University of Ghana http://ugspace.ug.edu.gh

**UNIVERSITY OF GHANA**

# SOCIAL MEDIA SELF CONTROL FAILURE AMONGST AFRICAN COLLEGE STUDENTS AND THEIR ONLINE PURCHASING BEHAVIOUR

**BY**

**NII NOOKWEI TACKIE**

**(10638043)**

**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF AN MPHIL MARKETING DEGREE**

**JUNE 2019**

University of Ghana http://ugspace.ug.edu.gh

# DECLARATION

I do at this moment declare that this work is the result of my research and has not been presented by anyone for any academic award in this or any other university. All references used in my work have been fully acknowledged.

I do bear sole responsibility for any shortcomings.

……. ……

NII NOOKWEI TACKIE DATE

(10638043)

University of Ghana http://ugspace.ug.edu.gh

# CERTIFICATION

I hereby certify that this Long essay was supervised in accordance with procedures laid down by the University

…… ……...

DR. E.Y. TWENEBOAH-KODUAH DATE

(SUPERVISOR)

…… ……...

DR. T. ANNING-DORSON DATE

(SUPERVISOR)

University of Ghana http://ugspace.ug.edu.gh

# DEDICATION

This work is dedicated to God, my family, and friends.

Thanks for the support through this exciting period of my life.

University of Ghana http://ugspace.ug.edu.gh

# ACKNOWLEDGEMENT

I will like to show my extreme appreciation to Dr E.Y. Tweneboah-Koduah and Dr T. Anning-Dorson for the dedication and direction they delivered during the supervision of this work. I am forever thankful.

I will also like to extend this appreciation to Dr R. Odoom, Baah, Philip, Ishmael, Melissa, Daniel, Freda, and Linus for their time and support during the writing of this manuscript, especially during my analysis. God bless you guys

To my colleagues, Vida, Bright, Nii Ayi, Jibril, Gidard, Aaron, Francis, Endonna and Bismark, it's been an exciting ride lets change the world.

Finally, my appreciation goes to the entire teaching and administrative body of the Department of Marketing.

University of Ghana http://ugspace.ug.edu.gh

# ABSTRACT

The purpose of this study was to examine the effect of social media self-control failure on the online purchasing behaviour of college students. The role of time spent in this relationship was also addressed. The study was designed to explain the cause and effect relationship between social media self-control failure and the constituents of online purchasing behaviour using an analytical research purpose, namely, attitude towards online purchasing, compulsive buying, conspicuous consumption and willingness to buy. Four research hypotheses were developed to understand the relationship.

The study employed the use of questionnaires in collecting data relevant to the study. Five hundred and fifty questionnaires were distributed amongst a student sample across three Ghanaian universities (University of Ghana, University of Education and Wisconsin International University College) within thirty days. Out of the distributed questionnaires Five hundred and twenty-six were deemed usable for data analysis. A PLS-SEM approach was used to test the developed hypotheses. The findings of the study revealed that once users experienced social media self-control failure, their online purchasing behaviour was likely influenced by it. The role of time in this relationship was found to be insignificant, and as such, regardless of the time spent on social media the moment self-control failure is experienced, there will be effects on an individual's behaviour. Group differences generated insights which showed that individuals would reach a point of realisation when social media self-control failure lures them into the engagement of problematic behaviour and that point presents opportunities and challenges which today's marketer must address to benefit from social media use in their operations continuously.

University of Ghana http://ugspace.ug.edu.gh

# TABLE OF CONTENTS

**DECLARATION** ..... i

**CERTIFICATION** ..... ii

**DEDICATION** ..... iii

**ACKNOWLEDGEMENT** ..... iv

**ABSTRACT** ..... v

**TABLE OF CONTENTS** ..... vi

**LIST OF TABLES** ..... xii

**LIST OF FIGURES** ..... xiii

**LIST OF ABBREVIATIONS** ..... xiv

**CHAPTER ONE** ..... 1

**INTRODUCTION** ..... 1

1.0. Background to the thesis ..... 1

1.1. Social media and behaviour ..... 2

1.2. Problem Statement ..... 4

1.3. Research Purpose ..... 9

1.4. Research Objectives ..... 9

1.5. Research Questions ..... 10

1.6. Significance of The Study ..... 10

University of Ghana http://ugspace.ug.edu.gh

1.7. Chapter Outline ..... 11

**CHAPTER TWO ..... 13**

**CONTEXT OF THE STUDY ..... 13**

2.0. Introduction ..... 13

2.1. The Internet and Social Media in Africa ..... 13

2.2. Social Media Use Demography ..... 14

2.3. Online Commerce and Social Media ..... 16

**CHAPTER THREE ..... 18**

**LITERATURE REVIEW ..... 18**

3.0. Introduction ..... 18

3.1. Social Media: An Evolutionary Revolution ..... 18

3.2. Social Media Self Control Failure (SMSCF) ..... 20

3.3. Online Purchasing Behaviour ..... 25

3.3.1. Attitude Towards Online Purchasing ..... 29

3.3.2. Compulsive Buying ..... 30

3.3.3. Conspicuous Consumption ..... 32

3.3.4. Willingness to Buy ..... 34

3.3.5. Time Spent and Social Media ..... 35

3.4. Conceptual Framework & Hypotheses ..... 37

3.4.1. SMSCF and Online Purchasing Behaviour ..... 39

University of Ghana http://ugspace.ug.edu.gh

3.4.2. High & Low SMSCF and Online Purchasing Behaviour. ..... 42

3.4.3. Time Spent on Social Media, SMSCF and Online Purchasing Behaviour ..... 43

3.4.4. SMSCF Group Differences, Time Spent on Social Media and Online Purchasing Behaviour ..... 44

**CHAPTER FOUR ..... 46**

**RESEARCH DESIGN & METHODOLOGY ..... 46**

4.0. Introduction ..... 46

4.1. Research Philosophy ..... 47

4.1.1. Positivism ..... 47

4.1.2. Realism ..... 48

4.1.3. Interpretivism ..... 49

4.1.4. Pragmatism ..... 49

4.2. Research Approach ..... 52

4.2.1. Deductive Approach ..... 52

4.2.2. Inductive Approach ..... 53

4.3. Research Purpose ..... 55

4.3.1. Exploratory Research Purpose ..... 55

4.3.2. Descriptive Research Purpose ..... 56

4.3.3. Explanatory Research Purpose ..... 56

4.4. Research Method Choice ..... 57

University of Ghana http://ugspace.ug.edu.gh

4.5. Research Strategy ..... 58

4.5.1. Experiments ..... 59

4.5.2. Survey ..... 59

4.5.3. Case study ..... 59

4.5.4. Grounded theory ..... 60

4.5.5. Ethnography ..... 60

4.5.6. Action research ..... 60

4.5.7. Archival research ..... 61

4.6. Time Horizons ..... 62

4.7. Research Population ..... 62

4.8. Research Sample ..... 63

4.9. Data Collection Sources ..... 65

4.10. Questionnaire Development ..... 66

4.11. Reliability and Validity ..... 68

4.12. Data Analysis Techniques ..... 70

4.13. Ethical Considerations ..... 71

**CHAPTER FIVE ..... 73**

**DATA ANALYSIS AND DISCUSSION OF RESULTS ..... 73**

5.0. Introduction ..... 73

5.1. Data Organisation and Process ..... 73

University of Ghana http://ugspace.ug.edu.gh

5.2. Assessment of Normality & Descriptive Statistics ..... 74

5.3. Assessment of Measurement Model ..... 78

5.4. Evaluation of The Structural Model ..... 82

5.4.1. Collinearity Issues ..... 83

5.4.2. Relationship Significance & Relevance of The Model ..... 83

5.4.3. Coefficient of Determination ($\boldsymbol{R2}$ Value) ..... 85

5.4.4. Effect Size ($\boldsymbol{f2}$) ..... 86

5.4.5. Predictive Relevance of The Model ($\boldsymbol{Q2}$) ..... 87

5.5. Hypothesis Testing ..... 88

5.6. Moderator Analysis ..... 89

5.6.1. Multigroup Analysis ..... 92

5.6.2. Group Direct Effects and Moderation ..... 93

5.7. Discussion of Findings ..... 97

5.7.1. SMSCF influences online purchasing behaviour. ..... 97

5.7.2. Time moderates the relationship between SMSCF and online purchasing behaviour 99

5.7.3. High SMSCF and Low SMSCF have an effect on online purchasing behaviour against the amount of time spent on social media platforms ..... 101

**CHAPTER SIX ..... 103**

**SUMMARY, RECOMMENDATIONS & CONCLUSION ..... 103**

University of Ghana http://ugspace.ug.edu.gh

6.0. Study Summary ..... 103

6.1. Recommendations ..... 104

6.1.1. Implications for Practice and Policy ..... 104

6.1.2. Implications to Theory and Literature ..... 105

6.2. Conclusion ..... 106

6.3. Limitations and Future Research ..... 106

**REFERENCES ..... 107**

**APPENDIX - QUESTIONNAIRE ..... 138**

University of Ghana http://ugspace.ug.edu.gh

# LIST OF TABLES

Table 4. 1: Summary of research philosophies (Source: Saunders et al., 2009)..... 51

Table 4. 2: Summary of Research Approaches..... 54

Table 4. 3: Questionnaire scales and measurement ..... 67

Table 5. 1: Descriptive Analysis of Measurement Statements ..... 75

Table 5. 2: Measurement model..... 79

Table 5. 3: HTMT Ratio Table ..... 80

Table 5. 4: Confidence Interval ..... 81

Table 5. 5: Measurement Model Summary..... 82

Table 5. 6: Model Collinearity Assessment..... 83

Table 5. 7: Model relevance and Significance..... 84

Table 5. 8: Coefficient of Determination..... 86

Table 5. 9: Effect Size ($\boldsymbol{f2}$) ..... 87

Table 5. 10: Model Predictive Relevance..... 88

Table 5. 11: Hypothesis one (H1) – Direct Relationships ..... 89

Table 5. 12: MICOM Summary of results..... 91

Table 5. 13: Moderation (Hypothesis 3)..... 93

Table 5. 14: Group Effects (Hypothesis 2) ..... 94

Table 5. 15: Moderation (Hypothesis 4)..... 95

University of Ghana http://ugspace.ug.edu.gh

# LIST OF FIGURES

Figure 3. 1: Conceptual Framework of the Study ..... 39

Figure 4. 1 "The Research Onion" (Sauders et al., 2009) ..... 46

Figure 5. 1: Future shopping intention ..... 77

Figure 5. 2: Structural Model showing path significance ..... 85

University of Ghana http://ugspace.ug.edu.gh

# LIST OF ABBREVIATIONS

SMSCF – Social Media Self Control Failure

ATOB – Attitude towards Online Buying

MCBS – Modified Compulsive Buying Scale

CONSP – Conspicuous Consumption

PLS-SEM – Partial Least Squares Structural Equation Modelling

University of Ghana http://ugspace.ug.edu.gh

# CHAPTER ONE

# INTRODUCTION

## 1.0. Background to the thesis

The internet or 'information superhighway' as it is also known has triggered the arrival of a fast-paced technological boom in this era. From communication, information access, entertainment delivery through to the conduction of transactions, the 'Internet' is currently an essential aspect of daily life, becoming a necessary facet of work and play (Ak, Koruklu, & Yılmaz, 2013; Murray, Maras, & Goldfield, 2016). From its inception in 1995, four billion people now have access to the Internet. Global Internet penetration rates have grown by a 55.1% average with Europe and North America, holding the highest penetration rates of 85.2% and 95% respectively (Miniwatts Marketing Group, 2018a). The advent of the internet is changing lives, business environment, governance, consumption and relationships. The growing increase in penetration rates only means the effect is most likely to get even stronger.

One major area the internet has shaped is how social interactions are undertaken via Web 2.0 technology. This interactive nature of the second incarnation of the web has powered internet growth and has also facilitated the change in social interactions, which has ultimately influenced consumption patterns of products and services the world over. The most significant byproduct of the development of Web 2.0 and the internet is social media. Citing Kaplan & Haenlein (2010), the concept of social media in its essence, encompasses mobile and computer applications powered by the internet and Web 2.0 technology, which enable the creation and exchange of user-generated content. Current statistics place social media users at more than 3.2 billion users (Statista Inc.,

University of Ghana http://ugspace.ug.edu.gh

2018b) with Facebook – the world's most popular social media platform- having a user base currently standing at 2.2 billion users worldwide. It is followed closely by YouTube, which has 2 billion users, then WhatsApp which has 1.5 billion users, Instagram with 1 billion users, and Twitter with 336 million users (Statista, 2017a, 2017b, 2018). Estimates currently show that 74% of adults who use the Internet are users of social media. Out of this figure, 89% of these users are between the ages of 18 and 29. In 2017, global statistics showed that teenagers and young adults spend on average 188.2 minutes on social media daily.

The African continent has not been left out of this development with current statistics and figures showing that the continent has become privy to the developmental and socio-economic benefits associated with the use and adoption of Internet-based technology. This development is seen in the sudden surge of Internet penetration rates on the continent from a 28.3% average in March 2017 jumping to 35.2% at the end of the same year (Miniwatts Marketing Group, 2018a). Concerning social media use, young adult African users have been identified as a user base which spends a lot of time of such platforms (194 mins/day) second only to Latin users of the same demographic (232 mins/day) (GlobalWebIndex, 2017).

These figures and statistics seem to show that today's consumers are living online. It is therefore imperative for academics and practitioners to understand and undertake social media research, taking into account its intricacies and the associated developments of this evolving technology.

### 1.1. Social media and behaviour

Social media use is currently the modern man's most recognised form of "social grooming"(Kim & Chock, 2015). It has transformed how individuals connect and maintain their relationships. The concept of social media revolves around the creation of opportunities for users to share their

University of Ghana http://ugspace.ug.edu.gh

thoughts, opinions and perceptions on a personal 'wall' which is usually publicly available to all to see. Naturally, as opportunities are being created for people to get their thoughts and opinions on these social 'walls', it is unavoidable that social media will begin to affect how, what, when and where consumers will buy and consume.

Social media is used for a myriad of things by consumers in different environments and disciplines such as finance, engineering, health, information systems, public administration, psychology and most especially marketing. Research and practice have identified a wide range of useful and beneficial purposes of social media such as government transparency, public sector openness, political communication, entertainment and music etc. (Bertot, Jaeger, & Grimes, 2010; Crosby, McKenzie, & Lenten, 2018; Hong, 2013; Picazo-Vela, Gutiérrez-Martínez, & Luna-Reyes, 2012).

Social media more so it's networking capabilities have continually shown its ability to influence behaviour in one way or the other (Christakis & Fowler, 2007). It has also been used to address harmful conduct and transform perceptions about such actions, for example, female equality, racism, social class and power. Undesirable behaviour such as trolling (writing malevolent comments intended to leave the targeted reader in a distraught state), negative 'virality' (where content posted goes viral and receives negative perceptions and reactions regardless of the opinions or intentions of the content originator) and online crazes (the adoption of negative and sometime dangerous social trends and fads) have been reported as behaviours and actions formed and adopted through social media use (BBC, 2016). Wang, Lee, & Hua (2015) study seems to advocate that excessive use of social media is likely to lead to negative habit-forming behaviours which can impact the way an individual interacts with the world around them.

According to Kasteler (2010), even though we mostly believe that we are in control of our daily lives, our perception of the world is greatly influenced by our social environment and the people

University of Ghana http://ugspace.ug.edu.gh

in it. The advent of social media makes it even easier to spread social contagions at higher speeds and over vast distances. The power of social media on human behaviour cannot, therefore, be understated and must be addressed to take advantage of the opportunities it presents as well as properly mitigate the potential threats. It is therefore imperative, due to the growing number of participants in this interconnected nexus coupled with the numerical statistics relating to average time spent on these platforms daily, to address the impact and effect of social media on consumer-related behaviour. Even more so amongst Africans who have a burgeoning and youthful population (63% of the Africans are below the age of 25 (US Census Bureau, 2013)). From a marketing perspective, understanding the power of social media on consumer behaviour provides brands with an opportunity to develop the necessary insights to create the right perceptions which will drive overall firm growth, profitability and sustainability.

## 1.2. Problem Statement

Today's consumers are virtually living online, from communication to the convenience of purchasing goods and services; a lot is being done online, primarily through social media. Companies have acknowledged the growing influence and impact of social media on their sales and pivoting some of them into the electronic commerce space (The Nielsen Company, 2018).

Social media is reportedly composed of 'Baby Boomers' (48.2%), 'Gen X' (77.5%) and 'Millennials' who have been identified as the most extensive base of social media users (90.4%) (eMarketer, 2018). Research has shown that this new phenomenon (social media) is a vital component in shaping the thoughts of consumers about products and services (Miller & Lammas, 2010). The higher likelihood of consumers making purchases via online mediums has been attributed to their social media use (Casey, 2016). A study by Miller & Lammas (2010) revealed that 70% of customers gather information about goods and services via social media. Most online

University of Ghana http://ugspace.ug.edu.gh

shoppers have indicated that they visit retail websites through social media platforms and that website visit, in turn, affects consumer's purchase intention (Chen, Fay, & Wang, 2011). Olenski (2012) reinforces this perspective by confirming in a study that, consumers believe that their purchasing choices were influenced by the social media posts of their friends in their networks as well as firms. Research has further shown that at least 84% of millennials report that content, whether direct or through a network share, generated by strangers, has some effect on their purchasing intentions (Gartner, 2016). The above statements seem to allude to the relative importance of social media to the 21st-century customer's purchase intentions and shopping behaviour.

Currently one of the most used channels in the marketing field, social media is an essential constituent in the establishment of strategic advantages through the various touchpoints and experiences delivered to customers on their path to purchase. Whilst earlier studies have addressed the numerous benefits tied to social media use, marketing research has made further calls for investigations situated in social media use and consumer behaviour due to its growing impact in the creation of brand perceptions, influencing behaviour and disruption of set business principles and structure (Cooke & Buckley, 2008; Danneels, 2004; Hutter, Hautz, Dennhardt, & Füller, 2013; Ngai, Tao, & Moon, 2015).

Identified by its growing accessibility and easy use, researchers have noted social media as a source of desires which are challenging to resist (Du, van Koningsbruggen, & Kerkhof, 2018; Lingling, Xiongfei, Zhiying, & Junkai, 2018). These desires usually come into conflict with the planned goals of individuals, which sets them up in situations where they are likely to lose self-control. Self-control is an essential element in determining consumer behaviour, and as such when social media users experience self-control failure, it is bound to have an impact on their behaviour such

University of Ghana http://ugspace.ug.edu.gh

as their online purchasing behaviour (Baumeister, 2002). Ioannidis et al.(2018) confirms this analogy by stating that online purchasing behaviour is one of the practices which can be impaired by the use of Internet-powered technology (social media). Users of social media are therefore susceptible to lose control of themselves when the 'goals versus desires' situations present themselves when they are making their pre, during and post purchasing decisions. Even though this failure can probably lead to problem behaviours such as compulsive buying and also negatively impact an individual's propensity to use the medium for future purchasing activities, studies positioned on the concept of Social Media Self Control Failure (SMSCF) have been relatively scanty with most authors concentrating on the rather extreme concepts of social media addiction and social media disorder - along with its associated impact on behaviour (Baumeister, 2002; Murray et al., 2016; Pahlevan Sharif & Yeoh, 2018; Spada, 2014; Suissa, 2015; Thatcher & Goolam, 2005; Van Den Eijnden, Lemmens, & Valkenburg, 2016). SMSCF is classified as the rather routine end of the social media disorder continuum, which occurs when social media users deviate from their intended purpose of using social media during a particular period. This deviation is borne from satisfaction that is experienced in undertaking the alternate activity on social media. With today's marketers using social media to push content and purchasing solutions having little to no understanding of self-control failure in the context of social media usage can impact their future relationship with customers. Calls have been made by scholars to identify the impact of SMSCF on consumer behaviour more so ones centred on purchasing impulses (Baumeister, 2002; Du et al., 2018; Hofmann, Baumeister, Förster, & Vohs, 2012; Hofmann, Vohs, & Baumeister, 2012). The idea is that such empirical investigations will corroborate early studies and help bring complementarity to the existing studies as well as help make definite conclusions on the nexus between SMSCF and online purchasing behaviour. Proper alignment of studies across both

University of Ghana http://ugspace.ug.edu.gh

frontiers will help managers and marketers serve their customers better while achieving company sustainability, profitability and customer delight. It is in this light that the current research finds the attention it deserves and the strategic contribution it merits.

Although social media is currently one of the most productive instruments used by most businesses in their marketing activities, there have been growing calls for studies situated in the excessive social media use domain more precisely its effect on individuals and their activities (Ioannidis et al., 2018; van den Eijnden, Lemmens, & Valkenburg, 2016). This study defines excessive social media use as "the degree to which an individual feels that she or he spends too much time and energy seeking information, communicating and socialising on social media" (Lingling et al., 2018). Excessive social media use relative to the time spent on social media has been linked to negative behavioural outcomes such as eating disorders, productivity issues, low academic output etc. (Cao, Masood, Luqman, & Ali, 2018; Lingling et al., 2018; Murray et al., 2016). Literature, in the marketing discipline about social media usage, has revealed that excessive usage in the concept of time spent on such platforms had a positive relationship with compulsive buying in young adults (Pahlevan Sharif & Yeoh, 2018). According to Kittinger, Correia, & Irons (2012), extensive time spent on these platforms (social media) may be a viable risk element for the development of problematic internet technology based disorders. The literature, more so, seems to allude that when users spend a lot of time on social media, they are bound to experience self-control failure, which could lead to the development of problematic buying behaviours which could affect their overall profitability as customers. However, based on literary investigation, there has been relatively no study addressing this role of time spent in the concept of self-control failure amongst social media users. Most studies discussing the idea of time spent have been situated in the psychological addiction, dependence and disorder literature with sheer neglect within the

University of Ghana http://ugspace.ug.edu.gh

marketing discipline. Such an inattention is worrying since contemporary marketers are continuously vying for the attention of customers on social media. Against the growing calls by research and practice of the addictive prowess of social media, understanding the impact of time spent in the relationship between social media use, self-control failure and online purchasing behaviour will empower marketers with the requisite knowledge to adapt and adequately position their social media marketing activities to draw on its benefits continuously.

Since SMSCF has been identified as the mundane end of the growing concept of the problematic social media disorder continuum, social media users will probably experience SMSCF on a scale of different intensity, with some individuals experiencing a comparatively lower or higher level of this intensity. In their study, Du et al., (2018) state that users who experienced a relatively higher SMSCF were prone to giving in to the temptation to use social media. This same group is also subject to spend a lot of time on social media as well. However, based on the researcher's investigation, there has been a relatively low empirical assessment to verify the effects of this level of intensity on the behaviour of such users. Except for Du et al., (2018) who identified this (SMSCF) as the first step towards the adoption of problematic social media disorders, most studies have concentrated on the overall concepts of disorders and addiction within the internet and social media use domain. More so, its relationship with consumer behaviour, such as online purchasing behaviour, has not yet been adequately established in the literature. About their purchasing decisions, this difference could likely affect how individuals buy their products and services via the medium and as such, enlighten marketers on how her consumer base use and interact with social media. An investigation into this phenomenon is also likely to deliver key marketing intuitions into the effects of their activities on their long-term relationship with customers. This current study will also attempt to look at the effect of these differences, more so in the presence of

University of Ghana http://ugspace.ug.edu.gh

time, which might exist amongst users who experience SMSCF and their online purchasing behaviour (Du et al., 2018).

Studies focusing on social media usage and its effect on behaviour are gradually growing. Sadly, even with the relatively large amount of time spent by young Africans on social media platforms, there have been relatively low studies done in the African context. Current studies have focused mainly on North America, Europe, Australia and Asia regions (Hu, Gu, Liu, & Huang, 2017). Research calls have also been made to understand how millennials spend their time online; most notably the amount of time they spend online and how that time is spent on social media (Scott, Bay-Cheng, Prince, Nochajski, & Collins, 2017) This study will seek to close this contextual gap and address these prevailing issues.

## 1.3. Research Purpose

The purpose of this study is to provide empirical evidence to assess the effect of SMSCF on the online purchasing behaviour of African college students, and whether this relationship is influenced by the time they spend on social media.

## 1.4. Research Objectives

In order to achieve the stated purpose of this study the underlisted research objectives will be addressed:

1. To evaluate the effect of SMSCF on online purchasing behaviour.
2. To ascertain the influence of time spent on social media on the relationship between SMSCF and online purchasing behaviour.
3. To evaluate the effect of High SMSCF and Low SMSCF on online purchasing behaviour against the amount of time spent on social media platforms

University of Ghana http://ugspace.ug.edu.gh

## 1.5. Research Questions

Based on the objectives listed above, the study will attempt to address the following research questions:

1. How does SMSCF impact online purchasing behaviour?
2. How does time influence the relationship between SMSCF and online purchasing behaviour?
3. Does High SMSCF or Low SMSCF have an effect on online purchasing behaviour against the amount of time spent on social media platforms?

## 1.6. Significance of The Study

This study is expected to be beneficial along three main branches, namely research, practice and policy. From a research perspective, this study will seek to make a case for the study of SMSCF due to the present importance of social media in the marketing space. It will further bridge the lack of literature in the marketing discipline about SMSCF and complement to the growing wealth of research in the area of social media use and online purchasing behaviour. Finally, this study will attempt to provide insights from the perspective of an African nation as well to contribute to the growing conversation on social media use.

From the perspective of practitioners, against the growing voice of concern attached to the addictive prowess of social media technology, findings from the study are expected to better inform marketers on how, when and where to inculcate the use of social media in their business activities. They will also be notified by this study to understand how to use social media to undertake campaigns to achieve the best results. Findings are also expected to equip marketers to seize all opportunities through social media use and transform awareness into actual purchases.

University of Ghana http://ugspace.ug.edu.gh

This study will also help in the development of policy especially with the proliferation of social media use in the lives of consumers, businesses will have the essential insights to design meaningful communication and promotional strategies which their marketers will use as a blueprint in developing their campaigns. These policies will go a long way to ensure that the effect of social media use will bring to the company profitability and relevance to be sustainable. Insights of African consumers from the study will give firms a means to strategize their continental operations as well.

## 1.7. Chapter Outline

The first chapter of the study encompasses the introductory components namely the research background, the problem statement of the study, research purpose, research questions and objectives of the study, the study's significance, and a synopsis of the chapter in order to introduce the study to the reader.

The second chapter addressed the context of the study, which will look at social media usage in Ghana and amongst Ghanaian adolescents relating it to consumer online purchase habits.

Chapter three focused on the relevant literature on social media use and self-control failure as well as online consumer purchasing behaviour and establish the related concepts from theoretical and empirical evidence to carefully formulate the appropriate research framework for the study.

Chapter four dealt with the methodology which highlighted the researcher's philosophical stance, population, sampling size and technique, data collection instrument and method, data processing and mode of analysis as well as the variables and ethical considerations of the study.

Chapter five consisted of the presentation of data used for the analysis, analysis and analytical process and discussion of findings.

University of Ghana http://ugspace.ug.edu.gh

Chapter six consisted of the summary, conclusions and recommendation; the references and appendices will follow this.

University of Ghana http://ugspace.ug.edu.gh

# CHAPTER TWO

# CONTEXT OF THE STUDY

## 2.0. Introduction

This chapter addresses the context under which this study was carried out. A case for the relevance of the research of SMSCF amongst college students is made, more so from an African country perspective. African insights of internet and social media use were discussed in this chapter as well. This is followed by an intergogation into the demographic structure of social media users. Finally, the importance of social media in today's marketplace was assessed in this chapter.

## 2.1. The Internet and Social Media in Africa

Africa has, in the last few years, come to understand the value of the internet in achieving its socio-economic developmental goals. Current internet penetration rates stand at 49% for Northern Africa, 39% for West Africa, 27% for East Africa with Middle Africa's 12% and Southern Africa's 51% being the lowest and highest respectively on the continent (Hootsuite, 2018). The introduction of Web 2.0 technology in proportionate relations with the growth of the internet have allowed more interactive capabilities; users can now work and play via the internet. Scholars have tagged social media as the most significant success of this relationship between Web 2.0 technologies and the growth of the internet (Blease, 2015; Kaplan & Haenlein, 2010; Kuss, Van Rooij, Shorter, Griffiths, & Van De Mheen, 2013; Rosen, Whaling, Rab, Carrier, & Cheever, 2013). Africa has not been left out of the growth of social media (most notably social networking platforms) with penetration rates currently at 18.6% compared to the global average of 42% (Hootsuite, 2018).

Ghana has an average population of about 29 million people, with 56% of the people living in urban areas (Hootsuite, 2018). Ghana is notably one of the earliest African countries to adopt the

University of Ghana http://ugspace.ug.edu.gh

use of the internet since its inception in 1995 (Bulley, Quaynor, & Tevie, 1997; Internet Society, 2018). Since then internet penetration rates have increased from 0.2% in 2000 to 35% as at 2018 with the number of users standing at 10.1 million (Bulley et al., 1997; Hootsuite, 2018; Miniwatts Marketing Group, 2018b). Social media statistics currently put the "internet present" Ghanaian populace using social media at 19% compared to international neighbours such as Nigeria (10%), Kenya (15%) and South Africa (32%) (Hootsuite, 2018). These figures show that Ghana is a relatively good representative for the study, in telling the African story.

## 2.2. Social Media Use Demography

Social media use has been attributed to the younger digital millennials even though digital migrants are quickly catching up to this growing global trend. Numerous studies have been carried out by researchers and have looked at this demographic and the effect of social media on them (Griffiths, Murray, Krug, & McLean, 2018; Z. Huang, Wang, Qian, Zhong, & Tao, 2007; Lutz, Ranzini, & Meckel, 2014; Pontes, Andreassen, & Griffiths, 2016; R. Singh, 2016; S. Singh, Farley, & Donahue, 2018; J. L. Wang, Jackson, Gaskin, & Wang, 2014).

Millennials can also be referred to as "digital natives" due to their birth years falling within the same period as the introduction and development of information, communication, and technology. This group has in its inclusion set, adolescents and young adults ,which includes college students, who spend a daily average of 100 minutes, engaging with their colleagues mainly through posts and viewing photos on Facebook alone (Murray et al., 2016). Social media is now a popular form of communication among millennials more so undergraduate students (Cao et al., 2018; Murray et al., 2016). Researchers have further noted that with "digital natives", platforms such as Facebook and Twitter are their preferred communication method, due to their repetitive and routine usage (Murray et al., 2016). This seems to agree with existing literature, which finds this demographic

University of Ghana http://ugspace.ug.edu.gh

as more accommodating and receptive to social media use. They are hypothetically more likely to embrace social media in relative comparison to the older generations (Kilian, Hennigs, & Langner, 2012). Millennials spend, on average, 188.2 minutes daily on social media platforms with African members of this demographic spending 194 minutes in their quotidian use of social media platforms (GlobalWebIndex, 2017). The importance of time in this demographic narrative has been explored by research and has classified 'time-intensive' use of social media by digital natives as addiction (4.1% boys, 3.6% girls) which is usually accompanied with a higher display of psychosocial distress (Müller et al., 2016). Excessive time spent on social media by this demographic has also been linked to poorer academic achievement and a withdrawal from alternative and beneficial activities (Müller et al., 2016). O'Keefe & Clarke-Pearson (2011) confirmed this, which revealed that excessive use of social media by these digital natives presents a varied range of potential risks which can affect their lives and well-being. These include online bullying, sexting, and privacy concerns, which they believe can activate risky behaviours, such as suicide, depression, anxiety, social isolation, and distress. These digital natives have also been identified to be the most susceptible to problematic online shopping with social media being identified as one of the drivers within this demographic (Forbes & Vespoli, 2013; Ioannidis et al., 2018; Olenski, 2012).

From a gender perspective, social media platforms with an addictive tendency, such as social networking sites like Facebook, are used by both genders. However, it has been established that differences exist with regards to the type of activities that the sexes engage in once they make use of internet-powered technology. Females are the most likely to communicate with their friends via social media whereas their male counterparts are more likely to use it to seek for information, socialisation and also for entertainment (Branley & Covey, 2017). It has, however, been argued

University of Ghana http://ugspace.ug.edu.gh

that females might be particularly at risk to the addictive tendencies of such technology. Scholars have noted that young females are more likely of the sexes to engage in the excessive use of social media platforms, along with the detrimental behaviours which accompany this behaviour. Kuss et al. (2013) who further identified the female gender as a predictor of problematic online shopping from the excessive use of internet-powered technology such as social media support this claim (Kuss et al., 2013).

African countries like Ghana (median age = 21.5 years, literacy rate = 76.5%) currently present a demographic picture, as described above (Hootsuite, 2018).

These core demographic characteristics of social media users also makes the college students situated in the Ghanaian environment suitable for the designed study. The possible influence of social media on their behaviour can be assessed, and insights developed to inform marketers on the best pathways to deliver on promises and the optimum approach to better position products and services.

### 2.3. Online Commerce and Social Media

The internet, with its omnichannel capabilities, is changing the business commerce landscape. Social media is currently playing an integral role in this online commerce space. The growing concept of s-commerce a subdivision of e-commerce, which deals with the use of social media as a driver for the sale of goods and services, is growing (Hsu, Chen, & Kumar, 2018). Due to large amounts of time spent on the platform by consumers and the freedom to share information about products and experiences, firms are now pushing their sales through this medium. In this digital age, marketers have taken social media as a core component in their activities to facilitate the anticipation, identification and satisfaction of customer needs. Usually, in the business world,

University of Ghana http://ugspace.ug.edu.gh

social media is used mainly for promotion and communication purposes, and also redirecting customers through to other online channels such as websites to facilitate business transactions. With growing technology advancement, social media platforms such as Facebook have now implemented payment technology unto their platform, which has made it easier for businesses to bring the buying and selling relationship conveniently closer to the consumer.

Statistics show that Facebook, Instagram and Twitter are notably the first three most preferred platforms marketers' use in promoting, communicating and selling their products or services (Statista Inc., 2018). A total of 47% of consumers who purchased social media did so through Facebook. Though currently, only a few consumers tend to make purchases via social media, a lot of social media users discover brands and their products through this medium and in turn make purchases through other online channels (Forbes & Vespoli, 2013; Olenski, 2012; Statista Inc., 2018). Videos and images have been identified as the most efficient means through which social media users can be influenced to make a purchase online (Statista Inc., 2018).

Social media is, therefore, an essential tool for today's marketer. Consequently, it is necessary for them to understand the value of the usage of social media. Though current marketing literature has seemly explored mainly the benefits of social media, marketing scholars must also examine all elements of social media use to promote ethical consumption which can prevent firms from losing the benefits altogether from social media use in their business activities.

University of Ghana http://ugspace.ug.edu.gh

# CHAPTER THREE

# LITERATURE REVIEW

## 3.0. Introduction

This third chapter of this study evaluated literature which addressed the pertinent issues surrounding the concepts and variables of the study. The idea of SMSCF and online shopping behaviour supported by a theoretical foundation based on the theory of planned behaviour was assessed. Empirical studies about the concepts of self-control, time spent in relation to social media use as well as research deconstructing the concept of online purchasing behaviour are also noted in this review. Finally, the conceptual framework of the study, along with the research hypothesis of the study, will be stated to address the research questions.

## 3.1. Social Media: An Evolutionary Revolution

Of all of the significant innovations which have advanced human society, none has arguably captivated the world as social media has today. The term social media is quite popular today, but its roots are far back from what is accepted as social media today (Hendricks, 2013). Literature reveals that there are two main periods in the development of social media. They can be classified along the lines of pre 21$^{st}$-century social media and post 21$^{st}$-century social media.

The design and formation of UseNet in 1979 is a classic example of pre 21$^{st}$ century social media, where users of the platform could post news to newsgroups on the internet (Hendricks, 2013; Kaplan & Haenlein, 2010). CompuServe was also first to introduce the concept of chatting via the internet in the 1980's, along with the Prodigy Communications Corporations that offered her customers access to a broad scope of internet services, such as online news, shopping, notice sheets, games, stocks, travel, and a variety of other features in 1984 (Hendricks, 2013; Morrison,

University of Ghana http://ugspace.ug.edu.gh

2015). IRC's also known as Internet relay chats, which were also built off text-based chatting via an internet network was initially introduced in 1988, and it maintained popularity well into the 1990s (Hendricks, 2013). All these showed the way internet powered technology could affect the direction of human interaction. SixDegrees in the late '90s picked on these functions and became one of the first version of what we would consider social media in this era. It allowed users to make their profiles, list associations with others and surf their rundowns (Boyd & Ellison, 2007). SixDegrees was by no means the only one offering these services via the internet, varied dating and community platforms at the time provided services such as the creation of profiles. AIM and ICQ buddy allowed users to build friends lists (private and personal) to the users and those they are connected to alone. Classmates.com was at the time connecting current students and their alma mater to high schools and colleges through their platform. It was successful because it was the first to combine all these features which appealed to the masses due to its positioning as that point of connection for the small world we live in due to our social networks. They believed that based on the relationships we develop, the world is connected (Mcintyre, 2014). Another example from the same period was the first blogging site, LiveJournal, which is regarded as one of the first and one of the oldest blog communities on the internet. LiveJournal was launched as a way of connecting friends and keeping them updated on what was going on (Kumar, Novak, Raghavan, & Tomkins, 2005). Scholars have noted it as the first to gain the recognition of a social networking site in the early periods of the post-21st-century era (Kouper, 2010). These are some of the precursors of social media that laid the foundation of what we appreciate as social media today.

The post-21st-century era of social media began in early 2001 with the introduction of platforms such as Myspace, Friendster, Hi5, Facebook, Flick, Orkut, YouTube, Reddit and more recently Twitter, Tumblr, WhatsApp, Snapchat, Tinder, and WeChat. The global phenomenon of social

University of Ghana http://ugspace.ug.edu.gh

media in its self is laid in the introduction of Facebook in 2004, even though a lot of similar platforms were in existence (Bennett, 2014). This success was based on the move from Web1.0 technology to Web2.0, which allowed for more interactivity and created the appeal which allowed such platforms to grow, inherently becoming an essential role in today's society.

### 3.2. Social Media Self Control Failure (SMSCF)

Generally speaking, accepting social media has had both positive and unwanted effects on our lives at different levels and in different forms. Because of the relative importance of these effects in our daily lives, we cannot ignore them, so it is imperative that studies continuously monitor the variations caused by social media over time to identify possible solutions as well as mitigate and control problems created through its use (Ngai, Tao, et al., 2015).

When buying goods and services, consumers often face some form of conflict as to whether the purchase will result in some satisfaction. The result that can arise when the consumer is confronted at such a point of decision making depends heavily on the conflict between the competing strengths of self-control and personal desire. (Hoch & Loewenstein, 1991). Baumeister (2002) states that during that battle between self-control and personal desire, the resulting outcome will be inherently dependent on how strong the urge is. Self-control overrides and replaces an individual's budding response pattern with another which will reduce the effect of the 'desire' (Hare, Camerer, & Rangel, 2009). Thompson, Locander, & Pollio (1990) in their study, discovered that amongst most customers a loss of control over their behaviour usually lead to excessive purchases. Baumeister (2002) further states that when individuals experience failure in the attempt to exhibit self-control, some behavioural outcomes include compulsive buying which may likely lead to immediate business profitability but at the expense of creating more unsatisfied customers and losing long term customer value.

University of Ghana http://ugspace.ug.edu.gh

Social media, just like other media forms, usually places her users in conflict situations between their media use (desires) and other structured goals (Baumeister, 2002; Du et al., 2018). Findings from previous research have shown that the most notable conflicts derived from social media use were centred along work, study, procrastination, and using time efficiently. This, in part, explains the importance that individuals and firms must attach to understanding the triggers and constituents of self-control.

Baumeister, Heatherton, & Tice (1993) concluded in their study that one is never truly controlled by 'irresistible' urges when giving into their purchasing desires it is more a question of reasoning than of being sincerely helpless against strong impulses, and the same is likely to apply to during a consumer's path to purchase. Resisting an impulse depends on the ability of the person to control himself or herself. In order to achieve this Baumeister (2002) in his development of the self-regulation theory identifies - standards, a process of monitoring behaviour, and an ability to change behaviour – as three crucial ingredients which must be understood for sufficient self-control to occur.

The first component standards, in consumer behavioural studies , refers to when guidelines are definite and defined it informs the manner in which an individual objectives and goals will be achieved (Baumeister, 2002). Usually, for one to achieve these desired standards and beneficial long term goals one must be able to control their behaviour in one way or the other. Once consumers have set standards, they are possibly less likely to indulge in challenging buying behaviour patterns than others who do not. They are also probably less susceptible to induced buying stimuli from marketers, sales staff, advertisers, etc. Research scholars have however been able to identify emotional stress as a critical factor which can facilitate a breakdown in the set standards, which then affect one's self-control. In the words of the researcher scholars "...When

University of Ghana http://ugspace.ug.edu.gh

my colleagues and I reviewed the self-control literature, we found that emotional distress has contributed to self-control breakdowns over and over. We then conducted laboratory experiments to test the hypothesis that the link between emotional distress and self-control failure is mediated by a shift in priorities" (Baumeister, 2002). According to Tice, Bratslavsky, & Baumeister (2001), in their study to evaluate people's resistance to eating unhealthy snack foods. Participants were placed in a sad mood, and then they were asked to eat some snack foods and fill a study questionnaire. This questionnaire was not going to be used, but as a distraction to assess how much food they will eat in that state. The study revealed that when individuals were sad, they ate a lot more than those who weren't. However, in a different version of the experiment, participants were told that eating would not improve the current emotional state they found themselves. The findings proved different, with the participants not engaging in increased eating. The results implied that when individuals were depressed, they break whatever standards they set. These studies seem to emanate the importance of setting standards in addressing the concept of self-control. Once some form of distress is experienced individuals move towards gratifying themselves to feel better and deviate from whatever rules they have laid down. Social media creates an interactive environment which ensures that her users will adopt some comparative behaviour. This behaviour especially when 'upward' social comparisons have been experienced, creates a sense of distress which affects a user's self-esteem and thus creates a propensity to experience self-control failure (Islam, Sheikh, Hameed, Khan, & Azam, 2018; Vogel, Rose, Roberts, & Eckles, 2014). In summary, when there is a breakdown in the standards, there is usually a breakdown in an individual's innate ability to control themselves.

The second component of self-control is the 'monitoring' process, which typically involves monitoring the behaviour concerned. For example, social media users have been noted to get lost

University of Ghana http://ugspace.ug.edu.gh

in their activities as they interact online. Users may initially begin with one objective and eventually end up undertaking virtually different purposes online (Du et al., 2018). Just like alcohol, social media usually 'traps' her users into situations where they are likely to lose self-control in one form or the other because they cease to monitor their behaviour (Du et al., 2018; Hofmann, Baumeister, et al., 2012). One possible reason is that, for example, when individuals are in a state of making 'upward' social comparisons on social media they experience some form of distress they usually stop monitoring their behaviour and us such open themselves up to engaging in problematic behaviour via social media technology (Baker & Algorta, 2016; Brown & Tiggemann, 2016; Hughes & Burke, 2018)

The third component of the self-control involves one's capacity to change. According to Baumeister (2002), the action of self-control usually involves the resources within one's self to prevent it from failing. In light of this, one will usually make use of some force or energy resource that is of equitable or greater power to the conflicting desire. Different experiments have shown that it takes willpower and strength to effect the needed change, which can control one's self. The implications appear to be clear for consumer behaviour. Individuals who experience a depletion of willpower are more susceptible to impulsive behaviour more so when they make purchases. Individuals with a higher level of self-control are known to have better social relationships, stronger family bonds, fewer psychological symptoms and issues (Alt, 2018; Baker & Algorta, 2016; Singleton, Abeles, & Smith, 2016)

The self-regulation theory states the importance of her three components – standards, monitoring behaviour and capacity to change- as integral to self- control. Ultimately the self-regulation theory seems to suggest that once an individual loses control of either one or all of her three components, one is likely to experience self-control failure which will most likely affect goals such as

University of Ghana http://ugspace.ug.edu.gh

behavioural outcomes. This seems to explain why it will be possible for self-control to predicts an individual's receptivity to various marketing strategies. The individual with a lower level of self-control may be vulnerable to immediate seduction, and thus easily give in to marketing communication highlighting immediate gratification. The person with high self-control, on the other hand, is more likely to buy based on long-term value and benefits being convinced.

In light of this concept of self-control scholars have noted the one might be heavily dependent on one media form or the other when it satisfies the individuals need or desires or helps them to achieve a goal (Ball-Rokeach & DeFleur, 1976; Ball-Rokeach, 2010). This dependency may occur from the frequent use of the media platform and in turn, may result in increasing reliance as the intensity of use also grows primarily as the user derives satisfaction. (Ball-Rokeach, 2010; Rubin & Windahl, 1986). The growing number of users on social media and the time they spend on such platforms places her user base in self-control failure situations. According to Du et al. (2018) in support of this assessment, users of social media often face a typical self-control dilemma that requires them to choose between the temptation to use social media and the quest to complete other goals that require voluntary efforts. Studies which have addressed the misuse of the internet technologies such as social media, have stated that it often leads to unhealthy consequences and usually leaves no time for anything else(Ho, Lwin, & Lee, 2017; Salmela-Aro, Upadyaya, Hakkarainen, Lonka, & Alho, 2017; Suhail & Bargees, 2006). In the work environment, for example, surfing social networking sites have often been seen as the main distraction to some employees as they can draw their attention away from work tasks and, in turn, damage a company's productivity (Ngai, Tao, et al., 2015). Social setups have not been excluded from this conflict between social media use and social relationships goals with about half of one study's participants reporting that they were spending less time with their families (Ngai, Moon, Lam, Chin, & Tao,

University of Ghana http://ugspace.ug.edu.gh

2015). According to Du et al. (2018) participants who scored higher on the SMSCF scale used social media more often and estimated a more significant percentage of their time spent on social media as "giving in to the temptation to use social media." The statement seems to show the ease with which individuals fail in controlling themselves when they consistently interact with social media. As an integral part of today's society, it means that it exposes users to a lot of behavioural influences which may be positive or negative and capable of affecting the accepted social system.

### 3.3. Online Purchasing Behaviour

Online purchasing is the process of purchasing products and services from Internet-selling merchants (Jusoh & Goh, 2012). Yu & Wu (2007) also defines online purchasing as a process involving the use of Internet-based technology and the convenience offered to customers to facilitate the purchase process of goods or services. Online purchasing has provided consumers with a new level of satisfaction that has driven interest and preference in the delivery of products and services supported by Internet technology. Ernst & Young (2000) (as cited in Miyazaki & Fernandez, 2001) states that 79 per cent of consumers plans to buy online. Wu (2003) further asserts that in the online purchasing space attitudes, perceptions and motivations are an essential aspect in the success or failure of marketing activities online leading to consumer purchases. The scholarly space has been littered with several studies which examine the factors which influence consumer attitudes and perceptions into making purchases online (Jusoh & Goh, 2012). According to scholars, social media is quickly becoming a significant element within the marketing mix and the process of shaping the thoughts and behaviour of today's online customers (Chu & Kim, 2011; Kang, 2018). Marketing campaigns which are undertaken by social media, for example, have been a driver for awareness creation that drives the consumer's decision-making process towards actually making a purchase. Mangold & Faulds (2009) go on to state that Internet-

University of Ghana http://ugspace.ug.edu.gh

based tools such as social media have placed limits to the control organisations have over the dissemination of information due to the free flow of information amongst consumers. Consumers have further iterated their perspective that social media is, rather than corporate sponsored communications, a more truthful source of information about products and services. According to Akar & Nasir ( 2015) social media is a cheaper and yet still very essential and influential marketing tool which can be used to drive sales and promote products and services to a wider potential audience. This new role of social media in the business environment has brought to bear the concept of social commerce or s-commerce. S-commerce involves the use of social media to enable people to participate in the marketing, sale, comparison, curation, purchase and sharing of products and services in online and offline markets and communities (Mikalef, Giannakos, & Pateli, 2012; Sirurmath, 2004; Statista Inc., 2018a).

Despite the growing spectrum of social media marketing literature, researchers have paid little attention to the interplay between social media use and e-commerce activities such as online buying behaviour (Zhang, Trusov, Stephen, & Jamal, 2017). Customers are rapidly adopting a strong preference for online shopping around the world, and this has pushed the value of the internet and its associated technologies such as social media, as a vital instrument in the field of marketing (Pramono, Wihuda, & Adawiyah, 2017). Current statistics reveal that more than 70% of shoppers in the United States opted to buy products and services via social media (Roy, Datta, & Basu, 2017). Menegatti, Ribeiro, Meneghatti, & Ribeiro Serra (2017) states that several variables motivate and or inhibits an individual's purchasing behaviour in the online shopping space. Akar & Nasir (2015), affirm this by saying that there are various factors which affect the online shopping behaviour of individuals such as age, gender, purchase intention, internet technology usage, social media platform, attitude, trust etc. According to Rani (2014) an

University of Ghana http://ugspace.ug.edu.gh

individual's characteristics such as personality can also affect the online shopping behaviour, motivations or intentions in the decision-making process.

The decision-making process characterises consumers in the online purchasing space in their effort to buy online. The procedure usually starts with typically starts with need awareness, then information search, alternative evaluations, deciding to purchase and finally, post-purchasing behaviour. The first three elements of the process validate the use of social media in today's online shopping environment. Before a customer can decide on making purchases, a comment, reaction, or an advert on social media can trigger the need and create the right awareness (Katawetawaraks & Wang, 2011). The ability to communicate and share information via social media enables consumers to fulfil the next two elements of the process that is information search and evaluation of alternatives. This process exposes consumers to the development of pre, during and post purchasing behaviour (Yuan, Morrison, Cai, & Linton, 2008). The growth of social commerce, which is the use of social media to support the commercial activities, will ensure that the actual purchasing can occur via the medium (Gummerus, Liljander, & Sihlman, 2017).

Childers, Carr, Peck, & Carson (2001) states that consumers usually engage in the buying process due to motivations such as the "need to socialise, to pass the time or to discover new trends." They further state that these motivations are usually of a utilitarian or hedonic orientation. Researchers have deciphered that in the online shopping environment consumers are generally more interested in the joy the shopping process offers rather than the actual utility the product or service delivers (Mikalef et al., 2012). A study by Laroche, Babin, Lee, Kim, & Griffin (2005) revealed that hedonic users were more likely to engage in unplanned shopping experiences, unlike utilitarian consumers.

University of Ghana http://ugspace.ug.edu.gh

Consumers are using this new medium (social media) and its empowering essence to push business organisations and brands (Perkins & Fenech, 2014). Varied studies have been conducted to analyse the importance of social media and its effects on online purchasing(Forbes & Vespoli, 2013; Leerapong & Mardjo, 2013; Vinerean, Cetina, Dumitrescu, & Tichindelean, 2013). Vinerean et al. (2013) in their study, for example, found that social media influences consumer online shopping patterns. Forbes & Vespoli (2013) specify in their findings that people consider the views of social media influencers (opinion leaders) and use this information when buying either expensive or cheap products. They, therefore, advise firms to inspire their clients to 'talk about them' on social media. Their study further found that consumers now demand information, so there's a growing interest in firms adopting more than one social media platform to engage her customers. Also, Maoyan, Zhujunxuan, & Sangyan (2014) study in the area of social media marketing found that social media affects the online buying intentions of consumers. They identified four elements namely placement, marketing, experiential marketing and interaction as factors that ultimately affect the inner perception of consumers (i.e., perceived value and perceived risk) and altogether, they affect online purchase intention. Zhang et al. (2017) found that greater use of social networking sites is undoubtedly related to shopping activity. However, they also find a short-term negative relationship, where online shopping activity appears to be lower immediately after a period of increased use of social networking sites. With the growing population of internet users, more and more people are choosing to purchase their items of value from internet powered sources and devices such as social media. Literature has also established the adverse effects of excessive social media usage which can likely to lead towards the adoption of compulsive buying behaviour (Lee, Son, & Kim, 2016; Pahlevan Sharif & Yeoh, 2018).

University of Ghana http://ugspace.ug.edu.gh

Currently, in this study, it is suggested that SMSCF, which is borne from some form of media dependency affects online purchasing behaviour based on how it is used. In their path to purchase consumers are noted to develop pre, during and post purchasing behaviour. To measure the concept of online purchasing behaviour for this study four significant components will be assessed, namely attitude towards online purchasing, compulsive buying, conspicuous consumption and willingness to buy which have all been identified as behavioural outcomes of social media use.

### 3.3.1. Attitude Towards Online Purchasing

Pelling & White (2009) defines attitude as a reflection of an individual's positive or negative behavioural assessment. Attitudes are also seen as individuals' subjective and consistent assessments of objects or ideas (Wu, 2003). These definitions establish the critical role of attitudes in predicting the behavioural outcomes of individuals. Attitudes serve as a bridge between the background characteristics of consumers and the consumption that meets their needs. Attitudes place people in a frame of mind to love or dislike things, to move towards or away from them (Kotler & Armstrong, 2010). To understand consumer attitudes towards online purchasing, one must realise that they are difficult to change, and thus places marketing practitioners in a position which requires them regularly to predict the online purchasing rate and assess the likelihood of future online business growth.

Attitude is a construct with multiple components which address cognition, affection and behaviour (Ajzen & Madden, 1986). The “cognitive component” takes into account the information and knowledge an individual has about an object, e.g. understanding the convenience of purchasing goods and services online. The “affective component” refers to the extent to which the item is loved or disliked by an individual. Finally, the “behavioural component” relates to the behavioural intention be it in secret or open expressions towards the item i.e. what kind of act a person will

University of Ghana http://ugspace.ug.edu.gh

take concerning the item or activity for example online shopping. The knowledge (cognition) and liking (effect) of the object by an individual affects his / her behavioural attitude towards the object (Hasan, 2010). Consumer attitudes are believed to affect the intention of an individual's to purchase online and ultimately decide whether or not a transaction will take place (Zhang et al., 2017). According to Pahlevan Sharif & Yeoh (2018), younger consumers were more likely to be more agreeable towards online shopping for its convenience relative to older consumers. Lin & Kalwani (2017) study found showed that a consumer attitude explains their intentions to shop online. According to Glassberg et al. (2006), there have been numerous studies addressing online shopping attitudes and behaviour in recent years. However, inconsistency in findings examining the relationship between attitude and online shopping is present across studies (Hasan, 2010). The favourable or unfavourable affirmations an individual perceives on a particular behaviour is related to the individual's position. The more favourable a person's attitude is towards some considered behaviour, the more likely it is that the person will want to engage in the behaviour. Theoretically, attitude is a critical concept in the theory of reasoned action (TRA) as well as the Theory of Planned Behaviour (Ajzen, 1985; Fishbein & Ajzen, 1975b). These theories have been the backbone of the theoretical foundations for a lot of consumer behaviour studies centred on online purchasing (Ajzen & Madden, 1986; Armitage & Conner, 1999; Hasan, 2010; Montaño & Kasprzyk, 2008; Perea Y Monsuwé, Dellaert, & De Ruyter, 2004).

### 3.3.2. Compulsive Buying

Wang & Xiao (2009) defines compulsive buying as an intense and repetitive purchasing action, which is usually undertaken as a response to undesirable 'feelings' or events. Often, compulsive buying is motivated by desires that have been defined as irresistible by those who have experienced it. Consumer behaviour authors have been noted to take a strong liking about the concept of

University of Ghana http://ugspace.ug.edu.gh

irresistible desires mostly amongst shoppers (Dittmar, 2005; Kukar-Kinney, Ridgway, & Monroe, 2012; Workman & Paper, 2010). Baumeister (2002) states that these irresistible desires usually lead to behaviour that is not monitored and terms it as impulsive behaviour. This impulsive behaviour is generally of interest when it puts individuals in conflict situations between their long-term goals and aspirations against these impulsive desires; this is due to the regret they may experience having yielded to these designated irresistible desires. An earlier study revealed that some shoppers felt helpless by the dictates of their desires; once that occurred, they are deemed more likely to engage in actions such as compulsive buying. Compulsive buying refers to the tendency of shoppers to engage in purchasing actions and activities that stem from an uncontrollable or irresistible desire, which leads towards obsession (Kukar-Kinney et al., 2012). Compulsive buying is noted to be purchasing behaviour, which results in distress among those who experience it. This distress is linked to difficulties experienced in finances and interpersonal relationships as well (Kukar-Kinney, Scheinbaum, & Schaefers, 2016). It is also noted to leave shoppers in a consistent fixation with the action of buying based on "irresistible, intrusive, and/or senseless impulses; regularly making unnecessary purchases or excessively spending beyond ones financial strengths; and spending relatively large amounts of time on purchasing activities (Mueller et al., 2011; Wang & Yang, 2008). Mueller et al. (2010) confirm that compulsive buyers often feel obliged to make frivolous purchases regardless of their economic standing and strength. They usually do not require what they buy, but they do that to alleviate a negative emotional state (Mueller et al., 2011; Wang & Xiao, 2009). D'Astous, Maltais, & Roberge (1990), confirmed this by showing that compulsive buyers usually regularly purchased more than the average buyer. Their incentive for their compulsive consumption of goods and services is to reduce their negative emotional state than actually owning the item purchased. O'Guinn & Faber ( 1989), in their study

University of Ghana http://ugspace.ug.edu.gh

addressing compulsive buying, stated that individuals in that state usually buy to derive self-satisfaction from the process of buying and not from the actual ownership of the product. Some studies have identified women as the group most likely to engage in compulsive buying with prevalence rates as high as 80% (Black, 2007). Duroy, Gorse, & Lejoyeux (2014) just like the other studies, confirmed that compulsive buyers spent more money and time purchasing items online. They went further to state that they made these purchases from more private sale websites or mobile phones, which gave immediate positive feelings and exhaustive offerings. While investigating the influence of internet use on compulsive buying behaviour their findings revealed that the internet was the most preferred medium for compulsive buyers and served as a strong motivator (Kukar-Kinney et al., 2016). 'Convenience' of buying at any time and unobserved has been identified as an enabler which drives the relationship between internet use (and its associated technologies) and compulsive buying. It also offers the ability to avoid social interactions (Kukar-Kinney et al., 2016; Mueller et al., 2011). Due to this private and personal nature of social media, it likely provides a conducive atmosphere for the germination this problem behaviour.

### 3.3.3. Conspicuous Consumption

When a consumer continuously purchases products and services to show off their economic prowess to maintain, attain and gain a 'better' social status, that consumer is noted as one who conspicuously consumes products and services (O'Cass & McEwen, 2004; Taylor & Strutton, 2016). The boosting of one self-esteem is the core result consumers of this nature want to achieve. This type of consumer usually treats money as a status symbol and uses it to enhance their self-esteem through their purchasing behaviour (Hanley & Wilhelm, 1992; Taylor & Strutton, 2016). Social media is noted as an instrument which can project the desired version of one's self, which can, in turn, lead to the enhancement and development of positive self-esteem. Scholars have

University of Ghana http://ugspace.ug.edu.gh

agreed with this statement and have indicated that social media is an essential ingredient in affecting one's self-esteem through their digital diet (Gonzales & Hancock, 2011; Thoumrungroje, 2014). In their social media space, individuals have a large amount of control on the information they share and as such, usually, present positive representations about themselves in their social network. This positive representation often implores positive feedback, which becomes a source of self-esteem growth and development. It has been associated with many positive benefits on individual wellbeing, most notably (Ellison, Steinfield, & Lampe, 2007). However, this growth in self-control has been noted to lead individuals towards losing self-control which in turn leads to the development of more indulgent behaviour such as conspicuous consumption (Khan & Dhar, 2006; Wilcox, Kramer, & Sen, 2010). Scholars have been able to note that once consumers experience a luxurious or hedonic product, and the experience led to the development of positive 'self-image', it is likely that when faced with a product of utilitarian value their choices will likely lean more towards those types of products more effortlessly regardless of the useful rational choice in front of them (Khan & Dhar, 2006). It means that once individuals feel good through the enhancement of their self-esteem, they are likely susceptible to the self-control failure, which may adjust their behaviour based on those impulses rather than from 'common sense'. One must note that conspicuous products are the ones that usually bend towards comfortable and hedonic spending, which satisfies a consumer's need for prestige. As it meets this need once it is not regulated leads to a consumption process which places the consumers in a position to buy products and services they might not necessarily need (Podoshen & Andrzejewski, 2012). Unlike compulsive buyers who are engaging in frequent purchases regardless of the value of the product, conspicuous consumers are buying to satisfy a need situated in social status and power. Based on previous studies in the area of social media and concepts of 'self' it is believed that conspicuous

University of Ghana http://ugspace.ug.edu.gh

consumption is a critical behaviour which can be derived when users of social media experience some form of regulatory failure of one's self.

### 3.3.4. Willingness to Buy

The willingness to make purchases online is referred to as the 'intention' of a consumer to shop via internet-based technology (Zhang et al., 2017). Scholars have been able to establish positive linkages between the attitude towards making purchases online and the consumer decision-making process (Zhang et al., 2017). Their findings have shown that attitude influences the purchasing intentions of individuals. The behavioural intention has been proven as a strong determinant of actual usage of products and services meaning that one's plan to use online platforms as a means of purchasing goods and services will likely position them to use the platform (Hong, Thong, & Tam, 2006). The intention to buy has also been linked with how satisfied one is with a given service; this is because satisfaction creates positive affirmations and in the case of online technologies improves the chances of adoption. The Theory of planned behaviour assumes that one's willingness (intention) to partake in a particular behaviour mediates the relationship between PBC and actual behaviour (Ajzen, 1985). The theory goes on to suggest that an individual's willingness to participate and or exhibit a specific behaviour can be predicted by the attitude the individual has about that specific behaviour.

Trust has also been identified as a possible factor which improves one's intention to adopt and use new technology quickly. The interactive nature of social media seems to provide her users with a platform to share their thoughts and opinions, which in turn affect the manner in which their social users will think about a product or service. Thus, as a conduit of trust, it is easy for social media to influence users into the buying products or services since the platform through trust can

University of Ghana http://ugspace.ug.edu.gh

significantly affect the user's intention to make actual purchases (Hajli, 2015; Lin & Kalwani, 2017; Lu, Zhao, & Wang, 2010).

### 3.3.5. Time Spent and Social Media

The current communication on the use of internet-powered technology has revolved around positive and negative effects, with a growing interest in the detrimental effects of internet-powered technology use (Suhail & Bargees, 2006). The focus on the impact has stemmed from the increasing time spent on internet powered technology such as social media. From its inception, social media use recorded at least an 18 per cent increase on time spent on their platforms in their first year alone. Facebook users, for example, have been reported a 566 per cent increment in the amount of time they spend on the platform (Kittinger et al., 2012). A study on Facebook use revealed that users were most likely choosing to spend a lot of time on Facebook with 33 per cent of respondents spending on average 1.5 hours a day on the platform whilst at least 5.4% were spending more than 10 hours on a day on the platform (Kittinger et al., 2012). Majority of the studies conducted assessing excessive use is usually centred around the younger generation (digital natives). This concept of excessive consumption is quantitatively measured with its prevalence and incidence using indicators such as minutes spent on the platform daily, frequency on social media platforms. Excessive consumption is inherently different from user engagement, which looks at the participative nature of usage. According to Correa, Hinsley, & de Zúñiga (2010), based on the frequency of usage, with over a billion users, Facebook users spent 28 per cent of their time online. One might falsely believe that excessive time spent on social media squarely equates to a measure of social media addiction, based on Andreassen, Pallesen, & Griffiths, (2017) definition of social media addiction. They defined it as a state of being overly involved and concerned about social media to be moved towards a consistent donation of time and other resources such that it

University of Ghana http://ugspace.ug.edu.gh

negatively impacts other social activities such as work, family, and wellbeing. The definition shows that qualitatively addiction to social media is different from excessive time spent on social media since one can spend a significant amount of time on social media, but without being addicted to it. Excessive use can, however, lay the foundation which will lead users towards addiction, especially when they are unable to control themselves. Studies which have found that young people who spend more than 2 hours online daily are subject to experiencing poor mental health, psychological distress and suicidal tendencies (Huang, 2017).

Growing studies have shown the negative consequences attached to the frequent use of social media platforms. Some of these problems have shown to affect individuals on an interpersonal, physical and behaviour level (Wilson, Fornasier, & White, 2010). Du et al. (2018), for example, showed that the most prominent elements of social media conflicts with self-control involved issues of work, study, procrastination and the effective use of time. They further stated that spending a lot of time on social media is bound to lead to addiction, reduced motivation to involve one's self in participating in activities, and likely cause physical health problems as well. The reverse has also been proven to be factual with efficient time usage and proactive approaches towards achieving goals as activities which conflict with an individual's use of media such as social media. Ngai, Moon, Lam, Chin, & Tao (2015) went on to state that from the perspective of personality using the big five personality types, extraversion and agreeable undergraduate respondents were less likely to be overly indulged in their use of social media technology, unlike other personality types. Other scholars who have also looked at the role of personality on internet powered technology use found that individuals who did not score high in the conscientiousness personality types were also prone to frequently using the internet (Wilson, Fornasier, & White, 2010). These findings seem to support other studies which found introversion as a strong predictor

University of Ghana http://ugspace.ug.edu.gh

of frequent use of social media and its related technology. Different personality types prone to the regular use of internet-powered technology include neuroticism and openness (Wilson et al., 2010).

In a study addressing compulsive buying, the 200 female participants interviewed revealed a relationship which existed with their frequent use of internet-powered technology and their shopping activity (Lejoyeux, Mathieu, Embouazza, Huet, & Lequen, 2007). Supported assertions made to the effect that compulsive buying is a time-consuming activity which, like problematic behaviours, can have an impact on daily life (Duroy et al., 2014). Some studies have linked the excessive use of social media to financial, work-related and academic problems. For example, Welsh found out that excessive use was linked to academic failure and reclusion from social relationships (cited in Anderson, 2001).

### 3.4. Conceptual Framework & Hypotheses

The current study will make use of the theoretical guidance from the self-regulation theory in order to understand self-control failure within the social media space and further understand the possible online purchasing behaviour patterns users were likely to adopt when they were faced with SMSCF. The critical concepts of compulsive buying, conspicuous consumption, attitudes towards online buying and willingness to buy used to confirm the affirmations social media users will have about their purchasing behaviour.

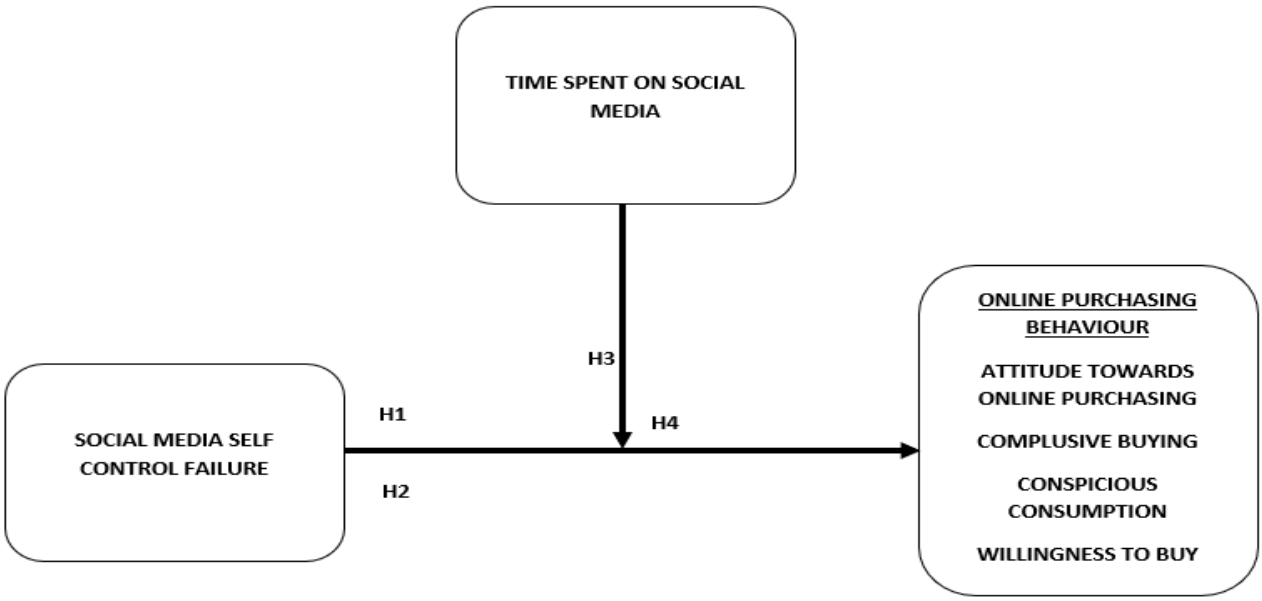
The purpose of the study is to scrutinise the relationship between SMSCF and online purchasing behaviour. Insights on the influencing role of time spent on social media platforms, on this relationship will also be examined. Based on reviewed literature the study expects that SMSCF will have a positive influence on the study's constituents of online purchasing behaviour (attitude

University of Ghana http://ugspace.ug.edu.gh

towards online purchasing behaviour, compulsive buying, conspicuous consumption and willingness to buy). The literature further implies that users who are exposed to social media are likely to experience self-control failure at one point or the other (Du et al., 2018). This exposure facilitates purchasing solutions on such platforms, is likely to influence online purchasing behaviour (Zhang et al., 2017). With the growing time spent on social media by consumers, the potential of time cannot be understated especially with the confusion of 'time in terms of frequency' and 'time in terms of type of usage' in the 'excessive use' literature (Ho et al., 2017; Jasso-Medrano & López-Rosales, 2018; Kittinger et al., 2012; Pahlevan Sharif & Yeoh, 2018; Satici & Uysal, 2015). These arguments are diagrammatically displayed in the conceptual framework of the study, which shows the key relationships which are to be tested. (See Figure 3.1).

University of Ghana http://ugspace.ug.edu.gh

**Figure 3. 1: Conceptual Framework of the Study**




**Source: Author's Construct**

### 3.4.1. SMSCF and Online Purchasing Behaviour

Currently, one of the most significant phenomena of this era, social media is inherently being used for all manner of things. The consistent exposure to social media occasionally brings users into situations where they have to choose between their social media use and other important things (Du et al., 2018). The moment users decide to give in to their desire to use social media over their planned objectives we say SMSCF has occurred (Baumeister, 2002; Hofmann, Baumeister, et al., 2012; Polites, Serrano, Thatcher, & Matthews, 2018). Originally social media was designed mainly as a platform to ensure that users were connected to individuals within their social network. Just like any new form of media, research has shown that social media use occasionally comes into conflict with the planned goals of individuals. Growth in its usage, coupled with changes in technology, pushed its development as a marketing tool for businesses and has created the

University of Ghana http://ugspace.ug.edu.gh

conducive atmosphere for self-conflicts to exist. Various studies have identified the growing preference of different internet powered technology for online purchasing activities by consumers. Studies which have addressed social media as the preferred medium to facilitate online purchasing have found that social media and the opinions shared on such platforms influence purchasing behaviour (Forbes & Vespoli, 2013; Miyazaki & Fernandez, 2001; Olenski, 2012; Zhang et al., 2017). Other studies have established a positive relationship between social media use and purchasing activity (see: Paquette, 2013; Ngai, Moon, et al., 2015). Users of social media in as much as they can face self-control failure situations can have their online purchasing behaviour also influenced making them prone to making a lot more purchases via social media. It is therefore proposed for this study that:

***H1: SMSCF positively influences online purchasing behaviour.***

Supporting literature has made the assumption that consumers in their path to purchase, will adopt behaviours at the pre, during and post purchase phase which can be influenced by social media (Yuan et al., 2008). Once SMSCF is experienced, it is bound to have an impact on these behaviours as well. For this study, attitude towards online purchasing, compulsive buying, conspicuous consumption, and willingness to buy have addressed as a composite unit to measure the study's concept of online purchasing behaviour.

Attitude has been identified to affect an individual's propensity to make an online purchase of a product or service via an internet-powered technology (Jahng, Jain, & Ramamurthy, 2001). For users to develop the right attitudes, which will define the behaviour of social media use for online purchasing activities, consumers must first and foremost accept social media as a medium through which purchases can be made. Social media as a platform for purchasing activities must be appealing to the customer and risks associated with using social media for online purchasing must

University of Ghana http://ugspace.ug.edu.gh

be either non-existent or minimal. Since social media use has generally been proven to positively affect the attitudes towards the adoption of social media technology in purchasing activities (Erkan Akar & Topçu, 2011; Ezgi Akar & Nasir, 2015). In the case of SMSCF, the study, therefore, proposes that:

*H1a - SMSCF positively influences attitude towards online purchasing*

Compulsive buying in the online purchasing literature is a by-product of problematic use of internet-powered technology such as social media (Pahlevan Sharif & Yeoh, 2018; Rose & Dhandayudham, 2014). Studies have linked compulsive buying as an outcome behaviour of excessive use as well (Duroy et al., 2014; Trotzke, Starcke, Müller, & Brand, 2015; Wang & Yang, 2008). In terms of shopping activities, self-control failure has been linked to the development of compulsive buying behaviour. The consensus for this study is that SMSCF will allow individuals to indulge in some problematic buying behaviour of one form or another and as such, the study proposes that:

*H1b - SMSCF positively influences compulsive buying*

With social media offering users a platform to engage in social comparison activities users are expected in their interactions with others in their social network to validate their self-esteem needs (Thoumrungroje, 2014; Trigg, 2001). This use of social media occasionally leads users to conspicuously consume products and services to satisfy these self-esteem needs (Taylor & Strutton, 2016). Once social media offers a chance to display a sense of wealth and higher social status, it can lead its users to consume in such a manner, which is going to drive them to make purchases via the medium since it facilitates it. The study, therefore, hypothesises that

*H1c - SMSCF positively influences conspicuous consumption*

University of Ghana http://ugspace.ug.edu.gh

Literature has shown that users will most likely engage in online purchasing once they have positive experiences and perceptions with the internet powered technology they use (Hutter et al., 2013; Lim, Yap, & Lee, 2011). Since social media adoption is at an all-time high, positive attitude has been adopted about it and hence the propensity for users to partake in buying activities on such platforms. SMSCF is, therefore, likely to create an environment where the convenience of purchasing goods and services will make users more enthralled to engage in online purchasing activities. The study, therefore, proposes that

*H1d - SMSCF positively influences willingness to buy*

### 3.4.2. High & Low SMSCF and Online Purchasing Behaviour.

Du et al. (2018) state that the concept of problematic use is growing, with users falling into addiction and disordered usage of this growing phenomenon. However, it is further argued by the authors that most studies which have addressed this found only a small percentage of users also falling - disordered range. The discussion on everyday media use revealed that self-control failure is somewhat more prevalent in most media users as against problematic forms such as addiction or disorder. Which means that users of social media will most likely lie on a continuum with self-control failure at the mundane end of the spectrum, while addiction and disorder at the more end. This difference establishes the platform where users will find themselves at one point or the other on the scale. SMSCF will most likely have users experiencing a lower or higher intensity on the scale. Users who experience self-control failure will then most likely experience a different effect on behaviour based on the SMSCF intensity. The study hypothesises that:

***H2: The relationship between SMSCF and online purchasing behaviour will differ between users who have lower SMSCF and higher levels of SMSCF.***

University of Ghana http://ugspace.ug.edu.gh

***H2.1: Low SMSCF positively influences online purchasing behaviour.***

*H2.1a -Low SMSCF positively influences attitude towards online purchasing*

*H2.1b – Low SMSCF positively influences compulsive buying*

*H2.1c – Low SMSCF positively influences conspicuous consumption*

*H2.1d – Low SMSCF positively influences willingness to buy*

***H2.2: High SMSCF positively influences online purchasing behaviour.***

*H2.2a -High SMSCF positively influences attitude towards online purchasing*

*H2.2b – High SMSCF positively influences compulsive buying*

*H2.2c – High SMSCF positively influences conspicuous consumption*

*H2.2d – High SMSCF positively influences willingness to buy*

### 3.4.3. Time Spent on Social Media, SMSCF and Online Purchasing Behaviour

The social media literature has addressed different moderators in the relationship between social media and various behavioural outcomes. These moderators have usually been centred around user characteristics and social factors (Ngai, Moon, et al., 2015). Time spent on social media is a very vital component of its usage in today's environment. Statistics have placed average social media usage at 3.14 hours a day, coupled with the growing numbers of participants in this interconnected nexus. The time spent on social media is likely to affect the relationship between social media use more so when it interferes with self-control (SMSCF) and behaviour such as online purchasing behaviour (GlobalWebIndex, 2017; Statista Inc., 2018b, 2018a). The study, therefore, proposes that:

University of Ghana http://ugspace.ug.edu.gh

***H3: Time moderates the relationship between SMSCF and online purchasing behaviour.***

*H3a: Time moderates the relationship between SMSCF and attitude towards online purchasing*

*H3b: Time moderates the relationship between SMSCF and compulsive buying*

*H3c: Time moderates the relationship between SMSCF and conspicuous consumption*

*H3d: Time moderates the relationship between SMSCF and willingness to buy*

### 3.4.4. SMSCF Group Differences, Time Spent on Social Media and Online Purchasing Behaviour

Based on the reviewed literature, the continuum SMSCF finds itself is deemed to have a likely effect on the users who purchase goods and services online. More so based on the intensity, self-control failure is experienced. These differences (High and Low SMSCF) are also believed to be influenced by the presence of time spent on social media on these relationships. The study further proposes that:

***H4: Time spent on social media can explain the group differences between low SMSCF and high SMSCF about online purchasing behaviour.***

*H4a: Time moderates the relationship between high SMSCF and attitude towards online purchasing*

*H4b: Time moderates the relationship between high SMSCF and compulsive buying*

*H4c: Time moderates the relationship between high SMSCF and conspicuous consumption*

*H4d: Time moderates the relationship between high SMSCF and willingness to buy*

University of Ghana http://ugspace.ug.edu.gh

*H4e: Time moderates the relationship between low SMSCF and attitude towards online purchasing*

*H4f: Time moderates the relationship between low SMSCF and compulsive buying*

*H4g: Time moderates the relationship between low SMSCF and conspicuous consumption*

*H4h: Time moderates the relationship between low SMSCF and willingness to buy*

University of Ghana http://ugspace.ug.edu.gh

# CHAPTER FOUR

# RESEARCH DESIGN & METHODOLOGY

## 4.0. Introduction

In this chapter, discussions presented on all the philosophical and methodological issues that are related to the current study. The chapter is introduced by an understanding of the ontological and epistemological stance chosen by the researcher for the current study. It is followed by the presentation of the research approach and the research purpose adopted for the current study. The research methods and strategies are also discussed and a justification given to support the choices selected by the researcher for this study. Data collection methods and the instruments used in the collection of data as well as the method of analysis and quality criteria are also discussed in this chapter. Sampling and issues related to sampling were also noted within this chapter with interest in the ethical steps used by the researcher in the study as well.

The current study makes use of Saunders, Lewis, & Thornhill (2009) research onion as a guide towards understanding the pathway towards achieving a successful study, especially due to his business management centred approach to research. See Figure 4.1

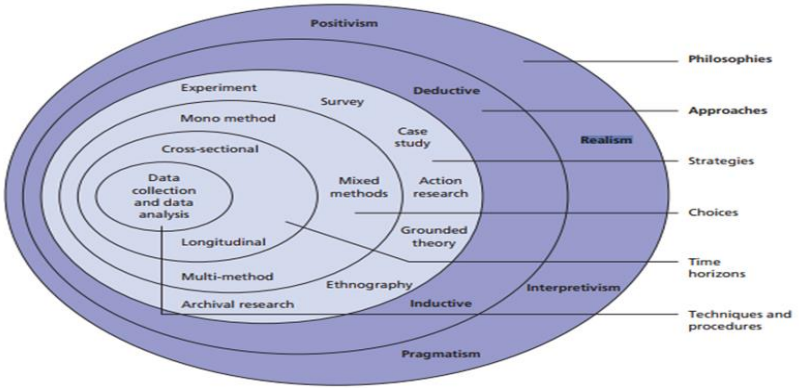



**Figure 4. 1 "The Research Onion" (Saunders et al., 2009)**

University of Ghana http://ugspace.ug.edu.gh

## 4.1. Research Philosophy

The research philosophy is an essential element of the knowledge discovery process, as well as its acquisition process of research. It addresses how, knowledge about a phenomenon should be collected, analysed and used. It forms the foundation of beliefs requisite for a researcher to undertake this knowledge acquisition process. The philosophy contains the critical assumptions which define how the researcher's views the world around them. The philosophy, in turn, affects the methods and strategies the researcher will select to ensure that his research goal is achieved. Research philosophy, therefore, looks at the relationship between knowledge and its development process. Pragmatically research philosophy is not bound in a rigid format, but instead flexible as it adapts to the best means by which the research question can be addressed (Saunders et al., 2009). Research philosophies are driven by the researcher's 'ontological' stance (the researcher's view of the nature of reality or being), 'epistemological' stance (the researcher's view regarding what constitutes adequate knowledge), and 'methodological' stance (the researches approach towards gaining knowledge).

Towards the adoption of a research philosophy for this study, the discussion below present's briefly four notable research philosophies identified in the field of business and management research. These are specifically positivism, realism, interpretivism, pragmatism (Saunders et al., 2009).

### 4.1.1. Positivism

Under this research philosophy, the researcher's view of what constitutes reality is external, objective, and independent of social actors. It is an essential aspect of the positivist philosophy, where the research is as value-free as possible. Some researchers have argued that the adoption of

University of Ghana http://ugspace.ug.edu.gh

a value-free position is already an adoption of particular value and thus defeats the positivist philosophy of research.

The researcher in this philosophy believes that only phenomena that you can observe will lead to the production of credible data (Johnson & Onwuegbuzie, 2007). Researchers who adopt a positivist philosophy build their research on existing theory in the development of the hypothesis to drive their study. This developed hypothesis is then tested and confirmed, leading to further developments of the theory. Positivist researchers tend to use a highly structured methodology to facilitate replication and are supported by statistical analysis from quantifiable data sources.

#### 4.1.2. Realism

This research philosophy is of the premise that reality and truth are based on the senses. The philosophy is similar to the positivist in that it assumes a scientific approach to the development of knowledge. It is also known as post-positivism (Crozier, Denzin, & Lincoln, 1994) or neo-post positivism (Miles & Huberman, 1994) research philosophy. This assumption underpins the method with which data is collected and also addresses how the data is interpreted. Realism is usually associated with quantification, but it is compatible with many qualitative methods. This meaning becomes more apparent when the two forms of realism are contrasted, i.e. critical and direct realism. Both critical and direct realism believe that reality comprises of the things that make up ‘reality’ and the sensations they convey. However, critical realism goes a step further to identify the mental processing that goes on after the sensation meets our senses to make sense of reality. Thus, the critical realist’s position is that our knowledge of reality is a result of social conditioning.

University of Ghana http://ugspace.ug.edu.gh

### 4.1.3. Interpretivism

According to (Boateng, 2016) this research philosophy views reality as one that is "socially constructed and is therefore dependent on the subjectivism of people". The researcher is poised to believe that knowledge is primarily subjective and dependent on the context of the study at hand. The knowledge can, therefore, be obtained when the researcher attempts to understand as many versions of explanations as possible, and from there, settling on more recurrent ones. The aim is to understand the world from the perspective of the research subject. This philosophy is based off the phenomenology – which is how a man makes sense of the world around him- and symbolic interactionism – which is the continuous interpretation of one's social environment, i.e. man's interactions others in others and in turn adjusting his meaning and understanding of the world based off these interactions. Saunders et al. (2009) state that empathy plays a crucial role in the adoption of this philosophy. Due to its nature, interpretivism often relies on inductive and qualitative approaches to research.

### 4.1.4. Pragmatism

The pragmatism philosophy believes in the researcher's ability to work with variations in their view of the world. Pragmatism believes that reality does exist and can be known; however, it is often-changing and requires different kinds of methodologies and approaches to identify and measure it (Saunders et al., 2009). According to Teddlie, Tashakkori, & Johnson (2008) due to the nature of this philosophy providing the researchers with a philosophical stance which will prevent an endless debate about concepts, truths and reality, pragmatism is intuitively appealing. It, therefore, often makes use of research designs like mixed methods to get the most out of reality. Table 4.1 presents a tabulated summary of the various research philosophies in the business management field.

University of Ghana http://ugspace.ug.edu.gh

The current study employed by the researcher adopted a direct realist stance to tackle the objectives of the study since it made use of a quantitative layout which has been tuned to tease out the constituents of reality about the study objectively. Since the researcher believed that prevailing scales could satisfactorily measure SMSCF, time spent on social media, online shopping behaviour and its associated outcomes from literature, large sample size and quantitative analytical methods were used to discover the truth.

University of Ghana http://ugspace.ug.edu.gh

| | Positivism | Realism | Interpretivism | Pragmatism |
|---|---|---|---|---|
| Ontology: *the researcher's perspective of what constitutes reality or being* | • Outward<br>• Unbiased<br>• Independent | It's objective.<br><br>It exists regardless of human ideals and beliefs or understanding of their presence (realist), but it is interpreted by social conditioning as well (critical realist) | • Socially constructed<br>• Subjective<br>• Susceptible to change | Multiple, view chosen to enable the best answering of the research question, external, |
| Epistemology: *the researcher's opinion concerning what establishes acceptable knowledge* | Credibility of data and reality can only be provided by the phenomena under study<br><br>Focussed on causal relationships, statistically inferred generalisations, addressing phenomena to its basic elements | Observable phenomena serve as the source of credible information and evidence<br><br>Inadequate data means mistakes in sensations (direct realism). Alternatively, phenomena create sensations which subject to misunderstandings (critical realism). Emphasis on elucidation within a context or contexts | Distinctive implications and social phenomena.<br><br>Emphasis is placed on the detail of the phenomena under study. Reality is formed from the details of the situation through subjective meanings and motivating actions | The research question can be answered by either the observed phenomena or subjective insights or by both in the knowledge acquisition process.<br><br>Pragmatic research and its application is the key focus, making use of varied approached in the interpretation of data |
| Preferred data collection methods | Very organised, structured measures, large samples, largely quantitative but possible to use qualitative means. | Methods selected must fit the topic, quantitative or qualitative | Small samples, in-depth investigations, qualitative | Multiple method designs, qualitative and quantitative |

**Table 4. 1: Summary of research philosophies (Source: Saunders et al. 2009)**

University of Ghana http://ugspace.ug.edu.gh

## 4.2. Research Approach

Easterby-Smith, Thorpe, & Lowe (2008) state three reasons which inform and addresses a researcher's decision into the adoption of an approach to their study. Firstly, the approach must enable the researcher to take a relatively more informed stance when choosing the make-up of the study, the data collection and analysis method. It provides a setup which "questions what type of evidence is gathered, from where, and how such evidence is interpreted to provide good answers to your initial research question." Secondly, the research approach will help the researcher think about the possible research strategies and choices that will aid in undertaking a successful study and empower the researcher to eliminate irrelevant strategies. Finally, an adept understanding of the different research approaches equips the researcher with the skills to properly modify and redesign a study's research design making accommodations for probable constraints.

In undertaking research, there are two main approaches in conducting a study, mainly deductive and inductive approaches (Trochim, 2015). Deductive approaches are more leaning towards a positivist as well as its associated research philosophies, while inductive approaches are more inclined towards 'interpretivist' and 'interpretivism' leaning research philosophies. Scholars, however, state that it is misleading to believe that these two research approaches must be rigidly applied when undertaking a study (Saunders et al., 2009).

### 4.2.1. Deductive Approach

Scholars note that the deductive approach is entirely hinged on the development and testing of a hypothesis and theory through the appropriate research strategy (Dudovskiy, 2018). Saunders et al. (2009), attest that the deductive approach is objective and concerned with the testing and or confirmation of the hypotheses. Under this deductivist style, the researcher begins "with an abstract, logical relationship among concepts then move towards concrete empirical

University of Ghana http://ugspace.ug.edu.gh

evidence",(Keith F Punch, 2013). Theory plays an essential role in this approach, as well. The approach facilitates the use of existing theory to develop the framework which will guide the research study, improve the hypothesis, choose the right variables, and the relevant measures to answer the research questions. Robson (2002), states that there are five consecutive steps which the deductive research approach must follow. It starts with the deduction of the research hypothesis, which usually comprises of testable constructs or variables from theory. Operationalisation of the hypothesis is the next step, which involves an introspective look into the relationship which occurs between the chosen research constructs or variables. Measures and scales are also identified at this step. The third step has the operationalised hypothesis tested. The fourth step examines the outcome of the study, whether it proves or disproves the theory of the study. Findings here may indicate if modifications have to be made to the existing theory. The final step looks at the action taken by researchers and the research community to modify the theory based on the findings. This process is cyclical, and an attempt is then made to confirm the revised theory by going back to the first step. Large sample sizes are generally preferred in the use of this research approach (Trochim, 2015).

### 4.2.2. Inductive Approach

The theory building process is the premise on which the inductive approach is operationalised, it starts with observations of specific instances and phenomena by the researcher and leads to the establishment of generalisations about the noted phenomenon (Hyde, 2000). The inductive approach to research is reliant on the collection, use and analysis of data towards development and formulation of theory (Trochim, 2006). Inductive research usually concerned with the contextual element of a study. It often makes use of small samples of the subject of the study, unlike deductive

University of Ghana http://ugspace.ug.edu.gh

approach, which requires more numbers to improve the generalisation power of the findings from the study.

The inductive research approach travels across a pathway of accurate and precise observations into the formulation of broad generalisations and advanced theories. Some scholars have informally named the inductive approach the 'bottom-up approach' since it a reversed form of the deductive approach. The inductive approach begins with the researcher making specific observations and then measures that begin to detect patterns and regularities, formulate some tentative hypotheses that can be explored, and finally end up developing some general conclusions or theories. Table (4.12) shows a summary of the various approaches in research.

| **Deductive Approach** | **Inductive Approach** |
|---|---|
| The theoretical framework is developed | No theoretical framework, however area of interest is identified. |
| Study instruments are developed | Broader themes for discussion are identified |
| Variables are designed off the relevant constructs | The respondents identify identification of constructs and the relationship which exist between them. |
| Specific questions are given to respondents of the study. | The respondents of the study discuss the general themes. |
| The theory is tested, and hypotheses are either accepted or rejected | The theory is developed |
| The study is usually aligned with more quantitative methods | The study is generally aligned with more qualitative methods. |

**Table 4. 2: Summary of Research Approaches**

The study being undertaken by the researcher made use of a deductive approach to find and examine the impact of SMSCF on the online shopping behaviour of college students. The study intends to test the existing theories which drive the relationship between the variables, most notably the theory of planned behaviour. This approach enables the researcher to test the developed

University of Ghana http://ugspace.ug.edu.gh

hypothesis for the study, findings of which will to ultimately lead to either acceptance or rejection of the guiding theories.

### 4.3. Research Purpose

Research literature has indicated three major classifications under which the research purpose is operated. They are either exploratory, descriptive, or explanatory (Salehi-Sangari & Engström, 2007). These three are discussed below with the justification made by the researcher for the study's chosen one.

#### 4.3.1. Exploratory Research Purpose

The exploratory purpose of a study typically seeks to investigate phenomena that are relatively new or not well understood (Marshall & Rossman, 1999). Exploratory research is used by researchers to identify and categorise the meaning used in generating hypotheses for further research (Adams & Schvaneveldt, 1991; Creswell, 2007; Yin, 2003). It leads to a research design which is characterised by a flexible and evolving approach requisite to understanding a phenomenon that is inherently difficult to measure. Exploratory research majorly emphasises the discovery of ideas and the development of new insights (Robson, 2002). The exploratory nature of the purpose deals with the study phenomena in a manner to facilitate the development and formulation of research concepts to further understanding and knowledge progress (Phillips & Pugh, 2005). Research has indicated that in such instances where exploratory purposes lead the study, the aim to further new knowledge can evolve the purpose into a descriptive or explanatory nature (Eriksson & Weidersheim-Paul, 2011). Also, exploratory research could be used to identify essential categories of meaning or to generate hypotheses for further research (Marshall & Rossman, 1999; Yin, 2003). It is predominantly useful when researchers seek to clarify their understanding of a problem, such that they will present the precise nature of a problem (Saunders

University of Ghana http://ugspace.ug.edu.gh

et al., 2007). Exploratory research makes use of three main ways of conducting the studies, namely, through literature search and reviews, interviewing 'experts' in the field of study and the conduction of focus group discussions.

### 4.3.2. Descriptive Research Purpose

When a research purpose is illustrative, it addresses the phenomenon of interest through documentation and description, without the explicit aim of assessing or examining causal relationships (Eriksson L-T & Weidersheim-Paul, 2011; Marshall & Rossman, 1999). Malhotra, Birks, & Nunan (2017) states that descriptive purposes offer a significant objective of describing the characteristics or functions of the phenomenon. Descriptive research is proposed in cases where the problem is structured, and the researcher is clear about what he or she intends to investigate (Eriksson L-T & Weidersheim-Paul, 2011). The object of descriptive research is to portray an accurate profile of persons, events, or situations (Robson, 2002). Descriptive research in management and business research has an obvious place and should be considered as a path to an end rather than an end in itself.

### 4.3.3. Explanatory Research Purpose

Explanatory studies attempt to describe the relationship between different phenomena, or variables in the problem model, and examine possible causal relationships between these (Marshall & Rossman, 1999; Phillips & Pugh, 2005). Explanatory research —focuses on studying a situation or problem to explain the relationships between variables Saunders, Thornhill, & Lewis, 2015; Saunders & Thornhill, 2016). The data collected in analytical research is usually subjected to statistical tests like correlations and regression analysis to explain or understand the link between the various variables.

University of Ghana http://ugspace.ug.edu.gh

The researcher will adopt an explanatory purpose to the study since this research purpose is subject to the use of statistical tests from quantitatively collected data. The use of statistical tests is essential to the researcher in addressing and assessing the relationship between the variables of the study. It also allows the researcher to set hypotheses for testing, which will aid in the explanation of the variables of the study and predict the relationship between them. It also allows the researcher to understand the characteristics of groups that are affected by the variables. These characteristics of this type of research purpose suit this study and will enable the researcher to achieve the goals and objectives of the study.

### 4.4. Research Method Choice

The research method choice in the business and management sphere comprises how data (qualitative or quantitative) is collected. Quantitative in research data collection refers to the use of numerical data, while Qualitative makes use of non-numerical data. When making use of quantitative and qualitative data, two main research methods can be chosen by the researcher; they are mono methods and multiple methods (Saunders et al., 2009). Mono methods chosen by the researcher will use a strictly one quantitative method such as questionnaires or one qualitative method such as interviews. Multiple methods can further be broken down in two streams, namely multi-methods and mixed methods. Multi-methods involve the use of two or more quantitative or qualitative methods by the researcher. The researcher may adopt the use of questionnaires and structured observations and therefore use a multi-method quantitative study (Saunders et al., 2015). A multi-method qualitative study is a term used to refer to a researcher's adoption of two or more qualitative methods for a study. Mixed methods approach is the general term for when researchers make use of both quantitative and qualitative data collection techniques and analysis procedures in research. It is made up of mixed methods research and mixed model research. Both of these

University of Ghana http://ugspace.ug.edu.gh

mixed-methods approaches take advantage of qualitative and quantitative data. However, mixed method research collects and analyses quantitative data quantitatively and qualitative data qualitatively. Mixed model research collects both data types, converts and analyses them either quantitatively or qualitatively.

The researcher employed the use of mono-method research choice more precisely a quantitative mono-method in undertaking this study.

### 4.5. Research Strategy

In order to operationalize the chosen research philosophy, the preferred research strategy is of importance. Some of the strategies used in research conform to more deductive approaches, while others might be more inclined towards inductive approaches. No one approach is superior to the other rather a means through which the research problem is addressed, which means that research strategies can be used in a complementing manner and are, therefore, not mutually exclusive. Each strategy can, therefore, be used for all of the three research purposes, i.e. explanatory, descriptive, and exploratory. Saunders et al. (2009) identify seven research strategies; these are "experiment, survey, case study, action research, grounded theory, ethnography, and archival research". These strategies are associated with their benefits and challenges with unclear and overlapping boundaries between them. The type of research questions posed, the level of control the researcher will have in influencing the behavioural outcomes of the study and the extent to which the study focuses on contemporary events inform the researcher's decision on the type of strategy to be adopted for the study (Marshall & Rossman, 1999). Based on Saunders et al. (2009), the following research strategies are discussed in brief:

University of Ghana http://ugspace.ug.edu.gh

### 4.5.1. Experiments

This classic strategy based on strong natural science heritage seeks to understand and explore casual linkages, usually whether the independent variable causes a change in the dependent variable. Experiments typically start with the definition of a theoretical hypothesis; this followed the selection of samples for the experiment. Accompanied with the development of groups at random from the samples, notably the experimental group – experimental conditions are set and applied to this group- and the control group – they usually have no conditions attached to them. The experiment then occurs with the manipulation of the variables.

### 4.5.2. Survey

This strategy is the most common and popularly used in the business management research space. It is usually simultaneously associated with the deductive approach. They allow the collection of a large amount of data from a sizeable population in a highly economical way. The data points are usually standardized and with no variations and therefore allows easy comparisons. The data can be analysed descriptively or inferences made on it, this means that patterns can be seen in the relationship of a study.

### 4.5.3. Case study

This a research strategy which involves the investigation of a particular phenomenon using multiple sources of evidence (Robson, 2002). Triangulation occurs here due to the varied means through which data can be collected because of the multiplicity of evidence sources. It is the process by which different data collection techniques are used within one study to ensure that the story is told correctly. The use of case studies as research strategies is the best fit when the researcher has a particular interest with the purpose of gaining a rich understanding of the context of the study as well as the processes being enacted.

University of Ghana http://ugspace.ug.edu.gh

### 4.5.4. Grounded theory

The grounded theory strategy makes use of inductive and deductive approaches in the theory-building processes. Goulding (2002) states that it is particularly useful in the prediction and explanation of behaviour. Data collection and data analysis occur concurrently with categorisation and analytic codes developed from the data collected (Noble & Mitchell, 2016). The strategy starts without the formation of an initial theoretical framework. The theory is developed from data generated by a series of observations. The data then leads to the development of predictions that are then tested in further observations.

### 4.5.5. Ethnography

Having the inductive approach to undertaking research as the core of this strategy. Its major aim is "to interpret the social world the researcher's subjects inhabit, in the way in which they interpret it". The process is usually extremely malleable with the researcher open to new thought processes as the study is being undertaken. Studies that make use of this strategy do not use data collection and analysis techniques which oversimplify the phenomenon that is being studied in the context that it operates. It is a research process that is very time consuming and takes place over an extended period.

### 4.5.6. Action research

The action research strategy is generally focused on the implementation of research to facilitate change. The strategy recognises the importance of time in "diagnosing, planning, taking action and evaluating, and the involvement of employees (practitioners) throughout the process" to facilitate change. In this research strategy, the researcher is usually part of the organisation within which the research and change process is taking place.

University of Ghana http://ugspace.ug.edu.gh

### 4.5.7. Archival research

This research strategy relies mainly on secondary data sources, which are predominantly administrative records and documents to drive the study. This by no means situates this strategy as a secondary data analysis technique, instead the data is analysed as a product of day-to-day activities and is, therefore, part of the reality being studied rather than having been collected originally as data for research purposes (Saunders et al., 2009; Ventresca & Mohr, 2005).

The current study made use of surveys as the research strategy of choice for the study with questionnaires as the tool for this strategy. This strategy aligns with the chosen paradigm of the researcher. Surveys have been defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, mainly when the limits between phenomenon and context are not evident (Cavaye, 1996). The survey is one of several ways of doing social science research. Since the study is situated in social media research and consumer behaviour space, the use of surveys is considered as one of the most suitable research strategies for this study.

First and foremost, this research intends to explore the influence of SMSCF on consumer online purchasing behaviour. Therefore, the use of surveys is more suitable for this study to produce answers to the research questions compared to other strategies such as the examination of archival records. Secondly, in line with the objective nature of the chosen research philosophy, the researcher had no control over the contemporary set of events. Bonoma (1985) states that "the survey is best suited for research when the researcher is interested in understanding dynamic contemporary events in an environment over which the researcher has no control".

University of Ghana http://ugspace.ug.edu.gh

## 4.6. Time Horizons

Time horizons refer to the time frame/ period within which the subject of the study will be under observation. Scholars have noted that most studies undertaken in academic conditions are usually time-constrained. Studies may be designed in a manner such that it takes advantage of the two primary forms of time horizons in research. Cross-sectional studies and longitudinal studies are the two major time-related perspectives which are used in undertaking research (Saunders et al., 2009). Longitudinal studies are those that capture data for the research at multiple times over a given period identified by the study. The study usually involves individuals or groups of individuals who are observed over some time (Ployhart & Vandenberg, 2010). Cross-sectional studies, on the other hand, typically consider the study and its constituting phenomenon being observed at a particular period in time. This type of study typically captures the state of the subject as at the time the research is being conducted. The study usually comprises of large sample sets studied at that the single point in time (Rindfleisch, Malter, Ganesan, & Moorman, 2008). One unique advantage of the cross-sectional study is the broad overview it provides the researcher on the subject under study and is especially necessary when there are time constraints that must be met by the researcher. The current study will make use of the cross-sectional study to gather data within a specific period through its use of surveys. One time data is collected from the participants of the study.

## 4.7. Research Population

In a bid to collect data from the right sources, it is integral for any researcher to identify participants who are relevant to the phenomenon under study. Before researchers can identify the sample required for the study, it is important to identify the research population for the study. The population constitutes all the cases from which the research sample will be taken (Saunders et al.,

University of Ghana http://ugspace.ug.edu.gh

2009). According to Burns & Bush (2010) "the entire group under study as specified by the objectives of the research project". The population affects the outcome and generalizability of the study due to their relationship with the study's phenomenon. A census comprises of the total constituents of a population when they are all accounted and partake in a study. The current population is composed of all college students in Ghana, notably undergraduate students. The country currently has ten (10) public universities and eighty-one (81) private universities across its length and breadth with a total undergraduate population of 208,511 as at the 2016-2017 academic year (National Accreditation Board, 2019). Literature has proven that this population share similar characteristics and preferences about their social media usage and therefore makes them ideal candidates for the study.

### 4.8. Research Sample

Due to the relatively time-bound nature of the study, together with some socio-economic limitations of the researcher, a sample will be used in place of a census to undertake the study. A sample is a subset of a population. It will be wrong to assume that the use of a sample over a census will provide less useful results. When it becomes not pragmatic for a study to survey the entire population, budget constraints with the execution of the study, and time constraints with the study it is only logical for the researcher to adopt a sampling method to conduct the study.

In the research domain, two major sampling methods are adopted by researchers they are representative sampling (probability sampling) and judgemental sampling (non-probability sampling) techniques (Saunders et al., 2009). The representative sampling technique presents a chance of each case being equally selected for the study from the total population. This technique is usually associated with the use of surveys and experiments. The types of representative sampling techniques include simple random sampling, systemic sampling, stratified random sampling and

University of Ghana http://ugspace.ug.edu.gh

cluster sampling. Judgemental sampling technique, on the other hand, does not present the probability of each case being selected from the total population. Saunders et al. (2009) state that you may be able to generalise with a judgemental sample however, statistical interpretations cannot be inferred about the characteristics of the population. Notable examples of non-probability sampling techniques are quota sampling, purposive sampling, snowball sampling and convenience sampling.

To calculate the ideal number of participants (i.e. the sample) for the study, Tabachnick & Fidell (2007) formula for calculating sample size was used. The formula N>50 + 8 (m), identifies N as the number of participants and (m) as the number of independent variables in the study. For this study, SMSCF was the only independent variable for the study. Therefore, N>50 + 8(1) = 58, which means that participants of the study must at least be equal or exceed 58 participants for this study. The study initially targeted 300 but distributed 550 to improve on the statistical power of the study. After separation and assessing the filled questionnaire, 526 respondents were used for the study.

Though a more probability sampling method would have been ideal for the study, it was mostly unfeasible to undertake it due to differences in academic schedules on the part of students as against time commitments and constraints on the part of the researcher. Thus, the employment of a non-probability sampling method by the researcher. The surveys were distributed by the researcher via a purposive sampling method across two public universities (University of Ghana, Legon & the University of Education, Winneba) and one private university (Wisconsin International University College), choosing students from the Business School of all three universities. Purposive sampling enables the researcher based on his subjective assessment to identify and select cases that will best allow the researcher to answer the study's research

University of Ghana http://ugspace.ug.edu.gh

question(s) and to achieve its objectives. The researcher believed that due to the exposure of business school students in these universities to the prospects of social media to business growth and profitability they would be the best group to provide answers to the study's questionnaire. Lecturers teaching courses related to electronic commerce were identified, contacted and engaged by the researcher. Their approval facilitated the conduction of the study in the various universities.

### 4.9. Data Collection Sources

There are two main data sources identified in literature, namely primary data sources and secondary data sources. These may be used in tandem or exclusively to achieve the set goals and objectives of the study.

Primary data also called 'original data' deals with data sources which provide the researcher with first-hand account information about the phenomenon under the study (Creswell, 2007). It, therefore, makes use of data collection instruments which have the sole purpose of addressing the set research questions and objectives. Secondary data sources, on the other hand, comprise of data sources that have been used for one purpose but still provide data relevant to the study of a phenomenon (Creswell, 2007). Secondary data sources most often offer better insights into the researched phenomenon.

The current study will make use of primary data through the use of a questionnaire to understand the influence of SMSCF on online purchasing behaviour amongst college students. Questionnaires usually comprise of a formalised set of questions used to obtain information from respondents (Malhotra & Birks, 2009). The benefit associated with the use of questionnaires includes the

University of Ghana http://ugspace.ug.edu.gh

simplicity to tabulate and analyse (Peterson, 2000), and the reliability it produces as a result of the framework of fixed alternatives (Malhotra & Birks, 2009).

### 4.10. Questionnaire Development

To address the research questions for the study, the researcher made use of questionnaires as the instrument used to collect data, as stated earlier. The questionnaire was developed from a careful curation of relevant literature in the social media use and customer online behaviour domain. The first portion of the questionnaire addressed possible control variables which the researcher believed might affect the study, which included socio-demographic data points such as age range, gender, the programme of study, social media platform/s used, and time spent using social media platforms. Time spent on social media is the proposed moderator for the study. Except time spent on social media, the rest of the data points were also considered as probable control variables of the study, since the research believed that they could impact the dependent variables of the study. However, based on reviewed literature of the current study where scholars have addressed the differences in social media use between the two notable sexes (Añez et al., 2018; Barker, 2009; Dhir & Torsheim, 2016; Ioannidis et al., 2018; Krasnova, Veltri, Eling, & Buxmann, 2017; Müller et al., 2016; Ruleman, 2012), coupled with the manner in which the respondents completed the questionnaire, only gender was deemed usable as a control variable for the analysis.

The second portion of the study inculcated the scales used to measure the desired variables outlined for the study. SMSCF was measured with the SMSCF scale adopted from Du et al. (2018), Scales were also adopted from D'Astous et al., (1990); Eastman, Goldsmith, & Flynn (1999); Hansen (2008); Pahlevan Sharif & Yeoh (2018) in order to measure, attitude towards online purchasing behaviour, willingness to buy, compulsive buying behaviour and conspicuous consumption respectively. The questions were all measured on a Likert scale ranging between one (1) through

University of Ghana http://ugspace.ug.edu.gh

to five (5). The degree of the respondent's relationship to each posed question item was from the weakest end (1) to the strongest end (5). SMSCF was measured from 'Never' (1) to 'Always' (5), whilst the items measuring 'Attitude towards online purchasing', one item under the willingness to buy variable, compulsive buying behaviour as well as conspicuous consumption were measured from 'Strongly disagree' (1) to 'Strongly agree' (5). The second willingness to buy item was measured in percentages to identify the likelihood in terms of future purchase action over internet powered technology. Table 4.13 below shows each scale and the number of items used to measure each variable.

| Variable | Number of items | Source |
|---|---|---|
| **Social Media Self Control Failure (SMSCF)** | 3 | Du, J., van Koningsbruggen, G. M., & Kerkhof, P. (2018). |
| **Attitude** | 3 | Hansen, (2008) |
| **Willingness to buy** | 2 | Hansen, (2008) |
| **Compulsive buying** | 10 | D'Astous et al., (1990); Pahlevan Sharif & Yeoh,(2018) |
| **Conspicuous consumption** | 5 | Eastman, J. K., Goldsmith, R. E., & Flynn, L. R. (1999). |
| **Total number of items** | 23 | |

**Table 4. 3: Questionnaire scales and measurement**

A pilot study was undertaken to ensure that the participants of the study easily understood the questions. Two M.Phil. students, together with ten undergraduate students, were used in this pilot. All participants of the pre-study reported clarity of most of the questions. Issues with Likert scale arrangement were identified by the participants and corrected accordingly, before the presentation of the complete instrument.

Questionnaires were distributed within thirty days in September 2018 after prior notification and approval by the lecturers of participating classes.

University of Ghana http://ugspace.ug.edu.gh

### 4.11. Reliability and Validity

Varied scholars have noted that the assessment of the validity and reliability of scales used in a questionnaire is of extreme importance to achieve the most accurate of results (Golafshani, 2003; Schmidt, Viswesvaran, & Ones, 2000; Westfall & Yarkoni, 2016). Reliability and validity are the methods of evaluating the dependability for the measurements to ensure they are free of any form of predisposition and misrepresentation. Hair, Hult, Ringle, & Sarstedt (2016), propose that once questionnaires can provide similar results once the tests are repeated, then the measurement scaled may be considered as reliable and valid.

Reliability is defined as the "consistency of a measure". This consistency is present once the measure produces the same outcomes under the same conditions. Citing Easterby-Smith et al. (2008) reliability can be assessed by posing the following three questions:

- Will the measures on other occasions produce the same results?
- Will other researchers reach similar observations?
- Is there transparency in how raw data was used and interpreted?

The most commonly used method to assess reliability is the internal consistency reliability, which is made up of the Cronbach's alpha and the composite reliability (Hair et al., 2016). The Cronbach's alpha offers an estimate of the reliability based on the intercorrelations of the observed dummy variables. It is statistically represented as:

$$\text{Cronbach's alpha } (\alpha) = \left(\frac{M}{M-1}\right)\left(1 - \frac{\sum_{i=1}^{M} s_1^2}{s_t^2}\right)$$

University of Ghana http://ugspace.ug.edu.gh

Where $s_1^2$ represents the variance of the dummy variable $i$ of a specific construct, measured with M indicators (i = 1,…, M), and $s_t^2$ is the variance of the sum of all indicators of that construct (Hair, Anderson, Tatham, & Black, 2009). The assumption that all indicators are equally reliable is made by the Cronbach's alpha. This measure of internal consistent reliability is also sensitive to the number of items in a scale and as such is a more conservative measure of internal consistency. The composite reliability tends to cover this limitation of the Cronbach's alpha. This measure of reliability takes into account the differences in the dummy variables by not assuming all the indicator variables are equal. It is statistically calculated as:

$$\rho_c = \frac{(\sum_{i=1}^{M} l_i)^2}{(\sum_{i=1}^{M} l_i)^2 + \sum_{i=l}^{M} var(e_i)}$$

Where $l_i$ is the standardized outer loading in the dummy variable $i$ of a specific construct measured with M indicators. $e_i$ indicates the error term of the dummy variable $i$ while $var(e_i)$ is the variance of the error term defined as 1 - $l_i^2$.

The validity of the study instrument assesses whether the instrument in the question precisely measures what it intends to measure, having eliminated systematic errors that result from several environmental and respondent factors.

According to Burns & Bush (2010), validity refers to the appropriateness of the measurements to assess the variable it claims to measure. This study will evaluate the validity of the constructs using mainly the convergent validity and discriminant validity measurements. Convergent validity is the degree to which a measure correlates positively with alternative measures of the same construct (Hair et al., 2016; Hair et al., 2009). The assessment is done by considering the outer loadings of the indicators and the average variance extracted (AVE). The AVE is the grand mean of the squared loadings of the indicators of the constructs; it is statistically represented as:

University of Ghana http://ugspace.ug.edu.gh

$$AVE = \left(\frac{\sum_{i=1}^{M} l_i^2}{M}\right)$$

Discriminant validity is used to identify the extent to which a construct is truly different from other constructs. The two measures of discriminant validity are usually the Fornell-Larcker criterion of the construct as well as the cross-loadings of the indicators. This study made use of the heterotrait-monotrait ratio (HTMT) and confidence intervals to check the discriminant validity issues of this study. All of these will be further addressed in the next chapter of the study.

### 4.12. Data Analysis Techniques

The researcher utilised IBM's Statistical Package for Social Sciences (SPSS) version 23 and the SmartPLS package version 3.2.8 to organise and process the data. SPSS was used to process the collected data; this involved cleaning and organising the data. Once this was done, a CSV file was created and exported from the data and used for the PLS-SEM process with SmartPLS. SEM or structural equation modelling has been a core tool in the social sciences for over two decades. It has been classified as a second generation multivariate statistical technique used to overcome the weaknesses of the first generation techniques such as cluster analysis, exploratory factor analysis, multidimensional scaling, ANOVA, Logistic regression, Multiple regression, and confirmatory factor analysis (Hair et al., 2016). There are two main types of SEM, namely, CB-SEM (covariance based) and PLS-SEM (Partial least squares) (Matthews, Hair, & Matthews, 2018). SEM attempts to compare the hypothesised relationships between latent variables and the data that has been collected by a researcher (Hooper, Coughlan, & Mullen, 2008). SEM allows the operation of much more complex regression models and achieves these simultaneously on data collected and entered into the software. This study will make use of SEM to understand the relationship between the constructs of the study in particular PLS-SEM. The PLS approach is noted for its ability to model

University of Ghana http://ugspace.ug.edu.gh

multiple dependents as well as independents variables, handle multicollinearity amongst the independent variables, robustness amid the noise in the data as well as in the presence of missing data, and creating independent latent variables directly. Based on cross-products involving the dependent variables improving the ability to make stronger predictions in the relationship being studied (Hair et al., 2016). The PLS-SEM also makes no assumptions about the distribution of data and has been identified as a good means to study small sized samples, even when the model is very complex.

### 4.13. Ethical Considerations

In meeting the ethical standards of the study, the researcher was precautious in handling all aspects of the study. Issues related to secondary data sources were carefully identified, and all authors were duly noted and acknowledged in this report. The data instrument used for the collection of primary data ensured that participants were informed about the aims and objectives of the study. Participants were also informed of the adiaphorous nature of responses and were also assured of their anonymity and confidentiality in the study.

Since participants were students undertaking some business-related course at the time of the study, their contribution to the study was compensated with a free social media marketing training course by the researcher worth 75 dollars per participant, which was done with the support and approval of the lecturers of the participating classes.

In summary the current cross-sectional study adopted a direct realist stance in addressing its set research objectives. This research philosophy further supports the adopted deductive stance as the research approach of choice. The study further makes use of an explanatory research purpose I order to test the hypotheses developed between the independent and dependent variables of the

University of Ghana http://ugspace.ug.edu.gh

study. The research methods choice used to drive the study was quantitative mono methods, making use of surveys as the research strategy of the study with questionnaires as the survey tool used. Questionnaires were developed with items from literature which addressed the variables of the study. The research population of the study comprised of all undergraduate students within Ghana and a sample of 550 respondents pulled from this population from three universities (Two public and one private) via a purposive sampling technique. The use of PLS-SEM was used to test the hypotheses designed for the study in order to achieve the set objectives.

University of Ghana http://ugspace.ug.edu.gh

# CHAPTER FIVE

# DATA ANALYSIS AND DISCUSSION OF RESULTS

## 5.0. Introduction

In this chapter, the outcomes of the research study are presented and discussed. The goal of the study was to examine the effect of SMSCF on online purchasing behaviour amongst college students. After the introduction of the study in the first chapter and the review of relevant literature in the following chapter, four key hypotheses for the study were developed. The third chapter made a case for the context of the study while the fourth chapter addressed the methods used by the researcher to acquire the correct data for careful analysis to give a story to the research goal. This present section of the study presents the results and findings that were obtained after the data was collected. It will use the PLS-SEM method to assess the developed model from the desired relationships and further detail the final results once analysis was performed on the data

## 5.1. Data Organisation and Process

To make sense of the data that has been collected, the researcher must prepare the collected data for analysis. Actions such as data screening, data entry, data editing, and data coding, will be undertaken and will enable the researcher to clean the data collected, making it efficient for the analysis process.

The first step was the definition of the variables of this study. It involved the selection of questionnaire items and their verification by the researcher. Once this was done, the data was immediately coded into the SPSS version 23 package before they were distributed. The researcher distributed a total of 550 questionnaires and participants returned all questionnaires; this represents a 100% response rate. This was due to the controlled approach used by the researcher in partnership

University of Ghana http://ugspace.ug.edu.gh

with the lecturers of the courses undertaken by the participants. Questionnaires were distributed and collected before the actual class began. Out of the 550 recovered, 526 were above 95 % complete and considered usable for the study since they met the minimum rate of completion required for a study (Buhi, Goodson, & Neilands, 2008).

Just like all statistical analysis, the treatment of missing values was performed on the collected data. Due to the meeting the 5% threshold required for PLS-SEM, a mean value replacement method was used to address the issues of missing data (Hair et al., 2016). Once the data was processed and organised, the rest of the analysis was done using the SmartPLS software version 3.2.8.

## 5.2. Assessment of Normality & Descriptive Statistics

Normality of the data distribution is considered a key aspect of the study and tied to its successful analysis processes (Hair et al., 2016; Saunders et al., 2015). In PLS-SEM, it is recommended that researchers examine the skewness and kurtosis as measures to examine the distribution of the data. Skewness is the degree to which the data analysed is symmetrical, i.e. if the responses attached to a variable move to the left or the right tail of the distribution. Kurtosis measures whether the distribution of the data is too peaked. A general guide for the assessment of the two measures is that the data understudy will be considered normally distributed when the skewness and kurtosis fall between -2 and +2 (Bryman, 2014; Fisher & Marshall, 2009; George & Mallery, 2003; Trochim, 2006). Table 5.1 shows the distribution of the data for this study and the results indicate the data that is normally distributed.

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 1: Descriptive Analysis of Measurement Statements**

| **Scale Items** | Code | Mean | Standard Deviation | Excess Kurtosis | Skewness |
|---|---|---|---|---|---|
| **Social Media Self Control Failure (SMSCF)** | | | | | |
| How often do you give in to a desire to use social media even though your social media use at that particular moment conflicts with other goals (for example: doing things for school/study/work or other tasks)? | SCF1 | 3.087 | 1.075 | -0.415 | -0.119 |
| How often do you give in to a desire to use social media even though your social media use at that particular moment makes you use your time less efficiently? | SCF2 | 2.973 | 1.030 | -0.311 | -0.251 |
| How often do you give in to a desire to use social media even though your social media use at that particular moment makes you delay other things you want or need to do? | SCF3 | 2.867 | 1.069 | -0.557 | -0.042 |
| **Modified Compulsive Buying Scale** | | | | | |
| When I have money, I cannot help but spend part or all of it on online shopping | MCBS1 | 2.717 | 1.192 | -0.898 | 0.202 |
| I often buy something I see online without planning, just because I have to have it. | MCBS2 | 2.696 | 1.209 | -0.927 | 0.212 |
| I sometimes feel that something inside pushes me to go online shopping | MCBS3 | 2.812 | 1.201 | -0.957 | 0.029 |
| There are times when I have a strong urge to buy online (clothing, music, jewellery, etc.) | MCBS4 | 3.023 | 1.250 | -1.027 | -0.201 |
| At times, I have felt somewhat guilty after buying something online because it seemed unreasonable. | MCBS5 | 2.869 | 1.258 | -1.057 | -0.021 |
| There are some things I buy online that I do not show to anybody because I fear people will think I foolishly wasted my money. | MCBS6 | 2.778 | 1.267 | -1.056 | 0.053 |
| I often have a real desire to go online shopping and buy something | MCBS7 | 2.852 | 1.215 | -0.970 | -0.052 |
| As soon as I visit an online shopping website, I want to buy something | MCBS8 | 2.741 | 1.228 | -0.945 | 0.144 |
| I have often bought a product online that I did not need even when I knew I had very little money left | MCBS9 | 2.643 | 1.203 | -0.952 | 0.201 |

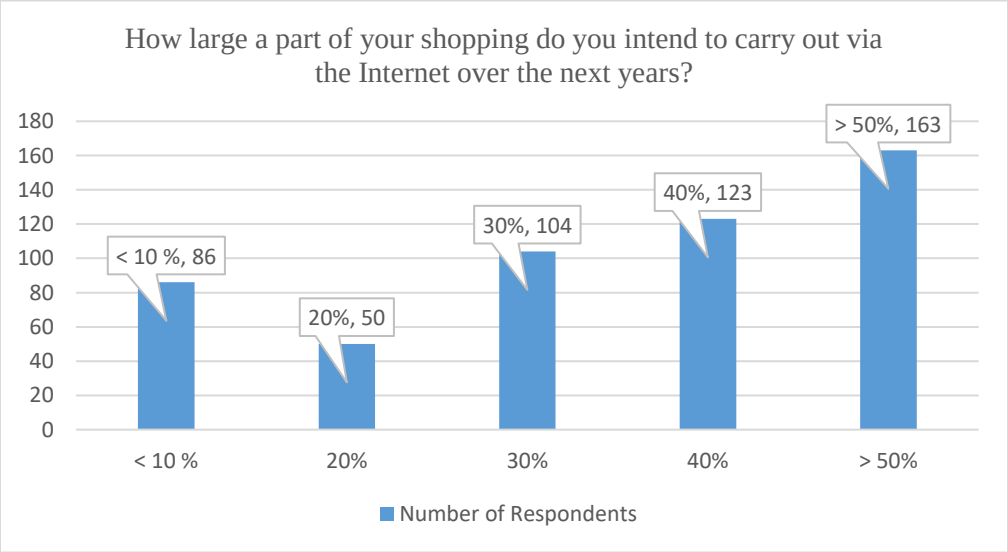
University of Ghana http://ugspace.ug.edu.gh

| | | | | | |
|---|---|---|---|---|---|
| Online shopping is a way of relaxing and forgetting my problems | MCBS10 | 2.707 | 1.217 | -0.928 | 0.162 |
| **Attitude towards online purchasing behaviour** | | | | | |
| Online shopping is attractive to me in my daily life | ATOB1 | 3.217 | 1.236 | -0.854 | -0.363 |
| Buying products and services via social media/internet is well suited to the way in which I normally shop. | ATOB2 | 3.192 | 1.130 | -0.674 | -0.303 |
| Buying via social media is beneficial to me | ATOB3 | 3.317 | 1.135 | -0.589 | -0.380 |
| **Willingness to Buy Online** | | | | | |
| How likely is it that over the next years you will shop via social media? | WTB1 | 3.587 | 1.336 | -0.817 | -0.614 |
| How large a part of your shopping do you intend to carry out via the Internet over the next years? * | WTB2 | 3.432 | 1.427 | -1.064 | -0.486 |
| **Conspicuous Consumption** | | | | | |
| On social media, I show off things I buy if they are expensive | CONSP1 | 2.798 | 1.231 | -0.966 | 0.051 |
| I am more likely to highlight my possessions on social media if they have some “snob appeal.” | CONSP2 | 2.721 | 1.227 | -0.963 | 0.143 |
| My social media page includes products and brands that are prestigious. | CONSP3 | 2.932 | 1.253 | -1.013 | -0.074 |
| When I buy things, I like to show them off on social media. | CONSP4 | 2.665 | 1.255 | -1.016 | 0.206 |
| I “like” brands on social media because they have status. | CONSP5 | 2.916 | 1.285 | -1.067 | -0.091 |
| **Source: Field Data, 2018** | | | | | |

University of Ghana http://ugspace.ug.edu.gh

An assessment of the descriptive statistics specifically the means scores and standard deviations provided by the Table 5.1 above also reveals how social media plays a role in the purchasing patterns of young adult consumers. The highest recorded mean score was 3.587 (How likely is it that over the next years you will shop via social media?), while the lowest mean score was 2.643 (I have often bought a product online that I did not need even when I knew I had very little money left). These findings seem to allude to the growing interest of Ghanaian young adult consumers in the convenience provided when making purchases via internet supported technology (Awiagah, Kang, & Lim, 2016; Hootsuite, 2018; Odoom, Anning-Dorson, & Acheampong, 2017). In support of this claim is the second question assessing willingness to buy (WTB2), which was measured on a 5-point scale ranging from 0% to more than 50% of online future purchasing intentions. The results showed that there exists a potential for using Internet-based technology in line with purchasing behaviour, with 30% (163) of respondents showing interest in migrating more than 50% of their online purchasing activities via such media (See Fig 5.1).

**Figure 5. 1: Future shopping intention**




**Source: Field Data, 2018**

University of Ghana http://ugspace.ug.edu.gh

## 5.3. Assessment of Measurement Model

In SEM analysis, the assessment of the measurement model is the first step of the systematic evaluation process. It ensures that the constructs are being measured by the items that make up or adequately measure the constructs. This supported by another important concept in the PLS-SEM process, which is the identification of the type of model being measured, either formative model or a reflective in one. For this study, the model was mainly reflective because the measures were representative of the effects of the constructs which they measured. There are three main criteria for evaluating the reflective model, firstly the internal consistency reliability – measured using the Cronbach's alpha, composite reliability, secondly the convergent validity – measured using indicator reliability and the average variance extracted and finally the discriminant validity. Table 5.2 presents the assessment of the internal consistency and convergent validity of the measurement model.

Table 5.2 shows the internal consistency of each construct of the measurement model. The rule of thumb associated with the measurement of the internal consistency state that Cronbach's alpha and Composite reliability should be between 0.60 – 0.90 (Fornell & Larcker, 1981; Hair et al., 2016; Hair, Sarstedt, Ringle, & Mena, 2012; Nunnally & Bernstein, 1999). While when using the average variance extracted (AVE) to measure convergent validity, values greater than 0.50 are considered acceptable (Hair et al., 2016). The model also took into account the indicator reliability in addressing the convergent validity, which also accepts values greater than 0.50, which looks at the size of the outer loadings. The rule of thumb for outer loadings is that values must be higher than 0.7.

Following these set rules in assessing the measurement model of the study, some of the outer loadings of items were well below the specified 0.7 minimum limit.

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 2: Measurement model**

| Constructs | Indicator | Outer Loadings | Cronbach's Alpha | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|---|---|
| **Attitude** | | | **0.86** | **0.85** | **0.66** |
| | **ATOB1** | **0.89** | | | |
| | **ATOB2** | **0.72** | | | |
| | **ATOB3** | **0.83** | | | |
| **Compulsive Buying** | | | **0.80** | **0.80** | **0.58** |
| | **MCBS4** | **0.82** | | | |
| | **MCBS6** | **0.64** | | | |
| | **MCBS7** | **0.80** | | | |
| **Conspicuous Consumption** | | | **0.85** | **0.86** | **0.66** |
| | **CONSP1** | **0.81** | | | |
| | **CONSP2** | **0.88** | | | |
| | **CONSP4** | **0.75** | | | |
| **Social Media Self Control Failure** | | | **0.77** | **0.77** | **0.53** |
| | **SMSCF1** | **0.69** | | | |
| | **SMSCF2** | **0.78** | | | |
| | **SMSCF3** | **0.71** | | | |
| **Willingness to Buy** | | | **1.00** | **1.00** | **1.00** |
| | **WTB1** | **1.00** | | | |
| **Controls** | | | | | |
| **Gender** | | | **1.00** | **1.00** | **1.00** |
| | **Gender** | **1.00** | | | |

**Source: Field Data, 2018**

It was expected since some social science disciplines such as marketing have been noted by scholars to usually experience weaker outer loadings when undertaking behavioural studies (Hair et al., 2016). The researcher revised the model by dropping outer loadings with values lower than the specified 0.7 but improved the internal consistency reliability and the average variance extracted (AVE). It resulted in the deletion of nine items (MCBS1, MCBS2, MCBS3, MCBS5, MCBS8, MCBS9, MCBS10, CONSP3 and CONSP5) which shared a high degree of residual variance with other measuring items. Thus, except MCBS6 and SMSCF1, which had an outer loading of 0.64 and 0.69 respectively, all other items were above the 0.70 thresholds. The two were maintained because they improved the AVE of the constructs of the model, which were all above

University of Ghana http://ugspace.ug.edu.gh

the 0.50 requirement. The revised measurement model also showed a high level of internal consistency with Cronbach's alpha and composite reliability above the 0.7 thresholds as well.

The next measure to address is the model's discriminant validity, which empirically shows the extent to which the constructs truly differ from one another in the model. This measure also ensures no two constructs are the same and wholly captures the phenomenon of the study. In most SEM analysis cross-loadings, together with the Fornell- Larker criterion has been the main means of measuring the discriminant validity of the measurement model. However, scholars have recommended the use of the heterotrait-monotrait ratio (HTMT) in PLS-SEM, since it deals with the reliability issues presented by the two popular measures (Henseler, Ringle, & Sarstedt, 2014; Voorhees, Brady, Calantone, & Ramirez, 2016). Table 5.3 and 5.4 below shows the HTMT ratio table and the confidence interval for the measurement model of the study together.

Since the HTMT ratio showed values which were lower than the 0.90 thresholds, the constructs were 'discriminantly' valid and conceptually independent of themselves. This is also supported by the bootstrapping of 5000 subsamples, which produced a confidence interval table with no construct producing a value of 1 (Hair et al., 2016). Table 5.5 summarises the assessment of the measurement model against all the thresholds.

**Table 5. 3: HTMT Ratio Table**

| | Attitude | Compulsive Buying | Conspicuous Consumption | Gender | SMSCF | Willingness to Buy |
|---|---|---|---|---|---|---|
| **Attitude** | | | | | | |
| **Compulsive Buying** | 0.59 | | | | | |
| **Conspicuous Consumption** | 0.37 | 0.66 | | | | |
| **Gender** | 0.06 | 0.01 | 0.10 | | | |
| **SMSCF** | 0.35 | 0.38 | 0.20 | 0.08 | | |
| **Willingness to Buy** | 0.46 | 0.29 | 0.16 | 0.02 | 0.28 | |

**Source: Field Data, 2018**

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 4: Confidence Interval**

| | Original Sample (O) | Sample Mean (M) | 2.5% | 97.5% |
|---|---|---|---|---|
| **Compulsive Buying -> Attitude** | 0.59 | 0.59 | 0.50 | 0.67 |
| **Conspicuous -> Attitude** | 0.37 | 0.37 | 0.27 | 0.47 |
| **Conspicuous -> Compulsive Buying** | 0.66 | 0.66 | 0.57 | 0.74 |
| **Gender -> Attitude** | 0.06 | 0.07 | 0.03 | 0.15 |
| **Gender -> Compulsive Buying** | 0.01 | 0.05 | 0.01 | 0.11 |
| **Gender -> Conspicuous** | 0.10 | 0.11 | 0.04 | 0.20 |
| **SMSCF -> Attitude** | 0.35 | 0.35 | 0.23 | 0.46 |
| **SMSCF -> Compulsive Buying** | 0.38 | 0.38 | 0.28 | 0.49 |
| **SMSCF -> Conspicuous** | 0.20 | 0.20 | 0.10 | 0.31 |
| **SMSCF -> Gender** | 0.08 | 0.08 | 0.02 | 0.17 |
| **Willingness to Buy -> Attitude** | 0.46 | 0.46 | 0.38 | 0.54 |
| **Willingness to Buy -> Compulsive Buying** | 0.29 | 0.29 | 0.20 | 0.38 |
| **Willingness to Buy -> Conspicuous** | 0.16 | 0.16 | 0.06 | 0.25 |
| **Willingness to Buy -> Gender** | 0.02 | 0.04 | 0.00 | 0.11 |
| **Willingness to Buy -> SMSCF** | 0.28 | 0.28 | 0.18 | 0.37 |
| **Source: Field Data, 2018** | | | | |

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 5: Measurement Model Summary**

| Latent Variable | Indicators | Convergent Validity | | | Internal Consistency Reliability | | Discriminant Validity |
|---|---|---|---|---|---|---|---|
| | | Loadings | Indicator Reliability | AVE | Composite Reliability | Cronbach's Alpha | |
| | | > 0.70 | > 0.50 | >0.50 | 0.60 – 0.90 | 0.60 – 0.90 | HTMT confidence interval does not include 1 |
| **ATTITUDE** | **ATOB1** | **0.89** | **0.79** | **0.66** | **0.85** | **0.86** | Yes |
| | **ATOB2** | **0.72** | **0.52** | | | | |
| | **ATOB3** | **0.83** | **0.69** | | | | |
| **COMPULSIVE BUYING** | **MCBS4** | **0.82** | **0.67** | **0.58** | **0.80** | **0.80** | Yes |
| | **MCBS6** | **0.64**** | **0.41**** | | | | |
| | **MCBS7** | **0.80** | **0.64** | | | | |
| **CONSPICUOUS CONSUMPTION** | **CONSP1** | **0.81** | **0.66** | **0.66** | **0.86** | **0.85** | Yes |
| | **CONSP2** | **0.88** | **0.77** | | | | |
| | **CONSP4** | **0.75** | **0.56** | | | | |
| **SOCIAL MEDIA SELF CONTROL FAILURE** | **SMSCF1** | **0.69**** | **0.48**** | **0.53** | **0.77** | **0.77** | Yes |
| | **SMSCF2** | **0.78** | **0.61** | | | | |
| | **SMSCF3** | **0.71** | **0.50** | | | | |
| **WILLINGNESS TO BUY*** | **WTB1** | **1.00** | **1.00** | **1.00** | **1.00** | **1.00** | Yes |
| **Controls** | | | | | | | |
| **GENDER*** | **GENDER** | **1.00** | **1.00** | **1.00** | **1.00** | **1.00** | Yes |

Source: Field Data, 2018
* Single item constructs
** Retained items between 0.4 -0.7 threshold which improve internal consistency reliability and AVE

## 5.4. Evaluation of The Structural Model

The second step in the SEM analysis process is the evaluation of the structural model of the study. The measurement model for the study has revealed that all constructs were reliable and valid. The model will be checked for any collinearity issues that may be present to evaluate the structural model of the study. This was followed by an assessment of the relationships within the model, with an insight into their significance and relevance to the study. The coefficient of determination ($R^2$), effect sizes ($f^2$), and the model's predictive relevance ($Q^2$) will also be assessed to evaluate the structural model.

University of Ghana http://ugspace.ug.edu.gh

### 5.4.1. Collinearity Issues

To assess the collinearity issues of the structural model, the VIF values of the model must be less than five (5). The results show that all the VIF values from the combinations of the endogenous constructs and exogenous constructs of the model are below five (Kock & Lynn, 2012). See Table 5.6. Hence the model for the present study does not have any collinearity issues present.

**Table 5. 6: Model Collinearity Assessment**

| | Attitude | Compulsive Buying | Conspicuous | Willingness to Buy |
|---|---|---|---|---|
| **Attitude** | | | | |
| **Compulsive Buying** | | | | |
| **Conspicuous** | | | | |
| **SMSCF** | **1.01** | **1.01** | **1.01** | **1.01** |
| **Willingness to Buy** | | | | |

**Source: Field Data, 2018**

### 5.4.2. Relationship Significance & Relevance of The Model

The next step in the structural model evaluation process is the assessment of the path coefficients which show the relationship between the constructs of the model. In SmartPLS this is shown through the arrows from the exogenous variable to the endogenous variable, while the endogenous constructs have the coefficient of determination in them. The path coefficients are usually between the values -1 and +1 and are used to interpreting the strength of the relationship in question. Path coefficients close to +1 represent a strong and positive relationship, path coefficients with values close to – 1 represent a strong negative relationship, while values closer to zero show a weak relationship in the constructs of the model (Hair et al., 2016). The process of bootstrapping or jackknifing is used (Efron, 1982) to achieve this. SmartPLS, just like most popular SEM applications, makes use of the bootstrapping method. The bootstrapping method reports the significance of the path coefficients through the provision of the t-statistics and p-values

University of Ghana http://ugspace.ug.edu.gh

empirically (Efron, 1982; Hair et al., 2012). The t statistic value is compared to the critical value, with a value greater than the critical value showing significance in that relationship. In undertaking a two-tailed test, the essential t values are 2.57, 1.96 and 1.65 at a significance level of 1%, 5% and 10% respectively.

**Table 5. 7: Model relevance and Significance**

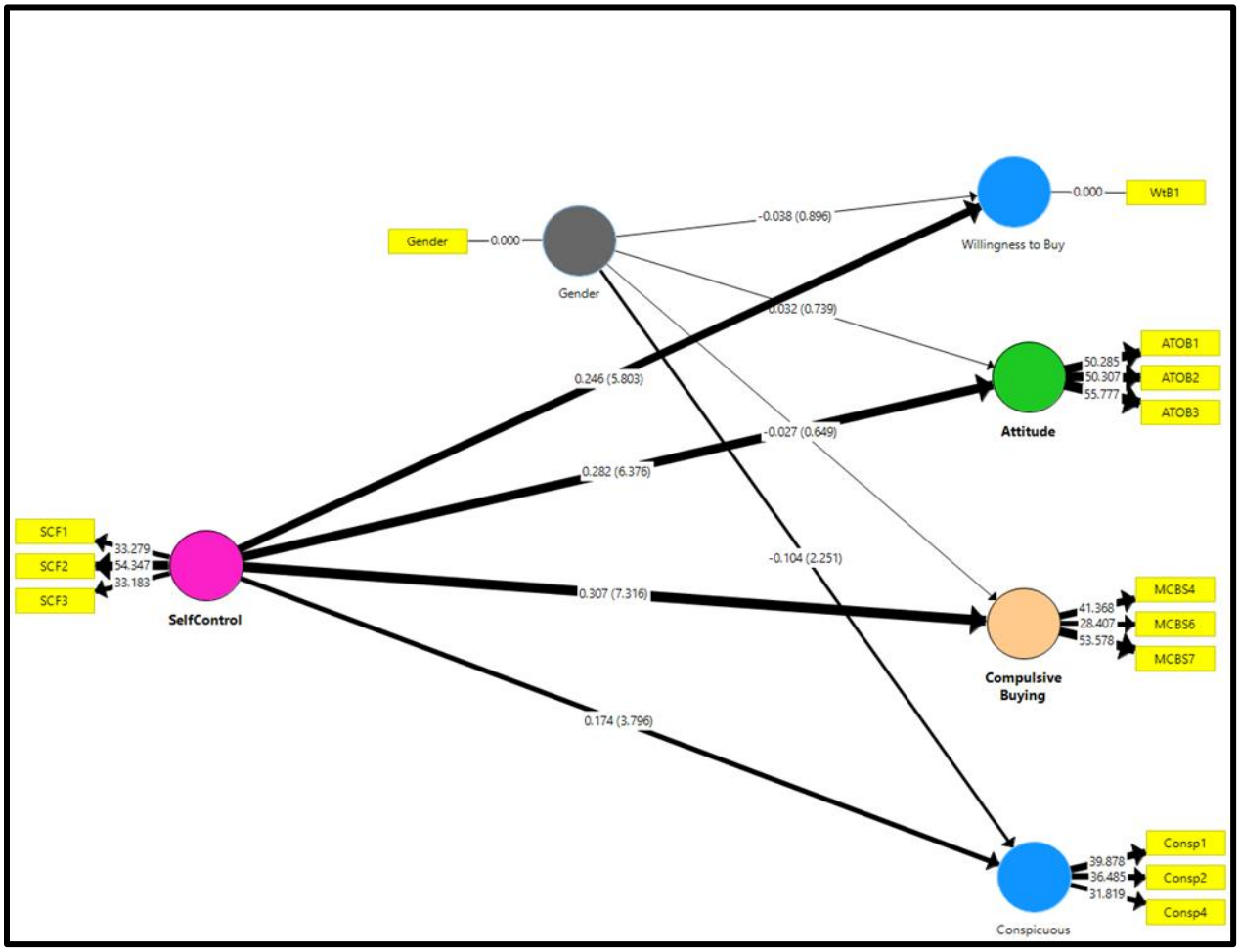
| **Direct Relationships** | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| **SMSCF -> Attitude** | 0.28 | 0.29 | 0.04 | 6.38 | 0.00 |
| **SMSCF -> Compulsive Buying** | 0.31 | 0.31 | 0.04 | 7.32 | 0.00 |
| **SMSCF-> Conspicuous** | 0.17 | 0.18 | 0.05 | 3.80 | 0.00 |
| **SMSCF -> Willingness to Buy** | 0.25 | 0.25 | 0.04 | 5.80 | 0.00 |
| | | | | | |
| **Controls** | | | | | |
| Gender -> Attitude | 0.03 | 0.03 | 0.04 | 0.74 | 0.46 |
| Gender -> Compulsive Buying | -0.03 | -0.03 | 0.04 | 0.65 | 0.52 |
| Gender -> Conspicuous | -0.10 | -0.10 | 0.05 | 2.25 | 0.02 |
| Gender -> Willingness to Buy | -0.04 | -0.04 | 0.04 | 0.90 | 0.37 |

**Source: Field Data,2018**

Table 5.7 above shows the path coefficients of the study model after a bootstrap of 5000 subsamples. It reveals that Compulsive Buying has the largest path coefficient of (0.31) this followed by Attitude to online purchasing (0.28), willingness to buy online via social media (0.25) and Conspicuous consumption (0.17). Since all the t statistic values for the relationships are above the 1.96 critical value threshold, all four tested relationships are significant and relevant. Figure 5.2 shows the model with the path coefficients.

University of Ghana http://ugspace.ug.edu.gh

**Figure 5. 2: Structural Model showing path significance**




### 5.4.3. Coefficient of Determination ($R^2$ Value)

The next step in the evaluation process of the structural model is to check its predictive accuracy; this is done by calculating the squared correlation between an endogenous construct's actual and predicted value. It is known as the $R^2$ or the coefficient of determination. The $R^2$ represents the explained amount of variance between the exogenous constructs and endogenous constructs they are linked to. It gives us the combined effects of the independent variables on the dependent variables of the study. $R^2$ values range between 0 and 1 with values close to 1 representing high predictive accuracy. Table 5.8 below represents the $\boldsymbol{R^2}$ of the study

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 8: Coefficient of Determination**

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T-Statistics (\|O/STDEV\|) | P-Values |
|---|---|---|---|---|---|
| **Attitude** | 0.08 | 0.09 | 0.03 | 3.21 | 0.00 |
| **Compulsive Buying** | 0.09 | 0.10 | 0.03 | 3.61 | 0.00 |
| **Conspicuous** | 0.04 | 0.04 | 0.02 | 2.19 | 0.03 |
| **Willingness to Buy** | 0.06 | 0.07 | 0.02 | 2.88 | 0.00 |

**Source: Field Data, 2018**

The results show that SMSCF can cause an eight per cent (8%) variation in an individual's attitude towards online purchasing. It can also cause a nine per cent (9%) variation in an individual' compulsive buying behaviour online, four per cent (4%) variation in an individual's online conspicuous consumption and a six per cent (6%) variation in one's willingness to buy goods and services via an internet-powered technology.

Human behaviour has been noted by most social scientists as one of the hardest phenomena to predict hence the unsurprising low $\boldsymbol{R^2}$ values presented by the study model (Baguley, 2009; June, 2016; Pek & Flora, 2018). The values are however significant and therefore hold explanatory power to ensure the model can make important predictions.

### 5.4.4. Effect Size ($f^2$)

It is the change in the coefficient of determination when the exogenous construct is removed from the model. It shows the substantive impact the removed exogenous constructs have on the endogenous constructs. Statistically, it is represented as

$$f^2 = (\boldsymbol{R^2}\ included\ -\ \boldsymbol{R^2}\ excluded)/(1 - \boldsymbol{R^2}\ included)$$

Where $\boldsymbol{R^2}$ included and $\boldsymbol{R^2}$ excluded are the $\boldsymbol{R^2}$ values of the endogenous latent variable when a selected exogenous latent variable is included in or excluded from the structural model. The

University of Ghana http://ugspace.ug.edu.gh

values 0.02, 0.15, and 0.35, are classified as small, medium, and large effects of the exogenous construct respectively, and are often used to measure the effect size (Hair et al., 2016).

**Table 5. 9: Effect Size ($f^2$)**

| | Attitude | Compulsive Buying | Conspicuous | Willingness to Buy |
|---|---|---|---|---|
| **Attitude** | | | | |
| **Compulsive Buying** | | | | |
| **Conspicuous** | | | | |
| **SMSCF** | 0.13 | 0.18 | 0.05 | 0.08 |
| **Willingness to Buy** | | | | |

**Source: Field Data, 2018**

Table 5.9 above shows the effect size of SMSCF on each endogenous construct, and it is observed that except Compulsive buying (0.18) which is of a relatively common effect all the other endogenous constructs had small effect sizes, i.e. (< 0.15).

### 5.4.5. Predictive Relevance of The Model ($Q^2$)

This next phase in the structural model evaluation looks at the predictive relevance of the model using Stone-Geisser's $\boldsymbol{Q^2}$ value (Geisser, 1975; Stone, 1974). In a reflective endogenous construct when the $\boldsymbol{Q^2}$ is of a value greater than zero, it indicates the path model's relevance for the construct. Running the blindfolding technique using SmartPLS with an omission distance (D) = 9, Table 5.10 showed the predictive relevance of the study's model. The final results showed the model generated values which were greater than zero.

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 10: Model Predictive Relevance**

| | SSO | SSE | $Q^2$ (=1-SSE/SSO) |
|---|---|---|---|
| **Attitude** | 1,578.00 | 1,485.16 | 0.06 |
| **Compulsive Buying** | 1,578.00 | 1,479.83 | 0.06 |
| **Conspicuous** | 1,578.00 | 1,535.12 | 0.03 |
| **Willingness to Buy** | 526.00 | 496.62 | 0.06 |

**Source: Field Data, 2018**

## 5.5. Hypothesis Testing

The research model of the study proposes four main hypotheses for predicting the effect of SMSCF on online purchasing behaviour amongst college students. The first hypothesis looks at the direct relationships between SMSCF (independent variable) and the dependent variables attitude, compulsive buying, conspicuous consumption and willingness to buy used to measure online purchasing behaviour. Using the PLS approach of SEM, the SmartPLS software provided the path coefficients which denotes the strength of the relationships and the *p* values which prove the level of statistical significance the relationships have in the studied model. As seen in table 5.11 the first four sub-hypotheses under the first hypothesis (H1), H1a to H1d are all statistically significant and positive, i.e. the effect of SMSCF on attitude, compulsive buying, conspicuous consumption and willingness to buy are all statistically significant. SMSCF has the strongest positive influence of 0.31 on compulsive buying, followed by attitude (0.28), willingness to buy (0.25) and lastly on conspicuous consumption (0.17).

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 11: Hypothesis one (H1) – Direct Relationships**

| **Hypothesis** | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | Bias | 2.5% | 97.5% | T Statistics | P Values |
|---|---|---|---|---|---|---|---|---|
| **H1a -SMSCF -> Attitude** | 0.28 | 0.29 | 0.04 | 0.00 | 0.19 | 0.36 | 6.38 | 0.00 |
| **H1b - SMSCF -> Compulsive Buying** | 0.31 | 0.31 | 0.04 | 0.00 | 0.22 | 0.39 | 7.32 | 0.00 |
| **H1c - SMSCF -> Conspicuous** | 0.17 | 0.18 | 0.05 | 0.00 | 0.08 | 0.26 | 3.80 | 0.00 |
| **H1d - SMSCF -> Willingness to Buy** | 0.25 | 0.25 | 0.04 | 0.00 | 0.16 | 0.33 | 5.80 | 0.00 |

**Source: Field Data, 2018**

## 5.6. Moderator Analysis

The third hypothesis (H3) with its sub-hypotheses (H3a-H3d) looked at the role of time spent on social media on the desired direct relationships, which was done through a multi-group analysis of the data groupings based on time spent using social media technology. The groups were created from 526 student sample based on their average usage of social media within an hour. Two groups were identified, those who spent less than 30 minutes in the hour (Group 1) and those who spent more than 30 minutes within the same hour mark (Group 2). There were 331 respondents in Group 1 and 195 respondents who made up the second group (Group 2).

In multi-group analysis, ensuring the measurement invariance (measurement equivalence) of the structural model is an important process. According to Hair et al. (2016), the establishment of measurement invariance ensures that the group differences do not result from the different and distinct meanings group respondents attach to the understudied constructs of the model. It acts as a means by which the true differences with the groups can be appropriately identified and assessed. When researchers ignore the measurement invariance, they might reduce the statistical power of their findings and provide misleading results.

University of Ghana http://ugspace.ug.edu.gh

In PLS SEM the MICOM (measurement invariance of composite models) process is used to address the assessment of the model's measurement invariance (Henseler, Ringle, & Sarstedt, 2016; van de Schoot, Lugtig, & Hox, 2012). It involves three steps. Step one looks at the configural invariance of the model. Step two looks at the compositional invariance of the model and Step three looks at the equality of composite means and variances. When the first two steps have been achieved, partial measurement invariance is said to have been established, and multi-group analysis by comparing the path coefficients of the various groups can be done. When the partial measurement invariance is also achieved, and the model constructs have equal means and variances across the groups, full measurement invariance is said to have been established, and the researcher can also undertake multi-group analysis with the added benefit of increased statistical power.

For this study, configural invariance was established by meeting the set three conditions, i.e. having identical indicators per measurement model, using identical data treatment across all groups and finally identical data analysis settings and processes. Once it was established the second step of addressing compositional invariance was measured. As seen in the MICOM summary results table (5.12) below, since all the *p* values were above 0.05 ($p > 0.05$), we can safely assume that computational invariance has been achieved in the study model. The third step was the establishment of equivalence amongst the composite means and variances, which is seen in the SmartPLS Permutation results in Table 5.12, the model, however, shows that except conspicuous consumption (0.00) all other variables had their permutation p values greater than 0.05 when the model's variance was evaluated. The same unequal measure was achieved when the means were also evaluated, which means that the model had achieved partial measurement invariance but not full measurement invariance and therefore, the researcher could undertake the multigroup analysis.

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 12: MICOM Summary of results**

| **MICOM Step 1** | | | | |
|---|---|---|---|---|
| **Configural variance established? Yes** | | | | |
| | | | | |
| **MICOM Step 2** | | | | |
| **Composite** | Correlation c | 5% quantile of the empirical distribution of $c_u$ | P value | Compositional invariance established? |
| **Attitude** | 1.00 | 0.99 | 0.51 | Yes |
| **Compulsive Buying** | 1.00 | 0.99 | 0.34 | Yes |
| **Conspicuous** | 0.99 | 0.98 | 0.26 | Yes |
| **Willingness to Buy** | 1.00 | 1.00 | 0.30 | Yes |
| **SMSCF** | 0.99 | 0.99 | 0.06 | Yes |
| **Controls** | | | | |
| **Gender** | 1.00 | 1.00 | 0.06 | Yes |
| | | | | |
| **MICOM Step 3** | | | | |
| **Composite** | Difference of the composite's variance value | 95% confidence interval | P value | Equal variance values? |
| **Attitude** | 0.11 | -0.21, 0.22 | 0.29 | Yes |
| **Compulsive Buying** | -0.08 | -0.20, 0.21 | 0.46 | Yes |
| **Conspicuous** | -0.28 | -0.19, 0.20 | 0.00 | No |
| **Willingness to Buy** | -0.05 | -0.18, 0.20 | 0.14 | Yes |
| **SMSCF** | 0.10 | -0.23, 0.24 | 0.42 | Yes |
| **Controls** | | | | |
| **Gender** | 0.14 | -0.09, 0.11 | 0.28 | Yes |
| | | | | |
| | | | | |
| **Composite** | Difference of the composite's mean value | 95% confidence interval | P value | Equal mean values? |
| **Attitude** | -0.29 | -0.17, 0.17 | 0.00 | No |
| **Compulsive Buying** | -0.29 | -0.18, 0.17 | 0.00 | No |
| **Conspicuous** | -0.20 | -0.18, 0.18 | 0.03 | No |
| **Willingness to Buy** | -0.23 | -0.18, 0.17 | 0.01 | No |
| **SMSCF** | -0.38 | -0.18, 0.18 | - | No |
| **Controls** | | | | |
| **Gender** | -0.10 | -0.17, 0.18 | 0.29 | Yes |

**Source: Field Data, 2018**

University of Ghana http://ugspace.ug.edu.gh

### 5.6.1. Multigroup Analysis

Using multi-group analysis ensures that the significance of the different path coefficients among the groups can be identified and established. Multi-group analysis usually tests the null hypothesis between the two groups to establish that they are not significant ($H_0$), in other words ,the absolute difference between the groups is equal to zero statistically represented as $|p^{(1)} - p^{(2)}| = 0$; $H_0$, once the path differences are established the, absolute values are usually greater than 0 (Hair et al., 2016).

For this study, the Permutation test was used to assess the differences in the path coefficients. This non-parametric method has been comparatively preferred by scholars for its advantageous statistical properties and is recommended when assessing two groups. The method randomly exchanges the various observations between the designed data groupings and re-estimates the model for each model. The computation of the differences between the path coefficient of each group enables the measurement of difference present in the groups. The permutation process is a six-step progression, firstly based on group-specific estimates of the path model, the path coefficient for two groups are obtained. The difference between the group-specific path coefficient is then computed. The third step involves the random permutations of the data within the various groups. Researchers are advised to use a minimum number of 1000 of permutations. Group-specific estimations for the path models are then calculated; this is followed with the establishment of the differences between the path coefficient estimates. The final step involves the creation of the 95% confidence interval based off the permutations. The lower boundary level (2.5%) and upper boundary level (97.5%) are also determined. If the primary difference of the group-specific path coefficients does not fall into the confidence interval, it is statistically significant.

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 13: Moderation (Hypothesis 3)**

| | Path Coefficients Original (< 30 minutes (1)) | Path Coefficients Original (>30 minutes (2)) | Path Coefficients Original Difference (< 30 minutes (1) - >30 minutes (2)) | Path Coefficients Permutation Mean Difference (< 30 minutes (1) - >30 minutes (2)) | 2.5% | 97.5% | Permutation p-Values |
|---|---|---|---|---|---|---|---|
| **H3a SMSCF -> Attitude** | 0.25 | 0.31 | -0.06 | -0.00 | -0.18 | 0.18 | 0.53 |
| **H3b SMSCF -> Compulsive Buying** | 0.31 | 0.28 | 0.03 | -0.00 | -0.17 | 0.17 | 0.72 |
| **H3c SMSCF -> Conspicuous** | 0.23 | 0.05 | 0.18 | -0.00 | -0.18 | 0.19 | 0.06 |
| **H3d SMSCF -> Willingness to Buy** | 0.21 | 0.27 | -0.06 | -0.00 | -0.18 | 0.18 | 0.53 |

**Source: Field Data, 2018**

Using the SmartPLS programme, the results from the Permutation tests of the two groups are shown in table (5.13) above. As seen from the results, there are generally no differences between the groups. The only exception is the relationship between SMSCF and conspicuous consumption, which is statistically significant at the 10% level. It means that the effect of SMSCF on conspicuous consumption is significantly different ($p \leq 0.10$) between social media users who spend less than 30 minutes (0.23) on social media platforms and those who spend more than 30 minutes (0.05) on social media.

### 5.6.2. Group Direct Effects and Moderation

The study model looked further into the data to develop deeper permutation to address hypotheses 2 and 4. Further groups were created in line with SMSCF against the already existing time spent on social media groupings. The two groups were 142 high SMSCF (this consisted of respondents who related positively with the questionnaire items measuring SMSCF) and 384 low SMSCF (which comprised of respondents who were more negatively inclined with the questionnaire items).

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 14: Group Effects (Hypothesis 2)**

| High SMSCF | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| H2a SMSCF -> **Attitude** | 0.08 | 0.03 | 0.16 | 0.51 | **0.61** |
| H2b SMSCF -> **Compulsive Buying** | 0.26 | 0.17 | 0.23 | 1.14 | **0.25** |
| H2c SMSCF -> **Conspicuous** | 0.03 | 0.05 | 0.10 | 0.26 | **0.79** |
| H2d SMSCF -> **Willingness to Buy** | 0.11 | 0.07 | 0.15 | 0.77 | **0.44** |
| | | | | | |
| **Low SMSCF** | | | | | |
| H2e SMSCF -> **Attitude** | 0.26 | 0.27 | 0.05 | 5.11 | **0.00** |
| H2f SMSCF -> **Compulsive Buying** | 0.32 | 0.32 | 0.04 | 7.16 | **0.00** |
| H2g SMSCF -> **Conspicuous** | 0.16 | 0.16 | 0.06 | 2.85 | **0.00** |
| H2h SMSCF -> **Willingness to Buy** | 0.23 | 0.23 | 0.05 | 4.55 | **0.00** |

**Source: Field Data, 2018**

To address hypothesis 2, the two groups separately examined the effect of SMSCF on online purchasing behaviour. The results are seen in table 5.14 above. The findings revealed that in the High SMSCF group, SMSCF had no significant effect on online purchasing behaviour, but in the Low SMSCF group, the effect of social media control failure was significant and positive on all the relationships. SMSCF had the strongest positive influence on compulsive buying (0.32), followed by the attitude to online purchasing (0.26), willingness to buy (0.23) and finally conspicuous consumption (0.16) in this Low SMSCF group. The groups were further examined against the time spent data groups to address the fourth and final hypothesis of the study. A permutation test was used to address this other moderation of the study. The High SMSCF was grouped against the less than thirty minutes' group (< 30 minutes) and the more than thirty minutes' group (>30 minutes). The same permutation was also done for the Low SMSCF group as well. Table 5.15 below shows the final results obtained.

University of Ghana http://ugspace.ug.edu.gh

**Table 5. 15: Moderation (Hypothesis 4)**

| **High SMSCF vs < 30 minutes** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Path Coefficients Original (High) | Path Coefficients Original (< 30 minutes (1)) | Path Coefficients Original Difference (High - < 30 minutes (1)) | Path Coefficients Permutation Mean Difference (High - < 30 minutes (1)) | 2.5% | 97.5% | Permutation p-Values |
| **H4a SMSCF -> Attitude** | 0.08 | 0.25 | -0.17 | 0.00 | -0.20 | 0.21 | 0.10 |
| **H4b SMSCF -> Compulsive Buying** | 0.26 | 0.31 | -0.05 | 0.00 | -0.18 | 0.18 | 0.61 |
| **H4c SMSCF -> Conspicuous** | 0.03 | 0.23 | -0.20 | 0.01 | -0.18 | 0.19 | **0.03** |
| **H4d SMSCF -> Willingness to Buy** | 0.11 | 0.21 | -0.10 | 0.00 | -0.20 | 0.20 | 0.34 |
| | | | | | | | |
| **High SMSCF vs > 30 minutes** | | | | | | | |
| | Path Coefficients Original (High) | Path Coefficients Original (>30 minutes (2)) | Path Coefficients Original Difference (High - >30 minutes (2)) | Path Coefficients Permutation Mean Difference (High - >30 minutes (2)) | 2.5% | 97.5% | Permutation p-Values |
| **H4e SMSCF -> Attitude** | 0.08 | 0.31 | -0.23 | 0.00 | -0.20 | 0.20 | **0.03** |
| **H4f SMSCF -> Compulsive Buying** | 0.26 | 0.28 | -0.02 | 0.00 | -0.20 | 0.21 | 0.86 |
| **H4g SMSCF -> Conspicuous** | 0.03 | 0.05 | -0.03 | 0.00 | -0.23 | 0.23 | 0.83 |
| **H4h SMSCF -> Willingness to Buy** | 0.11 | 0.27 | -0.16 | 0.00 | -0.22 | 0.23 | 0.17 |

University of Ghana http://ugspace.ug.edu.gh

| **Low SMSCF vs < 30 minutes** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Path Coefficients Original (Low) | Path Coefficients Original (< 30 minutes (1)) | Path Coefficients Original Difference (Low - < 30 minutes (1)) | Path Coefficients Permutation Mean Difference (Low - < 30 minutes (1)) | 2.5% | 97.5% | Permutation p-Values |
| **H4i SMSCF -> Attitude** | 0.26 | 0.25 | 0.01 | -0.00 | -0.15 | 0.15 | 0.90 |
| **H4j SMSCF -> Compulsive Buying** | 0.32 | 0.31 | 0.01 | -0.00 | -0.13 | 0.13 | 0.89 |
| **H4k SMSCF -> Conspicuous** | 0.16 | 0.23 | -0.07 | 0.00 | -0.14 | 0.14 | 0.32 |
| **H4l SMSCF -> Willingness to Buy** | 0.23 | 0.21 | 0.02 | -0.00 | -0.15 | 0.15 | 0.81 |
| | | | | | | | |
| **Low SMSCF vs > 30 minutes** | | | | | | | |
| | Path Coefficients Original (Low) | Path Coefficients Original (>30 minutes (2)) | Path Coefficients Original Difference (Low SMSCF - >30 minutes (2)) | Path Coefficients Permutation Mean Difference (Low SMSCF - >30 minutes (2)) | 2.5% | 97.5% | Permutation p-Values |
| **H4m SMSCF -> Attitude** | 0.26 | 0.31 | -0.05 | -0.00 | -0.18 | 0.17 | 0.58 |
| **H4n SMSCF -> Compulsive Buying** | 0.32 | 0.28 | 0.04 | -0.01 | -0.17 | 0.17 | 0.66 |
| **H4o SMSCF -> Conspicuous** | 0.16 | 0.05 | 0.10 | -0.00 | -0.19 | 0.21 | 0.30 |
| **H4p SMSCF -> Willingness to Buy** | 0.23 | 0.27 | -0.04 | -0.00 | -0.16 | 0.16 | 0.65 |

**Source: Field Data, 2018**

University of Ghana http://ugspace.ug.edu.gh

The results from Table 5.15 shows that when the groupings permutations were undertaken, most of the group paths did not display significance and hence, no differences between the groups. Group differences only occurred between users who experienced High SMSCF and spent less than 30 minutes on social media showed a significant relationship with conspicuous consumption. The High SMSCF users who spent more than 30 minutes on social media also showed significance in the relationship with attitude to online purchasing behaviour at a 5% significance level.

## 5.7. Discussion of Findings

Research has shown the pervasive prowess of social media in our day to day lives, which has made it essential for social media research to understand and develop a balanced insight into its pros and cons towards human psycho-socio-economic growth and development. The study primarily set out to comprehend the effect of SMSCF on consumer purchasing behaviour and assess the role of time spent on social media in this relationship (Baumeister, 2002; Du et al., 2018; Kittinger et al., 2012; Lingling et al., 2018). Since literature has been relatively quiet on the African perspective of social media related issues this study made an argument for the contextual relevance for the continent using the same demography used in previous studies (Hu et al., 2017).

### 5.7.1. SMSCF influences online purchasing behaviour.

In order to achieve the purpose of the study, which was to provide empirical evidence assessing the effect of SMSCF on the online purchasing behaviour of college students, objectives were set. The first objective was to test whether SMSCF influences online purchasing behaviour, which was addressed using the developed hypothesis one (H1) which looked at the direct relationships between SMSCF and the composites of online purchasing behaviour for the study, i.e. attitude towards online purchasing behaviour, compulsive buying, conspicuous consumption, and

University of Ghana http://ugspace.ug.edu.gh

willingness to buy. The results of the study indicate that once this college student demographic experienced SMSCF, it had an effect on their online purchasing behaviour.

The strongest online purchasing behaviour which SMSCF is likely to affect, based on the study, is compulsive buying. This confirms the previous finding by Baumeister (2002), who found that once shoppers experience self-control failure, it results in excessive and impulsive purchases. The cause is likely because of the convenience social media platforms affords her users, from reduced search and time costs when purchasing products and services through to the wide array of choices to satisfy personal desires; this "convenience" seems to open social media users up to more self-control failure dilemmas. Conspicuous consumption is also shown to be positively influenced by SMSCF which affirms previous studies which identified that social media use could lower one's self-control and lead towards more indulgent behaviour such as conspicuous consumption (Khan & Dhar, 2006). As stated earlier in this study, customers are now living online, most notably on social media. These platforms due to their interactive nature and the communication tool of preference by the demographics of the study serve as a conduit of trust and comparison which can positively influence their intention to buy via social media (Lu et al., 2010). This seems to explain the results of the study, which indicated that users who experienced SMSCF were likely to indulge in future online purchases. The findings of the study also point out that once SMSCF is experienced users are likely to have a positive attitude towards online purchasing. This is also in line with previous findings, which showed that consumer attitudes affect their intentions to buy online as well as making actual purchases (Zhang et al., 2017). This proves attitude as a precursor to the behaviour patterns measured in this study.

Thus, findings indicate that when a social media user experiences SMSCF, he or she is more likely and open to developing positive affirmations about online purchasing which can enhance their

University of Ghana http://ugspace.ug.edu.gh

interest in using social media and other Internet-based technology for their future purchasing activities. Once they are open to using social media to make purchases, customers will be positioned in self-control failure situations which open them up to problem purchasing behaviours such as compulsive buying and conspicuous consumption.

In the short term, these results mean that it will be profitable for any firm to continuously use social media to induce consumers into self-control dilemma situations. Literature has, however, stated that in the long run, this would produce dissatisfied customers who will eventually leave the company (Baumeister, 2002; Hofmann, Vohs, et al., 2012). In the marketing literature, the costly expense associated with acquiring a new customer against retaining an old is acknowledged, and as such it will be in the firm's best interest to adopt means and ways to keep customers to enjoy the long term value during the customer's lifetime. Marketers in this technology age must, therefore, take advantage of growing tools such as machine learning, artificial intelligence, and big data to identify the purchase patterns of individual customers balance them against occasionally well-structured behavioural surveys. Marketers can then identify customers who are exhibiting problematic buying behaviours and restructure messages and communications such that they will not be placed in a situation where their desires and goals will be in continuous conflict. This ethical approach will likely place the marketer's firm in a position to maintain a long-term customer.

### 5.7.2. Time moderates the relationship between SMSCF and online purchasing behaviour

In evaluating the nature of time, the third hypothesis (H3) was developed, which looked at the role of time in the relationship between SMSCF and online purchasing behaviour using multigroup analysis. This involved the creation of two groups, those who used social media for less than thirty minutes and those who used it for more than thirty minutes. The results showed that regardless of

University of Ghana http://ugspace.ug.edu.gh

the time spent once users experienced SMSCF, it will affect their online purchasing behaviour. The result is accurate because once set standards are broken, self-control failure is experienced, the user will typically give in to the desire and forgo all goals (Baumeister, 2002). Also, the results displayed that at a certain level, conspicuous consumption was dependent on the time spent on social media with those who spend less than thirty minutes more likely to consume conspicuously.

This findings from the second hypothesis seem to defeat the time narrative used in literature, where frequency of use has been drummed as a strong factor for problematic use of social media (Kuss & Lopez-Fernandez, 2016; Shaw, Timpano, Tran, & Joormann, 2015; Vannucci, Flannery, & Ohannessian, 2017). The study's findings show that it is likely there is a myriad of other factors which might influence users developing problematic behaviours from their social media use. Issues such as personality, social environment, and social class might create inhibitors or make users susceptible to the reigns of SMSCF. The results indicate that marketers' must be more concerned with the concept of self-control failure from social media use rather than the current message of the frequency of social media use.

The use of immersive formats such as videos have been proven to have a strong influence on consumers purchase intentions, they however usually demand a bit more time and attention of the consumer to make the requisite impact (Statista Inc., 2018b). Once time spent does not exhibit any influence on the relationship between self-control failure and online purchasing behaviour, marketers can invest in such media to improve their sales opportunities and increase the probability of profitability.

University of Ghana http://ugspace.ug.edu.gh

### 5.7.3. High SMSCF and Low SMSCF have an effect on online purchasing behaviour against the amount of time spent on social media platforms

This third research objective was addressed by the second (H2) and fourth (H4) research hypotheses of the study, which went a bit deeper into the data to identify two more groups i.e. the High SMSCF group and the low SMSCF group and their individual effect on online purchasing behaviour (H2) under the influence of time (H4). The results showed that high self-control media failure has relatively no impact on online purchasing behaviour, while low SMSCF positively influences online purchasing behaviour. Naturally, one would expect that both groups will have an impact on online purchasing behaviour, but this seems to speak to Du et al. (2018) finding which reported users who experience High SMSCF. These groups feel guiltier about their social media use and also report lower levels of subjective wellbeing after using social media, coming to this realisation may likely negatively affect their outlook on online purchasing activities. To marketers, this finding seems to suggest that at one point or the other people will eventually come to terms with the self-control failure they experience, and it may likely affect their rate of consumption. The result makes a case for the importance of individualised marketing in today's business environment. To ensure customers do not cross the threshold of low SMSCF, one will have to understand each customer individually. Marketers must make use of technology to take advantage of and manage this situation.

The introduction of time spent to assess the relationship shows that regardless of time spent on social media, users who experience Low SMSCF had a stronger likelihood to engage in online purchasing activities. These users will be liable to adopt problematic online purchasing behaviour regardless; these findings seem to agree with Zhang et al. (2017) who found that greater cumulative usage of social networking sites is positively associated with shopping activity. However, they

University of Ghana http://ugspace.ug.edu.gh

also find a short-term negative relationship, such that immediately after a period of increased usage of social networking sites, online shopping activity appears to be lower. Those who experience High SMSCF in the presence of time spent are likely to conspicuously consume when they spend less than 30 minutes within an hour of social media use. Those who spend more than 30 minutes within an hour are likely to develop positive perceptions about online purchasing but in totality have a decreased desire to partake in online purchasing activities, which shows that social media users in the High self-control failure group are still susceptible to online purchasing activities and behaviour. It shows that there is hope, and there exists a tendency to gain a customer. Marketers can always gain a competitor's customer based on this finding. The onus falls on the marketer to attract and transform them into customers who rather experience Low SMSCF to maintain profitable and mutually beneficial relationships.

University of Ghana http://ugspace.ug.edu.gh

# CHAPTER SIX

# SUMMARY, RECOMMENDATIONS & CONCLUSION

## 6.0. Study Summary

With the growing use of social media in the lives of consumers and the relative growth in its adoption in the online commerce space, a case was made for everyday self-control failure which has been found in previous studies to be more prevalent in everyday media use with a probability to impact behaviour in one way or the other. The study, therefore, aimed to provide empirical evidence of the effect of SMSCF on online purchasing behaviour. A case for time spent on social media as an essential moderator for social media research was also addressed. For this study, four components were used to represent the notion of online shopping behaviour. They were the attitude towards online purchasing, compulsive buying, conspicuous consumption and willingness to buy. The study used college students as the target population due to the possibility of respondents being 'digital natives' with a strong propensity to appreciate the nuances of social media technology. A total of five hundred and fifty respondents partook in the study and filled the questionnaire. However, only five hundred and twenty-six (526) of the filled questionnaires were considered usable for data analysis. The partial least square method of SEM was used to test the relationships of the study. The study was theoretically guided by the theory of planned behaviour to understand the relationship between SMSCF and online purchasing behaviour since it had been proven to realise behaviour which is affected by the 'will' of the individual.

The study's findings first and foremost showed that indeed, there exists a relationship between self-control failure and online purchasing behaviour. This relationship is however not usually

University of Ghana http://ugspace.ug.edu.gh

influenced by the amount of time one spends on social media meaning that once self-control failure is experienced time is of relatively no importance and individuals can get lost in their use of the technology. A breakdown of the users who experience SMSCF into high and low groups showed that SMSCF group did not affect the online purchasing behaviour of the high group, unlike the low group which showed the reverse. This was probably because of the realisation of the problem behaviours being developed as well as the accompanying guilt they experienced because of their use (Du et al., 2018). Finally, time spent on social media was reintroduced and tested amongst the two groups, and the findings revealed that time was irrelevant once SMSCF was experienced more so the low group. The high group showed that once they spend less time, they could conspicuously consume while if they spent more time, they would still be open to purchasing products online.

## 6.1. Recommendations

Statistics are showing the growing importance of social media in our everyday lives. With today's marketers consistently leveraging on this tool against a back drop of calls in the socio-cultural environment about the addictive prowess of social media, the current study was able identify the linkage between SMSCF and online purchasing behaviour. It was able to prove that our constant exposure to social media leaves us susceptible to some self-control failure dilemma at one point in time or another. The study therefore makes recommendations from findings which will impact both policy and theory

### 6.1.1. Implications for Practice and Policy

As firms continue to adopt this new media form as a means to communicate, promote and sell their products and services, the findings from this study lay foundations to the importance of individualised marketing in today's day and age. As earlier stated, the marketer is now presented with a situation where in a bid to continually maintain relationships with her customers will have

University of Ghana http://ugspace.ug.edu.gh

to make use of new technology. Coupled with using data analytics to understand her customers from an individual perspective addressing any problematic purchasing behaviour, her customers will display not only from the point of ethics but long-term profitability of the customer as well.

The study findings also show that the concept of time spent on social media is irrelevant in the relationship between SMSCF and online purchasing behaviour. Marketers can, therefore, make use of immersive technology, which demands a bit more time, such as the use of videos in their marketing communications, which demands a bit more attention.

Findings also show that when customers realise, they are adopting problematic behaviour, they tend to be reclusive from their purchasing activities. They, however, hold the propensity to be attracted and converted into long term customers. It falls on marketers to adopt and develop strategies which will win them over. The marketers of 'fad' products from the findings of the study can use social media as a good source to improve sales and profitability.

In terms of policy development, business managers must realise the propensity of social media to provide profitability for their businesses. They must, however, realise that to monitor and lay foundations to control problematic behaviour falls on them as a business. Investment in the requisite technology as well as the setting of measurement standards to categorise customers based on findings from behavioural surveys will go a long way to help the firm maintain long term, profitable relationships with her customer base.

### 6.1.2. Implications to Theory and Literature

Theoretically the current study further advances the self-regulation theory and shows that the concept of self-control failure can exist in social media use, thus validating the concept of social media self-control failure (SMSCF). The study also contributes to the growing literature on

University of Ghana http://ugspace.ug.edu.gh

problematic social media use and further makes a claim for marketing literature to be part of this growing conversation.

## 6.2. Conclusion

In conclusion, this study has been able to prove the important role of social media in the business environment of the current century, more so amongst the digital natives. This has gone forward to answer calls to address SMSCF within the consumer behaviour research portfolio. The study also identified pragmatic solutions for today's marketers in this technology-induced marketing environment and made a case for the adoption of an individualised marketing approach in dealing with consumers who purchase goods and services online to address the challenges attached to SMSCF.

## 6.3. Limitations and Future Research

The study was, however, fraught with a few limitations such as the use of a single country (Ghana) for the study, which might not be the same in other African countries and as such future research can look to address this due to the booming business potential present on the continent. The time narrative not being significant in the study also means that future research can also look into the role of other factors such as personality types which can also influence the relationship.

University of Ghana http://ugspace.ug.edu.gh

# REFERENCES

Adams, G. R., & Schvaneveldt, J. D. (1991). *Understanding research methods*. Addison-Wesley Longman Ltd.

Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In *Action Control*. https://doi.org/10.1007/978-3-642-69746-3_2

Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*. https://doi.org/10.1016/0022-1031(86)90045-4

Ak, Ş., Koruklu, N., & Yılmaz, Y. (2013). A Study on Turkish Adolescent's Internet Use: Possible Predictors of Internet Addiction. *Cyberpsychology, Behavior, and Social Networking*, *16*(3), 205–209. https://doi.org/10.1089/cyber.2012.0255

Akar, Erkan, & Topçu, B. (2011). An examination of the factors influencing consumers' attitudes toward social media marketing. *Journal of Internet Commerce*. https://doi.org/10.1080/15332861.2011.558456

Akar, Ezgi, & Nasir, V. A. (2015). A review of literature on consumers' online purchase intentions. *Journal of Customer Behaviour*. https://doi.org/10.1362/147539215X14441363630837

Alt, D. (2018). Students' Wellbeing, Fear of Missing out, and Social Media Engagement for Leisure in Higher Education Learning Environments. *Current Psychology*, *37*(1), 128–138. https://doi.org/10.1007/s12144-016-9496-1

Anderson, K. J. (2001). Internet use among college students: An exploratory study. *Journal of*

University of Ghana http://ugspace.ug.edu.gh

*the American College Health Association*. https://doi.org/10.1080/07448480109595707

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, *64*, 287–293. https://doi.org/10.1016/j.addbeh.2016.03.006

Añez, E., Fornieles-Deu, A., Fauquet-Ars, J., López-Guimerà, G., Puntí-Vidal, J., & Sánchez-Carracedo, D. (2018). Body image dissatisfaction, physical activity and screen-time in Spanish adolescents. *Journal of Health Psychology*, *23*(1), 36–47. https://doi.org/10.1177/1359105316664134

Armitage, C. J., & Conner, M. (1999). Predictive validity of the theory of planne behaviour: The role of questionnaire format and social desirability. *Journal of Community and Applied Social Psychology*. https://doi.org/10.1002/(SICI)1099-1298(199907/08)9:4<261::AID-CASP503>3.0.CO;2-5

Awiagah, R., Kang, J., & Lim, J. I. (2016). Factors affecting e-commerce adoption among SMEs in Ghana. *Information Development*. https://doi.org/10.1177/0266666915571427

Baguley, T. (2009). Standardized or simple effect size: What should be reported? *British Journal of Psychology*. https://doi.org/10.1348/000712608X377117

Baker, D. A., & Algorta, G. P. (2016). The Relationship Between Online Social Networking and Depression: A Systematic Review of Quantitative Studies. *Cyberpsychology, Behavior, and Social Networking*, *19*(11), 638–648. https://doi.org/10.1089/cyber.2016.0206

Ball-Rokeach, S.J., & DeFleur, M. L. (1976). A Dependency Model of Mass-Media Effects. *Communication Research*, *3*(1), 3–21. https://doi.org/10.1177/009365027600300101

University of Ghana http://ugspace.ug.edu.gh

Ball-Rokeach, Sandra J. (2010). Media System Dependency Theory. In *The International Encyclopedia of Communication*. https://doi.org/10.1002/9781405186407.wbiecm051

Barker, V. (2009). Older Adolescents' Motivations for Social Network Site Use: The Influence of Gender, Group Identity, and Collective Self-Esteem. *CyberPsychology & Behavior*, *12*(2), 209–213. https://doi.org/10.1089/cpb.2008.0228

Baumeister, R. F. (2002). Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior. *Journal of Consumer Research*. https://doi.org/10.1086/338209

Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1993). When Ego Threats Lead to Self-Regulation Failure: Negative Consequences of High Self-Esteem. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/0022-3514.64.1.141

BBC. (2016). *BBC News - What are four of the biggest hazards of social media?* Retrieved from http://www.bbc.co.uk/guides/zx9wv4j

Bennett, L. (2014). "If we stick together we can do anything": Lady Gaga fandom, philanthropy and activism through social media. *Celebrity Studies*. https://doi.org/10.1080/19392397.2013.813778

Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, *27*(3), 264–271. https://doi.org/10.1016/j.giq.2010.03.001

Black, D. W. (2007). A review of compulsive buying disorder. *World Psychiatry : Official Journal of the World Psychiatric Association (WPA)*.

University of Ghana http://ugspace.ug.edu.gh

Blease, C. R. (2015). Too many "friends," too few "likes"? Evolutionary psychology and "facebook depression." *Review of General Psychology*, *19*(1), 1–13. https://doi.org/10.1037/gpr0000030

Boateng, R. (2016). *Research made easy*. CreateSpace Independent Publishing Platform.

Bonoma, T. V. (1985). Case Research in Marketing: Opportunities, Problems, and a Process. *Journal of Marketing Research*, *22*(2), 199. https://doi.org/10.2307/3151365

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Branley, D. B., & Covey, J. (2017). Is exposure to online content depicting risky behavior related to viewers' own risky behavior offline? *Computers in Human Behavior*, *75*, 283–287. https://doi.org/10.1016/j.chb.2017.05.023

Brown, Z., & Tiggemann, M. (2016). Attractive celebrity and peer images on Instagram: Effect on women's mood and body image. *Body Image*, *19*, 37–43. https://doi.org/10.1016/j.bodyim.2016.08.007

Bryman, A. (2014). Quantitative Data Analysis with SPSS 12 and 13. In *Quantitative Data Analysis with SPSS 12 and 13*. https://doi.org/10.4324/9780203498187

Buhi, E. R., Goodson, P., & Neilands, T. B. (2008). Out of sight, not out of mind: Strategies for handling missing data. *American Journal of Health Behavior*. https://doi.org/10.5993/AJHB.32.1.8

Bulley, A., Quaynor, N. N., & Tevie, W. (1997). Development of the Internet in Ghana.

University of Ghana http://ugspace.ug.edu.gh

Burns, C. A., & Bush, F. R. (2010). Marketing Research. 6Th Edition. In *Pearson Prentise Hall.*

Cao, X., Masood, A., Luqman, A., & Ali, A. (2018). Excessive use of mobile social networking sites and poor academic performance: Antecedents and consequences from stressor-strain-outcome perspective. *Computers in Human Behavior*, *85*, 163–174. https://doi.org/10.1016/j.chb.2018.03.023

Casey, S. (2016). 2016 Nielsen Social Media Report.

Cavaye, A. L. M. (1996). Case study research: A multi-faceted research approach for IS. *Information Systems Journal*. https://doi.org/10.1111/j.1365-2575.1996.tb00015.x

Chen, Y., Fay, S., & Wang, Q. (2011). The Role of Marketing in Social Media: How Online Consumer Reviews Evolve. *Journal of Interactive Marketing*. https://doi.org/10.1016/j.intmar.2011.01.003

Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*. https://doi.org/10.1016/S0022-4359(01)00056-2

Christakis, N. A., & Fowler, J. H. (2007). The Spread of Obesity in a Large Social Network over 32 Years. *New England Journal of Medicine*. https://doi.org/10.1056/NEJMsa066082

Chu, S.-C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising*. https://doi.org/10.2501/IJA-30-1-047-075

Cooke, M., & Buckley, N. (2008). Web 2.0, Social Networks and the Future of Market Research. *International Journal of Market Research*, *50*(2), 267–292.

University of Ghana http://ugspace.ug.edu.gh

https://doi.org/10.1177/147078530805000208

Correa, T., Hinsley, A. W., & de Zúñiga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*. https://doi.org/10.1016/j.chb.2009.09.003

Creswell. (2007). Understanding mixed methods research. In *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. https://doi.org/10.1016/j.aenj.2008.02.005

Crosby, P., McKenzie, J., & Lenten, L. J. A. (2018). Social media followers as music fans: Analysis of a music poll event. *Economics Letters*, *168*, 85–89. https://doi.org/10.1016/j.econlet.2018.04.024

Crozier, G., Denzin, N., & Lincoln, Y. (1994). Handbook of Qualitative Research. *British Journal of Educational Studies*. https://doi.org/10.2307/3121684

D'Astous, A., Maltais, J., & Roberge, C. (1990). Compulsive Buying Tendencies of Adolescent Consumers. *Advances in Consumer Research*.

Danneels, E. (2004). Disruptive technology reconsidered: A critique and research agenda. *Journal of Product Innovation Management*. https://doi.org/10.1111/j.0737-6782.2004.00076.x

Dhir, A., & Torsheim, T. (2016). Age and gender differences in photo tagging gratifications. *Computers in Human Behavior*, *63*, 630–638. https://doi.org/10.1016/j.chb.2016.05.044

Dittmar, H. (2005). A New Look at "Compulsive Buying": Self–Discrepancies and Materialistic Values as Predictors of Compulsive Buying Tendency. *Journal of Social and Clinical Psychology*. https://doi.org/10.1521/jscp.2005.24.6.832

University of Ghana http://ugspace.ug.edu.gh

Du, J., van Koningsbruggen, G. M., & Kerkhof, P. (2018). A brief measure of social media self-control failure. *Computers in Human Behavior*, *84*, 68–75. https://doi.org/10.1016/j.chb.2018.02.002

Dudovskiy, J. (2018). Deductive Approach (Deductive Reasoning) - Research-Methodology. *Research Methodology*.

Duroy, D., Gorse, P., & Lejoyeux, M. (2014). Characteristics of online compulsive buying in Parisian students. *Addictive Behaviors*. https://doi.org/10.1016/j.addbeh.2014.07.028

Easterby-Smith, M., Thorpe, R., & Lowe, A. (2008). The Ingredients of Successful Research. In *Management Research: An Introduction*.

Eastman, J. K., Goldsmith, R. E., & Flynn, L. R. (1999). Status Consumption in Consumer Behavior: Scale Development and Validation. *Journal of Marketing Theory and Practice*, *7*(3), 41–52. https://doi.org/10.1080/10696679.1999.11501839

Efron, B. (1982). The Jackknife, the Bootstrap and Other Resampling Plans. In *Complexity*.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*. https://doi.org/10.1111/j.1083-6101.2007.00367.x

eMarketer. (2018). US Social Media Users, by Generation, 2019 (% of population). Retrieved April 30, 2019, from https://www.emarketer.com/Chart/US-Social-Media-Users-by-Generation-2019-of-population/226029

Eriksson L-T & Weidersheim-Paul, F. (2011). Att utreda, forska och rapportera. In *Malmö: Liber*.

University of Ghana http://ugspace.ug.edu.gh

Fishbein, M., & Ajzen, I. (1975a). Belief, Attitude, Intention, and Behavior, An Introduction to Theory and Research. *Belief, Attitude, Intention, and Behavior, An Introduction to Theory and Research*. https://doi.org/10.1016/B978-0-12-375000-6.00041-0

Fishbein, M., & Ajzen, I. (1975b). Chapter 8: Prediction of Behavior. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. https://doi.org/10.1017/CBO9781107415324.004

Fisher, M. J., & Marshall, A. P. (2009). Understanding descriptive statistics. *Australian Critical Care*, *22*(2), 93–97. https://doi.org/10.1016/j.aucc.2008.11.003

Forbes, L. P., & Vespoli, E. M. (2013). Does Social Media Influence Consumer Buying Behavior? An Investigation Of Recommendations And Purchases. *Journal of Business & Economics Research (JBER)*. https://doi.org/10.19030/jber.v11i2.7623

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Chemical Information and Modeling*. https://doi.org/10.1017/CBO9781107415324.004

Gartner. (2016). Marketing with User Generated Content. Retrieved from Gartner website: https://www.gartner.com/smarterwithgartner/fuel-social-marketing-user-generated-content/

Geisser, S. (1975). The predictive sample reuse method with applications. *Journal of the American Statistical Association*. https://doi.org/10.1080/01621459.1975.10479865

George, D., & Mallery, P. (2003). SPSS for Windows Step by Step. In *A Simple Guide and References*.

GlobalWebIndex. (2017). Average daily time spent on social media among teens and young

University of Ghana http://ugspace.ug.edu.gh

adults worldwide from 1st quarter to 3rd quarter 2017, by region (in minutes). Retrieved from GlobalWebIndex website: blog.globalwebindex.net

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*.

Gonzales, A. L., & Hancock, J. T. (2011). Mirror, Mirror on my Facebook Wall: Effects of Exposure to Facebook on Self-Esteem. *Cyberpsychology, Behavior, and Social Networking*. https://doi.org/10.1089/cyber.2009.0411

Goulding, C. (2002). Grounded theory: A practical guide for management, business and market researchers. *Strategies of Qualitative Inquiry*.

Griffiths, S., Murray, S. B., Krug, I., & McLean, S. A. (2018). The Contribution of Social Media to Body Dissatisfaction, Eating Disorder Symptoms, and Anabolic Steroid Use Among Sexual Minority Men. *Cyberpsychology, Behavior, and Social Networking*, *00*(00), cyber.2017.0375. https://doi.org/10.1089/cyber.2017.0375

Gummerus, J., Liljander, V., & Sihlman, R. (2017). Do Ethical Social Media Communities Pay Off? An Exploratory Study of the Ability of Facebook Ethical Communities to Strengthen Consumers' Ethical Consumption Behavior. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-015-2830-y

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2016). A Primer on Partial Least Squares StructuralEquation Modeling (PLS-SEM). *Sage, Thousand Oaks.* https://doi.org/10.1108/EBR-10-2013-0128

Hair, J F, Anderson, R. E., Tatham, R. L., & Black, W. C. (2009). Multivariate Data Analysis. In

University of Ghana http://ugspace.ug.edu.gh

*Pearson Education Ltd.* https://doi.org/10.1016/j.ijpharm.2011.02.019

Hair, Joe F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-011-0261-6

Hair, Joseph F., Ringle, C. M., & Sarstedt, M. (2012). Partial Least Squares: The Better Approach to Structural Equation Modeling? *Long Range Planning*, *45*(5–6), 312–319. https://doi.org/10.1016/j.lrp.2012.09.011

Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*. https://doi.org/10.1016/j.ijinfomgt.2014.12.005

Hanley, A., & Wilhelm, M. S. (1992). Compulsive buying: An exploration into self-esteem and money attitudes. *Journal of Economic Psychology*. https://doi.org/10.1016/0167-4870(92)90049-D

Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*. https://doi.org/10.1111/j.1470-6431.2007.00655.x

Hare, T. A., Camerer, C. F., & Rangel, A. (2009). Self-control in decision-Making involves modulation of the vmPFC valuation system. *Science*. https://doi.org/10.1126/science.1168450

Hasan, B. (2010). Exploring gender differences in online shopping attitude. *Computers in Human Behavior*. https://doi.org/10.1016/j.chb.2009.12.012

Hendricks, D. Complete History of Social Media: Then And Now. , Small Business Trends §

University of Ghana http://ugspace.ug.edu.gh

(2013).

Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-014-0403-8

Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*. https://doi.org/10.1108/IMR-09-2014-0304

Ho, S. S., Lwin, M. O., & Lee, E. W. J. (2017). Till logout do us part? Comparison of factors predicting excessive social network sites use and addiction between Singaporean adolescents and adults. *Computers in Human Behavior*, *75*, 632–642. https://doi.org/10.1016/j.chb.2017.06.002

Hoch, S. J., & Loewenstein, G. F. (1991). Time-Inconsistent Preferences and Consumer Self-Control. *Journal of Consumer Research*, *17*(4), 492. https://doi.org/10.1086/208573

Hofmann, W., Baumeister, R. F., Förster, G., & Vohs, K. D. (2012). Everyday temptations: An experience sampling study of desire, conflict, and self-control. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/a0026545

Hofmann, W., Vohs, K. D., & Baumeister, R. F. (2012). What People Desire, Feel Conflicted About, and Try to Resist in Everyday Life. *Psychological Science*. https://doi.org/10.1177/0956797612437426

Holly Paquette. (2013). Social Media as a Marketing Tool: A Literature Review. *Marketing i Zarządzanie*. https://doi.org/10.18276/miz.2016.46-05

University of Ghana http://ugspace.ug.edu.gh

Hong, S. (2013). Who benefits from Twitter? Social media and political competition in the U.S. House of Representatives. *Government Information Quarterly*, *30*(4), 464–472. https://doi.org/10.1016/j.giq.2013.05.009

Hong, S. J., Thong, J. Y. L., & Tam, K. Y. (2006). Understanding continued information technology usage behavior: A comparison of three models in the context of mobile internet. *Decision Support Systems*. https://doi.org/10.1016/j.dss.2006.03.009

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*.

Hootsuite. (2018). Digital in 2018. *We Are Social*. https://doi.org/https://wearesocial.com/blog/2018/01/global-digital-report-2018

Hsu, C. L., Chen, M. C., & Kumar, V. (2018). How social shopping retains customers? Capturing the essence of website quality and relationship quality. *Total Quality Management and Business Excellence*. https://doi.org/10.1080/14783363.2016.1171706

Hu, S., Gu, J., Liu, H., & Huang, Q. (2017). The moderating role of social media usage in the relationship among multicultural experiences, cultural intelligence, and individual creativity. *Information Technology & People*, *30*(2), 265–281. https://doi.org/10.1108/ITP-04-2016-0099

Huang, C. (2017). Time Spent on Social Network Sites and Psychological Well-Being: A Meta-Analysis. *Cyberpsychology, Behavior, and Social Networking*. https://doi.org/10.1089/cyber.2016.0758

Huang, Z., Wang, M., Qian, M., Zhong, J., & Tao, R. (2007). Chinese Internet Addiction

University of Ghana http://ugspace.ug.edu.gh

Inventory: Developing a Measure of Problematic Internet Use for Chinese College Students. *CyberPsychology & Behavior*. https://doi.org/10.1089/cpb.2007.9950

Hughes, N., & Burke, J. (2018). Sleeping with the frenemy: How restricting 'bedroom use' of smartphones impacts happiness and wellbeing. *Computers in Human Behavior*, *85*, 236–244. https://doi.org/10.1016/j.chb.2018.03.047

Hutter, K., Hautz, J., Dennhardt, S., & Füller, J. (2013). The impact of user interactions in social media on brand awareness and purchase intention: The case of MINI on Facebook. *Journal of Product and Brand Management*. https://doi.org/10.1108/JPBM-05-2013-0299

Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal*. https://doi.org/10.1108/13522750010322089

Internet Society. (2018). Histroy of the Internet in Africa. Retrieved November 27, 2018, from https://www.internetsociety.org/internet/history-of-the-internet-in-africa/

Ioannidis, K., Treder, M. S., Chamberlain, S. R., Kiraly, F., Redden, S. A., Stein, D. J., … Grant, J. E. (2018). Problematic internet use as an age-related multifaceted problem: Evidence from a two-site survey. *Addictive Behaviors*. https://doi.org/10.1016/j.addbeh.2018.02.017

Islam, T., Sheikh, Z., Hameed, Z., Khan, I. U., & Azam, R. I. (2018). Social comparison, materialism, and compulsive buying based on stimulus-response-model: a comparative study among adolescents and young adults. *Young Consumers*, *19*(1), 19–37. https://doi.org/10.1108/YC-07-2017-00713

Jahng, Jain, & Ramamurthy. (2001). The Impact of Electronic Commerce Environment on User Behavior: The Case of a Complex Product. *E-Service Journal*.

University of Ghana http://ugspace.ug.edu.gh

https://doi.org/10.2979/esj.2001.1.1.41

Jasso-Medrano, J. L., & López-Rosales, F. (2018). Measuring the relationship between social media use and addictive behavior and depression and suicide ideation among university students. *Computers in Human Behavior*, *87*, 183–191. https://doi.org/10.1016/j.chb.2018.05.003

Johnson, R. B., & Onwuegbuzie, A. J. (2007). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*. https://doi.org/10.3102/0013189x033007014

June, J. F. (2016). How to Interpret a Regression Model with Low R - squared and Low P values.

Jusoh, Z. M., & Goh, H. L. (2012). Factors Influencing Consumers' Attitude Towards E-Commerce Purchases Through Online Shopping. *International Journal of Humanities and Social Science*.

Kang, J. Y. M. (2018). Showrooming, Webrooming, and User-Generated Content Creation in the Omnichannel Era. *Journal of Internet Commerce*. https://doi.org/10.1080/15332861.2018.1433907

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59–68. https://doi.org/10.1016/j.bushor.2009.09.003

Kasteler, J. (2010). How Social Media is Influencing Your Behavior. Retrieved May 13, 2019, from https://searchengineland.com/how-social-media-is-influencing-your-behavior-40615

Katawetawaraks, C., & Wang, C. L. (2011). Online Shopper Behavior: Influences of Online

University of Ghana http://ugspace.ug.edu.gh

Shopping Decision. *Asian Journal of Business Research*. https://doi.org/10.14707/ajbr.110012

Keith F Punch. (2013). Introduction to Social Research: Quantitative and Qualitative Approaches. In *Sage*.

Khan, U., & Dhar, R. (2006). Licensing Effect in Consumer Choice. *Journal of Marketing Research*. https://doi.org/10.1509/jmkr.43.2.259

Kilian, T., Hennigs, N., & Langner, S. (2012). Do Millennials read books or blogs? Introducing a media usage typology of the internet generation. *Journal of Consumer Marketing*. https://doi.org/10.1108/07363761211206366

Kim, J. W., & Chock, T. M. (2015). Body image 2.0: Associations between social grooming on Facebook and body image concerns. *Computers in Human Behavior*, *48*, 331–339. https://doi.org/10.1016/j.chb.2015.01.009

Kittinger, R., Correia, C. J., & Irons, J. G. (2012). Relationship Between Facebook Use and Problematic Internet Use Among College Students. *Cyberpsychology, Behavior, and Social Networking*, *15*(6), 324–327. https://doi.org/10.1089/cyber.2010.0410

Kock, N., & Lynn, G. S. (2012). Lateral Collinearity and Misleading Results in Variance-Based SEM : An Illustration and Recommendations Lateral Collinearity and Misleading Results in Variance-. *Journal of the Association for Information*.

Kotler, P., & Armstrong, G. (2010). Principles of Marketing. In *World Wide Web Internet And Web Information Systems*. https://doi.org/10.2307/1250103

Kouper, I. (2010). The Pragmatics of Peer Advice in a LiveJournal Community.

University of Ghana http://ugspace.ug.edu.gh

*Languageatinternet.De*.

Krasnova, H., Veltri, N. F., Eling, N., & Buxmann, P. (2017). Why men and women continue to use social networking sites: The role of gender differences. *Journal of Strategic Information Systems*, *26*(4), 261–284. https://doi.org/10.1016/j.jsis.2017.01.004

Kukar-Kinney, M., Ridgway, N. M., & Monroe, K. B. (2012). The Role of Price in the Behavior and Purchase Decisions of Compulsive Buyers. *Journal of Retailing*. https://doi.org/10.1016/j.jretai.2011.02.004

Kukar-Kinney, M., Scheinbaum, A. C., & Schaefers, T. (2016). Compulsive buying in online daily deal settings: An investigation of motivations and contextual elements. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2015.08.021

Kumar, R., Novak, J., Raghavan, P., & Tomkins, A. (2005). Structure and evolution of blogspace. *Communications of the ACM*. https://doi.org/10.1145/1035134.1035162

Kuss, D. J., & Lopez-Fernandez, O. (2016). Internet addiction and problematic Internet use: A systematic review of clinical research. *World Journal of Psychiatry*. https://doi.org/10.5498/wjp.v6.i1.143

Kuss, D. J., Van Rooij, A. J., Shorter, G. W., Griffiths, M. D., & Van De Mheen, D. (2013). Internet addiction in adolescents: Prevalence and risk factors. *Computers in Human Behavior*, *29*(5), 1987–1996. https://doi.org/10.1016/j.chb.2013.04.002

Laroche, M., Babin, B. J., Lee, Y. K., Kim, E. J., & Griffin, M. (2005). Modeling consumer satisfaction and word-of-mouth: restaurant patronage in Korea. *Journal of Services Marketing*. https://doi.org/10.1108/08876040510596803

University of Ghana http://ugspace.ug.edu.gh

Lee, A. R., Son, S. M., & Kim, K. K. (2016). Information and communication technology overload and social networking service fatigue: A stress perspective. *Computers in Human Behavior*. https://doi.org/10.1016/j.chb.2015.08.011

Leerapong, A., & Mardjo, A. (2013). Applying diffusion of innovation in online purchase intention through social network: A focus group study of Facebook in Thailand. *Information Management and Business Review*. https://doi.org/10.7763/JOEBM.2013.V1.68

Lejoyeux, M., Mathieu, K., Embouazza, H., Huet, F., & Lequen, V. (2007). Prevalence of compulsive buying among customers of a Parisian general store. *Comprehensive Psychiatry*. https://doi.org/10.1016/j.comppsych.2006.05.005

Lim, Y. M., Yap, C. S., & Lee, T. H. (2011). Intention to shop online: A study of Malaysian baby boomers . *African Journal of Business Management*. https://doi.org/10.5897/AJBM10.640

Lin, H.-C., & Kalwani, M. U. (2017). Culturally Contingent Electronic Word-of-Mouth Signaling and Screening: A Comparative Study of Product Reviews in the United States and Japan. *Journal of International Marketing*. https://doi.org/10.1509/jim.17.0016

Lingling, Y., Xiongfei, C., Zhiying, L., & Junkai, W. (2018). Excessive social media use at work: Exploring the effects of social media overload on job performance. *Information Technology & People*. https://doi.org/10.1108/ITP-10-2016-0237

Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research and Applications*.

University of Ghana http://ugspace.ug.edu.gh

https://doi.org/10.1016/j.elerap.2009.07.003

Lutz, C., Ranzini, G., & Meckel, M. (2014). *Stress 2.0: Social Media Overload Among Swiss Teenagers*. https://doi.org/10.1108/S2050-206020140000008001

Malhotra, N. K., & Birks, D. F. (2009). Marketing Research: An Applied Approach. In *Pearson Education Ltd.* (Vol. 3). Retrieved from http://www.amazon.co.uk/Marketing-Research-An-Applied-Approach/dp/0273706896

Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*. https://doi.org/10.1016/j.bushor.2009.03.002

Maoyan, Zhujunxuan, & Sangyan. (2014). Consumer purchase intention research based on social media marketing. *International Journal of Business and Social Science*.

Marshall, C., & Rossman, G. (1999). Designing qualitative research1. Marshall C, Rossman G. Designing qualitative research. Designing Qualitative Research (3rd edition). 1999. p. 21–54. *Designing Qualitative Research (3rd Edition)*. https://doi.org/10.2307/2072869

Matthews, L., Hair, J., & Matthews, R. (2018). Pls - Sem : the Holy Grail for Advanced Analysis. *Marketing Management Journal*.

Mcintyre, K. (2014). The Evolution of Social Media from 1969 to 2013: A Change in Competition and a Trend Toward Complementary, Niche Sites. *The Journal of Social Media in Society*.

Menegatti, M. S., Ribeiro, I., Meneghatti, M. R., & Ribeiro Serra, F. A. (2017). INTERNET PURCHASE DECISION: AN ANALYSIS FROM TIME OF SOCIAL MEDIA USE AND INTERACTIVE WITH BRAND. *REVISTA BRASILEIRA DE MARKETING*.

University of Ghana http://ugspace.ug.edu.gh

https://doi.org/10.5585/remark.v16i1.3353

Mikalef, P., Giannakos, M., & Pateli, A. (2012). Exploring the Business Potential of Social Media : An Utilitarian and Hedonic Motivation Approach. *In Proc. of the 25th EBled Conference (BLED 2012)*.

Miles, M. ., & Huberman, A. . (1994). An expanded sourcebook: Qualitative data analysis (2nd Edition). In *Sage Publications*. https://doi.org/10.1016/0149-7189(96)88232-2

Miller, R., & Lammas, N. (2010). Social media and its implications for viral marketing. *Asia Pacific Public Relations Journal*. https://doi.org/10.4018/978-1-4666-6595-8.ch011

Miniwatts Marketing Group. (2018a). Africa Internet Usage, 2018 Population Stats and Facebook Subscribers. Retrieved from https://www.internetworldstats.com/stats1.htm

Miniwatts Marketing Group. (2018b). Africa Internet Users, 2018 Population and Facebook Statistics. Retrieved October 27, 2018, from https://www.internetworldstats.com/stats1.htm

Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer Affairs*. https://doi.org/10.1111/j.1745-6606.2001.tb00101.x

Montaño, D., & Kasprzyk, D. (2008). Theory of reasoned action, theory of planned behaviour, and the integrated behavioral model. In *Health Behaviour and Health Education. Theory, Research, and Practice*. https://doi.org/10.1016/S0033-3506(49)81524-1

Morrison, K. (2015). The Evolution of Social Media [Infographic]. Retrieved February 16, 2019, from https://www.adweek.com/digital/the-evolution-of-social-media-infographic/

Mueller, A., Mitchell, J. E., Crosby, R. D., Gefeller, O., Faber, R. J., Martin, A., … de Zwaan,

University of Ghana http://ugspace.ug.edu.gh

M. (2010). Estimated prevalence of compulsive buying in Germany and its association with sociodemographic characteristics and depressive symptoms. *Psychiatry Research*. https://doi.org/10.1016/j.psychres.2009.12.001

Mueller, A., Mitchell, J. E., Peterson, L. A., Faber, R. J., Steffen, K. J., Crosby, R. D., & Claes, L. (2011). Depression, materialism, and excessive internet use in relation to compulsive buying. *Comprehensive Psychiatry*. https://doi.org/10.1016/j.comppsych.2010.09.001

Müller, K. W., Dreier, M., Beutel, M. E., Duven, E., Giralt, S., & Wölfling, K. (2016). A hidden type of internet addiction? Intense and addictive use of social networking sites in adolescents. *Computers in Human Behavior*, *55*, 172–177. https://doi.org/10.1016/j.chb.2015.09.007

Murray, M., Maras, D., & Goldfield, G. S. (2016). Excessive Time on Social Networking Sites and Disordered Eating Behaviors Among Undergraduate Students: Appearance and Weight Esteem as Mediating Pathways. *Cyberpsychology, Behavior, and Social Networking*, *19*(12), 709–715. https://doi.org/10.1089/cyber.2016.0384

National Accreditation Board. (2019). National Accreditation Board. Retrieved March 17, 2019, from http://nab.gov.gh/2014-08-13-14-37-14

Ngai, E. W. T., Moon, K. K., Lam, S. S., Chin, E. S. K., & Tao, S. S. C. (2015). Social media models, technologies, and applications. *Industrial Management & Data Systems*, *115*(5), 769–802. https://doi.org/10.1108/IMDS-03-2015-0075

Ngai, E. W. T., Tao, S. S. C., & Moon, K. K. L. (2015). Social media research: Theories, constructs, and conceptual frameworks. *International Journal of Information Management*. https://doi.org/10.1016/j.ijinfomgt.2014.09.004

University of Ghana http://ugspace.ug.edu.gh

Noble, H., & Mitchell, G. (2016). What is grounded theory? *Evidence Based Nursing*. https://doi.org/10.1136/eb-2016-102306

Nunnally, J. C., & Bernstein, I. H. (1999). Psychometric theory (3rd Ed.). New York: McGraw-Hill. *Journal of Psychoeducational Assessment*. https://doi.org/10.1037/018882

O'Cass, A., & McEwen, H. (2004). Exploring consumer status and conspicuous consumption. *Journal of Consumer Behaviour*. https://doi.org/10.1002/cb.155

O'Guinn, T. C., & Faber, R. J. (1989). Compulsive Buying: A Phenomenological Exploration. *Journal of Consumer Research*, *16*(2), 147. https://doi.org/10.1086/209204

O'Keefe, G. S., & Clarke-Pearson, K. (2011). Clinical Report—The Impact of Social Media on Children, Adolescents, and Families abstract. *Pediatrics*. https://doi.org/10.1542/peds.2011-0054

Odoom, R., Anning-Dorson, T., & Acheampong, G. (2017). Antecedents of social media usage and performance benefits in small- and medium-sized enterprises (SMEs). *Journal of Enterprise Information Management*, *30*(3), 383–399. https://doi.org/10.1108/JEIM-04-2016-0088

Olenski, S. (2012). Are Brands Wielding More Influence In Social Media Than We Thought? Retrieved from Forbes website: http://www.forbes.com/sites/marketshare/2012/05/07/are-brands-wielding-more-influence-in-social-media-than-we-thought/#3a2950ad7748

Pahlevan Sharif, S., & Yeoh, K. K. (2018). Excessive social networking sites use and online compulsive buying in young adults: the mediating role of money attitude. *Young Consumers*, *19*(3), 310–327. https://doi.org/10.1108/YC-10-2017-00743

University of Ghana http://ugspace.ug.edu.gh

Pek, J., & Flora, D. B. (2018). Reporting effect sizes in original psychological research: A discussion and tutorial. *Psychological Methods*. https://doi.org/10.1037/met0000126

Pelling, E., & White, K. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *CyberPsychology & Behavior*, *12*(6), 755–759. https://doi.org/0.1089/cpb.2009.0109.

Perea Y Monsuwé, T., Dellaert, B. G. C., & De Ruyter, K. (2004). What drives consumers to shop online? A literature review. *International Journal of Service Industry Management*. https://doi.org/10.1108/09564230410523358

Perkins, B., & Fenech, C. (2014). *Deloitte Consumer Review: The growing power of consumers*. 1–16.

Peterson, R. (2000). Constructing Effective Questionnaires. In *Constructing Effective Questionnaires*. https://doi.org/10.4135/9781483349022

Phillips, E. M., & Pugh, D. S. (2005). How to get a PhD: A handbook for students and supervisors. In *McGraw Hill*. https://doi.org/10.1038/nj0137

Picazo-Vela, S., Gutiérrez-Martínez, I., & Luna-Reyes, L. F. (2012). Understanding risks, benefits, and strategic alternatives of social media applications in the public sector. *Government Information Quarterly*, *29*(4), 504–511. https://doi.org/10.1016/j.giq.2012.07.002

Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management*. https://doi.org/10.1177/0149206309352110

Podoshen, J. S., & Andrzejewski, S. A. (2012). An Examination of the Relationships Between

University of Ghana http://ugspace.ug.edu.gh

Materialism, Conspicuous Consumption, Impulse Buying, and Brand Loyalty. *Journal of Marketing Theory and Practice*. https://doi.org/10.2753/mtp1069-6679200306

Polites, G. L., Serrano, C., Thatcher, J. B., & Matthews, K. (2018). Understanding social networking site (SNS) identity from a dual systems perspective: an investigation of the dark side of SNS use. *European Journal of Information Systems*, *9344*, 1–22. https://doi.org/10.1080/0960085X.2018.1457194

Pontes, H. M., Andreassen, C. S., & Griffiths, M. D. (2016). Portuguese Validation of the Bergen Facebook Addiction Scale: an Empirical Study. *International Journal of Mental Health and Addiction*, *14*(6), 1062–1073. https://doi.org/10.1007/s11469-016-9694-y

Pramono, H. A., Wihuda, F., & Adawiyah, W. R. (2017). The Role of Social Media Browsing Intention for Behavioral Outcomes of Young Consumers. *Market-Tržište*. https://doi.org/10.22598/mt/2017.29.1.39

Rani, R. (2014). Factors influencing consumer behaviour. *International Journal of Current Research and Academic Review*, *2*(9), 52–61.

Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-Sectional versus Longitudinal Survey Research: Concepts, Findings, and Guidelines. *Journal of Marketing Research*. https://doi.org/10.1509/jmkr.45.3.261

Robson, C. (2002). Real world research. *Blackwell Publishing*. https://doi.org/10.1016/j.jclinepi.2010.08.001

Rose, S., & Dhandayudham, A. (2014). Towards an understanding of Internet-based problem shopping behaviour: The concept of online shopping addiction and its proposed predictors.

University of Ghana http://ugspace.ug.edu.gh

*Journal of Behavioral Addictions*. https://doi.org/10.1556/JBA.3.2014.003

Rosen, L. D., Whaling, K., Rab, S., Carrier, L. M., & Cheever, N. A. (2013). Is Facebook creating "iDisorders"? The link between clinical symptoms of psychiatric disorders and technology use, attitudes and anxiety. *Computers in Human Behavior*, *29*(3), 1243–1254. https://doi.org/10.1016/j.chb.2012.11.012

Roy, G., Datta, B., & Basu, R. (2017). Trends and Future Directions in Online Marketing Research. *Journal of Internet Commerce*. https://doi.org/10.1080/15332861.2016.1258929

Rubin, A. M., & Windahl, S. (1986). The uses and dependency model of mass communication. *Critical Studies in Mass Communication*, *3*(2), 184–199. https://doi.org/10.1080/15295039609366643

Ruleman, A. B. (2012). Social media at the university: a demographic comparison. *New Library World*, *113*(7/8), 316–332. https://doi.org/10.1108/03074801211244940

Salehi-Sangari, E., & Engström, A. (2007). Assessment of Business-to-business (B2B) E-marketplaces' Performance. In *Industrial Marketing*.

Salmela-Aro, K., Upadyaya, K., Hakkarainen, K., Lonka, K., & Alho, K. (2017). The Dark Side of Internet Use: Two Longitudinal Studies of Excessive Internet Use, Depressive Symptoms, School Burnout and Engagement Among Finnish Early and Late Adolescents. *Journal of Youth and Adolescence*, *46*(2), 343–357. https://doi.org/10.1007/s10964-016-0494-2

Satici, S. A., & Uysal, R. (2015). Well-being and problematic Facebook use. *Computers in Human Behavior*, *49*, 185–190. https://doi.org/10.1016/j.chb.2015.03.005

University of Ghana http://ugspace.ug.edu.gh

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students / Mark Saunders, Philip Lewis, Adrian Thornhill. In *Research methods for business students*. https://doi.org/10.1080/10810730.2015.1018568

Saunders, M. N. K., Thornhill, A., & Lewis, P. (2015). Research Methods for Business Students (5th Edition). In *Research Methods for Business Students*.

Saunders, M., & Thornhill, A. (2016). 3rd Research Methods for Business Students. In *Research Methods for Business Students*.

Schmidt, F. L., Viswesvaran, C., & Ones, D. S. (2000). Reliability is not validity and validity is not reliability. *Personnel Psychology*. https://doi.org/10.1111/j.1744-6570.2000.tb02422.x

Scott, C. F., Bay-Cheng, L. Y., Prince, M. A., Nochajski, T. H., & Collins, R. L. (2017). Time spent online: Latent profile analyses of emerging adults' social media use. *Computers in Human Behavior*. https://doi.org/10.1016/j.chb.2017.05.026

Shaw, A. M., Timpano, K. R., Tran, T. B., & Joormann, J. (2015). Correlates of Facebook usage patterns: The relationship between passive Facebook use, social anxiety symptoms, and brooding. *Computers in Human Behavior*, *48*, 575–580. https://doi.org/10.1016/j.chb.2015.02.003

Singh, R. (2016). Monotony of social networking among millennial and its effect on social advertisement: a challenge to digital marketers. *Young Consumers*, *17*(4), 376–387. https://doi.org/10.1108/YC-05-2016-00605

Singh, S., Farley, S. D., & Donahue, J. J. (2018). Grandiosity on display: Social media behaviors and dimensions of narcissism. *Personality and Individual Differences*, *134*(August 2017),

University of Ghana http://ugspace.ug.edu.gh

308–313. https://doi.org/10.1016/j.paid.2018.06.039

Singleton, A., Abeles, P., & Smith, I. C. (2016). Online social networking and psychological experiences: The perceptions of young people with mental health difficulties. *Computers in Human Behavior*, *61*, 394–403. https://doi.org/10.1016/j.chb.2016.03.011

Sirurmath, S. S. (2004). Electronic commerce. *Vikalpa*. https://doi.org/10.1177/0256090920040313

Spada, M. M. (2014). An overview of problematic Internet use. *Addictive Behaviors*, *39*(1), 3–6. https://doi.org/10.1016/j.addbeh.2013.09.007

Statista. (2017a). Number of monthly active Facebook users worldwide as of 2nd quarter 2017 (in millions). Retrieved from https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/

Statista. (2017b). Number of social media users worldwide from 2010 to 2021 (in billions).

Statista. (2018). Global social media ranking 2018 | Statistic.

Statista Inc. (2018a). *Dossier-Social commerce*.

Statista Inc. (2018b). Social Media Statistics & Facts. Retrieved September 11, 2018, from https://www.statista.com/topics/1164/social-networks/

Stone, M. (1974). Cross-Validatory Choice and Assessment of Statistical Predictions III Cross-validatory Choice and Assessment of Statistical Predictions. In *Source: Journal of the Royal Statistical Society. Series B (Methodological)*.

Suhail, K., & Bargees, Z. (2006). Effects of Excessive Internet Use on Undergraduate Students in Pakistan. *CyberPsychology & Behavior*. https://doi.org/10.1089/cpb.2006.9.297

University of Ghana http://ugspace.ug.edu.gh

Suissa, A. J. (2015). Cyber addictions: Toward a psychosocial perspective. *Addictive Behaviors*, *43*, 28–32. https://doi.org/10.1016/j.addbeh.2014.09.020

Tabachnick, B. G., & Fidell, L. S. (2007). Multivariate analysis of variance and covariance. In *Using multivariate statistics*.

Taylor, D. G., & Strutton, D. (2016). Does Facebook usage lead to conspicuous consumption?: The role of envy, narcissism and self-promotion. *Journal of Research in Interactive Marketing*, *10*(3), 231–248. https://doi.org/10.1108/JRIM-01-2015-0009

Teddlie, C., Tashakkori, A., & Johnson, B. (2008). Emergent techniques in the gathering and analysis of mixed methods data. In *Handbook of emergent methods.*

Thatcher, A., & Goolam, S. (2005). Defining the south African internet'Addict': Prevalence and Biographical profiling of problematic internet users in south Africa. *South African Journal of Psychology*, *35*(4), 766–792.

The Nielsen Company. (2018). *Connected Commerce*. Retrieved from https://www.nielsen.com/content/dam/nielsenglobal/dk/docs/connected-commerce-report-2018.pdf

Thompson, C. J., Locander, W. B., & Pollio, H. R. (1990). The Lived Meaning of Free Choice: An Existential-Phenomenological Description of Everyday Consumer Experiences of Contemporary Married Women. *Journal of Consumer Research*, *17*(3), 346. https://doi.org/10.1086/208562

Thoumrungroje, A. (2014). The Influence of Social Media Intensity and EWOM on Conspicuous Consumption. *Procedia - Social and Behavioral Sciences*.

University of Ghana http://ugspace.ug.edu.gh

https://doi.org/10.1016/j.sbspro.2014.07.009

Tice, D. M., Bratslavsky, E., & Baumeister, R. F. (2001). Emotional distress regulation takes precedence over impulse control: If you feel bad, do it! *Journal of Personality and Social Psychology*. https://doi.org/10.1037/0022-3514.80.1.53

Trigg, A. B. (2001). Veblen, Bourdieu, and conspicuous consumption. *Journal of Economic Issues*. https://doi.org/10.1080/00213624.2001.11506342

Trochim, W. (2006). What is the research methods knowledge base. https://doi.org/10.2471/BLT.05.029181

Trochim, W. M. K. (2015). Deduction & Induction.

Trotzke, P., Starcke, K., Müller, A., & Brand, M. (2015). Pathological buying online as a specific form of internet addiction: A model-based experimental investigation. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0140296

US Census Bureau. (2013). International Data Base Population Estimates and Projections Methodology. *U.S. Census Bureau, International Programs Center*. https://doi.org/10.1016/j.learninstruc.2012.08.003

van de Schoot, R., Lugtig, P., & Hox, J. (2012). A checklist for testing measurement invariance. *European Journal of Developmental Psychology*. https://doi.org/10.1080/17405629.2012.686740

van den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The Social Media Disorder Scale. *Computers in Human Behavior*, *61*, 478–487. https://doi.org/10.1016/j.chb.2016.03.038

University of Ghana http://ugspace.ug.edu.gh

Van Den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The Social Media Disorder Scale: Validity and psychometric properties. *Computers in Human Behavior*, *61*, 478–487. https://doi.org/10.1016/j.chb.2016.03.038

Vannucci, A., Flannery, K. M., & Ohannessian, C. M. C. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, *207*(7), 163–166. https://doi.org/10.1016/j.jad.2016.08.040

Ventresca, M. J., & Mohr, J. W. (2005). Archival Research Methods. In *The Blackwell Companion to Organizations*. https://doi.org/10.1002/9781405164061

Vinerean, S., Cetina, I., Dumitrescu, L., & Tichindelean, M. (2013). The Effects of Social Media Marketing on Online Consumer Behavior. *International Journal of Business and Management*. https://doi.org/10.5539/ijbm.v8n14p66

Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*. https://doi.org/10.1037/ppm0000047

Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-015-0455-4

Wang, C.-C., & Yang, H.-W. (2008). PASSION FOR ONLINE SHOPPING: THE INFLUENCE OF PERSONALITY AND COMPULSIVE BUYING. *Social Behavior and Personality: An International Journal*. https://doi.org/10.2224/sbp.2008.36.5.693

Wang, C., Lee, M. K. O., & Hua, Z. (2015). A theory of social media dependence: Evidence

University of Ghana http://ugspace.ug.edu.gh

from microblog users. *Decision Support Systems*, *69*, 40–49. https://doi.org/10.1016/j.dss.2014.11.002

Wang, J. L., Jackson, L. A., Gaskin, J., & Wang, H. Z. (2014). The effects of Social Networking Site (SNS) use on college students' friendship and well-being. *Computers in Human Behavior*, *37*, 229–236. https://doi.org/10.1016/j.chb.2014.04.051

Wang, J., & Xiao, J. J. (2009). Buying behavior, social support and credit card indebtedness of college students. *International Journal of Consumer Studies*. https://doi.org/10.1111/j.1470-6431.2008.00719.x

Westfall, J., & Yarkoni, T. (2016). Statistically controlling for confounding constructs is harder than you think. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0152719

Wilcox, K., Kramer, T., & Sen, S. (2010). Indulgence or Self-Control: A Dual Process Model of the Effect of Incidental Pride on Indulgent Choice. *Journal of Consumer Research*. https://doi.org/10.1086/657606

Wilson, K., Fornasier, S., & White, K. M. (2010). Psychological predictors of young adults' use of social networking sites. *Cyberpsychology, Behavior and Social Networking*.

Workman, L., & Paper, D. (2010). Compulsive Buying : A Theoretical Framework. *Journal of Business Inquiry*.

Wu, S. I. (2003). The relationship between consumer characteristics and attitude toward online shopping. *Marketing Intelligence & Planning*. https://doi.org/10.1108/02634500310458135

Yin, R. K. (2003). Applications of case study research. In *Case Study Research: Design and Methods*. https://doi.org/10.1097/FCH.0b013e31822dda9e

University of Ghana http://ugspace.ug.edu.gh

Yu, T.-K. T., & Wu, G.-S. G. (2007). Determinants of Internet Shopping Behavior : An Application of Reasoned Behaviour Theory. *International Journal of Management*.

Yuan, J., Morrison, A. M., Cai, L. A., & Linton, S. (2008). A model of wine tourist behaviour: A festival approach. *International Journal of Tourism Research*. https://doi.org/10.1002/jtr.651

Zhang, Y., Trusov, M., Stephen, A. T., & Jamal, Z. (2017). Online Shopping and Social Media: Friends or Foes? *Journal of Marketing*. https://doi.org/10.1509/jm.14.0344

University of Ghana http://ugspace.ug.edu.gh

# APPENDIX - QUESTIONNAIRE

## UNIVERSITY OF GHANA BUSINESS SCHOOL

## DEPARTMENT OF MARKETING AND ENTREPRENEURSHIP

Dear Respondent,

Thank you for sharing your time with us to discuss your opinions and beliefs about social media use. We ask questions that have no right or wrong answers and your opinions are very important to us. Kindly pay attention to the instructions and please answer every question as honestly as possible. Although some of the questions appear similar, we kindly request you to answer all of them as they have been deliberately framed in that manner for statistical purposes. The questionnaire is expected to take a maximum of 20 minutes. The anonymity of your responses is assured.

Thank you, once again.

1. Kindly provide us with your personal information to help us organise your responses well

a. Gender ☐ Male ☐ Female

b. Programme: ……..

c. Age: ☐ Below 18 years ☐ 18-24 years ☐ 25- 34 years ☐ 35-44 years ☐ 45 years or older

| *Tick the social media platform you use often. Tick as many as appropriate* | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☐*Facebook* | ☐Twitter | ☐YouTube | ☐LinkedIn | ☐Instagram | ☐Snapchat | ☐Skype | ☐WhatsApp |
| ☐*Other (Please State)* | | | | | | | |

| *On the average (within every hour during the day) how many minutes do you spend on social media* | | | | |
|---|---|---|---|---|
| ☐ *< a min* | ☐ Between 1 - 5 mins | ☐ Between 5-10 mins | ☐ Between 10 - 30 mins | ☐ >30 minutes |

University of Ghana http://ugspace.ug.edu.gh

| ***Kindly indicate how these statements reflect your beliefs with regards to social media use (1 – Never, 2 - Rarely , 3 – Sometimes , 4 – Very Often , 5 – Always )*** | |
|---|---|
| *How often do you give in to a desire to use social media even though your social media use at that particular moment conflicts with other goals (for example: doing things for school/study/work or other tasks)* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *How often do you give in to a desire to use social media even though your social media use at that particular moment makes you use your time less efficiently* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *How often do you give in to a desire to use social media even though your social media use at that particular moment makes you delay other things you want or need to do* | ☐1 ☐2 ☐3 ☐4 ☐5 |

| ***Indicate your level of agreement with the following statements regarding how you use social media.*** *On social media……..* *(1 - Strongly Disagree 2 – Disagree 3 – Undecided 4 – Agree 5- Strongly Agree)* | |
|---|---|
| *Online shopping is attractive to me in my daily life* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *Buying products and services via social media/internet is well suited to the way in which I normally shop.* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *Buying via social media is beneficial to me* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *When I have money, I cannot help but spend part or all of it on online shopping* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *I often buy something I see online without planning, just because I have to have it.* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *I sometimes feel that something inside pushes me to go online shopping* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *There are times when I have a strong urge to buy online (clothing, music, jewellery, etc.)* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *At times, I have felt somewhat guilty after buying something online because it seemed unreasonable.* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *There are some things I buy online that I do not show to anybody because I fear people will think I foolishly wasted my money.* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *I often have a real desire to go online shopping and buy something* | ☐1 ☐2 ☐3 ☐4 ☐5 |
| *As soon as I visit an online shopping website, I want to buy something* | ☐1 ☐2 ☐3 ☐4 ☐5 |

University of Ghana http://ugspace.ug.edu.gh

| | | | | | |
|---|---|---|---|---|---|
| *I have often bought a product online that I did not need even when I knew I had very little money left* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *Online shopping is a way of relaxing and forgetting my problems* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *On social media, I show off things I buy if they are expensive* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *I am more likely to highlight my possessions on social media if they have some "snob appeal"* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *My social media page includes products and brands that are prestigious.* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *When I buy things, I like to show them off on social media.* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *I "like" brands on social media because they have status.* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

***1 – Unlikely 2- Somewhat unlikely 3-Neutral 4-Somewhat Likely 5- Likely***

| | | | | | |
|---|---|---|---|---|---|
| *How likely is it that over the next years you will shop via social media?* | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| *How large a part of your shopping do you intend to carry out via the Internet over the next years? ** | ☐ <10% | ☐20 % | ☐30 % | ☐ 40% | ☐ >50% |