerbing 1988; Hair et al.

2006). Composite reliability score of variables was calculated by the formula stated below (Hair et al. 2006).

Composite reliability = $(\sum \text{ standardized loading})^2 / ((\sum \text{ standardized loading})^2 + \sum e j)$

6.7.2 Reliability of constructs

One of the most widely employed statistical techniques, coefficient alpha, was used to assess the reliability of the multiple item scale (Malhotra 2008). A group of variables measured each construct and consistency between variables represented similar meanings of that underlying construct. Coefficient alpha indicates the degree of consistency of the observed variables (Carmines & Zeller 1979). In exploratory research, coefficient alpha 0.5 and above is considered modest and recommended as this value indicates satisfactory internal consistency reliability (Hair et al. 2006; Malhotra 2008). Hence this study is exploratory in nature; coefficient alpha was used for reliability assessment. Table 6.30 shows the coefficient alpha underlying all constructs used in this research. The values indicate excellent reliability of the scales because all scores are more than .80, which is above the threshold level.

Constructs	Original reliability
Involvement on OSNM	.898
Tie Strength	.817
Trust	.918
Informational Influence	.890
EWOM	.906
Subjective Norm	.945
Attitude towards Brand	.951

Table 6:30: Construct reliability of scale items

6.7.3 Reliability of items

Squared multiple correlation coefficients (SMCs) was used to assess item reliability for observed variables. It involved designating measured variables as dependent variable and latent variable as the independent variable (Bollen 1989; Tabachnick & Fidell 2001). Each SMC value is interpreted as the reliability of the measured variable. Moreover, it also explains the proportion of variance in the measured variable that is accounted for by the latent variable. An SMC of > 0.3

corresponds to an error variance that exceeds the variation in the measured variable explained by the latent variable (Byrne 2001; Holmes-Smith 2002). Table 6.31 shows SMCs estimates for all variables under respective constructs used in the main model.

Variables	Estimate(SMC)
OSNM means a lot to me	.620
I think OSNM is essential	.535
I find using OSNM entertaining	.468
I think OSNM is involving	.455
OSNM can help me get along with people more easily in real life	.464
OSNM can help me escape loneliness	.537
I do customise the content and services in OSNM	.324
I have a compulsive need to know more about what my friends are putting on OSNM	.430
I like to engage in conversation about OSNM	.397
When I consider buying a new brand, I ask my friends on the OSNM for their advice	.700
I like to get my OSNM friends' opinions before I buy new brands	.699
I like to get only my close OSNM friends' opinions before I buy new brands	.449
I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them	.627
Often I like to get information about new brands from my OSNM friends	.522
I communicate frequently with my close friends on OSNM	.477
The friends I have on OSNM are important to me	.461
I feel close to my OSNM friends	.532
I use OSNM to stay in touch with my friends	.326
I find most of my OSNM friends dependable	.572
I think most of my OSNM friends are honest	.532
I think most of my OSNM friends are reliable	.602
I trust comments made by my OSNM friends	.571
I have confidence in my OSNM friends	.695
I can believe in my OSNM friends	.668
If I have little experience with a brand, I often ask my OSNM friends about the brand before buying	.626
I often consult my OSNM friends to help choose the best alternative available from different brands	.649
I frequently gather information from my OSNM friends about brands, before I buy	.654

 Table 6:31: Multiple correlation coefficients

Variables	Estimate(SMC)
I rarely purchase any brand until I am sure my OSNM friends approve of that	.458
Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM	.594
Typically, I like to do what my OSNM friends suggest that I do	.617
It is important that my OSNM friends approve of the brands I buy	.704
I am very loyal to brands that my OSNM friends buy	.700
If I want to be like my OSNM friends, I always buy the brands they buy	.708
I work long hours to save so that I can afford the brands my OSNM friends buy	.599
I feel a sense of belonging by buying the same brands that my OSNM friends buy	.693
My OSNM friends very much influence the choice of my brands	.664
I appreciate the brands my OSNM friends suggest me to buy	.656
I think the brands that my OSNM friends talk about are cool	.679
I find the brands that my OSNM friends like are good	.667
The brands that my OSNM friends like and suggest are practical	.639
The information that my OSNM friends provide on brands is effective	.692
If my OSNM friends find any brands appealing, I value that information	.699
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment	.680
If my OSNM friends find any brands pleasant, I notice that brand	.708
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page	.610

Most of the scale items in this research were adopted from other studies and some of those are established for the first time in the context of the role of OSNM in developing the attitudes of Gen Y towards brand. However, all of the scale items in latent variables show good item reliability scores of more than the 0.3 threshold (Table 6.31).

6.7.4 Validity

Convergent validity and discriminant validity both were considered when investigating the validity of this study. Convergent validity, which is a measure of construct validity (Malhotra 2008), is the degree to which multiple attempts to measure the same construct are in agreement (Hair et al. 2006). Convergent validity is achieved when a measure of some characteristic correlates or converges with other measures of the same characteristic (Aaker, Kumar & Day 2001). A satisfactory level of model fit indicates convergent validity of a measure is achieved. In addition, to achieve convergent validity, regression co-efficient (factor loadings) of all the indicators are also need to be statistically significant, for example, greater than twice its standard error (Anderson & Gerbing 1998). In this research, all CFA models achieved satisfactory fit, indicating convergent validity was achieved because each variable has a critical ratio larger than the critical value.

The degree to which one construct does not correlate or converge with other constructs, from which it is supposed to be different, is measured by discriminant validity estimates (Malhotra 2008). It involves demonstrating a lack of co-relation among different constructs. Discriminant validity can be addressed through a within-construct and across construct validity check. This study established within-construct validity because the measurement items were highly correlated with the underlying construct. In addition, across construct validity was achieved through a satisfactory level of model fit (Anderson & Gerbing 1988).

6.8 Conclusion

Evaluating the model is the next consideration in this research. A model can be estimated using a one-stage or a two-stage approach. The conventional way involves running measurement and structural models together in one stage or at a time (Diamantopolous 1994). This approach is more consistent with 'the spirit of causal modelling' and the strength lies in its rigor and lack of estimating bias (Hulland, Chow & Lam 1996). This research followed a one-stage approach by estimating both the measurement and structural model together. Researchers have strongly argued for superiority of this model since it relies on testing overall model fit rather than separating measurement and structural model (Fornell & Yi 1992). However, individual measurement models were assessed using CFA to ensure maximum reliability of latent variables and to reduce data to a manageable size so that it fits well to the structural model (Holmes-Smith & Rowe 1994). All measurement models were examined and discussed in full before testing the main full model (Anderson & Gerbing 1988; Bagozzi 1994). The next chapter discusses the structural model evaluation and test results.

CHAPTER 7: THEORETICAL MODEL AND HYPOTHESES TESTING

7.1 Introduction

The assessment of measurement scales used in the current research was discussed in Chapter 6. Results of the exploratory and confirmatory factor analyses were reported and the exclusion of few scale items was justified (sections 6.4.1 and 6.6). With the retained items, reliability and validity checks were carried out and reported accordingly. This chapter reports the evaluation of structural models to test the hypotheses on Gen Y involvement in OSNM and the development attitude towards brands which will answer the main research question 'How does Gen Y's involvement in online social networking media facilitate the development of their attitudes towards brands through their online friends?' First, the chapter discusses data normality and distribution then assesses the structural equation model. Second, amendments to the initial model are discussed. Last, the hypotheses for the model are examined.

7.2 Structural model evaluation

All relevant data were validated prior to testing the model. Moreover, a CFA was conducted to ensure that all variables are reliable and the optimum numbers of variables is used for subsequent analysis in SEM (Anderson & Gerbing 1988). The full proposed model for this research was then tested using SEM. Based on the findings and modification suggested from the SEM analysis of the proposed model, a revised main model was tested and then accepted. Since SEM analysis is based on the assumption of data normality, this issue has been considered carefully. The proposed model, the main model and the modified model are discussed in the following sections.

The use of SEM techniques for quantitative testing of the proposed model is also unique in this area of research. Multiple regressions, factor analysis, and multivariate analysis of variance analysis provide the researcher with powerful tools for addressing a wide range of managerial and theoretical questions. But, they all share one common limitation: each technique can examine only a single relationship at a time. SEM, as an extension of several multi-variate techniques, resolves this issue. Notably, along with other social structural variables in the proposed model; Gen Y's gender differences and age group differences were not measured by underlying variables in this research, since, these two variables are categorical in nature. Therefore, a multi-group analysis was carried out to understand the affect of gender differences and age group differences on the development of attitude towards brands of Gen Y through OSNM, discussed in section 7.3.

7.2.1 Data normality and assessment of distribution

Data normality is the SEM assumption (Andreassen, Lorentzen & Olsson 2006). Hence, before estimating the structural models, distributional properties of the measurement variables were assessed. The univariate summary statistics for the variables are reported in Table 7.1. On the basis of standard deviation, the variation from normality is evident in the table. However, since the distribution result is asymptotic and not exact, allowance for non-normality can be made (Rao 2002).

Negative skewness and kurtosis values represent that the distribution was relatively flat. The effect of non-normality can be somewhat alleviated because this research used the maximum likelihood (ML) method of estimation. ML is based on the assumption that the observed variables are normally distributed. Researchers have shown that when the data has slight or moderate deviation form multi-normality, ML performs relatively better (Anderson & Garbing 1988; Kline 2011). All 45 composite indicators used in this research have skewness values ranging from +.541 to -.999 and kurtosis values ranging from +.773 to -.920. All indicators can be considered as normally distributed because the threshold for skewness is less than 3.0 and kurtosis is less than 10, as Kline (2011) recommended. A sample size of 319 was considered adequate and satisfied the ML requirement (Byrne 2001).

Variables	min	max	skew	CR	kurtosis	CR
OSNM means a lot to me	1	7	407	-2.965	400	-1.457
I think OSNM is essential	1	7	399	-2.910	471	-1.718
I find using OSNM entertaining	1	7	742	-5.408	.382	1.394
I think OSNM is involving	1	7	632	-4.610	.612	2.232
OSNM can help me get along with people more easily in real life	1	7	431	-3.142	223	812
OSNM can help me escape loneliness	1	7	494	-3.599	425	-1.551
I do customise the content and services in OSNM	1	7	448	-3.270	.195	.710

Table 7:1: Assessment of	of	normal	itv
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Variables	min	max	skew	CR	kurtosis	CR
I have a compulsive need to know more about what my friends are putting on OSNM	1	7	361	-2.629	589	-2.148
I like to engage in conversation about OSNM	1	7	227	-1.656	341	-1.245
When I consider buying a new brand, I ask my friends on the OSNM for their advice	1	7	.099	.719	812	-2.962
I like to get my OSNM friends' opinions before I buy new brands	1	7	.061	.443	901	-3.283
I like to get only my close OSNM friends' opinions before I buy new brands	1	7	140	-1.022	827	-3.014
I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them	1	7	137	998	799	-2.913
Often I like to get information about new brands from my OSNM friends	1	7	332	-2.417	785	-2.861
I communicate frequently with my close friends on OSNM	1	7	679	-4.953	.042	.154
The friends I have on OSNM are important to me	1	7	480	-3.500	.070	.254
I feel close to my OSNM friends	1	7	250	-1.825	105	381
I use OSNM to stay in touch with my friends	1	7	999	-7.283	.773	2.819
I find most of my OSNM friends dependable	1	7	223	-1.625	419	-1.528
I think most of my OSNM friends are honest	1	7	338	-2.464	204	744
I think most of my OSNM friends are reliable	1	7	432	-3.150	054	196
I trust comments made by my OSNM friends	1	7	352	-2.565	149	544
I have confidence in my OSNM friends	1	7	454	-3.310	.119	.434
I can believe in my OSNM friends	1	7	238	-1.735	111	405
If I have little experience with a brand, I often ask my OSNM friends about the brand before buying	1	7	198	-1.445	831	-3.028
I often consult my OSNM friends to help choose the best alternative available from different brands	1	7	130	948	831	-3.030
I frequently gather information from my OSNM friends about brands, before I buy	1	7	.102	.745	875	-3.189
I rarely purchase any brand until I am sure my OSNM friends approve of that	1	7	.477	3.478	776	-2.830
Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM	1	7	120	879	913	-3.330

Variables	min	max	skew	CR	kurtosis	CR
Typically, I like to do what my OSNM friends suggest that I do		7	.114	.834	712	-2.597
It is important that my OSNM friends approve of the brands I buy	1	7	.541	3.944	736	-2.685
I am very loyal to brands that my OSNM friends buy	1	7	.217	1.583	882	-3.214
If I want to be like my OSNM friends, I always buy the brands they buy	1	7	.388	2.826	886	-3.232
I work long hours to save so that I can afford the brands my OSNM friends buy	1	7	.510	3.720	920	-3.355
I feel a sense of belonging by buying the same brands that my OSNM friends buy	1	7	.279	2.035	889	-3.239
My OSNM friends very much influence the choice of my brands	1	7	.253	1.845	889	-3.241
I appreciate the brands my OSNM friends suggest me to buy	1	7	338	-2.465	388	-1.415
I think the brands that my OSNM friends talk about are cool	1	7	161	-1.171	479	-1.748
I find the brands that my OSNM friends like are good	1	7	359	-2.616	062	224
The brands that my OSNM friends like and suggest are practical	1	7	268	-1.953	.143	.521
The information that my OSNM friends provide on brands is effective	1	7	343	-2.501	343	-1.251
If my OSNM friends find any brands appealing, I value that information	1	7	413	-3.012	404	-1.473
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment	1	7	484	-3.530	369	-1.346
If my OSNM friends find any brands pleasant, I notice that brand	1	7	376	-2.744	394	-1.438
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page	1	7	381	-2.781	701	-2.554

7.2.2 Estimating the proposed model

The proposed model developed on the basis of the current literature is discussed in Chapter 3 (Figure 3.1) and illustrated in Appendix 6. A model is accepted based on its best explanation even though all models do not fit data well. To investigate the extent of model fit, the proposed model for this research was tested first, so that, in case of unacceptable fit, modifications could be made to generate better explanatory power (Bollen & Lennox 1991; Hair et al. 2006). The proposed model is shown in Figure 7.1a and SEM output of proposed model is shown in Figure 7.1b. SEM test results of the proposed model evaluation are reported in Table 7.2.



Figure 7.1a: Proposed Model



Figure 7.2b: Proposed model of Gen Y's development of attitude towards brands through OSNM (SEM output)

As shown in Table 7.2, the fit measures of the proposed model do not satisfy all set criteria as suggested by researchers and discussed in Chapter 6 (Table 6.8).

Fit measure	Proposed model
Chi-Square	1842.500
Degree of freedom	935
Р	.000
Normed Chi-Square (CMIN/DF)	1.971
Root mean square of error of estimation (RMSEA)	.055
Goodness of fit index (GFI)	.783
Adjusted of goodness-of-fit index (AGFI)	.759
Normed fit index (NFI)	.858
Tucker-Lewis Index (TLI)	.920
Comparative fit index (CFI)	.924
HOELTER	180

Table 7:2: Fitness measures of the proposed model

An indication that the model is not consistent with the observed data is the chisquare associated with the model which is significant (p=.000). Overall, the indicators of goodness-of-fit criteria and other estimated values are under the suggested ranges except for TLI and CFI. Consequently, modification was needed to develop a better fit of the data to the model. Hence, the proposed model will not be considered in the rest of this thesis. The new model is addressed the main model and further discussions are based on the new model.

7.2.3 Modification of model

After the model assessment, it was considered necessary to modify the model according to the modification indices to improve model fit (Hair et al. 2006). Even if survey data does not support model fit, the literature emphasizes model modification to be based on theory (Diamantopoulos 1994; Tabachnick & Fidell 2001). This suggests the need for inclusion of some variables in the model if there is support in the literature despite its lack of contribution to the overall model fit (Joreskog & Sorbom 1993). In this case, two constructs (tie strength and trust) have been removed. Analysis of the data shows that, e-WOM is not mediated by 'trust'. Tie strength has also been removed because of its negative error variance. These problems could be corrected by constraining the variance to a positive value but the values would be the symptoms of a serious fit problem (Kenny 2011), thus the decision was taken to remove the constructs (tie strength and trust) from the model. The modified model (main model) which is used in the rest of this study was supported by both by theory and data.

7.2.4 Estimation of the main model

Model fit was examined to ensure that it meets all the criteria for running SEM analysis (Hair et al. 2006). Next, the main model was run using SEM and the assessment results are presented in Table 7.3. A comparison between the result of main and proposed models are shown in Table 7.4. The latent constructs involvement in OSNM (INV_OSNM), informational influence (INFO_INFLU), e-WOM (EWOM), subjective norm (SUB_NORM) and attitude towards brands (ATT_BR) are depicted in the main structural model. Figure 7.2 illustrates the main model. Path diagrams are shown in Appendix 7. Since model fit indices overall reached the acceptable thresholds recommended by researchers, the model was considered final without making further adjustments so that estimates can be used to evaluate hypotheses.

Fit Measure	Main model	Decision
Chi-Square	648.003	Acceptable
Degree of freedom	344	Acceptable
Р	0.000	Lower than critical value
Normed Chi-Square (CMIN/df)	1.884	Acceptable
Root mean square of error of estimation (RMSEA)	0.053	Acceptable
Goodness of fit index (GFI)	0.871	Acceptable
Adjusted goodness-of-fit index (AGFI)	0.848	Acceptable
Normed fit index (NFI)	0.918	Acceptable
Tucker-Lewis Index (TLI)	0.956	Acceptable
Comparative fit index (CFI)	0.96	Acceptable
HOELTER	201	Acceptable

Table 7:3: Fitness statistics of the main model



Figure 7.3: Main model of Gen Y's development of attitude towards brands through OSNM

The chi-square value, which is one of the indicators of goodness-of-fit is lower than the critical value in this case and may erroneously indicate poor fit of the model. If the sample size is large, even a good fitting model may result in an insignificant chi-square (Schumacker & Lomax 2004). For complex models (i.e., many variables and degrees of freedom), like the model in this research, it nearly always approaches statistical significance despite the data fitting the model well (Bearden, Sharma & Teel 1982). Researchers do not consider chi-square statistics to be significant and rely on chi/degrees of freedom (CMIN/df) in such scenarios to evaluate a model (Hooper, Coughlan & Mullen 2008). Moreover, different ratios of chi to degrees of freedom as an indication of model fit are used by different researchers. According to Byrne (2001), an acceptable fit for chi-square/df ratio value lower than 2 can be considered. As noted, although chi-square p-value s <.05 indicates poor fit of the model, CMIN/df of 1.884 explains that the predicted model is not very different from observed data because it meets the threshold set for this study. Even, in the case of data deviating from normality, chi-square is very sensitive (McIntosh 2006). Chi-square value based on the ML method tends to be larger with non-normal data. Therefore, it should not be compared against the (regular) central Chi-square distribution (Bollen & Stine 1992).

Furthermore, chi-square is considered as a conservative measure of goodness-of-fit (prone to type two error), that is why many researchers who use SEM with reasonable sample sizes (e.g., >200) indicating good approximate fit test by different fit indices (e.g., NFI, CFI, RMSEA) (Garson 2009). Absolute and incremental fit indices (Hu & Bentler 1999) as well as goodness-of-fit indices are most common in practice.

Fit measure	Proposed model	Main model
Chi-Square	1842.500	648.003
Degree of freedom	935	344
Р	0.000	0.000
Normed Chi-Square (CMIN/DF)	1.971	1.884
Root mean square of error of estimation (RMSEA)	.055	0.053

 Table 7:4: Comparisons of fit measures for proposed and main model

Goodness of fit index (GFI)	.783	0.871
Adjusted goodness-of-fit index (AGFI)	.759	0.848
Normed fit index (NFI)	.858	0.918
Tucker-Lewis Index (TLI)	.920	0.956
Comparative fit index (CFI)	.924	0.96
HOELTER	180	201

If all these fit indices are within the range, it indicates that the data supports the model well. Largely, the goodness-of-fit statistics in Table 7.3 are within the acceptable range. The CMIN/df ratio is 1.884, which in this case indicates good fit (Byrne 2001; Colom et al. 2004). As a measure of discrepancy between the model and data per degree of freedom (RMSEA), is also indicating good fit, which is well below the threshold of <.08, (Colom et al. 2004; Hair, Bush & Ortinau 2006). The CFI (.96) and NFI (.918) indicate comparative fit of the model because both values are close to the desirable 1 (McDonald & Marsh 1990). The CFI of the model (.96) meets the restrictive criteria \geq .950 set by Hu and Bentler (1999), indicating a robust fit of the model (Byrne 2008). The NFI of .918, although not reaching the rigid standard of \geq .95 (Schreiber et al. 2006), is considered as acceptable as long as the range is from .90 to .95 (Bentler & Bonett 1980; Hooper, Coughlan & Mullen 2008). The Tucker Lewis Index (TLI), also known as Non-Normed Fit index (NNFI) (Schaufeli et al. 2002), reflects good fit as it is >.95 (Schreiber 2006).

However, GFI and AGFI fell short of the required \geq .90 thresholds. It is not quite unexpected to get a low GFI and AGFI of the current model. GFI tends to produce downward bias with a large number of degrees of freedom in relation to the sample size, which is the case in this research (Sharma et al. 2005). The model includes many items and factors, omission of some insignificant factor loadings and error terms can also produce smaller values of GFI (Hu & Bentler 1998). For a complex model, like the one used in this study, AGFI also often results in a lower value than the threshold because AGFI represents adjusted GFI on the basis of degrees of freedom (Tabachnick & Fidell 2007). Some researchers do not recommend GFI and AGFI for measuring model fit because of the sensitivity of these two indexes in relation to factor loadings and sample sizes (Sharma et al. 2005). Many researchers do not use them as a standalone index and their reporting of GFI and AGFI is often based on historical importance (Hooper, Coughlan & Mullen 2008). Other practical fit indices, such as CFI and RMSEA are considered more relevant (Bentler 1990; Steiger 1990).

In recent times CFI had gained in popularity and is a widely reported index in SEM research since it is known to be less effected by sample size (Fan, Thompson & Wang 1999). Although not meeting the set criteria, with a value less than and close to .90, the GFI and AGFI for the current model are considered as a marginal fit (Colom et al. 2004). Overall, the statistics suggest that there is a satisfactory fit of the observed data with the predicted model.

Interpretation of model fit can be performed from two perspectives: overall and local fit. The explanatory power of the data of the entire analysis evaluates overall fit and local fit explains achieved significance for individual parameters within the model. The CMIN/df ratio of 1.884 indicates an overall model fit in this model (Byrne 1993). In addition, other fit indices, like CFI, NFI, TLI, RMSEA, GFI and AGFI evaluate overall model fit (Colom et al. 2004). As previously noted, all fit indices for the current model suggested good fit.

When individual parameters are found to be significant in their hypothesized direction, overall model fit is also reflected in local fit and item loadings are greater than .45 (Bentler & Wu 1993) (Appendix 7). The direction of the hypotheses and item loadings of the items conform to the set criteria, further confirming the local fit of the current model. Nevertheless, in recognizing this model as a perfect solution, it is necessary to be cautious because some of the indices, as discussed, are not supported by fit indices and are left to subjective evaluation.

7.2.5 Testing the hypotheses of the main model

Hypotheses listed in Chapter 3 were tested using regression coefficient obtained from the main model (Figure 7.2). Initially the model was used to test hypothesized relationships between respective constructs. To investigate whether hypothesized relationships are different for male and female, or for different age group, multi-group analyses were carried out. Table 7.5 reports standard estimates of the main model.

				Esti mate	SE	CR	Р	Hypot hesis test
H1	EWOM	<	INV_OSNM	.177	0.057	4.28	.000	Supported
H4	INFO_INFLU	<	INV_OSNM	.685	0.09 6	9.81 6	0. 00	Supported
	EWOM	<	INFO_INFLU	.860	0.056	15.325	.000	Supported
H5	SUB_NORM	<	E-WOM	.896	0.053	17.401	.000	Supported
H6	ATT_BR	<	E-WOM	.626	0.096	5.9	.000	Supported
H7	ATT_BR	<	SUB_NORM	.201	0.09	1.956	0.05	Supported

Table 7:5: Standard estimates of the main model

In the main model, all the regression coefficients are greater than .000. The hypotheses are all supported at p<.05 level. The supported hypotheses are further confirmed by the CRs. CRs are all greater than (\pm) 1.96 (two tailed test). As shown in Table 7.5, null hypotheses involving H1, H4, H5, H6, and H7 were all rejected (supported), indicating significant dependency between the respective dependent and independent variables of the main model.

7.3 Interpretation/discussion of empirical results

This section focuses on the empirical results along with explanations and interpretations.

H1. Gen Y's involvement in OSNM positively influences the e-WOM they receive.

The standardized co-efficient of the path from 'involvement in OSNM' to 'E-Wom' is significantly greater than zero (β = .177, p=.000), as shown in Table 7.5. Therefore, the results of this study support hypothesis H1. Gen Y's involvement in OSNM plays a significant role in the e-WOM they receive.

This hypothesis was developed based on the assumption (literature review) that involvement of Gen Y in OSNM has a positive influence on the e-WOM they receive on online platforms. Because people are involved in a group in order to interact, they are more likely to use WOM to pass on their knowledge and enhance their own knowledge about products, as suggested by Alon and Brunel (2006). Coupled with this argument, is the likelihood that knowledge gained from OSNM may be perceived as more trustworthy and credible than knowledge gained from unknown strangers because the people in a social networking site appear in their friend list. These factors mean that OSNM is an important source of product information for consumers, and facilitates and accelerates e-WOM (Chu & Kim 2011).

Involvement in an online social networking platform facilitates multidirectional communication. With a few clicks, e-WOM can take place and consumers can spread their opinions on a global scale (Dellarocas 2003; Norman & Russell 2006). These findings reconfirm that by being involved in OSNM, people tend to interact with their online friends and have influence on the e-WOM they receive.

In summary, the assumption that Gen Y's involvement in OSNM positively influences the e-WOM they receive was supported in this study. The empirically tested CFA model, standard regression weights and goodness-of-fit indices, shown in Chapter 6 (section 6.6.1) all show support for H1.

H2: Tie strength plays a mediating role in Gen Y's involvement in OSNM and the e-WOM they receive through this involvement.

H3: Trust plays a mediating role in Gen Y's involvement in OSNM and the eWOM they receive through this involvement.

It was hypothesized that tie strength and trust would have mediating impacts between OSNM and e-WOM (Chapter 3). During estimation of the proposed model stage in AMOS, fitness statistics and other estimated values did not produce satisfactory results. The next step was to make modifications of the proposed model to develop a better fit of data. However, as advised by Kenny (2011), it was decided to remove both constructs 'tie strength' and 'trust' from the proposed model otherwise the problem of serious fit may occur.

H4: Informational influences play a mediating role in Gen Y's involvement in OSNM and the eWOM they receive through this involvement.

The mediating impact of informational influence in the relationship between involvement in OSNM and e-WOM was tested following the Baron and Kenny (1986) approach. The procedure followed all four prescribed steps in testing the mediation effect. In the first step, a SEM model was run with e-WOM as the dependent variable and all the predictor variables in the model except for the hypothesized mediator informational influence. This showed a significant relationship between involvement in OSNM and e-WOM (β = .900). The relationship was tested for the mediating impact of informational influence (Table 7.6).

In the second step, the SEM model was run treating informational influence as a dependent variable and all other variables in the model as predictors. This test showed a significant relationship between involvement in OSNM and informational influence (β = 1.513), (Table 7.6).

To test the relationship between informational influence and e-WOM, a third SEM model was run with the mediator as an independent variables and e-WOM as a dependent variable. The result shows a significant relationship (β = .793).

Finally, a full SEM models was run with informational influence as the mediator. Table 7.7 shows β coefficients of all the tested paths (Post mediation stage) along with their significance levels.

 Table 7:6: Standard coefficients and significance level of the model (pre mediation stage)

Tested Path	Beta (β)	Significance (α)***
involvement in OSNM −−−−→ e-WOM	.900	.000
involvement in OSNM→ Informational influence	1.513	.000
Informational influence e-WOM	.793	.000

***p <.001

 Table 7:7: Standard coefficients and significance level of the model (post mediation stage)

Tested Path		Significance (a)***
involvement in OSNM→ eWOM	.177	.000
involvement in OSNM −−−−→ Informational influence	.685	.000
Informational influence eWOM	.860	.000

***p <.001
The results for information reported in Table 7.6 were compared with information recorded in Table 7.7 to understand the impact of the mediation. In order for a full mediation affect to take place, first the path from involvement in OSNM to informational influence and informational influence to e-WOM should remain significant at both the pre- and post-mediation level, which is the case here - as reflected in Tables 7.6 and 7.7. Second, after introducing the mediator (informational influence), the path from involvement in OSNM to e-WOM should become insignificant. While the first condition was met, the second condition fell short of the criteria because the path from involvement in OSNM to e-WOM remained significant for the model (Table 7.7). Thus, full mediation was not achieved. However, partial mediation is observed because, despite significant relationships between involvement in OSNM and e-WOM in the pre- and postmediation models, Table 7.7 shows a decrease in the magnitude of the β coefficients (.900 to .177) (Baron & Kenny 1986). Thus, informational influence partially mediates the relationship between Gen Y's involvement in OSNM and the e-WOM they receive.

The impact of information collection and sharing has been observed in past studies (Bearden et al. 1989; Deutsch & Gerard 1955; Henningsen & Henningsen, 2003; Lee et al., 2006), though there was no observed mediating impact of informational influence on e-WOM in the specific OSNM context in which this research was carried out.

In summary, Gen Y is involved in OSNM which leads them to become exposed to information, which, in turn, generates e-WOM in OSNM. In other words informational influence in this model played a partial mediating role in the relationship between involvement in OSNM and e-WOM. Therefore, the assumption made in this research grounded in theories from past research is justified here with consistent and robust results.

H5. There is a positive influence of e-WOM received by members of Gen Y through their involvement in OSNM on their subjective norm. The standardized coefficients of the path from e-WOM to subjective norm is significantly greater than zero (β = .896, p= .000), as shown in Table 7.5. The relationship between e-WOM and subjective norm is significant. Therefore, empirical data support hypothesis H5 In the Australian context, e-WOM on OSNM does produce a significant effect on the subjective norm of Gen Y. To investigate the determinants of user acceptance of online social networks, past research found a positive relationship while focused on social influence involved in online social networks (Qin et al. 2011). Group behaviour on the Internet was also monitored in past research and evidence was found that consumers monitor the comments of others regarding specific topics and use them as a basis for their own choices and behaviour on the Internet (Huang & Chen 2006). However, in past studies, there was no clear evidence that members of OSNM who are influenced by e-WOM would also have their subjective norm positively influenced.

Because OSNM is a platform where members of the network are actively engaged in seeking comments, suggestions and opinions on products and brands from their online friends, the assumption was that their activities might influence them to conform to their specific referents. Results of this research found that e-WOM received by members of Gen Y through their involvement in OSNM positively influenced their subjective norm. Thus, this result confirms that, in the moderntechnology oriented environment where Gen Y is a prolific users of OSNM, there is a positive influence of e-WoM on the subjective norm of Gen Y.

H6. There is a positive influence of e-WOM received by Gen Y through their involvement in OSNM on their attitude towards brands.

The standardized coefficients of the path from e-WOM to attitude towards brands is significantly greater than zero (β = .626, p= .000), as shown in Table 7.5. The influence of e-WOM on attitude towards brands is significant. Therefore, the results support hypothesis H6.

Studies linking e-WOM with brand image and advertising have been carried out in the past. E-WOM is recognised as an efficient and credible factor in brand literature. Findings from the study on brand awareness (Ferguson 2008), brand attitudes (Herr, Kardes & Kim 1991), brand loyalty (Sung, Kim & Moon 2008), purchase intention, and decision (Riegner 2007; Söderlund & Rosengren 2007) show that e-WOM behaviour is significant.

The finding of the current research focusing on Gen Y in Australia supports past research findings. It was assumed, based on the past studies, that because Gen Y is involved in social media for communication, that impact on brand attitude formation from the information they receive online, through their OSNM friends would be significant. Although previous studies on the effect of WOM on consumer attitudes was conceptualised as a cognitive effect (Gelb & Johnson 1995), this research recognises all three components (cognitive, affective and conative) of attitude formation through received e-WOM on OSNM by their online friends. Information from the qualitative stage (section 5.8) of the current study may also be used to justify the conclusion that Gen Y in Australia are positively influenced by the e-WOM they receive through their involvement in OSNM on the formation of attitude towards brands. Therefore, support for hypothesis H6 is enriched by findings reported from previous as well as both stages of the current research.

H7. There is a positive influence of Gen Y's subjective norm on their attitude towards brands.

The standardized coefficients of the path from subjective norm to attitude towards brands is significantly greater than zero (β =.201, p= .05), as shown in Table 7.5. The influence of subjective norm (the influence of important others) on attitude towards brands is significant. Therefore, empirical data does support hypothesis H7 Past research claimed that informational rather than normative influence is expected to play a central role in influencing online consumers. The argument runs that individuals do not need to conform to the expectations of others when making a purchase, and they all have informational motives to make good decisions (Dholakia, Basuroy & Soltysinski 2002).

However, researchers have observed that online social networks participants are more driven by social influences (Qin et al. 2011). Subjective norm in an online environment is found to affect users' intention to make online purchase (Pavlou & Fygenson 2006), play online games (Hsu & Lu 2004), adopt a blog (Hsu & Lin 2008), use advanced mobile services (López-Nicolás et al. 2008) etc. On that foundation, in the current research it was assumed that members of Gen Y may follow others' opinion as a result of overt conformity pressures from online peer groups and that might influence the formation of attitude towards brands. The result of the research confirms the assumption. Information from in-depth interviews on subjective norms (section 5.7) and attitude towards brands (section 5.8) in the qualitative stage of this research may be used to justify this finding. Information from the literature (despite some contradictions), the qualitative interview and final result of this research confirms the role of the subjective norm of Gen Y on their attitude formation towards brands through OSNM friends.

7.4 Multi group analysis

As earlier stated, hypotheses H8 and H9 were tested using multi group analysis. As gender and age group differences of Gen Y are categorical variables, they could not be tested within the main model. Rather, their effects were tested using multi-group analysis, results of which will be presented in the following sections.

Cross validation between groups is more a matter of degree that can be determined by applying a series of progressively more rigorous tests across samples (Bentler 1980). Tight cross validation is considered ideal but more imposing than is necessary (MacCallum et al. 1994). Partial cross-validation, as represented by a test of loose cross validation, factor structure equivalence and test of factor loading equivalence provide adequate evidence of cross validation (Hair et al. 2006). Differences in model fit are generally tested using chi-square changes (ΔX^2). No change in chi-square ($\Delta X^2 = 0$) refers to no difference between unconstrained (less constrained) and constrained models or any two models. In terms of changes in the degrees of freedom (Δ df), significance is evaluated. Since a chi-square test value is very often known to be influenced by large sample size, even insignificant differences between models are magnified through chi-square change (ΔX^2) statistic (Brannick 1995). In this type of situation, with large sample sizes, researchers may wish to rely more on changes in key relative fit indices, such as the CFI, with each of the progressive test. Changes in CFI (Δ CFI) is considered as a robust technique for evaluating practical differences between models or testing between-group invariance. A change in CFA value of < .01 can be regarded as an indication of invariance (Cheung & Rensvold 2002). If each progressive test produces insignificant changes in fit over the subsequent test, cross validation is established (Hair et al. 2006). This approach has been taken for multi-group analysis in this research.

7.4.1 Multi-group analysis of gender differences

H8: There is a difference between male and female Gen Y's involvement in OSNM and its effect on their development of attitude towards brands.

In this section, the effect of social structural variable, gender differences of Gen Y on development attitude towards brands by involvement on OSNM will be discussed as it was one of the hypotheses in this research. As this was one of the categorical variables, it was not tested with the main model. Rather, effect of Gen Y's gender difference was tested using multi-group analysis, results of which will be presented below. Female group was considered as the original sample and male group as the validation sample.

Table 7.8 shows that involvement in OSNM has positive affect on developing attitude towards brands in both male and female members of Gen Y because both the groups satisfy the goodness-of-fit criteria. Further, each progressive test (factor structure equivalence, factor loading equivalence) supports cross validation of the results (Table 7.9). The loose validation test produces adequate fit statistics. The first multiple sample test (factor structure equivalence) also provides adequate fit. Furthermore, each progressive test produces insignificant change in fit as well as change in CFI (Δ CFI) over the subsequent test.

Fit Measures	Male	Female
Chi-Square	554.642	610.004
Degree of Freedom	344	344
Р	.000	.000
Normed Chi-square (CMIN/df)	1.612	1.773
Root mean square of error of estimation (RMSEA)	0.062	0.07
Goodness of fit index (GFI)	0.796	0.794
Adjusted of goodness-of-fit index (AGFI)	0.76	0.757
Normed fit index (NFI)	0.862	0.862
Tucker-Lewis Index (TLI)	0.936	0.928

 Table 7:8: Goodness-of-fit estimates of male and female

Comparative fit index (CFI)	0.942	0.934
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Model description	Df	\mathbf{X}^2	CFI	RMSEA	Comments
Loose cross validation	344	610.004	0.934	0.07	Reasonably good fit
Factor structure equivalence	688	1164.643	0.938	0.047	Reasonably good fit
Factor loading equivalence	717	1182.16	0.939	0.045	Δ CFI = .001 No Practical Difference

 Table 7:9: Goodness-of-fit statistics for tests of invariance across male and female

However, differences of goodness-of-fit between the two groups also show that involvement on OSNM affect development attitude towards brands marginally differently. Table 7.10 shows standard estimates of the hypothesized relationships of two groups (Male/Female) after multi-group analysis.

Past studies show that Gen Y males and females have different preferences for OSNM (Cole & Griffiths 2007; Fan & Miao 2012; Fietkiewicz et al. 2016; Gefen & Ridings 2005; Pempek et al. 2009) and the assumption in this research is that, ultimately, there would be differential affects for the two groups on outcomes of attitude towards brands.

				Standard estimates		Z-Value
				Male	Female	
H1	EWOM	<	INV_OSNM	.207	.163	0.71
H4	INFO_INFLU	<	INV_OSNM	.714	.688	0.523
	EWOM	<	INFO_INFLU	.828	.874	187
H5	SUB_NORM	<	E-WOM	.913	.877	1.312
H6	ATT_BR	<	E-WOM	.490	.693	448
H7	ATT_BR	<	SUB_NORM	.346	.135	1.068

 Table 7:10: Multi-group analysis of gender differences on development of attitude towards brands

The findings of this study confirm the assumption from the perspective of OSNM involvement. Table 7.10 shows the positive influence of involvement on OSNM for both male and female on the e-WOM they receive. Informational influence is highly influenced by the OSNM involvement for both the groups. However there are differences between male (.714) and female (.688) regarding seeking, and

gathering information from friends, and consulting with friends in the OSNM environment. It appears that Gen Y females' received e-WOM are more likely to be highly influenced by information (.874) compared to their male counterparts (.828).

There is also evidence of a strong influence of received e-WOM on the subjective norms of Gen Y males (.913) and females (.877) but it appears that males are more influenced by e-WOM than their female counterparts. The two groups show minor differences because both the groups have similar beliefs regarding their specific referents. Interestingly, e-WOM more significantly affect female (.693) development of attitude towards brand than it does male group members of Gen Y (.490). On the contrary, subjective norm significantly affect the development of attitude towards of males (.346) more than their female counterparts (.135).

Overall, the structural model fits for both the genders though there are some differences in the standard estimation for some of the measurement items between genders. Accordingly, hypothesis H8 is only partially supported.

7.4.2 Multi-group analysis of age group differences

H9: There is a difference between different Gen Y age groups involvement with OSNM and its effect on their development of attitudes towards brands.

Effect of the social structural variable, age group differences of Gen Y on development of attitude towards brands by OSNM, will be discussed in this section. Like gender, age group is a categorical variable, hence it could not be tested with the main model. Rather, influence of age group differences was tested using multi-group analysis and results are presented in this section.

Both age groups fitted the data well and satisfied the criteria, as reflected through the goodness-of fit statistics shown in Table 7.11. Age group 25-29 was classified the original sample and the 18-24 age group the validation sample. Further, each progressive test (factor structure equivalence, factor loading equivalence) supports cross validation of the results (shown in Table 7.12). The loose validation test produces adequate fit statistics. The first multiple sample test (factor structure equivalence) also provides adequate fit. Furthermore, each progressive test produced insignificant change in fit as well as change in CFI (Δ CFI) over the subsequent test.

However, differences of goodness-of-fit between the two groups also show that OSNM affects their development of attitude towards brands marginally differently. Table 7.13 shows standard estimates of hypothesized relationships of the two age groups after multi-group analysis.

The current literature acknowledges that there is a general lack of understanding about the affect of intra-generational differences (Bolton et.al, 2013). This research focused on this issue and tested the model using multi group analysis based on age group differences. Findings of this study somewhat confirm that there are age group differences within Gen Y in their development of attitude towards brands through their involvement in OSNM.

Table 7.13 shows there is a minor difference between age groups in terms of effect of involvement on e-WOM they receive. Informational influence is influenced by OSNM involvement for both the groups. However there is a difference between the younger group (.651) and the older group (.702) regarding their seeking, gathering and consulting information in OSNM friends. It appears that Gen Y's younger groups' received e-WOM are more likely to be influenced by their informational influence (.885) compared to their older counterparts (.834). Further, Gen Y's younger age group (.881) and older age group (.906) show strong influence of received e-WOM on their subjective norm but it appears that older group is more influenced by e-WOM than their younger counterparts.

The two groups show only minor differences because both groups have similar beliefs regarding their specific referents. It is evident that development of attitude towards brand as a result of e-WOM they receive affects the older group (.633) more than younger group members of Gen Y (.601). Similarly subjective norm significantly affect the development of attitude towards brands of the older age group (.214) more than their younger counterparts (.195).

Fit Measures	Age group (18-24)	Age group (25-29)
Chi-Square	600.511	627.33

Degree of Freedom	344	344
Р	0	0
Normed Chi-square (CMIN/df)	1.746	1.824
Root mean square of error of estimation (RMSEA)	0.069	0.072
Goodness of fit index (GFI)	0.791	0.785
Adjusted of goodness-of-fit index (AGFI)	0.754	0.746
Normed fit index (NFI)	0.835	0.871
Tucker-Lewis Index (TLI)	0.913	0.931
Comparative fit index (CFI)	0.921	0.937

 Table 7:12: Goodness-of-fit statistics for tests of invariance across different age groups

Model Description	Df	\mathbf{X}^2	CFI	RMSEA	Comments
Loose cross validation	344	600.511	0.921	0.069	Reasonably good fit
Factor structure equivalence	688	1227.84	0.930	0.05	Reasonably good fit
Factor loading equivalence	717	1251.869	0.931	0.049	Δ CFI = .001 No Practical Difference

 Table 7:13: Multi-group analysis of age group differences on development of attitude towards brands

				Standar	d Estimate	7
				Age Group 18-24	Age Group 25-29	Z- value
H1	EWOM	<	INV_OSNM	0.154	0.203	0.064
H4	INFO_INFLU	<	INV_OSNM	0.651	0.702	901
	EWOM	<	INFO_INFLU	0.885	0.834	126
H5	SUB_NORM	<	E-WOM	0.881	0.906	201
H6	ATT_BR	<	E-WOM	0.601	0.633	164
H7	ATT_BR	<	SUB_NORM	0.195	0.214	0.034

Overall, the structural model fits for both age groups though there are some differences in the standard estimates for some of the measurement items between the age groups. Accordingly, hypothesis H9 is only partially supported.

7.5 Conclusion

This chapter presents all the results from the quantitative data analysis for this research. Data normality was analysed and results discussed before testing the structural model. To initiate testing of the structural models, data distribution was

found to be satisfactory. Structural models were run using AMOS for both proposed and main models, and test statistics were evaluated and reported. The proposed model was modified to become the main model to generate better fit of to the data. Goodness-of fit statistics of the main model were all acceptable. Hypotheses were tested and findings were reported with interpretations and justifications. Also support from past research was established. Multi stage analyses were carried out to find the effect of the mediating variable, informational influence. Multi-group analyses in AMOS were carried out to test gender and age group influence, while the Baron and Kenny (1986) approach was followed for mediation analyses.

A summary of the research findings is shown in Table 7.14 and significance of the results reported in this chapter. Figure 7.3 illustrates the empirically tested model.



Figure 7.4: The empirically tested model of development of attitude towards brands through OSNM involvement

Table 7:14: su	mmary of resea	arch findings
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Research objectives	Research hypotheses	Results
1) To develop and test a model of the formation of Gen Y's attitude towards brands influenced by their involvement in online social networking media	Developed SEM using AMOS	Reasonably Supported

Research objectives	Research hypotheses	Results
2) To determine how involvement on OSNM affects Australian Gen Y's electronic word of mouth they receive from their online friends	H1 . Gen Y's involvement in OSNM positively influences the e- WOM they receive.	Supported
	H2: Tie strength plays a mediating role in Gen Y's involvement in OSNM and the e- WOM they receive through this involvement.	Not Supported
3) To investigate whether tie strength, trust and informational influence works as catalyst between Gen Y's involvement on OSNM and eWOM they receive from their online friends	H3: Trust plays a mediating role in Gen Y's involvement in OSNM and the eWOM they receive through this involvement.	Not Supported
	H4: Informational influences play a mediating role in Gen Y's involvement in OSNM and the eWOM they receive through this involvement.	Partially Supported
4) To determine whether Gen Y's received eWOM through their online friends lead them to comply with their specific referent	H5. There is a positive influence of e-WOM received by members of Gen Y through their involvement in OSNM on their subjective norm.	Supported
5) To determine whether Gen Y's received eWOM through their online friends lead them to form attitude towards brands	H6: There is a positive influence of e-WOM received by Gen Y through their involvement in OSNM on their attitude towards brands.	Supported
6) To determine whether Australian Gen Y's subjective norm affects formation of attitude towards brands	H7: There is a positive influence of Gen Y's subjective norm on their attitude towards brands.	Supported
7) To determine how Gen Y's gender differences influence the role of OSNM in their development of attitude towards brands	H8: There is a difference between male and female Gen Y's involvement in OSNM and its effect on their development of attitude towards brands.	Partially Supported
8) To determine how Gen Y's age group differences influence the role of OSNM in their development of attitude towards brands	H9: There is a difference between different Gen Y age groups involvement with OSNM and its effect on their development of attitudes towards brands.	Partially Supported

Chapter 8 will cover discussion of the implications.

CHAPTER 8: CONCLUSION

8.1 Overview

This research identified the research problem based on a literature review and analysed data to find how Gen Y's attitude formation towards brands takes place as a result of their involvement in online social networking media (OSNM). The research problem was: How does Gen Y's involvement in online social networking media facilitate the development of their attitudes towards brands through their online friends? This chapter will report relevant implications and conclusions based on the findings of the research.

Table 8:1: List of research	objectives	for this	research
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Research objectives		
1.	To develop and test a model of how Gen Y's involvement in OSNM influences	
	their attitudes towards brands.	
2.	To determine how Gen Y's involvement in OSNM affects the development of their attitudes towards brands in Australia.	
3.	To determine the influence that Gen Y's involvement in OSNM has on the e-WOM they receive.	
4.	To determine the mediating role of tie strength, trust and informational influence on e-WOM received by Gen Y through their involvement in OSNM.	
5.	To determine the influence that the e-WOM received by Gen Y through their involvement in OSNM has on their subjective norms.	
6.	To determine how Gen Y's involvement in OSNM influences the development of	
	their attitudes towards brands through e-WOM and their subjective norm.	
7.	To determine how Gen Y's age and gender influence the role that OSNM plays in	
	the development of Gen Y's attitudes towards brands.	

The background of this research was discussed in Chapter 1, setting the context for this research. A literature review was carried out to find information on the relevant factors affecting formation of attitude as a result of the online context. It was proposed that the effect of identified independent variables on dependent variables could be investigated in light of a new media context. OSNM was considered as relatively new media and Gen Y in Australia was selected as participants in this research because of their distinctiveness. Further insights into Gen Y and their use of OSNM may open new avenues for marketing. For the purpose of the current study, the research problem was first defined. Research issues were outlined and specific objectives were set based on the defined problem. Chapter 1, by identifying gaps in the current literature, discussed the intrinsic benefits of this study and the relevance and importance of conducting research of this nature. This study was reflected as significant because research gaps were identified in the literature, which indicated a lack of research on the area of Gen Y's attitude development towards brands because of their involvement in OSNM.

Chapters 2 and 3 reviewed the existing literature relating to the research problem and identified variables from past research. The purpose of the literature review was, first, to understand and explain parent theories known to explain formation of attitudes in general along with identifying the variables that meet the purposes of this study. Second, more specific information that directly affects on relationships between identified variables was explored. In other words, in the second phase of the literature review, factors considered important to develop attitude towards brands were explored.

Therefore, the literature review was divided into two parts. In the first part, (Chapter 2), foundation theories related to consumer behaviour and consumer socialization were discussed. Relevant to consumer socialization, social learning theory which is a product of learning theory was reviewed. In the discussion, situated cognition theory, activity theory and communication theories drew attention to the lack of empirical examination of the effect OSNM on Gen Y's development of attitudes towards brands. The discussions highlighted the importance of the Internet and its effect on the development of attitudes towards brands.

The first part of the literature review set the theoretical foundation of the research. Based on that foundation, a conceptual framework was established in the second part of the literature review (Chapter 3). The second part focused on identification of variables from the existing literature pertaining to the field of developing attitude towards brands through Gen Y's involvement in the online social networking media. From the extant literature, involvement in OSNM, e-WOM and subjective norms were identified as important variables and their relationships with developing attitudes towards brands were proposed for investigation. The causal link between involvement, e-WOM, subjective norm and attitudes towards brands was discussed to identify the chain-effect relationship between these four variables where Gen Y's development of attitude towards brands is concerned. As informational influence plays a vital role in online social media, Chapter 3 also presented an argument for proposing informational influence as a catalyst for the e-WOM behaviour. Based on the research objectives of this research, a conceptual framework was developed and hypotheses derived. Discussion on Gen Y's gender difference and age group difference were emphasized because Gen Y is a large significant cohort in generational studies and needs special attention is one is to learn about this market.

Chapter 4 discussed the methodologies that were followed in the current research. Both qualitative and quantitative research methods were employed to increase the robustness of the study. In-depth interviews were conducted as part of the qualitative approach to explore different constructs and to gain more insights on the research problem. Further, information gained from interviews was used to refine current measurement scale items to make them relevant for Gen Y for collecting quantitative data. The chapter also contains information on quantitative research fundamentals. Scale development phases were acknowledged and followed, and constructs were defined and inclusion of scale items was justified for each construct. Further, scales were assessed and appropriate prescriptions were followed in designing the questionnaire. The characteristics of the population were discussed and sample size of 319, ensuring maximum diversity, was justified. A detailed discussion to justify using an online consumer panel to collect quantitative data was also included. The outcomes in this research are obtained based on following correct statistical procedures in relation to questionnaire administration, data preparation, data screening and data entry. Finally, to analyse quantitative data, the use of exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and structural equation modelling (SEM) were described. Both EFA and CFA were used to refine measurement items while SEM was employed to test all hypotheses made in this research.

Chapter 5 reported the findings of the 12 in-depth interviews conducted at the qualitative stage of the research. Reports were based on the responses from the

interviewees in relation to involvement on OSNM to develop attitude towards brands. The findings were grouped under pertinent constructs and conveyed in a tabular format. Justification on the elimination, addition and adjustments in the questionnaire was discussed in this chapter and, in addition, important and interesting comments were quoted.

Chapter 6 described the quantitative analysis used to refine the measurement scales and results were shown. EFA in the first stage identified five factors. Variables with high loadings under each factor were retained whereas those with low factor loadings were eliminated. Support from past studies was provided for all the retained and eliminated variables. A total of 46 out of 50 variables were finally carried forward for CFA in the next stage of the quantitative data analysis. Measurement items for each construct were submitted for a separate CFA. Criterion for goodness-of-fit statistics for CFA models were evaluated from the existing literature and acceptable ranges of values were established for this research. Findings from the CFA showed acceptable goodness-of fit statistics for the model concerned. Reliability of constructs and measurement items were found to be satisfactory, as revealed through co-efficient alpha and squared multiple correlation coefficients (SMCs) respectively. Both constructs and discriminant validity were assessed and achieved for the current study. In summary, Chapter 6 detailed all results for the above-mentioned analysis.

All relevant information on structural equation modelling (SEM) in estimating the proposed structural model was presented in Chapter 7. Data normality was checked and reported before estimating the model. Because the proposed model lacked a satisfactory fit for some goodness-of-fit measures, the model was modified based on modification indices and, finally, the main model was developed. The main model was supported with acceptable goodness-of-fit statistics. The results of tests on the seven hypothesized relationships between identified variables reported in this chapter and the results interpreted and analysed in reference to the past research in the current field. The impact of social structural variables and one mediating variable were also observed and reported upon in this chapter. Multi-group analysis in AMOs was carried out to test the gender and age group effect on the model and the Barron and Kenny (1986) approach was followed to test the impact of mediating variable.

This section, so far, has overviewed the relevant components of the current study involved in studying Gen Y's formation of attitudes towards brands through their involvement in OSNM. The next section of the chapter discusses the contribution of the current research to the existing body of knowledge and establishes arguments in favour of this contribution based on identified gaps in the literature. Theoretical implications are discussed, indicating possible value additions to the theoretical framework of attitude towards brands model involving OSNM influence. Furthermore, highlighting the relevance of using knowledge from this study, suggestions are made for managers to solve managerial problems. Limitations involved in the current study are also discussed with advise in interpreting the results. Finally, to carry out new research of this type in future to corroborate current findings and also to explore new avenues to enrich the existing knowledge bank on this theme, roadmaps for future research are drawn.

8.2 Contribution of this research

According to the extant literature, the consumer socialization process has three major components: consumer socialization agents, social structural variables and consumer socialization outcomes (John 1999). Media, especially electronic media is considered as one of the influential agents in the consumer socialization process. Moreover, the increasing use of the Internet as a communication tool makes this an important agent of socialization in the consumer socialization process (La Ferle, Edwards & Lee 2000). Because Gen Y is the first generation to have spent their entire lives in the digital environment, information technology profoundly affects how they live and work (Bennett et al., 2008; Wesner & Miller, 2008). It is likely that the Internet is playing a vital role in their socialization process, although this area of research has not been adequately addressed. Studies regarding OSNM and its role in different aspects on consumer behaviour are in their early stages. The process of consumer socialization is multi-faceted and difficult to measure for the following reasons: outcome of consumer socialization must be measured with same sample group at a different time period; and the outcome of consumer socialization cannot isolate the role of any particular socialization agent.

This research contributes to the extant literature by addressing gaps concerning the above-mentioned second issue. This research adopted and modified variables through qualitative and quantitative analysis from the relevant discipline to measure Gen Y's formation of attitudes towards brands through their involvement with friends through OSNM. The conceptual model in the current study integrates variables that appear to affect the formation of attitudes in the online social networking environment. The same variables were identified, used and justified by previous researchers on isolated cases and they were all based on empirical results. In other words, each study by respective researchers included only a few variables, putting less emphasis on the observation of the combined effect to generate a clear picture of the elements that jointly affect the attitude formation process. No model currently put forward in the literature tested the chain effects of online social networking, electronic word of mouth (e-WOM), subjective norm and attitude formation towards brands relationships despite much evidence of their combined effect in the consumer behaviour literature. Including all these variables in one model, this study went further by providing significant information on Gen Y's consumer behaviour when multiple influencing factors are involved. This effort of integration is a new initiative in this field of research.

Researchers of consumer socialization have identified the role of the media in the consumer socialization process. However, past studies do not provide a structured, empirically tested model of how Gen Y develops their attitudes towards brands as a result of OSNM involvement. Furthermore, there is little contribution in the extant literature about the role of OSNM in the attitude formation process. This indicates that the selection of media in developing attitudes becomes imperative because it influences the mindset and evaluation process of people. The same concept may be applicable in the case of brands, yet little is known about this phenomenon because limited research has been carried out using brands as an attitude object from online social networking involvement. More specifically, attitude towards brands related to consumer markets has seldom been studied to understand the possible affects on Gen Y because of the increased use of the Internet. This research, in an attempt to fill gaps in research, uses online social networking involvement to measure formation of attitudes towards brands. Results from this study, thus, can be compared to other media involvement of Gen Y, adding new information to the repository. Thus, this research work represents an

empirical investigation which seeks to explain development of attitudes towards brands in the context of OSNM involvement.

Despite generation cohort studies in consumer behaviour, few researchers incorporate social structural variables, such as gender and age, for intra generation studies on consumer socialization outcome – developing attitudes, in this case. This research addressed the influences of gender differences and age group differences far from Gen Y's perspective in the OSNM context. The current research was designed to fill the gap in knowledge about the impact of social structural variables so that consumers could show their differences when OSNM is involved in their evaluation process. Results of this study contribute to an understanding of the consumer psyche of Gen Y, especially when the evaluation process is influenced by gender and age. Therefore, addressing the significance of these social structural variables on development of attitude towards brands through OSNM involvement and empirically testing their influences, this study adds value to the existing information on intra-generation comparisons because of the large cohort of Gen Y.

So far, research regarding social networking media have been mainly conducted in the US (Chu & Kim 2011; Gangadharbatla 2008; Hennig-Thurau et al. 2010; Shao 2009; Shin 2010,), with few conducted in Australia. In fact, there has been no research conducted in Australia on development of attitudes towards brands of Gen Y through their OSNM involvement. This research addressed this dearth in the social networking media context and added value to Gen Y research in Australia.

8.2.1 Implications for theory

The current research is not unique in its context because evidence of Internet research is extensive in the literature. However, the originality of the research lies in the fact that, theoretically, it contributes to the areas where significant gaps are evident. Addressing those gaps was considered significant because there of the prospects for new information to emerge to explain developing attitudes towards brands from different perspectives. Moreover, it is a common practice to base research activities on the basis of theory for its robustness, so that findings can be applied to solve real life marketing and management problems (Pemberton 1992). This research added value by employing theories that had been ignored and

unapplied in defining variables and describing the relationships between the variables. It is timely that consumer behaviours take such an integrated approach towards research in these fields, especially for generational research. The following lists the gaps in the literature that this research addresses, thereby contributing to the theoretical framework of the current field.

The extant literature highlighted that media plays a significant role in the consumer socialization process. Studies of this type mainly investigated the proposition in the context of traditional media as socialization agents. The majority of the studies fall short on investigating the impact of new media resulting from the invention of the Internet (La Ferle, Edwards & Lee 2000). This study is significant because it does explore the impact of new media, specifically, online social networking, on formation of attitudes, which is an outcome of the consumer socialization process. This research includes the impact of OSNM as an agent of the consumer socialising process on attitude development.

Word of mouth (WOM), the precursor to electronic WOM, is a key force in the marketplace because of its influential role on consumers' attitudes, beliefs and behaviour patterns (Hennig-Thurau et al. 2004; Sweeney, Soutar & Mazzarol 2014). Given the ease of e-WOM generation and dissemination due to the advent of the Internet and its impact on consumer buying behaviour, researchers have been calling for more research into e-WOM for a number of years and acknowledge that it is an under-researched area (Gupta & Harris, 2010; Hennig-Thurau et al., 2004; Valck, 2006; Zhang, Craciun & Shin 2010). Its inclusion as a variable deserves greater consideration because it is known to affect the evaluation process.

In the extant literature, it is well recognised that consumers search for information and seek advice from others when making a purchase decision and reflect with a high level of opinion seeking behaviour (Flynn, Goldsmith & Eastman 1996). Opinion-seeking behaviour is regarded as one of the dimensions of e-WOM. Many studies in the current field overlooked the effect of this particular dimension on attitude formation towards brands, especially in the OSNM context which become an important source of product information for consumers, and tremendously facilitate and accelerate eWOM (Chu & Kim 2011). Such studies often utilise social cognitive theory which analyses social diffusion of new behaviour patterns (Bandura 2001). In addition to that, the elaboration likelihood model explains critical influence on eWOM received. The current research attempted to apply the diffusion of innovation theory and the elaboration likelihood model by incorporating e-WOM in the development of attitude towards brands relationship. The incorporation of e-WOM was based in a strong theoretical foundation and the study has added to the understanding of the influence of e-WOM. This is an important contribution because few studies combined diffusion of innovation theory and elaboration likelihood model in assessing the role of e-WOM on development of attitude towards brands. More importantly, it is novel to apply this framework using Gen Y.

Important people influence others in making decisions in the online environment (Hsu & Lin 2008; Hsu & Lu 2004; López et al. 2008; Pavlou & Fygenson 2006;, Qin et al. 2011). The concept was termed 'subjective norm' in the theory of reasoned action (TORA). Since social norms dictate decision-making behaviour, the role of subjective norm on developing attitudes should be considered as reasonably important. This research treated subjective norm as a significant variable even though other researchers have focused on the informational influence rather than normative influence of the Internet (Dholakia, Basuroy & Soltysinski 2002). The different treatment of subjective norm thus made the study more relevant from the TORA model perspective. Combining social exchange theory to conduct research on subjective norm made this research robust because the online social networking platform is used to investigate the effect of subjective norm in the development of attitudes towards brands. Information from Gen Y added further information to TORA because the researcher was able to study Gen Y's behaviour from a different philosophical stance, that is, the influence of other people on the development of attitude. The current research, therefore, extended the theoretical boundary by adding a relevant construct useful for understanding consumer behaviour in relation to the formation of attitudes of Gen Y.

Another important contribution of the current research is that it addresses the importance of informational influences, which refers to the tendency to accept information from knowledgeable others, as an indicator of reality and be guided in product, brand and store search (Bearden, Netemeyer & Teel 1989; Deutsch &

Gerard 1955). Using the heuristic–systematic model utilized in information processing research (Chaiken 1980; Chaiken & Ledgerwood 2011), this research takes an approach suggested by Lee et al. (2006) that information from external sources can enhance an individual's confidence in beliefs or attitudes toward some object. This research observed the mediating role of informational influence between involvement in OSNM and e-WOM, thus adding value to social influence theory. This research not only attempted to measure causal link of normative influence on developing attitudes towards brands but also acknowledged informational influence as a mediator of the online context to disseminate e-WOM through information seeking behaviour.

Another important contribution of the current research is that it addresses variables specifically important for developing attitudes towards brands through online social networking friends. The chain effect of all variables in this research are persuading developing attitude towards brands that describes through tri component model of attitude. The attitudes towards brands literature found in relation to brand advertising, brand extension on parent brand (Cheng-Hsui & Chen 2000; Czellar 2003; Shahrokh, Sedghiani & Ghasemi. 2012), developing positive attitude for mobile phone brands (Alamro & Rowley 2011) and in different even disconnected directions. Further, the vast online arena for consumer knowledge about brands is a priority for marketers (Loken, Ahluwalia & Houston 2010). The growing international literature advocates the development of online marketing strategies using new media (Loken, Ahluwalia & Houston 2010; Hennig-Thurau et.al 2010; Safko 2010; Wood-Solomon 2009). The soundness of such strategies appear to lack a strong foundation in explaining the process of how a person's involvement in OSNM may impact in the development of attitudes towards brands. Along with a need for integration, current theories include relationships between some constructs that do not effectively explain the nature of the effects on developing attitudes towards brands, let alone in the online social media context. This research addresses this specific gap in theory, emphasizing the presence of the online environment while using situated cognition and activity theory for context study. Information from this research will add value in conceptualising developing attitudes towards brands in relation to involvement in OSNM. This is an important contribution to the extant literature because studies

defining attitude using tripartite views in relation to brands in online environment is scarce. This research conceptualises the development of attitude towards brands based on the inherent characteristics and reflects all three components in the online context. Thus, development of attitudes towards brands reflects a better mental predisposition than found in contemporary studies of online social networking research.

Moreover, the merit of the current research contributes to the contexts of OSNM and Gen Y in relation to consumer behaviour. Specifically it will shed lights on Gen Y research in consumer behaviour. This can be considered as quite a value addition as the current model is based on strong theoretical platform.

Multi-item measurement scales were developed in this research from identified and tested specific variables and constructs. Although the variables and constructs were adopted and scales were borrowed from extant literature, their contributions to the current and future research are significant. That is, this research adjusted the scales found in the literature to make them more suitable to administer in the online social networking media setting. Modifications were based on the results of meeting acceptable criteria of a qualitative study and expert judgement. Therefore, it can be argued that these measurement items form the basis for further research in the area, especially in the area of Gen Y consumer behaviour research in the online social networking media context. Compared to consumer socialization and consumer behaviour theories, formation of attitudes towards brands through OSNM involvement of Gen Y is a completely unexplored research area.

Constructs of the empirically tested research model	Contribution to the extant theory		
Involvement in OSNM	Situated cognition and Activity theory, Social learning,		
	Socialisation theory, UGT.		
Informational influence	UGT, social influence theory, Heuristic-systematic		
	model		
eWOM	Social judgement theory, ELM,		
Subjective norm	Social exchange theory, TORA, TPB		
Attitude towards	ELM, Tri component model of attitude, Means end		
brands	theory		

 Table 8:2: Contribution to the extant theory from findings of this research

8.2.2 Implications for methodology

This research borrowed measurement scales from relevant disciplines to measure corresponding constructs. Items were adopted and modified based on the requirements of the platform setting in which the research took place, making it more acceptable and suitable for the online social networking media context. To check the consistency of these items in general, qualitative and quantitative methods were used. Statistical analyses and judgements were then used to support adjustments to the original model, made specifically for generation Y to measure development of attitude towards brands through online social networking media friends. Combining these two forms of analyses resulted in enhancements that expedited easy and convenient collection of data, which then served as a basis for advanced analysis in testing hypotheses. Much past research relied mainly on quantitative analysis in evaluating measurement scale items in this field, this research, however, followed a rigorous mixed-method methodology which further strengthened its methodological foundation in data collection technique.

This research not only contributed to the refinement of the scale items used by employing the mixed method approach but also served the purpose of comparing findings between qualitative and quantitative analysis. In attaining the research objectives, the combination of qualitative and quantitative research brought the respective strengths of the two methods together. The qualitative study was used both as a preliminary and complementary method to refine data and to crossvalidate results with the quantitative analyses. The principal method for data analysis was quantitative analysis and information used to evaluate results and check consistencies with the complementary method (Morgan 1998).

Qualitative research sets the stage for quantitative analyses through identifying substantiative phenomena that are significant as a research object which is the advantage of using mixed methods (Heilborn 1993). The need for unifying these two methods to refine scales for optimum outcome is also emphasized by measurement theoreticians (Narens 2002). Therefore, the mixed method approach for this research strengthened its acceptance by contributing to the scale development/modifications, data collection and result comparison. Researchers in the field of social science stress the importance of such methodology.

This research employed the SEM technique to test relationships between variables in the proposed model. This allowed the researcher to consider the psychometric notion of constructs and measurement errors to develop an econometric model (Fornell & Larcker 1981). Generally, SEM combines the process of regression (dependence of relationships) and factor analysis (representation of constructs through observed variables), which normally would have to be carried out separately under multiple-regression, factor analysis and other multi-variate analysis. Checking of relationships between independent and dependent variables simultaneously is a typical limitation of the above-mentioned separate analysis and is overcome by SEM. SEM facilitates robust findings through the use of each component-structural model (relationship among constructs) and measurement model (relationship between each construct and observed variables) (Martínez-Carrasco et al. 2012). In the current field, these findings are, therefore, superior to other studies that did not consider SEM as an analytical tool in their analysis of data. In addition, SEM entails transformation of a causal model (based on a theoretical justification) into an experimental model (based on EFA and CFA results) and then as a part of ensuring rigour proceeds with hypotheses testing (Martínez-Carrasco et al. 2012). The current research followed this recommendation and, thus, yields findings that are more adequate than those of other studies of its type.

8.2.3 Implications for policy and practice

It is imperative that findings of this research should be interpreted and communicated to managers to help their decision making in relation to marketing and management problems. This section discusses findings in terms of policy and practice which will aid marketers, managers and other relevant professionals to understand the psychology of Australian Gen Y in relation to formation of attitude towards brands, particularly involving social networking media. In addition, knowledge from this research can also be applied to other generational cohorts and to similar scenarios across other nations.

For managers, it is at their discretion as to how they would like to use this model. The model is flexible in the sense that information can be obtained from either any single variable or integrated information from the interaction of multiple variables to understand the problem at hand. Professionals related with this field may consider following policies and practices applying to the situation that they confront in their work settings.

Findings of this research and the resulting model will be of interest to brand marketers and marketing communication planners in Australia and other developed countries. This model will be practically significant to both experienced and aspiring brand marketers and marketing communication planners. Furthermore, marketers can address the issues of consumer socialization outcome from the angle of gender and age group differences. For example, e-WOM more significantly affects Gen Y females' development of attitude towards brand than Gen Y males. Therefore, businesses that emphasize their female clientele should consider this information to target their customers.

On the contrary, subjective norm significantly affect the development of attitude of Gen Y males more than Gen Y females. Moreover, interestingly, the older Gen Y age group is more affected by e-WOM and subjective norm in their development of attitudes towards brands than the younger Gen Y age group. One reason could be people lead carefree lives in their younger years. Over time people seek more information from their network and want to make responsible decisions as a sign of maturity and want to use their money wisely. Therefore, brand marketer could consider how to develop their positioning strategy among Gen Y from different gender and age group.

Further, market communication planners, social networking media strategists and brand marketers also can gain a clearer indication of the different ways that Gen Y are influenced to form attitudes towards brands through interactive OSNM, which might be fruitful to implement their ideas accordingly for their marketing strategies. Finally, the model developed in this research would be useful for the research and development wing of an organisation to assist with new products that may support the brand marketers.

Managers can take the necessary steps to highlight the prestige associated with the consumption of certain brands by having them promoted by people important to the target market. This will enable them to use subjective norm as an instrument to influence the development of positive attitudes towards brands. Marketers can also

measure the prestigious component outcome of consuming a brand and promote it accordingly. The expected prestigious outcome will aid consumers to develop a positive attitude towards brands.

Moreover, outcome of this research will be helpful for business practitioners and policy makers to learn how Gen Y is influenced to develop attitude towards brands. The model developed and tested as a part of this thesis, will encourage practitioners in how they structure any specific decisions. In addition to promoting changes to structuring the process, this new decision model includes flexibility in the decision process. In considering the new model, market practitioners will be able to add specific insights, qualified judgements, and intuition towards their target markets that are particularly crucial for brand strategists and online social networking media marketers.

Due to the invention of the Internet, globalization is turning the world market into a global village. Companies are trying to market their products/services in different countries using the advantages provided by Internet through online shopping. Because of the availability of this communication medium, the diffusion of innovation has become easier. Therefore, findings of this research are promising, indicating the process of developing attitude regarding brands despite their country of origin. The way of communication and availability of options played a role in making people communicate and make conversation regarding different brands in their online social networks. This means multinational companies considering similar backgrounds in different parts of the world may not have to worry about brand marketing associated with Gen Y. Managers can save time, money and effort in targeting Gen Y with a bigger market for their products and brands. Marketing expenses to some extent can be reduced by promoting brands using similar advertising themes and other media strategies. Moreover, targeting social networking media as a platform for advertising could also be considered for new brands.

Another implication for managers is that they should be careful in marketing brand message that have a close relevance to sensitive values. Open minded people tend to be more tolerant of different values, whereas diversified users of online social networks may show sensitivity and spread their negative opinion in a click on online social networking media and hence form negative perceptions about particular brand. That might affect other friends in a network to develop attitudes towards that particular brand. Marketers, therefore, should pay close attention to brand message in positioning and developing value propositions for their brands.

As a learning platform, academics and researchers who intend to use software for structural equation modelling can also use this research. To run structural equations for hypotheses testing, AMOS was used in this research and it involved the process of including and excluding variables until a satisfactory result was achieved. This trial and error method gives an opportunity to understand the relative weights of each variable and the contributions they make to the overall acceptance of a model. Professionals, academics and researchers in the relevant field can enhance their knowledge to efficiently operate the software to perform complex analyses in their research by understanding the procedure.

8.3 Limitations

In spite of many positives, the current research is not without its limitations. Before interpreting and applying information from the findings, one should consider all these limitations since factors like background, media and other product/service or participants' characteristics that are generally involved with a research activity can limit the generalizability and applicability of the findings. Therefore, it is of interest to the researcher and other concerned persons to clearly consider the limitations within which the research took place.

One important drawback of this research is that the study was conducted in Sydney only. A significant number of Gen Y live in Sydney metropolitan area but there are also seven other metropolitan cities. Despite their involvement with online social networking, these people were excluded from the sample to simplify the research. Inclusion of these people could have generated different findings, which might have led to different conclusions. By not including people from all the geographic locations of the country, the research may have built-in bias caused by the socioeconomic characteristics specific to Sydney. Furthermore, this research only studied developing attitudes towards brands through Gen Y's involvement in OSNM in a metropolitan area only. A large number of Gen Ys also live in outer metropolitan area and in the countryside. However, this research does not represent Gen Y from rural and regional areas. Accordingly, the findings of this research should be accompanied by similar research in other demographic areas as well other countries.

Furthermore, this research did not consider a large number of the populations who are migrants. A large portion of Gen Y are first and second generation Australians and have diverse cultural backgrounds. For example, a member of Gen Y who migrated from a conservative Japanese background may not have the same values and openness in the online environment. This research did not examine the affect of acculturation and consumer socialization of this migrant generation, which imply a need for further research.

Managers need to study the level of exposure of the target market to the online environment in general and also to a specific country for attitude towards different branded products. Because of different cultural backgrounds, evaluation of Gen Ys involvement in online social networking media may not be the same in a different country. This will help managers to understand the impact of the online social networking media involved. It is also equally important to observe country-specific consumer behaviour in relation to the need for branded products/services. Furthermore, it is of relevance to evaluate the quality and availability of different brands and brand messages, which can explain much about the potential demand for branded products.

From the methodological point of view, this research also suffers from a limitation. In the current literature, some research suggests that understanding consumer socialization outcomes through media involvement should be tested using an experimental design (e.g, pre test-post test control group design) (Bushman 2005). However, because of time and resource constraints, this research did not use such an experimental methodology.

Finally, the model in this research was based on findings from past studies in the field of Internet research. Variables were identified from different studies and integrated into a model to study their combined effect on the development of attitudes towards brands. However, there may be other important variables that influence development of attitude towards brands that were not included. The presence of those factors may have been able to explain more variations in attitude

development. In addition, data on which the conclusions were drawn are time specific. Because the environment and consumer behaviour changes, it might not be possible to utilize the research insights in future from contemporary findings.

8.4 Implications for future research

Based on the limitations of the current research, new avenues could be explored to discover more about the factors involved in the development of attitude towards brands in the online environment. The information would be useful for researchers designing new research plans using online media. Addressing issues that this research failed to resolve may result in significant improvements in research methodologies, which may contribute to more relevant information that would help potential users to understand the development of attitude in relation to different brands in general.

The scope of the future research should be broadened to include other online media apart from online social networking, which is the most contemporary vehicle in the electronic media context. This may serve as a reference point against which results of the current research can be evaluated. The effect of the identified variable on the attitude development of different brands might not work in the same fashion across other online Internet vehicles (e.g., electronic discussion boards, online journals and forums) categories. It is better to consider other vehicles which also have a significant role in the daily lives of Gen Y to cross-check results. For the sake of generalization, similar research needs to be conducted among other Internet vehicles to obtain a clearer understanding of attitude development towards brands. This will further enhance the knowledge to support findings with regard to the generalization of the theoretical framework across all situations.

Researchers should follow caution in sample selection. Representation of all relevant elements should be ensured, including all groups approximately equally, to validate findings. Based on the current context of the research, this means sample should include elements from all possible geographic areas where the research will be carried out. Also important to note in this research is that mainly urban-based consumers were included in the survey, which may have biased results because urban-based populations generally have greater exposure to branded products. It would be interesting to conduct a similar study on rural-based

consumers who are also interested in social networking. Including urban and rural based consumers should also be considered in the case of comparing attitudes towards generic or non-branded products and branded products, because non branded product characteristics and consumer profiles may lead to different conclusions.

As already noted the measurements of variables were adopted from previous internet research and adjusted for the purposes of the current study. Although implementation of these items was not completely new, it was the first time these instruments were applied to measure development of attitude towards brands through online social networking media involvement. Because differences may exist between different online media, further research is required to re-test such scales for possible refinement and future use for other online mediam studies and confirm their applicability in the consumer behaviour discipline.

Findings of this research have identified the factors that are considered in developing attitude towards brands through OSNM. Also, it has identified the observed variables that measure those factors. However, this research did not measure the relative weight and importance of each of those factors and variables. In reality, although each of those factors and associated variables are included in developing attitude towards brands through OSNM, it may well be the case that different consumer sociologists and market practitioners put different weighting on the factors and variables. While it was not an objective of this research to find out the relative importance of variables, if any, further research may be conducted to establish whether individual variables will need to assign specific numerical weights to each of the factors to indicate their relative importance in developing attitude towards brands through OSNM.

It was noted earlier that most research in consumer socialization by media has been carried out in developed countries. OSNM is an invention in the electronic media space – the Internet – in the developed countries. Still, the online medium in Australia is not as advanced as that of other developed countries, such as the US and UK. The findings of this research may contribute to the development of a new model, and guide data definition for future research in a similar country, such as New Zealand, as well as other developed and developing countries. Given the

rapid change in electronic media and socialization research, it is surprising that there has been no research on the development of an empirically tested model of developing attitude towards brands through OSNM. Currently, there is a significant gap in the area of consumer socialization through OSNM, particularly attitude (the outcome of consumer socialization) formation through OSNM in the developed countries let alone developing countries. Further research needs to be conducted to assess such implications.

8.5 Specific conclusions drawn from this research based on objectives and hypotheses

The following conclusions are drawn based on the specific research and objectives and hypotheses stated in Chapter 3.

- There is a positive influence of Gen Y's involvement in OSNM on the eWOM they receive.
- Informational influence plays a partial mediating role between Gen Y's involvement in OSNM and the e-WOM they receive through this involvement.
- Received e-WOM through OSNM friends has a positive affect on Gen Y's subjective norm.
- 4) There is a positive influence of e-WOM received by Gen Y through their involvement in OSNM on their development of attitudes towards brands.
- 5) There is a positive influence of Gen Y's subjective norm on their development of attitudes towards brands through OSNM friends.
- 6) There is a difference between male and female Gen Y's involvement in OSNM in Australia and its effect on their development of attitude towards brands.
- 7) There is a difference between different age group of Gen Y's involvement with OSNM in Australia and its effect on their development of attitude towards brands.

8.6 Conclusion

The first section of this chapter summarised information from all the chapters of this research. Next, the contribution of this research was discussed in the context of the research findings and then suggestions were made about how the obtained finding of this research could be applied to theory, policy and practice. Potential limitations associated with the study were also described. The limitations section was followed by a discussion of the implication for future research to assist future researchers where roadmaps and guidelines were provided.

This research identified and described the factors influencing the development of attitudes towards brands and how different social structural variables also influence the attitude development process of Gen Y in a developed country, Australia. Received e-WOM in online social media was observed to influence attitude development towards brands in the research which studied differences of that effect among different genders and age groups. Further, the role of subjective norm on developing attitudes towards brands was also observed. Finally, the effect of involvement in OSNM, eWOM, subjective norm and attitude towards brands was explored with the possible influence of informational influence in the OSNM involvement and received e-WOM relationship.

An empirical model was developed and tested to gain insights into the relationship between variables. Significant contributions were made because new information was added to the extant literature. As the research was the first of its type highlighting a structure of understanding developing attitude of Gen Y by OSNM involvement, it will assist future researchers in understanding the critical issues in relation to attitude formation towards brands through online social network friends. Further, the empirically tested model is a contribution because it is the first extensively and rigorously researched step towards understanding the role of OSNM as a consumer socialization agent of Gen Y in Australia. The model was built from theory and empirical research to present this process and provides a foundation for the further research. The specific results of this research which are similar to or different from or unique to the previous researchers are shown in Table 8.3.

Specific results of this research	Results similar to / different from / unique to the past research
There is a positive influence of Gen Y's involvement in OSNM on the eWOM they receive.	Similar to the past research. However, influence on Gen Y is unique to this research.
Informational influence plays a partial mediating role between Gen Y's involvement in OSNM and the e-WOM they receive through this involvement.	To test the mediating role of informational influence between Gen Y's involvement in OSNM and the e- WOM they receive through this involvement is unique to the past research.
Received e-WOM through OSNM friends has a positive affect on Gen Y's subjective norm.	Similar to the past research. However, influence on Gen Y is unique to this research.
There is a positive influence of e-WOM received by Gen Y through their involvement in OSNM on their development of attitudes towards brands.	Similar to the past research. However, influence on Gen Y through their involvement in OSNM is unique to this research.
There is a positive influence of Gen Y's subjective norm on their development of attitudes towards brands through OSNM friends.	This is unique to the past result as no research has been conducted regarding influence of Gen Y's subjective norm on their development of attitude towards brands through OSNM friends.
There is a difference between male and female Gen Y's involvement in OSNM in Australia and its effect on their development of attitude towards brands.	There is a difference between male and female of generation Y which is similar to the past research. However, difference between male and female Gen Y's involvement in OSNM in Australia and its effect on their development of attitude towards brands is unique to the past research.
There is a difference between different age group of Gen Y's involvement with OSNM in Australia and its effect on their development of attitude towards brands.	Difference between different age groups of Gen Y's involvement in OSNM in Australia and its effect on their development of attitude towards brands is unique to the past research.
Develop and test a model of Gen Y's attitudes towards brands through their OSNM friends.	This is unique in this research. No model of Gen Y's attitude towards brands through their OSNM friends has been developed and tested in the past research.

Table 8:3: Results similar to/different from/unique to the past research

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Ethics Approval

UWS HUMAN RESEARCH ETHICS COMMITTE

12 March 2012

Doctor Syed Rahman, School of Business

Dear Syed,

I wish to formally advise you that the Human Research Ethics Committee has approved your research proposal **H9464** "*Involvement of Gen Y in Online Social Networking Media: Role in Developing Attitude towards Brands*", until 30 June 2014 with the provision of a progress report annually and a final report on completion.

Please quote the project number and title as indicated above on all correspondence related to this project.

This protocol covers the following researchers:

Syed Rahman, Sabreena Amin, Laurel Jackson.

Yours sincerely

Marcham

Dr Anne Abraham Chair, UWS Human Research Ethics Committee

Record of Candidature

Locked Bag 1797 Penrith NSW 2751 Australia

Student Administration Postgraduate Research Unit

Ref: 16823512

15 January 2016

Co. Supervisor 2: Dr Laurel Richter Jackson

Mrs Sabreena Zoha Amin 33E DOUGLAS RD QUAKERS HILL NSW 2763

RECORD OF CANDIDATURE

8048 Doctor of Philosophy - Business

Org Unit: SCHOO	L OF BUSINESS	
Attendance Pattern:	PT Campo	us: PARRAMATTA CAMPUS
Thesis Topic: In De	volvement of Generatio eveloping Attitude Towa	n Y in Online Social Networking Media: Role in ards Brands.
Commenced: 10	January 2011	
Minimum Submissio	n Date: 9 January 2	2014
Maximum Submissio	on Date: 30 June 20	16
SUPERVISORY PAI	NEL	
Chair Supervisor: Dr Syed Hakimur Ra	ahman	Email: s.rahman@uws.edu.au Phone: 02 46203254

This information has been extracted from Student Records as at 15 January 2016. Inaccuracies should be brought to the attention of Student Administration - Postgraduate Research Unit.

Email: la.jackson@uws.edu.au Phone: (02) 9685 9197



E-mail: sa-research@uws.edu.au Phone: 02 - 47360665 Fax: 02 - 47360013

Questionnaire

Involvement of Gen Y in online social networking media: Role in developing attitude towards brands

<u>A Survey Questionnaire</u>

Your completion of this questionnaire will be greatly appreciated. All information will be treated in **strict confidence**.

Study Conducted By:

University of Western Sydney

SCHOOL OF MARKETING

On completion,

Please return it to the researcher

If you have any questions regarding this questionnaire or the study please contact: Sabreena Zoha Amin: (Phone) 04 1195 8352, email: <u>s.amin@uws.edu.au</u> School of Marketing, Locked Bag 1797 Penrith South DC NSW 1797, University of Western Sydney, Australia.

Any concerns about this research you have should be directed to : The Executive Officer, Ethics in Human Research Committee, University of Western Sydney, Rooms K.1.35 to K.1.53, First Floor, Building K, Second Avenue, Kingswood, NSW 2747, Australia, Facsimile: 61 2 47360905.

Your completion of this questionnaire will be taken to indicate your consent to participate in the study.

Study of developing attitude towards brands through involvement in Online Social Networking Media

Explanatory Notes:

Coverage

This study will cover Australians belonging to 18-29 years age group (Gen Y).

Who should answer the questionnaire?

Any Australian male or female, aged between 18-29 years, with an account in Social Networking Site(s).

The questions

The questions require your considered opinion. Please answer the questions on the basis of your experiences of online social networking, which result in the formation of attitude towards brands.

Some of the questions may appear similar, but your answer to each question will enable us to scientifically assess the responses and draw valid conclusions.

Confidentiality and use of data

All the data gathered though this survey will be held in the strictest confidence. The data gathered in this survey will be used in several reports, including a doctoral thesis. In all publications resulting from this survey only aggregated total figures will be published.

SECTION A

Ning

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Tagged

1. Do you fall in the 18-29	years age group?	
Yes 🗌 (please continu	e with the survey)	No 🗌 (please terminate)
2. Do you have an account	t in Social Networki	ng Sites?
Yes (please continu	ue with the survey)	No 🗌 (please terminate)
3. What type of sites most	tly you use?	
Facebook	myyearbo	ok
twitter	meetup	
MySpace	Badoo	
LinkedIn	bebo	

mylife

friendster

Multiply

- 4. Which of the following activities, if any, have you done in the past month on the online social media applications you use? *Check all that apply*.
 - □ Posted pictures (other than a profile picture)
 - □ Posted video/music
 - □ Posted links to other web sites (including links to videos)
 - □ Linked to a company, product, or service
 - □ Told people about music/movies/games/TV shows I like
 - □ Clicked a paid advertisement
 - □ Participated in a promotion or contest
 - □ Searched for information for buying particular brand purposes
 - □ Updated activities/posted thoughts
 - \Box Responded to posts of others
 - □ Started a group
 - \Box Included a podcast

5. How frequently do you typically check your online social media applications?

- \Box Logged in all of the time
- \Box Every few minutes

□ Monthly□ <Monthly

Other, Please Specify

- □ Hourly
- \Box 5-6 times daily
- \Box 3-4 times daily
- \Box 1-2 times daily
- \Box Few times per week
- \Box Few times per month

6. How many hours do you typically spend on your online social media applications?

- \Box < 1 hour
- \Box 1-2 hours
- \Box 2-3 hours
- \Box 4-5 hours
- \Box <5 hours

7. How long have you been using online social media applications?

- \Box A few weeks
- \Box 1-2 months
- \Box 3-4 months
- \Box 5-6 months
- \Box 7-12 months
- \Box 1-2 years
- \Box 3-4 years
- \Box 5 years or more

SECTION B

Q8. In the following section we would like to know about different aspects of your involvement in Online Social Networking Media (**OSNM**). On a scale of 1 to 7, where 1 is *strongly disagree* and 7 is *strongly agree*, to what extent do you agree or disagree with the following statements? (**Please select the number that best reflects your agreement and disagreement on the following statements**)

Strongly Disagree

Strongly Agree

1	2 3	4	5	6	7
	l				I

Statement	Strongly Disagree			
	Strongly agree			
I use OSNM to stay in touch with my family	1 2 3 4 5 6 7			
OSNM means a lot to me	1 2 3 4 5 6 7			
I think OSNM is essential	1 2 3 4 5 6 7			
I find using OSNM entertaining	1 2 3 4 5 6 7			
I think OSNM is involving	1 2 3 4 5 6 7			
OSNM can help me get along with people more	1 2 3 4 5 6 7			
easily in real life	1254507			
OSNM can help me escape loneliness	1 2 3 4 5 6 7			
I do customise the content and services in OSNM	1 2 3 4 5 6 7			
I have a compulsive need to know more about what	1234567			
their friends are putting on OSNM				
I like to engage in conversation about OSNM	1 2 3 4 5 6 7			
When I consider buying a new brand, I ask my	1 2 3 4 5 6 7			
friends on the OSNM for their advice				
I like to get my OSNM friends' opinions before I	1 2 3 4 5 6 7			
buy new brands				
I like to get only my close OSNM friends' opinions				
before I buy new brands (New scale from in-depth	1 2 3 4 5 6 7			
interview).				
I feel more comfortable choosing brand alternatives				
when I have got my OSNM friends' opinion on	1 2 3 4 5 6 7			
them				
Often I like to get information about new brands	1231567			
from my OSNM friends	1254507			
Often I want to gain further clarity on negative	1231567			
comments I receive from my OSNM friends	1234507			
I communicate frequently with my close friends on	1 2 3 4 5 6 7			
OSNM	1254507			
The friends I have on OSNM are important to me	1 2 3 4 5 6 7			
I feel close to my OSNM friends	1 2 3 4 5 6 7			
I use Online Social Networking Media (OSNM) to	1 2 3 4 5 6 7			

stay in touch with my friends							
I find most of my OSNM friends dependable	1	2	3	4	5	6	7
I think most of my OSNM friends are honest	1	2	3	4	5	6	7
I think most of my OSNM friends are reliable	1	2	3	4	5	6	7
I trust comments made by my OSNM friends	1	2	3	4	5	6	7
I have confidence in my OSNM friends	1	2	3	4	5	6	7
I can believe in my OSNM friends	1	2	3	4	5	6	7
I trust opinions of my close OSNM friends about a							
brand more than opinions on electronic discussion	1	2	3	4	5	6	7
board							
If I have little experience with a brand, I often ask	1	\mathbf{r}	2	4	5	6	7
my OSNM friends about the brand before buying	1	Ζ	3	4	3	0	1
I often consult my OSNM friends to help choose the	1	r	2	1	5	6	7
best alternative available from different brands	1	2	3	4	5	0	7
I frequently gather information from my OSNM	1	\mathbf{r}	3	1	5	6	7
friends about brands, before I buy	1	2	5	4	5	0	7
I rarely purchase any brand until I am sure my	1	2	3	1	5	6	7
OSNM friends approve of that (Info_Influ_4)	1	2	5	+	5	0	7
Most of my close OSNM friends think I should buy							
myself the brand they gave me information on or	1	2	3	4	5	6	7
recommended to me on OSNM							
Typically, I like to do what my OSNM friends	1	2	3	Δ	5	6	7
suggest that I do	1	2	5	т	5	0	7
It is important that my OSNM friends approve of	1	2	3	Δ	5	6	7
the brands I buy	1	2	5	-	5	0	7
I am very loyal to brands that my OSNM friends	1	2	3	Δ	5	6	7
buy	1	2	5	•	5	0	1
If I want to be like my OSNM friends, I always buy	1	2	3	4	5	6	7
the brands they buy	1	2	5	•	5	0	1
I work long hours to save so that I can afford the	1	2	3	4	5	6	7
brands my OSNM friends buy	1	2	5	•	5	0	1
I feel a sense of belonging by buying the same	1	2	3	4	5	6	7
brands that my OSNM friends buy	1	-	5	•	5	U	
My OSNM friends very much influence the choice		~					_
of my brands	1	2	3	4	5	6	7

SECTION C

Q9. In the following section, we would like to know about the influence of your Online Social Networking Media (OSNM) friends on your product brand choice. This may include **any** branded product which is advertised or discussed on OSNM (such as Facebook) that you buy or get information on.

On a scale of 1 to 7, where 1 is *strongly disagree* and 7 is *strongly agree*, to what extent do you agree or disagree to the following statements generally about any product brands you buy? (Please select the number that best reflects your agreement and disagreement on the following statements)

Strongly Disagree		Strongly Agree				
1 2 3 4	5	6 7				
I appreciate the brands my OSNM friends suggest me to buy	1 2	2 3 4 5 6 7				
I think the brands that my OSNM friends talk about are cool	1 2	2 3 4 5 6 7				
I find the brands that my OSNM friends like are good	1 2	2 3 4 5 6 7				
The brands that my OSNM friends like and suggest are practical	1 2	2 3 4 5 6 7				
The information that my OSNM friends provide on brands is effective	1 2	2 3 4 5 6 7				
If my OSNM friends find any brands appealing, I value that information	1 2	2 3 4 5 6 7				
If I see any favourable comments from my OSNM friends regarding any brands, I value that comment	1 2	2 3 4 5 6 7				
If my OSNM friends find any brands pleasant, I notice that brand	1 2	2 3 4 5 6 7				
My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page	1 2	2 3 4 5 6 7				
When I seek information about brands from my OSNM friends, it allows me not to go unnoticed	1 2	2 3 4 5 6 7				
When I talk about brands in OSNM, it allows me to get more respect	1 2	2 3 4 5 6 7				

SECTION D

For each of the following questions, please tick ($\sqrt{}$) the answers that apply to you from the options provided:

a.	In which of these age groups y 18-24 years	You belong to?		
b.	What is your gender?	Female		
c.	What is your current marital second second second second second second second widowed	tatus? Married Divorced In a de-facto re	lationship	
d.	What is the education level yo Primary Bachelor	u have completed? HSC Post Graduate	and above	
e.	Are you currently studying? Yes	No No		
f.	What is your current occupation	on?		
g.	In which of the following gra falls into? < 30,000 51,000-70,000 91,000-120,000 151,000 Plus	oups your total annu 30,000-50,000 71,000-90,000 121,000-150,000	ual household in) ,000	come
h.	In which in?	suburb	you	live

THANK YOU VERY MUCH FOR YOUR ASSISTANCE AND CO-OPERATION

Flyer for volunteers

Volunteers needed for in depth interview

If you are male or female

- a. Aged between 18-29 years
- b. A regular user of online social networking Site(s)
- c. Can speak and read English

----then you may wish to participate in a PhD research conducted by University of Western Sydney titled

"Involvement of Generation Y in Online Social Networking Media: Role in Developing Attitude towards Brands"

This research is the first of its kind done in Australia which will explore development of generation Y's attitude towards brands through their involvement in online social networking sites. Also, effect of Australian generation Y's involvement in online social networking media on the way electronic word of mouth is spread and the influence of tie strength, trust and informational influence plays in this regard will be studied.

This study is conducted by the School of Marketing and approved by the Human Ethics Committee at University of Western Sydney (Ref no: **H9464**).

You will be invited to participate in an in-depth interview held in Sydney which will take about 45 minutes and will be conducted by a trained researcher. Participation in this research is totally voluntary. Your privacy is our priority! So you do not have to provide your name, contact details or any personal information in the discussion as it will be audio recorded. You can withdraw your participation at any time during the discussion.

Should you need more information and/or to express your interest in participation, please contact Sabreena Zoha Amin on 0411958352 or email <u>16823512@student.uws.edu.au</u>. The date and time of the discussion will be negotiated once you have expressed your interest in participating.

Research protocol

University of Western Sydney



SCHOOL OF MARKETING

Dr. Syed H. Rahman Senior Lecturer

> Parramatta Campus Room: ED.G.52 Locked Bag 1797, Penrith NSW 2751, Australia Phone:61 2 9685 9162 Fax: 61 2 9685 9612 Email: s.rahman@uws.edu.au

PARTICIPANT INFORMATION STATEMENT

Research Project

Title: Involvement of Generation Y in Online Social Networking Media: Role in Developing Attitude towards Brands

(1) What is the study about?

This research aims to gain a better understanding of generation Y's attitude towards brands through their involvement in online social networking media/sites. The study will be conducted among Australian members of generation Y, both male and female, who are 18-29 years old.

(2) Who is carrying out the study?

This study is being conducted by Sabreena Zoha Amin and will form the basis for the degree of Doctor of Philosophy at University of Western Sydney under the supervision of Dr. Syed H. Rahman and Dr. Laurel Jackson.

(3) What does the study involve?

The study involves you participating in an in-depth interview to be facilitated by a trained researcher. The topics and questions discussed will be relevant to the research aims. You do not have to identify yourself by name. You can respond only to the questions that you want to. The discussion will be audio recorded for transcribing purposes only and will not identify any individual participant. These in depth interviews will be organised in Sydney. As your participation is voluntary, you will not be paid for this participation.

(4) How much time will the study take?

The in-depth interview may take up to maximum of 45 minutes.

(5) Can I withdraw from the study?

Being in this study is completely voluntary, you are not under any obligation to consent and – if you do consent – you can withdraw at any time without prejudice or penalty. If you withdraw from participation during the discussion, any audio information that you have provided during the discussion, till the point of withdrawal, cannot be separated and destroyed as your responses are not individually identifiable. Any other information you may have given up to that point will be destroyed.

(6) Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

(7) Will the study benefit me?

Your participation in this study may be beneficial for the entire Gen Y population of Sydney and in other similar city all around Australia.

(8) Can I tell other people about the study?

Yes.

(9) What if I require further information?

When you have read this information, Sabreena Zoha Amin will discuss it with you further and answer any questions you may have. If you do like to know more at any stage, please feel free to contact Sabreena Zoha Amin, PhD candidate on 0411 958 352 or email <u>s.amin@uws.edu.au</u> or Dr. Syed H. Rahman on 61 2 9685 9162 or email s.rahman@uws.edu.au

(10) What if I have a complaint or concern?

Any concerns about this research you have should be directed to: The Executive Officer, Ethics in Human Research Committee, University of Western Sydney, Rooms K.1.35 to K.1.53, First Floor, Building K, Second Avenue, Kingswood NSW 2747, Australia. Facsimile: 61 2 4736 0905.

This information sheet is for you to keep

Participant consent form

University of Western Sydney



SCHOOL OF MARKETING

Parramatta Campus Room: ED.G.52 Locked Bag 1797, Penrith NSW 2751, Australia Phone:61 2 9685 9162 Fax: 61 2 9685 9612 Email: <u>s.rahman@uws.edu.au</u>

PARTICIPANT CONSENT FORM

I.

_____, give consent to my participation

in the research project

Title: Involvement of Generation Y in Online Social Networking Media: Role in Developing Attitude towards Brands

In giving my consent I acknowledge that:

- 1. The procedures required for the project and time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.
- 2. I have read participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.
- 3. I understand that my involvement in this study is strictly confidential and no information about me will be used in any way that reveals my identity.
- 4. I understand that being in this study is completely voluntary I am not under any obligation to consent.
- 5. I consent to the audio recording of the interview.

6. I understand that I can withdraw from the study at any time if I do not wish to continue and any recorded information provided by me during the discussion, till the point of withdrawal, cannot be separated and destroyed as my responses are not individually identifiable. Any other information that I have given to the interviewer up to this point will be destroyed.

Signed:_____

First Name:_____

Surname:_____

Date:_____

In-depth interview discussion script

In-depth interview Script: Attitude towards brands through involvement in online social networking media

Introduction Key Components: • Thank you • Your name • Purpose • Confidentiality • Duration • How interview will be conducted • Opportunity for questions • Signature of consent	I want to the with me toda Today, I wo experiences r Social Netwo developing at This intervie will be tapin miss any of taking some possibly wri Because we'r so that we do All responses that your inte with research that any infor not identify y don't have to and you may Are there an explained?	 I want to thank you for taking the time to mee with me today. My name is Sabreena Zoha Amin Today, I would like to talk to you about you experiences relating to your involvement in Online Social Networking Media and the role it plays in developing attitude towards brands. This interview should take around 45 minutes. will be taping the session because I don't want to miss any of your comments. Although I will be taking some notes during the session, I can' possibly write fast enough to get it all down Because we're on tape, please be sure to speak up so that we don't miss your comments. All responses will be kept confidential. This mean that your interview responses will only be shared with research team members and we will ensure that any information we include in our report doe not identify you as the respondent. Remember, you don't want to and you may end the interview at any time. 		
Questions • No more than 15	open-ended	1.	How social networking site is important to you? Please explain.	
questions		2.	What are the features of social	
• Ask factual before o	pinion		networking sites you find most interesting?	
• Use probes as needed		3.	How do you use social networking sites in your daily life?	
		4.	Are there certain types of friends that you are more likely to seek opinions from social networking sites?	
		5.	How do you evaluate who is a	

	trustworthy source in social
	 6. How do you find social networking site a place for information search? How about information regarding products and brands?
	 The information you obtain from social networking site (if any), do you find them trustworthy?
	8. How do you find information about brands from your online social network friends?
	9. Provide a description of a specific instance in which you made a purchase based on word of mouth or information that was obtained from your friends in social networking sites.
	10. How do you evaluate the information about brands you get to know from your friends in online social network?
	11. How do you evaluate the opinions in online social networks of your friends who are important to you?
 Closing Key Components: Additional comments Next steps Thank you 	Is there anything more you would like to add? I'll be analyzing the information you and others gave me for my research purpose. I will be happy to answer any of your concerns in the meantime, if you have any. Thank you for your time.

The SEM output of the proposed model for this research



302

Computer output of the SEM analysis of the empirically tested main model



	E	stimate	
INFO_INFLU	<	INV_OSNM	.685
EWOM	<	INV_OSNM	.177
EWOM	<	INFO_INFLU	.860
SUB_NORM	<	EWOM	.896
ATT_BR	<	EWOM	.626
ATT_BR	<	SUB_NORM	.201
Q8_24	<	EWOM	.857
Q8_25	<	EWOM	.869
Q8_26	<	EWOM	.709
Q8_27	<	EWOM	.858
Q8_28	<	EWOM	.778
Q8_42	<	INFO_INFLU	.882
Q8_41	<	INFO_INFLU	.850
Q8_40	<	INFO_INFLU	.835
Q8_51	<	SUB_NORM	.857
Q8_50	<	SUB_NORM	.837
Q8_48	<	SUB_NORM	.834
Q8_47	<	SUB_NORM	.878
Q8_46	<	SUB_NORM	.837
fQ9_2	<	ATT_BR	.831
fQ9_3	<	ATT_BR	.841
fQ9_4	<	ATT_BR	.829
fQ9_7	<	ATT_BR	.803
fQ9_8	<	ATT_BR	.849
fQ9_12	<	ATT_BR	.849
fQ9_13	<	ATT_BR	.842
fQ9_14	<	ATT_BR	.845
fQ9_15	<	ATT_BR	.780
Q8_9	<	INV_OSNM	.773
Q8_16	<	INV_OSNM	.711
Q8_17	<	INV_OSNM	.765
Q8_19	<	INV_OSNM	.581
Q8_20	<	INV_OSNM	.707
Q8_21	<	INV_OSNM	.685

Standard regression weights (main model)

Multi-Group analysis output

Goodness-of-fits estimates of gender differences

Fit Measures	Male	Female
Chi-Square	554.642	610.004
Degree of Freedom	344	344
Р	.000	.000
Normed Chi-square (CMIN/df)	1.612	1.773
Root mean square of error of estimation (RMSEA)	0.062	0.07
Goodness of fit index (GFI)	0.796	0.794
Adjusted of goodness-of-fit index (AGFI)	0.76	0.757
Normed fit index (NFI)	0.862	0.862
Tucker-Lewis Index (TLI)	0.936	0.928
Comparative fit index (CFI)	0.942	0.934

Multi-group analysis of gender differences (Standard estimates)

			Standard estimates	
			Male	Female
EWOM	<	INV_OSNM	.207	.163
INFO_INFLU	<	INV_OSNM	.714	.688
EWOM	<	INFO_INFLU	.828	.874
SUB_NORM	<	E-WOM	.913	.877
ATT_BR	<	E-WOM	.490	.693
ATT_BR	<	SUB_NORM	.346	.135

Goodness-of-fits estimates of different age groups

Fit measures	Age group (18-24)	Age group (25-29)
Chi-Square	600.511	627.33
Degree of Freedom	344	344
Р	0	0
Normed Chi-square (CMIN/df)	1.746	1.824
Root mean square of error of estimation (RMSEA)	0.069	0.072
Goodness of fit index (GFI)	0.791	0.785
Adjusted of goodness-of-fit index (AGFI)	0.754	0.746
Normed fit index (NFI)	0.835	0.871
Tucker-Lewis Index (TLI)	0.913	0.931
Comparative fit index (CFI)	0.921	0.937

			Standard Estimate	
			Age Group 18-24	Age Group 25-29
EWOM	<	INV_OSNM	0.154	0.203
INFO_INFLU	<	INV_OSNM	0.651	0.702
EWOM	<	INFO_INFL U	0.885	0.834
SUB_NORM	<	E-WOM	0.881	0.906
ATT_BR	<	E-WOM	0.601	0.633
ATT_BR	<	SUB_NOR M	0.195	0.214

Multi-group analysis of age group differences (Standard estimates)

List of constructs and variables

Constructs	Variables
Online Social	Gen Y use OSNM to stay in touch with their family
Networking	OSNM means a lot to Gen Y
Media	Gen Y think OSNM is essential
	Gen Y find using OSNM entertaining
	Gen Y think OSNM is involving
	OSNM can help Gen Y get along with people more easily in real life
	OSNM can help Gen Y escape loneliness
	Gen Y do customise the content and services in OSNM
	Gen Y has a compulsive need to know more about what their friends are putting on OSNM
	Gen Y like to engage in conversation about OSNM
Electronic Word of Mouth	When I consider buying a new brand, I ask my friends on the OSNM for their advice
	I like to get my OSNM friends' opinions before I buy new brands
	I like to get only my close OSNM friends' opinions before I buy new brands (New scale from in-depth interview).
	I feel more comfortable choosing brand alternatives when I have got my OSNM friends' opinion on them
	Often I like to get information about new brands from my OSNM friends
	Often I want to gain further clarity on negative comments I receive from my OSNM friends
Tie Strength	I communicate frequently with my close friends on OSNM
	The friends I have on OSNM are important to me
	I feel close to my OSNM friends
	I use Online Social Networking Media (OSNM) to stay in touch with my friends
Trust	I find most of my OSNM friends dependable
	I think most of my OSNM friends are honest
	I think most of my OSNM friends are reliable
	I trust comments made by my OSNM friends
	I have confidence in my OSNM friends
	I can believe in my OSNM friends
	I trust opinions of my close OSNM friends about a brand more than opinions on electronic discussion board
Informational Influence	If I have little experience with a brand, I often ask my OSNM friends about the brand before buying
	I often consult my OSNM friends to help choose the best alternative

Constructs	Variables
	available from different brands
	I frequently gather information from my OSNM friends about brands, before I buy
	I rarely purchase any brand until I am sure my OSNM friends approve of that (Info_Influ_4)
Subjective Norm	Most of my close OSNM friends think I should buy myself the brand they gave me information on or recommended to me on OSNM
	Typically, I like to do what my OSNM friends suggest that I do
	It is important that my OSNM friends approve of the brands I buy
	I am very loyal to brands that my OSNM friends buy
	If I want to be like my OSNM friends, I always buy the brands they buy
	I work long hours to save so that I can afford the brands my OSNM friends buy
	I feel a sense of belonging by buying the same brands that my OSNM friends buy
	My OSNM friends very much influence the choice of my brands
Attitude towards	I appreciate the brands my OSNM friends suggest me to buy
Brands	I think the brands that my OSNM friends talk about are cool
	I find the brands that my OSNM friends like are good
	The brands that my OSNM friends like and suggest are practical
	The information that my OSNM friends provide on brands is effective
	If my OSNM friends find any brands appealing, I value that information
	If I see any favourable comments from my OSNM friends regarding any brands, I value that comment
	If my OSNM friends find any brands pleasant, I notice that brand
	My curiosity for a brand increases if I see any of my close OSNM friends has clicked the 'like' button of the brand's official web page
	When I seek information about brands from my OSNM friends, it allows me not to go unnoticed
	When I talk about brands in OSNM, it allows me to get more respect