

The Digital Family in A Traditional Society

**Attitudes of Saudi Young People and Parents Towards the Use of Social Media in Family
Communication**

EASA ALQAHTANI

School of Journalism, Media and Culture

Cardiff University

This thesis is submitted to Cardiff University in fulfilment of the
requirement for the Degree of Doctor of Philosophy

December 2020

Dedication

To my lovely wife and the four amazing fruits of our love.

Acknowledgements

I acknowledge the supremacy and providence of Allah (SWT) and remain eternally gracious for all the gifts He has endowed me including good health and adequate resources to complete this work.

Through the difficult times of illness and raising our children, I am forever indebted to my wife for the support, patience and love that inspired me every day when my energies were low.

To my children, those little eyes full of innocence and faith in daddy without the doubt that daddy was the superman challenged me to live up to those expectations. Thank you.

My dear, patient and ever-understanding supervisors Dr. Arne Hintz and Dr. Francesca Sobande, and panel convenor Dr. Emiliano Trere, I cannot thank you enough for the consistent advice and guidance throughout the entire research process. Despite busy schedules and lives, you were there for me when I wrote long chapters and short, numerous emails seeking your feedback. Your energies were amazingly challenging, and your constructive criticism was given with so much love and understanding it made me feel like a spoilt, doctoral infant.

To Dr. Joanna Redden, although I did not complete this PhD journey with you, I will never forget your contribution in helping me lay a firm foundation for this work.

I am grateful to Cardiff University and especially School of Journalism, Media and Culture, particularly Professor Stuart Allan, Professor Paul Bowman, Professor Stephen Cushion, Helen Szewczy, Jo Marshall-Stevens, Julie Jewell, Huw Thomas, Cerys Thomas and Sarah Bruford, for giving me the endless opportunities to complete my PhD without any hindrances.

I am also thankful to King Khalid University for supporting me by sponsorship to complete my PhD degree and to undertake research. Special thanks to all the interviewees, those who participated in this research and all the questionnaire respondents.

To anyone that has not been mentioned by name, yet contributed to the accomplishment of this PhD, especially my friends and the Saudi Community in Cardiff, please accept my sincere gratitude.

Abstract

This thesis examines the attitudes and perceptions of the Saudi family towards the use of social networks in family communication. Specifically, it takes into account whether there are any perceived changes in family relations in Saudi Arabia, and if so, can this be traced back to the relatively recent shift to allow wider access to the Internet and the proliferation of social media applications. With the increasing growth of social media platforms, numerous questions have arisen concerning people's perceptions. This has been widely observed among the young Saudi and parents whose attitude toward the social media has varied. This study's focus was to provide an in-depth investigation of the Saudi young and parents' attitude towards increasing social media use for communication within the family set up. The inclusion of both the young and parents make the study very significant because it investigates the increased use of social media for communications and their perceptions. The research question that guided the entire research was based on how social media has impacted family communication leading to the different attitudes exhibited by the young and parents. The study used a multi-stage research design that takes the form of surveys and in-depth interviews. During the survey process, 818 participants were given an opportunity to express their opinions in the survey distributed to them. Of the 818 participants, there are 103 parents, and 515 young Saudis. Besides, in the interviews, 15 parents and 15 young people were interviewed. By applying the research design, the study managed to capture all the necessary data needed to show the respondents' perception of social media's rising rate as a form of communication. This was enhanced by utilizing the descriptive approach that helped to include and analyse all the participants' data. The results show that for four in five of the young people, their attitudes were more positive towards the use of social media in family communication, and indeed, most participants felt that their attitudes towards the use of social networks in family communication had become more positive. In addition, most participants showed they had a positive experience in using social media applications, such as WhatsApp and Twitter, as these platforms offer useful information on several issues, including family building, children's needs, and parenting techniques. The findings show that the parents' purpose of using social media involved networking, education, and news reception. They used WhatsApp for corresponding with family and friends, Twitter for news, and YouTube for educational purposes. The young people thought that WhatsApp provided an avenue for bonding through the creation of family groups. It also gave the young people a freedom of expression that had been hard to achieve with previous forms of communication. These findings indicate that the more frequent utilisation of WhatsApp and other social media platforms by parents and young people confirms that social media gives Saudis the opportunity to reinforce bonds with their families.

Table of Contents

Table of Contents	vi
List of tables	x
List of figures	x
Chapter 1: INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 SAUDI FAMILY STRUCTURE AND VALUES	3
1.3 SOCIAL MEDIA AND SOCIAL CHANGE IN SAUDI ARABIA	7
1.4 RESEARCH PROBLEM	9
1.5 AIMS AND OBJECTIVES	10
1.6 RESEARCH METHODS.....	10
1.7 THESIS LAYOUT.....	11
1.8 STUDY KEY RESULTS	12
Chapter 2: LITERATURE REVIEW.....	13
2.1 INTRODUCTION	13
2.2 SOCIAL MEDIA	13
2.2.1 Social media definitions.....	13
2.2.2 A brief history of social media	15
2.2.3 Web 2.0	18
2.3 COMMUNICATION TECHNOLOGY DISRUPTION OF DIFFERENT LIFE ASPECTS.....	21
2.3.1 The historical account of communication technologies	22
2.3.2 Social media and the media industry	25
2.3.3 Social media and politics	27
2.3.4 Social media and culture	30
2.3.5 Social media and economics.....	31
2.4 FAMILY AND COMMUNICATION	34
2.4.1 Family communication through different media.....	34
2.4.2 Family communication through social media.....	38
2.5 SAUDI SOCIETY	47
2.5.1 The history of social change in Saudi Arabia	47
2.5.2 Modern life and Saudi society	50
2.5.3 Media and the internet in Saudi Arabia.....	52
2.6 STUDY FRAMEWORK	55
2.6.1 Media effects theory (MET).....	56
2.6.2 The family systems theory (FST)	60
2.6.3 Theory of reasoned action (TRA), technology acceptance model (TAM), and media richness theory (MRT)	62
2.6.4 Social media and the public and private spheres	64
2.6.5 Family as a private sphere	67
2.7 RESEARCH GAP	72
2.7.1 Social media and familial communication in Saudi Arabia	73
2.8 CHAPTER SUMMARY	74

Chapter 3: METHODOLOGY.....	76
3.1 INTRODUCTION	76
3.2 RESEARCH QUESTIONS	76
3.3 RESEARCH DESIGN.....	76
3.4 THE RESEARCH STRATEGY.....	78
3.4.1 Online survey as a quantitative method.....	79
3.4.1.1 Advantages of online survey questionnaire	79
3.4.1.2 Disadvantages of online survey questionnaire.....	81
3.4.2 In-depth interview method	83
3.4.2.1 Advantages of in-depth interviews	83
3.4.2.2 Disadvantages of in-depth interviews	84
3.5 STUDY SETTING	85
3.6 STUDY SAMPLE.....	88
3.6.1 Sampling for the survey questionnaire.....	88
3.6.2 Sampling for interview method.....	89
3.7 DATA COLLECTION PROCEDURES.....	90
3.7.1 Ethical approval	90
3.7.2 Back-translation technique.....	91
3.7.3 Pilot study.....	92
3.7.4 Collecting data	93
3.8 DESCRIPTION OF THE STUDY VARIABLES.....	94
3.8.1 Dependent variables (DVs)	94
3.8.2 Independent variables (IVs).....	95
3.9 QUESTIONNAIRE	95
3.9.1 Sections of the questionnaire	95
3.9.1.1 Social media usage purposes and duration of use	96
3.9.1.2 Examples of social media and networking sites	96
3.9.1.3 Experience with social media	96
3.9.1.4 Attitudes towards using social media to support learning.....	97
3.9.1.5 Factors in using social media for familial communication purposes.....	98
3.10 DATA ANALYSIS	99
3.10.1 Questionnaire results analysis.....	99
3.10.2 Analysis of interviews	100
3.10.3 Questionnaire validity and reliability.....	104
3.10.3.1 Reliability	104
3.10.3.2 Validity.....	105
3.11 STUDY LIMITATIONS	106
3.12 CHAPTER SUMMARY	108
Chapter 4: ANALYSIS OF PARENTS' DATA.....	109
4.1 INTRODUCTION	109
4.2 DEMOGRAPHICS.....	109
4.3 VERIFICATION OF THE VALIDITY AND RELIABILITY.....	110
4.3.1 Validity.....	110
4.3.1.1 Correlation the score of the statement and the score to each scale:	110
4.3.2 Reliability testing	113
4.3.2.1 Analysis of answers based on the Likert scale:.....	113

4.4 USE OF SOCIAL NETWORKS.....	114
4.4.1 Parents’ purposes in using social media	114
4.4.2 Examples of social networks used by parents	118
4.4.3 Parents’ experience of using social networks.....	120
4.4.4 Parents attitudes towards the use of social networks in family communication.....	123
4.5 FACTORS FOR USING SOCIAL NETWORKS FOR FAMILY COMMUNICATION.....	131
4.5.1 Expected ease of use	131
4.5.2 Perceived usefulness of using social networks in family communication	133
4.5.3 Social media richness and family communication.....	135
4.5.4 Parents’ preferred medium for communication with their children	138
4.5.5 Rewarding behaviour from parents.....	140
4.6 INTERVIEWS WITH PARENTS.....	142
4.6.1 Interviewees’ demographics	142
4.6.2 Analysis of interviews	142
4.6.3 Perceived change in family.....	145
4.6.3.1 Family relationships.....	145
4.6.3.1.1 Family dynamics	145
4.6.3.1.2 Family communication	147
4.6.3.2 Family values	148
4.6.3.2.1 The family roles	149
4.6.3.2.2 Family concerns	150
4.7 SUMMARY	152
<i>Chapter 5: YOUNG PEOPLE DATA ANALYSIS.....</i>	<i>154</i>
5.1 INTRODUCTION	154
5.2 QUESTIONNAIRE DEMOGRAPHICS.....	154
5.3 VERIFICATION OF THE VALIDITY AND RELIABILITY.....	155
5.3.1 Validity.....	155
5.3.1.1 Correlation of the score of the statement and the score to each scale	155
5.3.2 The reliability.....	157
5.4 USAGE OF SOCIAL NETWORKS	157
5.4.1 Purposes of using social media.....	157
5.4.2 Examples of social networks used by young people	160
5.4.3 Young people’s experience of using social networks	163
5.4.4 Young people’s attitudes towards the use of social networks in family communication	166
5.4.4.1 Time spent daily using social networks to communicate with parents.....	166
5.4.4.2 Young people’s attitude towards using social networks in family communication in the past three years	172
5.5 FACTORS FOR USING SOCIAL NETWORKS FOR FAMILY COMMUNICATION.....	174
5.5.1 Expected ease of use	174
5.5.2 Perceived usefulness of using social networks in family communication	177
5.5.3 Social Media Richness and Family Communication.....	179
5.5.4 Preferred medium for Saudi young people to communicate with their parents	182
5.5.5 Rewarding behaviour from parents.....	184
5.6 INTERVIEWS WITH YOUNG PEOPLE	186
5.6.1 Interviewees’ demographics	186
5.6.2 Analysis of interviews	187
5.6.3 Perceived change in family.....	189
5.6.3.1 Family relationships.....	189
5.6.3.1.1 Family dynamics	189
5.6.3.1.2 Family communication	191

5.6.3.2 Family values	192
5.6.3.2.1 Roles of family members	192
5.6.3.2.2 Family concerns	194
5.7 SUMMARY	195
Chapter 6: DISCUSSION.....	197
6.1 INTRODUCTION	197
6.2 PROPERTIES OF INTERNET USE	197
6.2.1 Internet use in familial communication.....	200
6.3 FAMILY DYNAMICS AND ROLES	206
6.3.1 Family dynamics	206
6.3.2 Communication behaviours.....	206
6.3.3 Power position and decision-making.....	209
6.3.4 Family roles.....	210
6.3.5 Sharing emotions.....	213
6.4 ADVANTAGES AND DISADVANTAGES OF SOCIAL NETWORKS IN FAMILY COMMUNICATION....	215
6.4.1 Sharing problems and concerns	215
6.4.2 Participation and interactivity	216
6.4.3 Time saving.....	218
6.4.4 Family values	220
6.5 ANSWERS TO RESEARCH QUESTIONS AND SUMMARY	222
Chapter 7: CONCLUSIONS	225
7.1 INTRODUCTION	225
7.2 CONCEPTS DRAWN FROM THE EXISTING LITERATURE AND BACKGROUND MATERIAL	226
7.3 METHODOLOGY	227
7.4 Data analyses	229
7.4.1 Participants' attitudes towards social media use	229
7.4.2 The impact of social media on familial communication	230
7.4.3 Traditions, roles and values.....	231
7.5 Research contribution	233
7.6 Recommendations for further work	236
Appendices.....	238
Appendix A	238
Appendix B	244
Appendix C.....	252
Appendix D	254
References.....	258

List of tables

Table 3-1 Aspects of planning a mixed-methods design	77
Table 3-2 King Khalid University colleges	88
Table 4-1 Correlation of the score of the statement and the score to each scale	112
Table 4-2 Reliability statistics.....	113
Table 4-3 Categories of social media.....	115
Table 4-4 Parents' goals in using social media	115
Table 4-5 Parents' purposes in using social media.....	117
Table 4-6 Examples of social networks used by parents	119
Table 4-7 Parents' experiences of using social networks.....	122
Table 4-8 Parents' attitudes towards social networks in family communication in the past three years	131
Table 4-9 Expected ease of use of social media	133
Table 4-10 To what extent do parents agree with the following statements?.....	134
Table 4-11 To what extent do parents agree with the following statements about social media richness for family communication?.....	138
Table 4-12 In parents' communication with their children through social networks, the best option is...	139
Table 4-13 To what extent do parents agree with the following statements?.....	142
Table 4-14 Codes and themes	144
Table 5-1 Correlation of the score of the statement and the score to each scale	156
Table 5-2 Reliability statistics.....	157
Table 5-3 The purposes of using social media.....	159
Table 5-4 Examples of social networks	162
Table 5-5 Young people's experience in using social networks	165
Table 5-6 Time spent daily using social networks to communicate with parents	167
Table 5-7 Statements about young people's attitudes towards the use of social media in familia communication	171
Table 5-8 Attitude towards social networks in family communication in the past three years ...	174
Table 5-9 Expected ease of use.....	177
Table 5-10 To what extent do you agree with the following statements?	179
Table 5-11 To what extent do you agree with the following statements about social media richness for family communication?.....	182
Table 5-12 In communicating with my parents through social networks, the best method is.....	184
Table 5-13 To what extent do you agree with the following statements?	186
Table 5-14 Encoding structure.....	188

List of figures

Figure 4-1 Examples of social networks.....	120
Figure 4-2 Frequent networking across social networks has reduced face-to-face communication	129
Figure 4-3 Parents' attitudes towards social networks in family communication in the past three years	131
Figure 4-4 Preferred way for communication with my parents via social media networks	140
Figure 5-1 The purposes of using social media	159

Figure 5-2 Examples of social networks..... 163
Figure 5-3 Young people's experience in using social networks..... 166
Figure 5-4 Frequent networking across social networks has reduced face-to-face communication
172
Figure 5-5 Attitude towards social networks in family communication in the past three years.. 174
Figure 5-6 Preferred way of communicating with my parents via social media networks..... 184

Chapter 1: INTRODUCTION

1.1 INTRODUCTION

The tremendous developments in the information sector, marked by the growing dominance of online communication, have played a significant role in the Gulf Cooperation Council's (GCC) effort to transform traditional societies' reliance on the generosity of land and sea to a more modern way of life. GCC countries, such as Saudi Arabia, the United Arab Emirates, Kuwait, Oman, Qatar, and Bahrain, have developed significantly as far as interaction with and dissemination of information via modern and current communication methods are concerned, for example, with mobile internet penetration increasing in Saudi Arabia by 54% in 2012 (Alshehri and Meziane 2017, p. 128). The proliferation of social media usage has affected how people spend their leisure time (Gaikwad 2015, p. 251). Ultimately, the development of information technology has compelled Saudi Arabia to keep pace with other parts of the world.

Similar to many Western countries, Saudi Arabia has experienced considerable economic, technological, and infrastructural transformation. The nation has evolved from a simple desert state into a prominent, powerful and wealthy nation in the Arab Gulf region that is investing immense effort in developing its people and elevating them towards a more modern standard of living. (Alshahrani 2016, p. 19). This gradual transformation has taken place over the last seven decades (Alsharkh 2012). During the early twentieth century, it was believed that Saudi Arabia was lacking in natural resources (Al-Tahliand and Maarop 2018). However, the discovery of oil deposits significantly boosted the country's socio-economic prospects in the second half of twentieth century until today. Alsharkh (2012) asserted that the country had recently experienced a significant socio-economic transformation, and this had resulted in changes to the structure of governance with respect to its educational, political, social and health aspects. The discovery of oil significantly altered Saudi Arabia's economy and elevated the country to global leadership status within the Arabian Peninsula.

Saudi Arabia is among the countries in the GCC that have openly embraced the social media trends (Alshehri and Meziane 2017, p. 128). Makki and Lin-Ching Chang (2015) argued that internet and social media use in Saudi Arabia has increased significantly during the recent years. In this regard, the country's decision to adopt new communication channels while simultaneously retaining traditional customs and beliefs is proving to be a herculean task, particularly for the younger generation.

Compared to other countries within the GCC, Saudi Arabia has opened up its society discernibly to e-commerce-based investment, infrastructure technological advancements, and modern methods of privatising and exploring social media interactions – the most powerful aspect of modern communication as well as globalisation (Alshehri and Meziane 2017, p. 128; Alsharkh 2012, p. 2). Therefore, for the first time, the Saudis have a new space for dialogue, discussion, and exchange of opinions on a wide and less restrictive basis (Alotaibi, 2020).

Moreover, Saudi Arabia plays a particularly important role globally as a member of the G20 which hosted the summit in November 2020. Since the 1930s, Saudi Arabia has been among the world's major suppliers of oil. Now, in 2020, the country has the largest economy in the Middle East (OECD, 2020). The country's strategic location, bordering several prosperous countries, including the UAE, Bahrain, Kuwait, and Jordan, places it at the centre of global business. As a result of its geographical advantage, Saudi Arabia has become the centre of trade in the Middle East. Consequently, with the emergence of new avenues of communication, the Saudi populace boasts the highest number of social media users within the GCC (Al-Tahliand Maarop 2018). Briefly, Saudi Arabia's central location in the Arabian Peninsula has catapulted the country into commercial leadership within the region. Similarly, Saudi Arabia has been able to tap into the advantages of trade and has become the leading country within the GCC to embrace new communication styles. Saudi Arabia, as a country, is socially enclosed, yet it is characterised by both traditional and modern architecture. For centuries, Saudi Arabia has also traditionally been the capital of Islam (AlMunajjed, 1997). Thus, although the country has adopted some elements of modernity, ancient practices and traditions continue to be key pillars of the country due to the influence of Islam (al-Ken, 1995). In this regard, Saudi Arabia is a suitable case study for this research. Given these notable traits and the country's focus on wealth creation – from both the historical and economic perspectives– it is important to examine how new technology affects traditional forms of family communication, and so it explores the consequences of new technology on Saudi society.

The reason for the aforementioned assertion is Saudi Arabia's thriving economy, which has led to an increase in the typical Saudi family's income, making it easier for Saudis to own computers and smartphones and to enjoy good internet connections, which has doubled the number of Saudis using social media in last decade.

1.2 SAUDI FAMILY STRUCTURE AND VALUES

The Saudi constitution states that the family is the main component of Saudi society. Therefore, Saudi society is a collective rather than an individual society; it is based on community and family interaction rather than individual interests (Alotaibi, 2020). The rights, duties, and values that represent the interests of the community and society are prioritised over the interests of individuals. Traditional social ties in Saudi society depend on the blood relationships within the same tribe (*al-qabila*). Traditionally, loyalty between individuals forms the basis of the tribe and its leader. The tribe is the second main component of society after the family. In addition, social discrimination is made not on the basis of wealth but on the basis of honour, generosity, and trustworthiness (Al-Khariji, 1983). However, social discrimination is also made on the basis of the tribe to which one belongs.

Structurally, tribal groups are defined by shared parental proportions that unite individuals in increasingly larger segments. Although tribes may differ in their status, all proportions of a particular tribe are considered equal. Donald Cole (1973) – in his study *The enmeshment of nomads in Saudi Arabian society: The case of Murrah* – indicated that four to six branches associated with one origin are grouped together into a clan. Community ties between groups in the immediate community of traditional isolated communities and tribes were distinguished by the strength of the group, which consisted not only of extended family members but also of distant relatives and friends. Thus, interaction within Saudi tribes is collective in nature. However, this characteristic is more oriented towards individuality in large cities. The strength of the traditional group has diminished, and the individual now enjoys the freedom to join various groups, such as societies and clubs that are characteristic of complex societies (Al-Saif 1997).

To clarify how the traditional family is formed in Saudi Arabia, we have to take a brief look at the process of marriage because it is important in understanding the formation of the family and the relationships within it. In the traditional Saudi family, marriage is restricted to prospective spouses from the same tribe or even from the same extended family. However, some restrictions vary across the country's different regions. In the central part of the country, for example, these restrictions are more pronounced, while they are less evident in the western region, in cities such as Makkah and Jeddah. Regarding exogamy, the dominant marriage pattern is among first cousins, primarily paternal cousins. Marriage to maternal cousins was long regarded as being in the second rank. During the 1990s, this situation became reversed, largely due to the increasing influence of mothers

in the selection of their son's wives (Achoui, 2006). However, young and educated men tend to choose their wives from different tribes, groups, and clans. The groom or his family must provide a dowry (bride-price), usually consisting of jewellery or anything precious to the bride, as part of the groom's or his family's obligations towards the bride in accordance with Islamic teachings. Marriage without this dowry is illegal, regardless of the dowry's value. The husband, according to Islamic teachings, is responsible for his family and must be the bearer of the family's financial burden, even if his wife works or is wealthy, unless concessions are made (Achoui, 2006). Therefore, noticeable here is the importance of the male role in the family, which affects the level of relationship and communication within the family. This usually gives the strongest role to male children - more than female children - within the family in terms of making decisions and controlling family choices in general. In addition, it reduces the decisions and freedom of choice for Saudi females (Almosaed, 2008). This has an impact on the pattern of communication within the family, as the person who has a strong role in the family has a different form of dialogue and opinions, and the way others interact with his or her views is also different. Therefore, this study will shed light on some of the changes that have occurred in this communicative aspect within the Saudi family.

Moreover, the traditional extended Saudi family structure can be described as tribal and patriarchal in linear proportions, whereby the relatives of both sexes are viewed as being related to men only. It can also be described as patriarchal because the father or grandfather has legal authority that is supported by social norms. In large Saudi cities, the family's distinct type tends towards nuclear, although relatives are inclined to live close to one another even in large cities that expand horizontally rather than vertically. Therefore, interaction between relatives is more easily achieved. The extended family usually includes three generations – grandparents, sons / fathers, daughters / mothers, and children – whereby the grandfather is the head of the family in terms of the power structure, and this includes close relatives (cousins, uncles, sisters, sons, daughters) and relatives through marriage (parents-in-law, brother-in-law and sisters-in-law) (Alanazi, 2015).

As mentioned above, the Saudi constitution – which was reformulated in 1992 – states, “The family is the nucleus of Saudi society” (p. 7). Some sociologists, such as Al-Saif (1997), believe that this new organisation of society is positive because it stresses the importance of the family rather than the tribe or the individual. The age of marriage, for example, is an indication of the impact of urbanisation on the Saudi family. Fifty years ago, women were married at a young age, typically between 13 and 16 years old. However, the tradition has completely changed, and women now marry at between 20 and 25 years old. Similarly, fifty years ago, men married at between 15 and

18 years old. However, currently, most young people prefer to delay marriage. About 60% of Saudi youth choose not to marry early because of the expenses of marriage (Rasheed and Akkurt, 2020). Nonetheless, late marriage for both men and women may be attributed to several factors, such as increased years of schooling for both sexes, high marriage expenses (particularly the cost of the dowry), the desire to live independently, and the desire to choose a spouse freely (Fadaak and Roberts, 2018). Nonetheless, the birth rate in Saudi Arabia is one of the highest in the world (3.5%).

Previously, residence after marriage was traditionally patrilocal in that married sons resided in or near their father's residence. The married daughter is traditionally expected to live in or near her father-in-law's house, and the mother-in-law has some authority over the daughter-in-law. Even in large cities, it is evident that married sons are expected to live near their parents if not in the same house. However, the trend among educated spouses is to live independently from their parents, even if they are expected to live close to them as a social obligation (Achoui, 2006).

Traditionally, the father in the Saudi family is the breadwinner while the mother is the guardian of the home. Grandparents are highly respected and play a major role in monitoring many family problems. Women in traditional families are not expected to work outside the home, family property, or in out the group boundaries. Consequently, the percentage of Saudi women in the workforce in recent decades has declined (by between 6 and 9%). However, the rapid economic change has affected the women workforce in Saudi Arabia: for example, in 2020, Saudi women represented 31.4% of the country's workforce (General Authority For Statistics, 2020).

Since 1970, almost all girls have attended school, with the result that marriage is delayed and the percentage of unmarried girls has increased. Al-Khariji (1983) argued that young women with higher education levels are less likely to marry before completing their studies. Meanwhile, Al-Saif (1997) confirmed that a new trend has been developing over the last three decades in that Saudi families generally support women working outside the family, provided they respect Islamic traditions and do not mix with men. In total, 52% of Saudi women tend to work outside the family for financial reasons, and 50% of them are eager to work for self-realisation and to gain a role and social standing. The husbands support the work of their wives despite the restrictions associated with being outside the home. Al-Saif (1997) also mentioned that social and economic changes in Saudi Arabia since 1970 have brought about changes in several roles and in the social status of many individuals and jobs in society. However, he stressed that the relationship between role and status is not always positive. For example, the role of women in society may change positively

though their situation may remain traditional. In the case of family disputes, parents and grandparents play an important role in conflict resolution. In addition, girls are expected to assist their mothers, while boys are expected to assist their fathers, while girls are also expected to help their parents and brothers at home. However, maids in wealthy and middle-class Saudi families assume most maternal jobs, including childcare, cooking, and cleaning.

Regarding social relations, Achoui (2006) stated that about 80% of households in Riyadh were originally nomadic. Currently, the majority of the population live in neighbourhoods with people who share the same values, traditions, and blood relationships. However, social relations in the major Saudi cities are changing. Social relationships among extended families have become weaker with respect to type and number (Al-Masaad, 1995), leaving room for more pragmatic relationships.

Unfortunately, no studies are available on changes in values. However, social studies related to marriage, values, social ties, and social change in general, as shown above, show that family values are changing, particularly in large cities such as Riyadh, Jeddah, and Dammam, as a result of urbanisation, industrialisation, and education. Nonetheless, the veil, gender segregation practices, and the values associated with these practices remain unchanged. No clear desire for change in this regard is evident because these practices are based on basic family tribal values, which are adopted and established by scholars (religious scholars) and the central government.

In fact, communication between family members is one of the most important elements of Saudi society, and it is considered an indicator of the strength of the relationship within the family. Direct face-to-face communication remains the chief factor in communication within the Saudi family, and it is considered a sign of benevolence towards parents that their children sit and talk with them. However, Saudi society gives young people little space to interact with social issues since the discussion and resolution of such issues is the domain of society's elders, and the elderly members of Saudi society are often tasked with resolving such issues (Alsharkh 2012, p. 2). In the past, Saudi customs and beliefs prevented the populace from openly expressing their interactions with each other (Al-Tahli and Maarop 2018). Notably, the customs and traditions of the Kingdom of Saudi Arabia display an overtly limited interaction and communication between its society and its national heritage, especially with regard to the interaction of its youth with social issues; young people do not have an opinion or any advice, and often, everyone is meant to follow whatever decision the adults make. However, with recent changes such as the emergence of free education,

TV, satellite, the internet, and social networks, it can be said that this has begun to change (Alotaibi, 2020). These changes will inevitably lead to transformations within family communication, which in turn will affect changes in family values and the habits and roles of family members, and these changes will be investigated during this research. Accordingly, it is important to review the history of social change in Saudi society to understand the contemporary reality of the Saudi family and to understand the methods of communication within it. Therefore, the next section considers such changes in more detail.

1.3 SOCIAL MEDIA AND SOCIAL CHANGE IN SAUDI ARABIA

The abrupt change to a new lifestyle, occasioned by new technologies, has affected the livelihood of most Saudis, and this has divided the populace (Al-Tahli and Maarop 2018; Alshehri and Meziane 2017). The country's conservative population has condemned the emergence of new technologies, believing that any sudden change is likely to influence family traditions and the Saudi belief system (Al-Tahli and Maarop 2018). However, new technologies, such as television, allow Saudis to explore Western cultures. Ultimately, the religious elements in Saudi society regarded this development as a threat to the social fabric, but the country's government encouraged the incorporation of modern technologies into the socially enclosed country. Conversely, some are willing to adapt to the new changes because they agree that the country should keep pace with other parts of the world by allowing the penetration of new technologies. The newer generation is adversely affected by this dilemma. On balance, the desire to adapt to the global changes brought about by technology has created a schism in Saudi Arabia (Alshehri and Meziane 2017). Ultimately, the division encompasses one group advocating for the adoption of new technologies and another that believes that such a move will lead to the disintegration of the social fabric that keeps Saudi family traditions and religion intact. Nonetheless, the evolution of the Saudi government has been a key feature in the transformation of Saudi Arabia from a traditional society to a modern and more open society.

Undoubtedly, the internet provides a powerful avenue through which people can interact and communicate. Indeed, the internet has led to a shift in social behaviours and human life (Tang-Mui and Teng 2017). Nonetheless, Saudi society is experiencing another revolution that is likely to significantly affect the country's social fabric, namely, the 'open society' boosted by social media that comprises Twitter, YouTube, Facebook, blogs, and many more (Alsharkh 2012). Social media permits cross-border interactions and bridges the gap between multiple cultures as well as exposing

global populations to divergent traditions and cultures (Sultana 2017). Therefore, with the revolution of the social media enveloping the entire country, people are wondering if the communication revolution that will cause modifications to familial communications is imminent. Alshehri and Meziane (2017) argued that use of the internet in the entire Arab world has been growing exponentially by a rate of around 400 per cent in last ten years. Resultantly, social media is a new technology in Saudi Arabia that is likely to cause significant changes because it exposes the country's population to external cultures and beliefs.

The effects of significant technological shifts on family relationships are complex. The rise of the internet has engendered a degree of fear regarding the actual impact of its use on existing social relations. Some studies have indicated that the internet has only a limited impact on intra-family relations (Sultana 2017, p. 47), and similar studies (Lee and Chae, 2007, Shim, 2007, Williams and Merten, 2011) have considered social media platforms as substitutes for traditional forms of communication. However, other studies have arrived at contradictory conclusions, arguing that social media is having a significant impact on familial communication due to the exposure to various cultures that it offers. According to Alshehri and Meziane (2017), the younger population has been exposed to new cultural identities that differ from those of the nation's heritage. Such exposure occurs as the youthful population in Saudi Arabia continues to use the internet (Al-Tahli and Maarop 2018). Within the Gulf Peninsula, various countries are shaped by a blend of traditional social norms and religion. Indeed, in the typical Saudi family, the members engage in robust social interaction with one another (Alshehri and Meziane 2017).

Moreover, social bonds within Saudi society are created through the strong links that exist between grandparents and grandchildren. According to Tang-Mui and Teng (2017), who applied media dependency theory (MDT), such social bonds are linked to the benefits that individuals acquire from their preferred social media platforms, which encourage users to maintain strong ties (p. 36). Indeed, it has been argued that the use of social media has the potential to alter existing societal bonds since social media use in Saudi Arabia has increased immensely. For instance, in the year 1999, the number of internet users was 100,000, but the figure had reached one million users by the autumn of 2001 (Alshahrani 2016, p. 20). However, the impact of social media on the structure of Saudi familial communications has yet to be fully examined. Notably, the incorporation of social media in any society will have significant effects on all aspects of the society. Accordingly, this thesis discusses the overall Saudi attitude towards the use of social media in familial communications.

Therefore, research in this area is critical. Most of the research that has been carried out in this area has taken place in the context of Western culture. Even within these contexts, most studies about the influence of social media on family and social communication predate the present era, which is marked by the proliferation of mobile phones (Alshehri and Meziane 2017). Most of the social studies in Saudi Arabia about the effects of social networks on the family have focused on researching these effects from the point of view of one social group only. Thus, this study is one of the first studies to examine the views on and attitudes towards the effects of social networks on family communication for both parents and children in both sexes in Saudi society.

1.4 RESEARCH PROBLEM

Due to the potential it offers to create virtual identities, social media has become a crucial aspect of many lives of many people and especially adolescents and young adults in Saudi Arabia. Arguably, adolescents and young adults are the most frequent visitors to social media sites. The growing prevalence in social media use is inducing the younger population, not only in Saudi Arabia but also across the globe, to become more dependent on online relations, thus alienating them from their familial and social ties. A similar study conducted among Chinese students by Hing Keung Ma and Pow (2011), assessing the correlation between antisocial behaviour and internet use, observed the prevalence of internet addiction and/or pathological internet use Problematic Internet Use (PIU) (p. 123). The exponential growth of social media networks has significantly influenced family and social ties in today's society, as the youth opt to create and maintain virtual relationships. Indeed, the youth are increasingly becoming dependent on online communication tools, and this may lead to the rupture of traditional forms of communication.

This study examines the attitude among Saudis towards the use of social media in family communication and considers the growing use of social media in the changing familial communication in Saudi Arabia. Indeed, it is necessary to examine explicitly the extent to which these new modes of communication are influencing changes around familial communication. Additionally, it is important to evaluate the influence of social media networks on traditional social structures.

Notably, if it is the case that use of the internet disrupts family social interactions, this will have far-reaching consequences for countries such as Saudi Arabia. Saudis view social interaction as an

integral factor that holds society together. Generally, Saudi society is traditional, characterised by a set of traditions and beliefs associated with familial and social interactions. A case in point is the family tradition that requires members to meet daily or weekly to discuss emerging issues. Furthermore, society requires all members to meet on a weekly and/or monthly basis during celebrations at which attendance is mandatory (Eldardiry and Elmoghazy 2018). Such meetings are believed to enhance social relations between family members and society as a whole. Against this background, this study interrogates Saudi family attitudes towards the use of social media in familial communication and seeks to fill the existing research gap regarding the impact of social media on familial communication.

1.5 AIMS AND OBJECTIVES

The aim of this study was to identify the consequences of social media use for family communication in the context of Saudi traditional family structures. This study was guided by the following research objectives:

- i. to study the impact of social media use on family communication among Saudi youth
- ii. to establish the attitudes of Saudi parents towards the use of social media as a tool for familial communication
- iii. to interrogate the barriers experienced by Saudi families when using social media for family communication
- iv. to find out whether social media offers new avenues for improving family communication in Saudi society
- v. to establish whether social media use has resulted in changes in traditional communication methods in Saudi Arabia
- vi. to ascertain whether social media use results in changes to traditional family roles in Saudi Arabia

1.6 RESEARCH METHODS

To achieve the stated research objectives, I adopted a multistage research design for this study. First, I conducted two surveys by circulating the questions to the target respondents, specifically, students at King Khalid University, Asir, Saudi Arabia, and their parents. The respondents in the survey were required to give their opinions and attitudes regarding the influence of social media on familial communication. In addition, I conducted interviews with another set of young people

and another set of parents, who were required to describe in more depth their attitudes regarding the influence of social media on familial communication and family relations. In effect, this study used a mixed-methods research design.

It is imperative to recognise that adopting a variety of research methods, both quantitative and qualitative, is very significant to obtain results that help to achieve an interpretation of attitudes and perceptions towards social issues, particularly since this study is one of the first studies to collect the attitudes and opinions of students and their parents towards this significant social and familial topic.

1.7 THESIS LAYOUT

Chapter 1 provides a general background to the impact of social media and the internet on family relations and outlines the thesis statement, research problem, and objectives. Next, Chapter 2 provides an in-depth analysis of the existing research on internet use and, by extension, the impact of social media on familial communication. The chapter adopts a thematic approach to outline various themes that relate to internet use and family communication. In Chapter 3, the appropriate research design used in the study is developed and discussed. Notably, I used a synchronously mixed-methods design that combined survey questionnaires and in-depth interviews. Chapter 4 presents the study's research data. It focuses on the parents' data analysis and is divided into several sections. First, the validity and reliability of the questionnaire data are tested and validated. The second section examines the use of social networks and analyses various data, such as parents' purposes for using social media, examples of social networks that parents use, parents' experiences in using social media, and parents' attitudes towards the use of social media in family communication. An additional section analyses the factors for using social media for family communication. These factors are expected ease of use, the perceived benefit of using social media in family communication, the richness of social media and family communication, parents' preferred method of communicating with their children, and parents' rewarding behaviour. A further section analyses the interviews parents and the interviewees' demographics, and the final section examines the marked changes in the family. In Chapter 5, the data were analysed in the same way, and with the same sections and factors, but with the youth. Chapter 6 discusses the research findings in light of five themes, properties of internet use, internet use for family communication, family dynamics and roles, advantages, and disadvantages of social networks in familial communications, and family values. The study's research questions are evaluated in this chapter. The chapter argues that the rise of social media has led to changes in the traditional social

norms in Saudi Arabia and influences familial communication. As a result, it appears that there is some disruption of traditional family relations, where family roles and power positions are changing, but traditional structures are not entirely overturned by social media. Finally, Chapter 7 summarises the contents of the thesis, discusses the research contribution and recommendations for further work.

1.8 STUDY KEY RESULTS

The research reached conclusions that show the impact of social media on family relationships by investigating whether the attitudes of Saudi youth towards the use of social media affect their intentions in family communication. The results showed that among the young people, four out of five had more positive attitudes towards the use of social media in family communication. Additionally, most of the participants reported having a positive experience of using social media applications, as these platforms provide easier and fast tools for familial communication, more spaces for solving familial disputes, and more space for participating in family decisions. The results also show that one of the main the aims of parents in using social media is to communicate with their children. The young people also saw social media as providing a way to bond by creating family groups. It also gave them freedom to express their opinions and feelings, something which had been difficult to achieve with previous forms of communication. These results indicate that the frequent use of social media platforms by parents and young people confirms that social media gives Saudis an opportunity to strengthen bonds with their families.

Chapter 2: LITERATURE REVIEW

2.1 INTRODUCTION

With the arrival of emerging technologies in this digital age, online communication has become a crucial part of people's lives and behaviour. Social media, as an aspect of these new technologies, has brought about major changes in the social studies and social relations in human society. Moreover, social media has altered the concepts of "time" and "place" as they pertain to human communication.

This chapter reviews earlier studies relevant to this research. In the first section, I examine definitions of social media and offer a brief history of social media, Web 2.0, and social media statistics. In the second section, I focus on family and communication, social media and the public and private spheres, the family as a private sphere, and young people. The third section covers Saudi society, exploring the history of social change in Saudi Arabia, modern life and Saudi society, social media and the internet in Saudi Arabia, and Saudi young people's and adults' social media use. The fourth section presents the research framework. This study is conceptualised according to Bowen's family systems theory (FST), the theory of reasoned action (TRA) developed in 1975 by Fishbein and Ajzen, Davis's technology acceptance model (TAM), and Daft and Lengel's media richness theory (MRT). The final section addresses the gaps in the literature regarding social media and familial communication in Saudi Arabia.

2.2 SOCIAL MEDIA

2.2.1 Social media definitions

Internet studies scholars have offered a wide range of definitions of social media. To define social media, let us begin with Boyd and Ellison's definition (2007) of social network sites as a

web-based services that allow users to 1) construct a public or semi-public profile within a bounded system 2) articulate a list of other users with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system.
(Boyd and Ellison, 2007, p. 211)

This definition focuses on the social aspects of social media. Kaplan and Haenlein (2010, p. 61) defined social media as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content". Accordingly, they focused on user-generated content (UGC) as a technical tool that has

changed human online communication on the one hand and social participation on the other. The term 'social media' is often used interchangeably with the terms 'Web 2.0', 'social software', and 'user-generated content (UGC)' (Dabbagh and Reo, 2010, Kaplan and Haenlein, 2010).

Besides, Kaplan and Haenlein, Shirky (2008, pp. 20-21) also defined social media and social software as the tools that "increase our ability to share, to cooperate, with one another, and to take collective action, all outside the framework of traditional institutional institutions and organisations". Here, Shirky, like other scholars, combines and overlaps the technical and social aspects of social media. These discrete definitions have all effectively yielded the same result: new technological tools to facilitate increased social communication. Meanwhile, Dabbagh and Reo (2010) defined social media as a new phrase used to describe various internet tools which support the users to socially interact, collaborate, and express their emotions. Lenartz (2012) stated:

In general, the term "social media" seems to be most often used as a broader umbrella term that includes many of the Web 2.0 functions, including social networking. The term "social media" is generally more appropriate to define methods of conveying a message as an extension of traditional media outlets. The term "social media" also seems more appropriate when the intention is for organizations or individuals to convey an intentional message to an audience. Organizations often use this new technology to achieve a specific purpose such as conveying a message, connecting with an identified group sharing a message, or promoting their organisation. Use of a range of Web 2.0 applications in this manner is most appropriately referred to with the umbrella term "social media. (p. 10)

Accordingly, Lenartz here views social media as a media tool that targets an audience and not as a tool for communication between individuals.

Several categorisations and kinds of tools are considered social media technologies, as they support online social engagement and depend on online users' creations and participation. Kaplan and Haenlein (2010) categorised social media into six different forms: content communities (e.g., YouTube), social networking sites (e.g., Facebook), tasks created collaboratively by users (e.g., Wikipedia), virtual social worlds (e.g., Second Life), virtual game worlds (e.g., World of Warcraft) and blogs and microblogs (e.g., Twitter).

According to Dabbagh and Reo (2010) and Dabbagh and Kitsantas (2012), examples of social media involve experience- and resource-sharing tools, such as Delicious, WordPress, and Twitter, which enable online/social bookmarking; blogging and microblogging; wiki software, such as PBworks.com, which enables the creation of collaborative workspaces; media-sharing tools, such as Flickr and YouTube, which enable social tagging; and web-based (cloud-computing) office

tools, such as Google Apps, which enable document and calendar sharing and editing among other things. Boyd (2009) argued that examples of social media and Web 2.0 include the following: internet messaging, text chat, video chat rooms, blogs, weblogs, wikis, social networks, search engines, social guides, social bookmarking, social libraries, and peer-to-peer social networks.

2.2.2 A brief history of social media

Consistent with the definitions presented above, the first notable social media network was SixDegrees.com, which was initiated in 1997. SixDegrees.com offered users the capacity to produce their personal profiles, list their contacts and, from 1998, search through the ‘friends’ profiles. Other sites had offered these features before SixDegrees combined them in a single site. User profiles existed on most main dating websites and on several community sites. On AIM (America Online Instant Messenger) and ICQ (which is a cross-platform messenger) ‘buddy’ files-maintained lists of friends, although those friends were not visible to others. Classmates.com also allowed people to connect with their high school or college and to search their networks for others who were also connected, but web users could not make profiles or list friends until several years later. SixDegrees was the first social site to combine these structures. It advertised itself as a tool to help people connect with and send messages to others. However, although SixDegrees attracted millions of web users, it failed to become a sustainable business, and the service was terminated in 2000 (Boyd and Ellison, 2007). Although people were already flocking to the internet, most did not have complete networks of friends who were online. Early internet users complained that they had little to do after adding friend requests, and most users were not interested in connecting with strangers. Thus, it was still difficult to find family or friends online and communicate and interact with them over the internet.

The next wave of social media began with the launch of Ryze.com in 2001, which allowed users to take advantage of their social connections. The creators behind Ryze, Tribe.net, LinkedIn, and Friendster, in particular, were powerfully interlinked personally and professionally. They assumed that they could reinforce each other without opposing or damaging each other. Ultimately, Ryze did not gain much popularity, while Tribe.net expanded to attract an enthusiastic user base, and LinkedIn became an influential professional networking service (McLoughlin and Lee, 2007).

Social media soon became popular across the globe. While Myspace attracted media attention in the US and abroad, Friendster became extremely popular in the Pacific Islands, and Orkut was the

main social media site in Brazil and later in India. Mixi was the best-known social media site in Japan, while LunarStorm gained attention in Sweden, and Dutch users chose Hyves as their preferred social networking site. Grono was the main social media in Poland. Hi5 was chosen by some countries in Latin and South America and smaller European countries, and Bebo attracted users in New Zealand, the UK, and Australia. Early widespread communication and community services began to adopt features associated with social media sites. When the Chinese QQ social messaging platform added a profile-creation feature and made friends visible, it became the biggest social media platform worldwide. In addition, by allowing access to friends' homepages and profiles, the forum tool Cyworld captured the Korean market (Boyd and Ellison, 2007).

Facebook was launched in 2004 as a Harvard-only social media site (Cassidy, 2006). To link with the service, a user had to have a harvard.edu email address. As Facebook began to support other universities and colleges, those users were also required to have university email addresses associated with specific universities or schools, a condition that maintained the site as a closed, private community. However, beginning in September 2005, Facebook expanded to include secondary school followers, professionals within corporate networks, and, finally, everyone (Boyd and Ellison, 2007).

In 2005, Chad Hurley, Steve Chen, and Jawed Karim founded YouTube, a video community website that consists largely of UGC (Lidsky, 2010). Then, in 2006, Jack Dorsey, Evan Williams, and Biz Stone founded Twitter, which is a microblogging website (Johnson, 2013). Three years later, Jan Koum and Brian Acton founded WhatsApp Messenger, an alternative to Short Message Service (SMS) that supports the sending and receiving of various media text, photos, videos, documents, and locations as well as voice calls (About WhatsApp, 2017). Instagram, which is one of the most widely used photo-sharing platforms, was established by Kevin Systrom and Mike Krieger in 2010 and was later acquired by Facebook in 2012 (Ahmad, 2014). Launched in 2011, Snapchat is an image and video messaging application created by Evan Spiegel, Bobby Murphy, and Reggie Brown (Molloy, 2017).

In 2014, the Facebook Company acquired the WhatsApp Messenger Company in the largest social media acquisition to date. Facebook chief executive Mark Zuckerberg reportedly said that it was “worth paying as much as \$19 billion to buy WhatsApp because the mobile messaging company is on a growth track that dwarfs anything else he has ever seen” (Anders, 2014). WhatsApp

Messenger in October 2020 is the biggest social messaging application with more than two billion users per month worldwide (Clement, 2020).

With the expansion of the internet and the increase of social media, China has the world's largest active environment for social media platforms (Chiu et al., 2012). By 2015, the number of social media platform users in China had reached 410.5 million, and 61.6% of these were mobile social media users (Chen, 2017). Although the Chinese government has blocked access to Facebook, Twitter, YouTube, and other US-based social media platform users, social media users in China can access local social media platforms, such as Weibo and WeChat – developed by Chinese internet service companies (Chiu et al. 2012). WeChat – similar in design to WhatsApp– was launched in 2011 and is the most popular and social media mobile app in China (Millward, 2016). By the end of 2015, WeChat had 762 million monthly active users worldwide, about 91% of whom were from China; moreover, about 639 million users accessed WeChat on smartphones (Smith, 2016).

QQ is another important social media platform for most Chinese internet users. In February 1999, Tencent developed network communication tools with reasonable design, ease of use, robust functionality, and stability. These tools have numerous users in China. Initially, QQ was called OICQ in imitation of ICQ, the international chat tool. However, as the name 'ICQ' was similar to OICQ, Tencent changed the name to QQ. In 2000, QQ ranked first in the Chinese online instant messaging market with around 100% coverage. It was the only popular instant messaging tool in China in 2000. After 2000, QQ was developed further, meaning new jobs became available. QQ continues to be used today as an online instant messaging program. In 2004, Facebook was launched and became popular. Three years later, China had its own Facebook – Ren Ren – which quickly spread among college students, thus opening a new chapter in the history of Chinese social media (Yin and Ke, 2016).

After the riots that erupted in Urumqi in July 2009, China closed most domestic services similar to Twitter. Many well-known non-China-based microblogging services, such as Twitter, Facebook, and Plurk, have since been banned. This was considered an opportunity by Sina CEO Charles Chao, and the Sina Corporation launched a trial version of Sina Weibo in August 2009. Multiple sites in China offer microblogging services, but Sina Weibo is still the most popular on the Chinese web. Three years after its launch, it already had 503 million registered users, which represented a significant majority of China's total 640 million internet users (Bijia, 2017).

In 2011, Tencent designed the messaging app only on mobile devices, which was a major break from Tencent social networks and the online gaming empire. The new app was called Weixin in Chinese. It also became the first mobile internet connection tool in China. After 2011, the numbers of new social media platforms increased, as more and more people started investing in social media. By the end of 2013, social media companies had begun to take an interest in the mobile platform (Yin and Ke, 2016).

2.2.3 Web 2.0

The web was developed in 1989 by Tim Berners-Lee, an employee at CERN (European Organization for Nuclear Research) in Geneva, Switzerland. Since then, Berners-Lee has played an active role in guiding the development of web standards (such as mark-up languages in which web pages are composed), and in recent years, he has defended his vision of the Semantic Web. Web 1.0 refers to the Web's early stages when it was composed of static websites, and it was difficult to find UGC or to find user interaction taking place. Rather, it usually comprised pages, lists, and various tables. However, the internet gradually became interactive, and Web 1.0 became Web 2.0 as user interaction began to increase. While Web 1.0 consists solely of one-way communication – informative web pages that offer the user no role in adding reviews, comments, or feedback – Web 2.0 constitutes websites that emphasise UGC, usability, and various operations. It is helpful in creating inbound links that assist in internet marketing. It is noteworthy that Web 2.0 constitutes two-way communication involving participation, information and data sharing, and collaboration (Jadhav, 2019).

Web 2.0 offered a unique opportunity to build new forms of electronic software aimed at enhancing human communication through the internet. The term 'Web 2.0' was introduced in 2005 by Tim O'Reilly, the founder of the publishing house O'Reilly Media, which focuses on the field of computer technology. He described Web 2.0 as an "architecture of participation" that is constantly updated and reproduced by different users, which offers a user-driven network beyond the possibilities offered by Web 1.0 (O'reilly, 2005). According to O'reilly (2005), Web 2.0 can be described in several ways. The difference between Web 1.0 and 2.0 technologies is discernible on several levels, one of which is technical. User participation also differentiates these tools from other technologies; the affordances of Web 2.0 tools are greater than those of the regular Web 1.0 tools, according to (Karasavvidis, 2010). For example, Kim (2008) observed that blogs, as one example of a Web 2.0 tool, offer more affordances than content management systems (CMS).

Moreover, wikis, as Web 2.0-based technologies, have significant benefits over threaded discussions (West and West, 2009). O'reilly (2005) argued that users “add value” to the technologies, which are specifically constructed around user participation. In fact, the key feature of Web 2.0 is user-driven, collaborative content provided through openness and the sharing of services and platforms (Alexander, 2006). Therefore, with Web 2.0, the entire audience has the ability to create content, making it a more collaborative process (Lenartz, 2012).

Other researchers, such as Alexander (2006) and Donelan et al. (2010), have stated that no single satisfactory definition of Web 2.0 exists. Kaplan and Haenlein (2010) noted that the term ‘Web 2.0’ was first utilised in 2004 to define a new method in which software developers and online users began to use the World Wide Web. Alexander (2006) described Web 2.0 as a chain of tools, functions, websites, and applications founded throughout social software and improved by the social connectivity of the World Wide Web. Donelan et al. (2010) described Web 2.0 as a development of the World Wide Web, which contains a transformation from unchanging content to an active platform based on participation. It is a platform whereby content and applications are no longer created and published by individuals but instead are continuously modified by all users in a participatory and collaborative fashion (Kaplan and Haenlein, 2010).

However, some scholars, like Allen (2013) and (Scholz, 2008), have argued that social media applications are not new and that their origins can be traced back to years earlier than the emergence of the concept of Web 2.0 in 2005. According to Kaplan and Haenlein (2010), Truscott and Ellis (1979) started “Usenet”, a global discussion system that allowed online users to publish public posts. In 1993, social networking sites began to emerge when Bruce and Susan Abelson created ‘Open Diary’, a primary social networking site that brought together internet diary writers into an online community. In 1994, the expression ‘weblog’ was used for the first time and abbreviated to ‘blog’ when one blogger changed the term ‘weblog’ into the phrase ‘we blog’. Then, with the accessibility and affordability of the internet, social networking sites such as SixDegrees.com (1997), Myspace (2003) and Facebook (2004) were established, providing more popularity for the concept of ‘social media’ in this digital age. In addition, ‘virtual worlds’, which are computer-based simulated environments inhabited by three-dimensional avatars, are considered to be other tools that participate in disseminating the concept of ‘social media’ (Kaplan and Haenlein, 2009). In fact, the concept of ‘social media’ is older than the concept of ‘Web 2.0’. However, the differences between Web 2.0, social media, and social networking have not been clearly distinguished. (Lenartz, 2012) argued that the expression ‘social media’ can be used to categorise

Web 2.0 applications as well as social networking applications. Social media indicates a description of Web 2.0 as the creation of UGC, often with a particular plan or message that the user is aiming to promote. Kaplan and Haenlein (2010) argued that social media is a new format that relies on social networking and other Web 2.0 applications, services, and websites. Kear (2011) described social networking as a subsection of Web 2.0 and social media that includes social networking platforms. Kear argued that social networking sites are not clearly defined as a group but can be classified as facilitating virtual interactions among online users.

Shuen (2008) argued that Web 2.0 is aimed at connecting network effects and users' collective intelligence to shape tools that improve with the increased use of these applications. Therefore, social Web 2.0 is a phase of the World Wide Web in which communication is described as a community of practice whereby online users interact and share their life events and present themselves to one another. Web 2.0 not only supports social interaction but also allows feedback, conversation, and networking. It was also designed with flexibility and modularity that enable collaboration, according to (Shittu et al., 2011).

Moreover, O'reilly (2005) identified the following features as the main characteristics of Web 2.0: participation rather than publishing, users as contributors, rich user experience, and the use of the web as a platform for publishing and sharing. Unlike the previous period, in which the internet, like television and radio, offered only one-way communication, this is considered an opening for social communication among the members of a society. These opportunities for communication and publishing create new environments and open up new horizons for dialogue between members of a single community.

Additionally, Web 2.0 is distinguished by some utilities that differentiate it from Web 1.0 (e.g., personal web pages). Kaplan and Haenlein (2010) stated, "Although Web 2.0 does not refer to any specific technical update of the World Wide Web, there is a set of basic functionalities that are necessary for its functioning" (p. 61). Among these tools is Adobe Flash, which is a widely used system for adding animation, interactivity, and audio/video streams to web pages. Another is Really Simple Syndication (RSS), which is a family of web-feed formats utilised to publish frequently updated content, such as blog entries or news headlines, in a standardised format. A third is asynchronous JavaScript (AJAX), which is a method used to retrieve data from web servers asynchronously, allowing the updating of web content without affecting the entire page's display and behaviour (Kaplan and Haenlein, 2010).

Furthermore, O’reilly (2005) stated that Web 2.0 has seven main capabilities that can be used in websites, applications, and software to determine whether the qualifications are considered part of Web 2.0. These standards include services, unpackaged software with cost-effective scalability, and the control of unique data sources that are difficult to recreate, that get richer with increased use, and that trust users as participating developers. The absence of cost to users is an important motivation for participation and publication, and the free availability of these services contributes significantly to their spread. Shang et al. (2011) said that Web 2.0 service tools have two major elements: socialisation – Web 2.0 allows end-users to view web data and participate in a web community – and externalisation – Web 2.0 allows end-users to create data (such as writing emails, sharing information, teleconferencing, and uploading videos or audio files). These two elements are particularly significant in communication between members of society and the exchange of information and ideas.

User-Generated Content (UGC) is also considered a key element of Web 2.0. UGC can be described as the final result of all practices in which people use social media whereas Web 2.0 symbolises the ideological and technological foundation. The term ‘user-generated content’, which attained wide popularity in 2005, is typically used to define several types of media content that are widely accessible and produced by online end-users (Kaplan and Haenlein, 2010). Similarly, the term ‘social software’ has been widely used and was described by Shirky (2008) as software that maintains group interaction. Indeed, social software is one of the main elements of Web 2.0. Bragg (2006) described social software as the range of applications that allows social connections, group interactions, and shared web spaces for participation and information exchange in online-based environments. In fact, ‘social software’ is the fourth concept that is interchangeable with social media in addition to Web 2.0 and UGC.

2.3 COMMUNICATION TECHNOLOGY DISRUPTION OF DIFFERENT LIFE ASPECTS

Communication technology is associated with positive impacts on various aspects of human lives through presenting solutions to the problems that affect human beings in their daily lives. Consequently, communication technology is credited with revolutionizing the world and the daily lives of human beings, and this has been achieved through the creation of amazing resources and tools that have ensured information is at the fingertips of people (Bouwman et al. 2005, p. 1).

Communication technology, as a result, has affected the manner in which people communicate, think, and learn thereby determining how people interact with one another in society on a daily basis. This has been achieved through new ways of electronic communication where technological advancements have made communication quicker and easier through the use of the internet. There are currently various quick and easy methods of communication, for example, instant messaging apps, social media platforms, emails, face timing, and video conferencing, among others (Fulk 2017, p. 2). Overall, the literature indicates that communication technology brought about a significant transformation in the way people learn, think, and interact in the society wherein its emergence is commonly associated with positive effects and benefits, but it is also considered to have an adverse effect on face-to-face conversations and other traditional ways of interaction.

Accordingly, social medial platforms, such as Twitter, Facebook, and Instagram, are used so that information can be communicated conveniently, instantly, and easily (Akram and Kumar 2017, p. 352). Therefore, communication technologies have changed society to a significant extent regarding how people communicate with and relate to one another, as there are new advancements in technology that present new opportunities and uses which were not present previously. Moreover, they stated that communication technologies have simplified the daily tasks of individual, such as paying bills, performing banking activities, and socialising, by facilitating mass communication and long-distance communication. Further, communication technologies, the advent of the internet, and social media platforms have enabled easy access to information and benefitted in terms of cost and time (Akram and Kumar 2017). In contrast, technology is adversely associated with human lives, as it has resulted in several health-based ramifications, such as depression, anxiety, and insomnia. The next section discusses the effects of communication technologies on human lives and mainly their disruptive nature is explained and critically examined. In addition, the historical account is given of communication technologies, social media, social media and culture, social media and politics, and social media and economics. This theme focuses on analysing and discussing the views of authors regarding the disruptive nature of communication technologies and their impact on business models, culture, economics, politics, and other crucial aspects of human lives as providing a basis for exploring the areas of family communication and social media.

2.3.1 The historical account of communication technologies

To understand the role of social media in familial communication, this section presents a short history of electronic communication media, with a particular focus on the internet. Therefore, the internet should be placed in its historical context within the field of communication technologies. In the history of human communication, before the internet, a series of electronic media changed human communication and social interaction.

The telegraph had a major influence on social communication among people and businesses in the nineteenth century when it overcame the obstacle that physical space posed to communication between people (Standage, 1998). Until 1830, the world was still very much the local environment that it had always been: no message could travel faster than a person could travel. Everything changed when Samuel Morse invented the telegraph. For the first time in human history, anyone could send a message between London and New York in a matter of minutes rather than in sixty-five days (Spar, 2001). The telegraph made it possible to encode information in immaterial electrical impulses that could then be sent along a conductor – usually a wire or set of wires. Technically, the dematerialisation of information transmission led to the detachment of the movement of information from the movement of people, animals, or things, all of which consist of matter and therefore adhere to certain rules of material movement. In short, it led to the large-scale detachment of communication from the transportation of humans or things. Telegrams were used to report the illness or death of family members, to convey price information, to give orders to buy or sell something, or to inform the recipient that a pending job offer could not be accepted (Wenzlhuemer, 2017).

Some authorities prohibited use of the telegraph, assuming that it would disperse revolutionary thoughts among their populations, such as in Russia during the period of Tsar Nicholas I (Spar, 2001). In the present era, similar worries and concerns have often been expressed with regard to the internet and social media. The telephone, which was created accidentally by Alexander Graham Bell in the 1880s – while he was making a multichannel telegraph – changed the telegraph into a device for communication by voice between two distant points (Matei and Ball-Rokeach, 2001). This innovation transformed human communication, prompting questions about whether or not the telephone would reinforce ties with friends and family members over great distances. The telephone allowed better social communication than via the telegraph, as the telephone shifted coded communication (through Morse code signals) to verbal communication. However, several scholars and writers were worried about the social consequences of the telephone, fearing that it would lead to a collapse in face-to-face communications between family and friends and decrease

their real visits (Fischer, 1994).

The next chief communication innovation was the radio, a wireless communication gadget that made interaction over long distances even easier. The radio conveyed voice messages wirelessly and was particularly significant where a wired connection was not possible, such as from ship to ship or from ship to shore. It was the first mass media device that could transport a verbal message, such as the latest news, to millions of people at the same time.

The internet, for the first time in human history, combined the mass media features of radio and television and the person-to-person features of media, such as the telephone and telegraph, into a single communication medium (Bargh and McKenna, 2004). Furthermore, the internet has some new features that can influence human social interaction. One of these is richness: communications mediated through the internet have access to more social cues than those who communicate through telephone, radio, or written correspondence. Social media users can communicate through text, voice, video, and symbols like emojis and Graphics Interchange Format (GIFs). This richness gives the online user a greater ability and capacity to use rich messages in communicating with others. In addition, Boyd (2007) stated that four fundamental properties distinguish face-to-face communication from online communication. The first is persistence, which means that internet communications are recorded for posterity. This enables asynchronous communication, but it also extends the period of existence of any speech act. The second is search ability because, on the internet, expressions are recorded, and identity is created through text, search, and discovery tools that assist online users to find like-minded friends. While offline users cannot currently access the geographical location of any person in unmediated spaces, finding one's digital body online is just a matter of keystrokes. The third property is replicability: hearsay can be deflected as misinterpretation, but online expressions can be copied from one place to another so precisely that it is impossible to differentiate the 'original' from the 'copy' (Negroponte et al., 1997). The final property is invisible audiences: while we can visually detect most people, who might overhear our speech in unmediated spaces, it is virtually impossible to identify all those who might encounter our expressions in networked public spaces. This is further complicated by the other three properties, since our expressions may be heard at a different time and place from when and where they were originally uttered (Boyd, 2007).

Technology and media are closely related, and hence neither can be separated from the other in the current society. Media refers to various means of communication, such as print, electronic, and

digital, among others. Technology, on the other hand, is a system of tool-using behaviour (Venkatesh and Vitalari 1985, p. 5). Technology creates media and, in this sense, controls where as well as how information is shared. Consequently, technology is an integral part of the media. There are various new media technologies that are affecting society as a whole. According to McGrath (2012, p. 4), integrating such technologies into social settings has had a significant impact on social interactions between people. New technologies in various sectors, such as the media sector, emerge often and tend to improve the existing media technology that is being used. Accordingly, the new technological advancements in digital media in most cases disrupt the existing manner of media operations. Disruptive technology with reference to digital media and technology entails a technology that is newly developed and that leads to the creation of a technology of greater value in comparison to the technology that exists. In addition to that, disruptive technology usually changes the manner of working, doing business, interacting, and living. In this sense, disruption in the digital media and technology sphere encompasses the creation of a new market as well as a value network, subsequently disrupting the existing value network and market of the digital media and technology whereby various established products, such as marketing leading business organizations, are displaced as stated by Bower and Christensen (1995, p. 44).

2.3.2 Social media and the media industry

There are several cases in which digital technology has been able to substantially change the manner in which various organizations carry out their operations. As a result, digital disruption is on the rise and thereby is becoming a real threat that many media organizations face. Therefore, many media leaders and managers are being forced to acquire a vital comprehension of digital disruption to ensure the survival of the various digital media organizations (Steward, Schatz and Khare 2017, p. 1). Digital disruption may take place in phases or stages whereby the earlier gains that are made to an organization are undermined subsequently through the continual digitization that has the effect of changing the digital product or service that exists in the market for purposes of establishing a new and better digital service or product (Steward, Schatz and Khare 2017, p. 13). These phases of disruption are categorised as first-order disruptions and second-order disruptions, which are associated with the five business model reinventions propagated by Westermann, Bonnet, and McAfee (2014, p. 78). Digital disruption in the current society has led to new media and technology, which includes all the interactive information exchange forms. These include forms such as social networking sites/social media, podcasts, wikis, blogs, and virtual worlds,

among others. The various forms of information exchange keep on growing through new digital technological inventions in digital media and technology. Lievrouw and Livingstone (2006, p. 3) stated that the new media levels the playing field with reference to the person who is constructing the platform in addition to providing alternative forums to groups that are not able to access the platforms that were traditionally used for people to interact socially. In this sense, digital disruption in digital media and technology is common in the current society, hence altering the existing operations of various digital media and technological organizations.

Lax (2009, p. 1) asserted that technology is vital to communications and the media. There is a constant reminder of the early years of the twenty-first century where the technologies that were in place could not have been imagined, afforded, or achieved just ten years earlier. An example being an mp3 player that was able to hold many songs while a simple mobile phone was able to call any recipient from anywhere around the world while the advanced mobile phone could provide high-speed access around the world as a result of the internet. In this regard, the role that technology has played in communication is explained in this straightforward manner where new technologies have led to the change in society to a great extent through new uses as stated by Sutton (2013, p. 7). Thus, people have imagined that the technological changes in society with respect to communication in particular have taken place in very disruptive and transformative ways (Albarran 2010, p. 16). According to this line of thinking, the previous methods of communication were totally overhauled and disrupted hence erasing their existence or trace in the communication sector. Lax (2009, p. 1), however, presented a different way of thinking whereby he argued that the change in society as a result of new technologies did not happen in very disruptive and transformative ways because that would be understating the significance of comprehending media and communications. Hence, it is fundamental to consider the social factors in the course of the development of communication technologies just like its political and economic factors. A range of factors affect the particular job that a given technology carries out, which includes political decisions, economic decisions, and technological capabilities.

Various features of the media as well as the methods of communication depend on the ways in which technological systems operate. In this sense, real life has not been changed as much as imagined by the new technologies. An example is the case of mobile phone systems, which have been in operation for more than five decades, but it was only when the system of cellular transmission was developed in the last thirty years that they adapted to the extent with which society is currently familiar. Hence, the most significant influence of technological developments

is history (Lax 2009, p. 4). Therefore, it is impossible to come up with an idea that is completely new in either the technology or in its usage. Most of the changes in technology entail an enhancement or a development of what has gone before. Even the technologies that are referred to as 'breakthrough' technologies are dependent on previous technologies, as new technologies are influenced by their history. MacKenzie and Wajeman (1999, p. 9) asserted that even the advancements in technology that many people might want to refer to as revolutions in technology have been long in the making. The usage of new technologies is usually enhancements of previous systems of technology; hence, there are already established usage patterns making the new technology fit readily. A truly novel usage as a result of transformative and disruptive technology would have no immediate and obvious application (Lax 2009, p. 4) and hence would not change a lot about life. Overall, it was noted that disruptive technologies such as social media platforms, video calling and messaging, and smartphones brought major changes to the way individuals communicate and also changed business models and ways of doing business. Technological advancements influenced business activities and significantly influenced the overall business frameworks of organisations.

2.3.3 Social media and politics

Hintz and Milan (2011, p. 1) stated that media and communication policy in recent times has been in the spotlight around the world with reference to social and political change. Many governments in the Arab world have made attempts to prevent the sharing of oppositional content that is based on the web. There have been several cases of mass demonstrations against the surveillance using various electronic activities which, among other issues, point to the current transformations and developments of social media in communication. The use of social media with reference to the various uprisings that took place in the Arab world in 2011 led to the debate concerning the new information and communication technology (ICT) in promoting democratic citizen action as well as the alternative exchange of information, as stated by Hintz (2012, p. 128). Before the Arab uprisings, the earlier mobilizations were termed 'SMS' protests like the post-election protests in Moldova in 2009, the Ukraine, and Iran, among others. According to Hintz (2012, p. 128), there is a perception that social media has a strong impact on the prospects of political mobilizations. As a result, due to the use of social media, the concept of democratization has increasingly become more accepted by the general public in countries that do not practise democracy. Indeed, an Egyptian activist, Ghonim, pointed out that if a free society is needed, then the internet should be given to that particular society (Hintz 2012, p. 128). Commercial platforms of social media have become

vital in the contemporary forms of protests. This is because they are employed intensely by various advocacy groups, social movements, non-governmental organizations, and other political actors who, to a large extent, integrate social media platforms into broader practices or campaigning and organizing (Diamond 2010, p. 1).

In most nations of the Arab world, there was no real democracy, and this could be attributed to their culture (Diamond 2010, p. 93). This state of affairs started changing during the Arab uprising when most of the Arab nations rose up against the authoritarian regimes that were in place and demanded democracy. This was made possible through the use of social media where information was shared easily, conveniently, and quickly due to the technological advancements in digital technology. In this sense, social media, to a large extent, is credited with aiding or effecting change in the Arab nations in what has been termed the 'social media revolutions.' Various people have argued that the social media revolution in the Arab Spring offers a good example of the alleged disruptions that were as a result of digital technologies as well as a criticism of that hype which was part of a large discourse in voicing liberation technology as stated by Diamond (2012, p. 2). In this sense, the normal outcome was for the non-democratic authoritarian regimes to undergo a total overhaul to usher in democracy in the various nations in the Arab world. Thus, digital technology in the sense of social media led to disruption in society.

Sakr (2013, p. 322) in one of her studies explores the influence of online media on political discussions in TV talk shows developments. Taking into account studies related to the interaction between online and offline media in democratic and non-democratic environments, her study discovers the processes that directed to the development of opposition discourse on Egyptian television during three successive periods. It was found that these were related to the peculiarities of national politics and economy as is the case with transnational social media. In fact, it was the restrictions on the mainstream media that drove political communication online through social media, which validates Kraidy's theory of the hypermedia space, where multiple social media access points are seen to facilitate challenging the status quo. However, asymmetric power relationships outside the internet continue to shape these access points.

Dencik and Leistert (2015, p. 1) stated that the relationship that exists between social media and protest presents some of the most pertinent questions regarding the role and the place of digital media technologies in the current societies. There are various interpretations of the use of social media as well as its effects. A common argument related to the political protests and uprisings in

recent times celebrates the advent of social media platforms as simple tools that are instrumental in liberating the people when used by progressive political and social actors (Dencik and Leistert 2015, p. 1). This is made possible through using new media tools to aid social movements in the dissemination and organization of information. This narrative has been embraced by inherent modernist sensibilities as well as the Enlightenment ideals of technology as being the midwife to advances in political and social dimensions as stated by Curran (2010, p. 2). Despite this, the narrative does not illuminate the contradictions and the complexities of the current forms of protest in an age of social media. Evgeny Morozov led the wave of thought of the negative effects of social media. Initially, Morozov was among those who celebrated the revolutionary potential of social media, although later, he became critical of its revolutionary potential. In his criticism of the social media revolution, he argued that the advancement in technology does not necessarily translate into democratic transformation (Salanova 2012, p. 15). In this sense, he asserted that social media and the internet, in general, can be as effective in aiding various political activists to achieve their demands as they are powerful in backing up authoritarian regimes (Morozov 2011, p. 5). Therefore, his criticism of social media is founded on the hypothesis that like activists, authoritarian regimes can be quick to employ social media tools for their own interest, which could be through controlling and monitoring societies with means that are increasingly improving (Salanova 2012, p. 15).

The advent of the various social media platforms with the help of the internet connection led to various people or the public at large engaging actively in the process of collecting, analysing, reporting, and disseminating information and news (Stuart and Einar 2009, p. 1), which is known as citizen journalism. Citizen journalism is mostly performed by netizens (net citizens) who inhabit cyberspace on a regular basis, as stated by Hintz and Milan (2009, p. 233). Netizens, therefore, engage in various activities on online social media platforms including the collection and dissemination of information. As a result, the current world is characterised by radical interconnectedness, communication, and interdependence in the flows and formations of the media (Stuart 2007, p. 2). The advancement in digital technology leading to new media has ensured that there are new ways of communicating and of relaying information as well as new ways of carrying out journalism. Therefore, the efficient democratization of multimedia as well as the new Information and Communication Technologies (ICT) has led to almost every citizen becoming a reporter - hence the term 'citizen journalism'. The rise of citizen journalism has led to a change in the perception of professional journalism. Citizen journalism in some instances proposes information that has high added value; thus, it does not concern itself with the traditional gatekeeper

journalism role. The fundamental notions of gatekeeping entail verifying the facts, collecting and evaluating the news, and vetting sources. Currently, there are various journalists that are reporting materials that are not original but, in contrast, are drawn from outside sources or reports for the purposes of curating and collecting the top headlines of the day for republication in a process known as aggregation. In this regard, the media sector was disrupted to a great extent by the advancement in digital technology. Consequently, various businesses and practices experienced disruptions in the course of their operation as a result of the emergence of citizen journalism. Despite this, Stuart (2007, p. 5) argued that the disruption of various hierarchies by citizen journalism cannot be attributed only to the rise of the digital technologies although these technologies to a great extent optimise the propagation of citizens' messages. Subsequently, citizen journalism was not invented during the appearance of the internet although this new method of communication is democratised to a large extent; hence, it can be regarded as a media tool that has highlighted a public issue. Therefore, with the increase in the popularity of citizen journalism, there is a high possibility that citizen journalism might replace professional journalism. As a consequence, citizen journalism is taking a significant position in the media. It is estimated that digital media technologies played a key role in Arab Spring by connecting protestors, conveying their messages to the masses, influencing the society and providing them with the platform to constantly communicate. Thus, it can be said that disruptive communication technologies are shaping and influencing the views of individuals in Arab society to a large extent.

2.3.4 Social media and culture

Digital technologies serve as a powerful catalyst for cultural change in society. This can be seen in the recent past, which has been characterised by cultural innovation on a mass scale ranging from the virtualization of group networks and social identities to the digital convergence of audio-visual and text media (Karaganis 2007, p. 11). Accordingly, the development of digital technologies has led to the rise of digital culture, which includes the manner in which the internet and technology have shaped, in a significant manner, the way people work, interact, communicate, think, and behave in their social settings. Digital culture is, therefore, a complex new notion that encompasses the various new possibilities that are created by ICT leading to global interconnectivity and the rise of networks, which have the effect of challenging the traditional ways that people understood culture (Uzelac and Cvjeticanin 2008, p. 3). Therefore, digital culture is another vital area within which there have been significant changes whereby people participate in the creation of culture.

The current digital culture is an open and dynamic process that is founded on interactive communication. The democratizing effect of the changes in technology to a large extent draws people into cultural production at a fast pace compared to the declining returns that drive them away. In most instances, various groups of artists interact intensely with one another as well as with sophisticated and committed publics, which revives the intimacy of folk cultures although only in genres in which innovation is prized (Henkins 2006, p. 3).

Moreover, Lessig (2004, p. 4) stated that the internet has become part of the ordinary life of people in the current time, as the integration of the internet in people's lives has changed many aspects, such as culture. Additionally, he claimed that integration of the internet in human lives has led to significant and unprecedented changes. The change in this sense has led to the radical transformation of various traditions that are quite old and which would be rejected were people to realise the change was brought about by technology. However, most people do not see the change in culture that is brought about by the internet. Technology has been instrumental in ensuring that it cultivates a culture that is beyond the local boundaries with reference to various aspects of life, such as business, social interactions, and communication, among others. In this sense, the advancement of digital technology has led to the disruption of culture to a great extent through the introduction of the digital culture. Overall, it is considered that digital technologies and internet trends are influencing the behaviour and attitudes of individuals and are shaping their perceptions and beliefs, which further results in cultural changes and values. The literature presents contrasting views of communication technologies' impact on culture and traditions, but the majority of sources claim that substantial changes are witnessed in the cultural values and interaction aspects of the society as a result of the improvement in communication technologies.

2.3.5 Social media and economics

Despite the presumed 'disruptive' aspect of the digital media and technology that form part of the business hype around social media, the reality in most cases is that there has been far less disruption than is generally imagined. Disruption ought to have negative consequences in a given setting; hence, disruptive technology in the digital media and technology ought to lead to adverse economic effects in that sector, as noted by Skog, Wimelius, and Sandberg (2018, p. 432). On the other hand, disruptive technology in digital media and technology is often associated with opening up job opportunities to many people and hence widening the economic advantages to many individuals. In this sense, disruptive technology helps in finding a path around a given problem and thus

streamlining the given path to get the maximum benefit out of it. Thus, it makes the path shorter. Therefore, as opposed to 'disrupting' the normal way of doing things in society, digital disruption can be optimised to ensure that they have greater benefits to both society and the business world like the media (Knickrehm, Berthon, and Daugherty 2016, p. 3). Therefore, new digital media and technology markets could be created for the new services and products like the case of social media, thus creating more economic opportunities like the world-leading social media technologies such as Facebook, Twitter, Instagram, WhatsApp, WeChat and others have been able to do. Accordingly, disruptive technologies, to a large extent, have adopted models that champion transformative change as well as the positive social impact of the new services and products that they innovate. As opposed to ruining various aspects of life, disruptive technologies lead to a change in the mindset. Additionally, they address the conditions that exist that give rise to new or future issues and provide long term plans to cater for them. Subsequently, 'digital disruption' in digital media and technology is frequently less 'disruptive' than commonly thought.

The term 'digital economy' refers to the economy that is based on the various technologies of digital computing. According to Benkler (2006, p. 2), the digital revolution is more revolutionary than is generally recognised currently even by those who passionately defend it. In this sense, the new information communication technologies have made the former ways of doing things more efficient as well as leading to support for new ways of carrying out activities. A fundamental change in this sense is the rise of social production in the recent past. Social production is a mode of interaction that is radically distributed and decentralised and which is commonly referred to as commons-based peer production (Benkler 2006, p. 7). Peer production, as a result, involves creating and disseminating UGC using various sources, such as open-source software that gives permission to the users to generate their own entries as well as make some modifications of the entries created by other people. Consequently, commons-based peer production is characterised by weak property rights, a focus on intrinsic as opposed to monetary/extrinsic rewards in addition to exploiting knowledge that is tacit and dispersed. Therefore, social production provides an alternative to the traditional market and hierarchical organizational modes (Benkler 2006, p. 33). Despite the disruption concept in the digital economy leading to digital changes, it is not as people foresaw, and this can be seen where Benkler provides a wealth of anecdotes to illustrate the revolutionary nature of the new economy but provides little information on the magnitude of the change. Subsequently, the new advancements in technology emphasise participatory and empowering forms of production; hence, people are becoming active creators as opposed to simply the receivers who accept the existing content (Benkler 2006, p, 137).

Smicek (2017, p. 4) claimed that the scenery of capital accumulation and property relations between firms has been altered fundamentally by the evolution of internet technologies. In this regard, the platform businesses are able to enjoy huge and perpetual returns on their initial infrastructural investments. The reason for this is that should platforms be built as well as established, the businesses will be able to enjoy the monopolistic ability to benefit and exploit in a continuous manner from their activities and uses with relatively minimal productive input on their part (Smicek 2017, p. 19). Therefore, the platform economy has led to the disruption of various sectors in the economy whereby in the event that the platform is successful, it creates its own marketplace, and if it is very successful, it then results in the control of almost an entire economy. Van Dijck et al. (2018, p. 10) on their part asserted that there are four major elements of a platform that are organised by algorithms, fuelled by data, and governed through user agreements, and ownership relations that are driven by business models. Kenney and Zysman (2020, p. 1) pointed out that the platform economy including the various leading firms such as Facebook, Amazon, and Google, have reorganised value creation geography as well as value capture on both the local and the international scale. The implications of the platform have been underappreciated in the global space despite the enormous changes or disruptions it has brought in the economic sector. This is despite the various social and technical boundary resources that are provided by the platform to the users, for example, the application programming interfaces (APIs), which provide access to software development kits, data, and various templates that lower the cost of use in a dramatic manner.

Van Dijck et al. (2019, p. 16) claimed that the platformization of services and products has replaced the old economies and markets as well as transforming the societal organization and public accountability in a profound manner, hence resulting in another form of disruption that is not focused on new business models. Dencik, Hintz, Redden, and Treré (2019, p. 1) pointed out how the datafication of the society has led to transformation and so a different form of disruption, which was not the manner in which the given disruption had been foreseen. Hintz and Brown (2017, p. 785) stated that the digital economy has various regulations; for example, various platforms of social media and other forms of online businesses have provided for terms of service for the purposes of regulating the use of their platforms as well as, for example, putting in place conditions of privacy. Therefore, the digital economy involves digital citizens who are able to take part in the digital space and engage in different aspects of the online economy. There are various regulatory inconsistencies in the current digital world as stated by Hintz (2011, p. 154) although the

advancements in technology have been felt in various parts of the world. Thus, the digital economy is one of the fundamental areas where disruption has occurred although not as foreseen. It is considered that participatory culture, the emergence of a platform economy, social movements, and citizen journalism are the outcomes of disruptive technologies, and they are a clear indicator of the crucial role played by communication technologies in human lives.

2.4 FAMILY AND COMMUNICATION

2.4.1 Family communication through different media

This theme elaborates upon and examines the use of different media in the context of family communication. Humans work, think, and survive on the basis of communication (Coates 2009). When a baby is born, the parents and doctors test the baby multiple times to ensure s/he can respond to sound. At workplaces, computers and telecommunication devices are checked regularly so that the communication can flow smoothly. Similarly, communication is important between families. The exchange of non-verbal and verbal information in a family is termed ‘family communication’. The relationship shared between family members is unique in its own way. These relationships are formed by default, and hence, the forces working within the family communication are both involuntary and voluntary. Family communication plays a significant role in building a person's perception about themselves. It is also the first step towards entering into an intimate connection with others. These relationships are mostly long-lasting bonds and have an inevitable impact in shaping a person's identity (Wanzer et al. 2017). Family communication can be established through different media. Here we will focus on the most effective medium of family communication by analysing the studies that have already been conducted over the past ten years.

Family communication patterns theory (Koerner & Fitzpatrick 2006) states that families develop a family shared social reality (FSSR) to operate optimally. A further study was conducted by Ningxin Wang, David J. Roaché, and Kimberly B. Pusateri in 2018, which was based on the family communication patterns theory. The study analysed the relations between the communication competence between young adults and their parents, with respect to technologically mediated communication (TMC) and face-to-face (FtF) communication. The researchers focused on two significant aspects of communication competence: appropriateness and effectiveness. The self-report data analysis of 104 parent-child dyads indicated that the children's self-reported TMC and FtF appropriateness was directly proportional to the parent's self-reported face-to-face communication appropriateness (Wang et al. 2018). Another theory states that face-to-face

communication is becoming a rarity today, and soon it will become a thing of the past (Keveresk and Iliev 2017). A study was conducted on 869 primary school children, secondary school children, and university students in the Republic of Macedonia. The study aimed at determining the intensity, implication, and quality of interpersonal interaction. A questionnaire, known as PUKOM-20, was used for the study. The results derived from the study indicated that families are heading towards new challenges related to communication and its different aspects. It was further established that students in the study spent just 1 hour on average communicating with their parents per week, and the interactions included a lot of formality, misunderstandings, and fear (Keveresk and Iliev 2017). Overall, family communication patterns theory is centred on child and parent communication and relates to building a shared social reality wherein its two main aspects include conformity and conversation orientation. It is noted that the communication approaches and methods used by family members and the way information is exchanged among family members reflect family communication. On the contrary, it is reported in a recent study that face-to-face communication is becoming rare in terms of family communication. Both the theories highlight different facets of family communication.

In 2015, Nuhu Diraso Gapsiso and Joseph Wilson conducted a study to explore the influence of internet on face-to-face communication amongst teenagers (Gapsiso and Wilson 2015). The researchers based the study on the time-displacement hypothesis, which suggests that if someone starts a new activity, they need to reduce the time invested in other activities. It was also based on media richness theory to find out why face-to-face interaction is more efficient and informative compared to the communication established through technological devices. The main findings from the study concluded that the communication between students and their parents has decreased drastically over time owing to the increased application of internet-based devices (Gapsiso and Wilson 2015). Shim (2007) investigated the correlation between interpersonal communication behaviour and internet usage amongst teenagers. The study investigated whether internet usage is related to a teenager's lack of desire to establish face-to-face communication with friends and family. Also, it addressed the question of whether the lack of desire for face-to-face communication with friends and family can be associated with definite motives for going online. The findings of the study concluded that internet application was largely associated with a reduction in face-to-face interaction with family. Additionally, the study stated that internet usage significantly replaced the time spent in communication with family triggering a lack of interest towards the same (Shim 2007). As a whole, it is observed in the light of views presented by several authors that face-to-

face interaction with family and parents is drastically reduced following the popularity and extensive use of media technologies among teenagers.

Shim's (2007) study showed that the lack of interest in face-to-face communication among teenagers does not indicate a subsequent decline in the actual amount of time they spare for interaction with their family. The findings revealed that teenagers' interest in face-to-face communication with their family members is not mainly related to the actual amount of time they reportedly spend with their families. A further conclusion that can be drawn from the study is that teenagers might have to invest time interacting with their family members irrespective of their willingness to spend time with them, as they are still dependent on their families, particularly their parents, for financial and other support. The study concluded that the internet has been playing a major role in displacing teenagers' desire to interact with their family by limiting the time they need to invest in such interactions (Shim 2007). Lee et al.'s (2011) study emphasised comprehending the internet's role in quality of life (QoL). It sought to determine if the internet can replace face-to-face communication and enhance QoL in the process. To find the answers to the research questions, sample survey data was collected from four Chinese cities, namely, Taipei, Hong Kong, Wuhan, and Beijing. Diener's (1984) Satisfaction with Life Scale (SWLS) was applied to evaluate life quality in these cities. The results, which were arrived at through a regression analysis, stated that use of the internet for interpersonal communication had a negative influence on the QoL. On the contrary, Lee et al. (2011) concluded that face-to-face interactions for 10 minutes or more had a positive impact on QoL.

Storch and Ortiz Juarez-Paz (2018) conducted 26 semi-structured interviews with US parents to determine their patterns of family communication and the significance of mobile devices in their communication patterns. The grounded theory approach and thematic analysis was used to recognise the key themes in the participants' responses. The study concluded that there was an event of 'connect-disconnect' related to the usage of mobile phones. Although the device helped them to overcome barriers posed by time and distance, it also caused a certain level of negative emotional responses, misunderstandings, and distractions (Storch and Ortiz Juarez-Paz 2018). A similar study conducted by Kushlev and Dunn (2018) addressed the unfavourable impacts of smartphones on real life connections. The research had two parts; the first part was conducted in a Canadian museum where a sample of 200 parents were asked to maximise smartphone usage when they were with their children, and the second part involved tracking their daily usage for a week.

The findings revealed that smartphone usage can compromise the quality of attention given to children along with reducing their social interaction.

A study by Kildare and Middlemiss (2017) led to similar results, where the researchers conducted a study to gauge the effect of increased mobile phone usage on parent-child communication. The study was conducted through individual semi-structured interviews with 60 families. The results stated that parents using mobile phones during a communication with their children are prone to become less sensitive. The findings generally support and extend other work in this context with reference to mobile phones (Buckingham 2003; Ito et al. 2005; Ling 2000, 2003; YouGov 2006). Their work stated that mobile phones are largely used between parents and young people for making plans, confirming arrangements, and notifying each other about changes in arrangements. Many young people and parents identified the mobile phone as their 'lifeline'. According to the parents, mobile phones play a significant role in ensuring the safety of young people when they stay away from home. However, several parents saw it as a 'false security' and as a medium inviting higher risk-taking as a result. The association shared by new technologies and level of greater and lesser risk is an important question for future research. The study further reported gender differences, with girls perceived to be additionally protected if they carry a mobile device. The results were similar to the findings by Campbell (2006) and Ling (2003) Some interesting generational differences suggested that parents prefer to speak over the phone with their children rather than texting them. This is mostly because parents find texting difficult, and hearing their child's voice reassures the parent about their safety. On the other hand, many young people consider their parents as incompetent when it comes to using mobile phones (see also Ito et al. 2005).

Medrano et al. (2017), attempted to enhance the quality of family communication of 100 young people in Nicaragua. Text messages with instructions on family-related positive thinking and actions were sent to the participants two times a week for a 6-month period. This intervention was very effective, as there were positive behavioural changes in most young people; their family communication skills had improved dramatically. Similar research was conducted in the US by Hurwitz and Lauricella (2015). The researchers conducted a 6-week text messaging program with a sample of 256 parents to help them engage in learning activities with their children within the Head Start program. The study found that text messaging with parenting tips helped the participants to engage with their children more meaningfully. This approach was especially effective for fathers

and parents of boys (Hurwitz and Lauricella 2015). However, several studies have shown that social media is quickly replacing the traditional text messaging mode of communication.

Stauss et al. (2017) explored the use of letter writing by mothers in prison. A sample of 16 US women took part in the Letters to Children program. The research was based on theories related to general strain theory, gender-responsive programming, and maternal distress theory. The study revealed that letter writing is effectual in such contexts and improves family communication. A similar study by Burns and Casbergue (1992) focused on the decline or improvement in communication between parents and their young children (2-5 years old) as they gathered to write letters to other people. The researchers concluded from the study that increased parental control over the process of letter writing led to a lack of interest among children.

Bergström et al. (2019) conducted a study through semi-structured interviews with 46 Swedish parents. The researchers found that several separated parents chose to interact with their children only through email to prevent any conflicts with their ex-spouses. James (2018) conducted a similar study and concluded that texting and email are often the sole medium of communication in separated families. However, a study by Smaldone et al. (2015) revealed that only 15.4% of the sample of 65 US adolescents used email for family communication. Meanwhile, Rudi (2014) studied the aspects of family communication by conducting a research on 195 US families. It was based on the family communication patterns theory, and the findings revealed that adolescents with conversation orientation were more likely to use email to communicate with their mothers and fathers compared to those with conformity orientation. This finding is supported by family communication patterns theory.

The review of research studies based on family communication and use of internet and communication media technologies by children and teenagers showed that internet use and high media usage is positively linked with reduced face-to-face communication with parents and decreased family communication. In contrast, some of the studies claim that internet use does not affect family communication and face-to-face conversation. It is also noted that different media of communication, such as telephone and email, are used by parents and children depending on the situation.

2.4.2 Family communication through social media

High internet usage has gradually become associated with low levels of social interaction. Existing research on internet use has shown that excessive online presence may result in addiction to the internet (Amichai-Hamburger and Ben-Artzi 2003). However, previously, to access the internet, one had to physically sit at a computer. Therefore, earlier studies decisively concluded that the more time individuals spend online, the less time they have for their families (Hing Keung Ma and Pow 2011, p. 124). These researchers identified increased use of the internet as the primary cause of depression and loneliness and negative parental relations (Mesch 2003; Hing Keung Ma and Pow 2011, p. 123). Findings from other studies indicate that long periods spent on the computer negatively affect face-to-face relations. Gaikwad (2015) asserted that social media use negatively affects children in familial communication by isolating them from their parents. As a result, excessive internet use is linked with weaker familial relations and reduced social engagement. In sum, face-to-face engagements and familial relations are significantly affected by increased use of the internet.

Several studies (Aifan, 2015, Al-Faleh, 2012, Al-Sharqi et al., 2015) have also shown that individuals who spend less time on the internet have better relationships with their families and friends compared to those individuals who frequently use the internet. In addition, it has been observed that individuals who frequently use the internet have a lower degree of social engagement (Amichai-Hamburger, Wainapel and Fox 2002). Frequent use of the internet negatively affects social relations, as it alienates users from their social spheres (Gaikwad 2015, p. 252). Indeed, research has revealed a direct link between internet use and social engagements, whereby frequent internet users attend fewer social engagements while people who do not spend significant amounts of time on the internet have better social relations.

Online engagements and relations differ significantly from traditional forms of interaction and relationships. Several researchers, including Fioravanti, Dèttore and Casale (2012), have argued that having computers at home reduces family leisure time. Moreover, de Zúñiga et al. (2017) associated increased internet use with reduced social support and increased loneliness. Similarly, a disconnect exists between internet-based social engagements and relationships and traditional social connections (Amichai-Hamburger and Ben-Artzi 2003). Fioravanti, Dèttore and Casale (2012) deduced that individuals who engage in heavy internet use, mostly adolescents, spend less time with their immediate family members than they did before they became addicted to internet communication channels (p. 319). Similarly, de Zúñiga et al. (2017) concluded that internet communication channels can cause individuals to withdraw from their friends and family as well

as from society at large. Moreover, internet communication tools indubitably affect social engagements and relations because they cause users to withdraw from friends and family and, sometimes, entirely from society (Gaikwad 2015, p. 252). On balance, frequent use of the internet to communicate reduces social support, exacerbates loneliness, and affects social interactions between members of a given society. In contrast, social media is viewed as a medium for obtaining social support, presenting and managing individual identity, increasing participation in community activities through the convenient sharing of videos and images, along with accessing useful health-related information via young people (Fergie, Hunt and Hilton 2016).

In general, some evidence suggests that internet use intensifies social isolation and diminishes social interaction (Wesley and Yu-hao 2011). For instance, Wikipedians detest knowledge sharing, scoring low in openness, conscientiousness, and agreeableness (Wesley and Yu-hao 2011, p. 852). Moreover, it is also noted that bloggers, social media users, and Wikipedians consider social media an important tool for connecting with members of an online community, as it allows them to share their interests and likes and engage with the community in a better way (de Zúñiga et al. 2017). Similarly, such conclusions are supported by several other studies, including a study conducted by Hing Keung Ma and Pow (2011) on Chinese adolescents, which claimed there is a positive prosocial relationship between social behaviour and daily internet usage (p. 124). Some studies' findings predate the present mobile technology age. However, mobile technology is credited with creating opportunities for easier connectivity (de Zúñiga et al. 2017). Consequently, it is easier today to communicate quickly with people across the globe while retaining physical familial relationships or participating in social engagement. In spite of this, however, internet use may reduce social interaction and increase social isolation, and such conclusions predate the modern mobile phone age. In contrast, mobile technology has been cited as a catalyst for social relations that transcends the physical limits of traditional communication channels (Kukulka-Hulme 2010).

Similarly, internet use in Saudi Arabia during the early years of the twenty-first century was limited because the main software and browsers available then did not support Arabic scripts. Additionally, internet use during this period was only possible using a desktop computer. Data from Saudi Arabia show that the number of internet users has grown exponentially since the early 2000s, increasing from 200,000 people in 2000 to almost 29 million users by 2018 (Eldardiry and Elmoghazy 2018). This number is projected to increase to 35 million people by 2023. Such exponential growth has been a subject of concern among various stakeholders in Saudi Arabia: some view it as a way of

modernising the economy, while others view it as a way of westernising the country by corrupting and detaching it from its social and religious traditions.

Saudi Arabia's geographic position has been identified as the primary contributor to the growing use of mobile phones as a means of accessing the internet. Indeed, mobile phones have been fundamental in expanding the use of internet facilities outside large cities. In effect, the younger population in Saudi Arabia have come to consider the internet to be an integral aspect of their day-to-day lives (Alshahrani 2016). However, the impact of internet use among this population remains unclear, including the use of social media as a means of communication at family level, as the new mobile technology allows users to send messages and even to talk, accelerating its preference as the main tool of social communication. This is the focus of this research.

Procentese et al. (2019) used a survey questionnaire method to determine the role of social media in family communication. It was concluded that social media usage within the family and parents' positive perception of technology can significantly improve the efficiency of family communication. Gjylbegaj and Abdi (2019) aimed to evaluate the effect of social media use in family communication in the United Arab Emirates. Media displacement theory was used in the process to comprehend the negative effects of social media. The study revealed that most UAE families were aware of the risks of social media use and did their best to limit media consumption at home. Another study on 125 UAE families conducted by El Khouli (2013) investigated the negative impacts of social media usage. A statistical analysis was used to gauge the negative influence of social media usage. The study revealed that excessive engagement with social media might lead to the isolation of children and severe impairment of family cohesion. Another study (Lopez and Cuarteros 2020) shed light on the role of Facebook in family communication. It was conducted on a sample of 120 Filipino college students. The research was based on a comprehensive theoretical framework that encompassed technological determinism and gratification and used this theory along with family system theory. The findings revealed that Facebook assisted the respondents to maintain family bonds through a non-threatening and comfortable interface.

A study by Joo and Teng (2017) based in Malaysia was conducted on 217 respondents through questionnaires; 53% of participants stated that Facebook assisted them in connecting with their family members and becoming acquainted with what was happening in their lives. In a study that reviewed much of the previous literature, Chang (2015) concluded that there is a scholarly

consensus regarding the idea that social media is a reliable tool for parents to build a psychological connection with their children. A study by Fife, LaCava, and Nelson (2013) aimed to determine social media's influence on familial communication in the US. The study was based on communication privacy management and involved four focus group discussions. The intention was to find out how the respondents interacted with their family members through Facebook. The findings of the study revealed that the students considered their privacy concerns on Facebook and other social media for maintaining and strengthening their familial relationships.

A similar study, based in Italy, was conducted in 2019 by Procentese, Gatti, and Di Napoli. The survey included 227 parents who had at least one teenager at home who was using Facebook and WhatsApp to connect with them. The findings stated that besides the impact of social media on the family communication, parents' perspectives mattered equally. A similar survey by Ante-Contreras was conducted in 2016. The study incorporated surveys that were distributed to various online chat platforms consisting of parents and parenting groups; the discussions and questions revolved around parenting styles, social media usage, and hours spent on their devices. The findings revealed that there was a significant relationship between hours spent on social media and authoritarian parenting styles; excessive social media usage causes parental distraction in families hence affecting parent-child communications. A related study by Sultana (2017) conducted in Dhaka city explored the connection between social networking sites and family communications. The research involved collecting data from a sample of 384 social media users residing in Dhaka city. The findings stated that social media usage had a significant deteriorating effect on family relationships in the city in Bangladesh.

A study by Joo and Teng (2017) based on the theories of media dependency and the diffusion of innovation revealed that use of social media sites such as Facebook had a positive impact on family members as it helped in building a better society and strengthening the bonds between family members and improving their communication with each other. In 2015, Gaikwad conducted a study with the objective of learning the effects of social media sites, such as Facebook, WordPress, Google+, Twitter, Blogger, Pinterest, Tumblr, MySpace and LinkedIn, on current family culture and communication in Pune. He administered a questionnaire with 18 questions to a sample of 274 families. The study found that there are both negative and positive impacts on behavioural and social development. However, while there were positive effects on health, there were numerous negative effects, such as violence, tobacco use, alcohol addiction, and risky sexual behaviours within families. In Zimbabwe, Ngonidzashe conducted research in 2016 to study the influence of

social media sites such as Facebook, Twitter, and WhatsApp on the Zimbabweans' interpersonal relationships.

A descriptive survey design and convenience sampling technique was incorporated into the process. The questionnaire included both closed-ended and open-ended questions and was sent via email to 30 respondents of whom only 20 responded. The findings revealed that when social media is used properly, it can have positive impacts on interpersonal and family relationships. Alsharkh (2012) in his study based on the situation in Saudi Arabia gathered data from 617 University of Dammam students. The study results stated that the students' involvement with social media helped them significantly to improve their self-decision making and their ability to consider opposing opinions from family members and from their peers. In 2012, Porter et al. conducted research based on internet dependency and relationship satisfaction theories to study the connection between addiction to inter-personal relationship satisfaction, social media utilization, and the influence of social media on a person's closest relationships. An online questionnaire was administered to 219 social media users aged 18-25. The results, however, presented a negative correlation between social media utilization and relationship satisfaction, which contradicted the initial hypothesis of the study. In 2018, Alanazi conducted a study in Saudi Arabia which explored the influence of social media utilization as a tool for family communications on their relationships. Questionnaires were given to 499 participants aged 20-50 years of both genders. The findings stated that social media had no significant impact on communication between members of families including parent-children and husband-wife relations in Saudi Arabia.

A study by Salgür in 2016 in Constanta and Bucharest in Romania revealed that the frequent utilization of social media was not thought to be a problem to the teenagers, as it enhanced familial communication. Khalid (2017) conducted a study based in Lahore. The study investigated utilization of the internet and social media and its effect on familial communication and relationships. The questionnaire was administered to 400 respondents (200 male, 200 female) aged 20-40, who were students and professionals ranging from low-, middle-, and high-income earners. Most of the respondents indicated that social media usage results in less familial bonding in families, as both the parents and the children spend time on the internet.

Christensen conducted a study in 2018 regarding social media usage and its impact on the emotional well-being of individuals in close relationships in a family. The study's results stated that the more time an individual spent on SNSs, the more likely he or she was to experience a

destructive impression on their emotional happiness as well as a reduced quality of familial communication. A study conducted in the US by Sharaievska and Stodolska (2017) explored the bidirectional connection between social media usage for leisure and for family satisfaction. The research was based on the socio-technological model, and the results indicated that social media affected gratification, with family satisfaction and family leisure varying. Zywicki (2014) conducted a case study to examine how families took part in the project and used social media to interact with their children and other families. The data collection was done through online, classroom, and home observations using questionnaires and interviews. The results pointed out that not all guardians/parents felt more involved in their children's learning using social media as per the hypothesis of this case study.

A study by Larrañaga et al. (2016) conducted in Spain aimed at examining the relationship between parent to child communication, loneliness, and cyber bullying and victimization. Several tools were implemented to interview 813 adolescents studying in grades 7–10. Their parents took part in the study by completing a parent to child communication scale. The study indicated that adolescents who avoided parent-child communication even on social media faced sporadic cyber bullying and victimization. Mullen and Hamilton (2016) conducted a study based on communications privacy management theory to explore the attitudes of adolescents to parental presence on social media, particularly Facebook. The research was conducted with a sample of 262 students staying at home and were recruited at their respective schools. The study results indicated that peer influence and privacy management were significantly linked to adolescents' attitudes on having their parents on Facebook which, in turn, affected the parent-child communication. In a slightly different context, a study conducted by Bittner (2014) on military families in the US examined how social media was being used by service members, their children, spouses, partners, and significant others to maintain familial communication during their deployment. The research, titled 'Operation Enduring Freedom, Operation Iraqi Freedom, Operation New Dawn', focused on the conflict period post-9-11 and identified the communicative media or devices of preference that were being utilised at the moment and the frequency of reaching out to the families. The results of the study indicated a high level of satisfaction, availability, and frequency of social media usage for reaching out between the members of the service and their families during deployment.

Kanter, Afifi and Robbins (2012) conducted a study examining whether 'friending' a child on Facebook by a parent affected the parent-child communication, relationship, and insights of parental privacy invasions. The study used a random assignment of 118 parent-child dyads to

experimental clusters where the parents were requested to create new Facebook accounts, then ‘friend’ their children, and make use of the accounts for more than 2 months. Similarly, a control group was formed where the parents had no Facebook accounts. The results of this study indicated that having parents on Facebook essentially did not lead to significant privacy invasions as perceived but was rather linked to reduced clashes in parent-child connections. In fact, in cases where the parents and children had a disputed relationship before the parents joined Facebook, his or her being on Facebook improved their parent-child attachment and closeness. In Egypt, a study by Moawad and Ebrahim (2016) was conducted by randomly selecting secondary and preparatory schools from two governorates to study family communication through social media only. The research revealed that a greater statistical correlation existed between technology and social media usage by adolescents and improved social interaction and communication with parents. A study by Brandtzaeg, Heim, and Kaare (2010) was conducted in Norway to explore the relationship between family-bonding, peer-bonding, and bridging on social network sites (SNSs). The findings stated that 25% of the users of SNSs used social media to communicate with their family while 53% used it to communicate with peers. A study by Coyne et al. (2014) examined the association between child–parent social interactions and adolescent outcomes. The results indicated that familial communications using social media brought about amplified connections between the adolescents and their parents. On the other hand, adolescent social interactions without their parents were linked to negative outcomes, for instance, increased interpersonal aggression, delinquency, decreased emotional connection, and internalizing behaviour.

Ball, Wanzer and Servoss conducted a study in 2013 to investigate several patterns that involved parent-child communication using Facebook in conjunction with whether the students who have their parents as “friends” on Facebook adjusted their privacy settings. An online survey was administered to 189 college students. The results showed that female young adults were more expected to add their parents as “friends” on Facebook and, in turn, reported higher conversations in family communication patterns than the ones who did not have their parents as friends. Additionally, young adults who friended their parent(s) altered their privacy settings and updated their profiles regularly and reported fewer conversations. Taipale and Farinosi (2018) conducted a study in Italy and Finland which investigated the utilization of WhatsApp messenger in families within these two countries, which have diverse family and communication traditions. The study used qualitative research material in collecting data from families that consisted of three or more generations living together or in different households. The study results showed that WhatsApp was considered to enhance familial communication and interactions across generations.

Williams and Merten (2011) carried out a study that explored parents' and adolescents' use of the internet and other technology in terms of family connectedness and parent–child dynamics. The findings shed light on the potential of social media to strengthen family bonds. These findings supported the report by Kennedy et al. (2008); they suggested families felt closer today than when the parents were children thanks to modern technology. However, it is important to note that too much technology in the home can potentially isolate members from one another by increasing communication and connectivity but reducing intimacy and relational closeness (Williams and Merten 2011).

Research has indicated that technological advances may lead to frequent negative work-family spillover (Brown et al. 2009). Perhaps families who perceive the internet and working from home positively are also those families who are more likely to actively control the boundary between work and family (e.g., turning devices off during dinner or that the direction of spillover may be from family to work. Lee and Chae (2007) conducted a survey of 222 fourth-, fifth-, and sixth-grade Korean children. The results stated that the total time invested online was considered responsible for the declining amount of family time but was not related to family communication.

A brief review of various research studies and a discussion of the diverse perspectives of authors imply that social media technologies affect family communication in both positive as well as negative ways, as high social media engagement led to reduced family time while it also helped in communicating with distant family members. The isolation of family members and reduced intimacy and closeness are among the adverse consequences of excessive technology consumption. Different social media platforms have distinct levels and types of impact on familial communication, as WhatsApp messenger use is associated with improved interactions in the family, while Facebook interactions have both positive and negative effects on parent-child communication. This is because in some cases, it contributed to fostering intimacy and strengthening the bond whereas in a few cases, it was perceived as an invasion of privacy. However, it is also reported that adolescent social interactions with parents are associated with negative outcomes, such as increased interpersonal aggression, decreased emotional connection, delinquency, and internalizing behaviour. Moreover, the internet is also linked with improved QoL and increased intimacy between distant family members, thereby having a positive effect on human lives.

2.5 SAUDI SOCIETY

In this section, I will review the history of the formation of Saudi society and the social transformations it has undergone as well as the economic and social transformations with modern life, in addition to the development of the internet and the means of communication in Saudi society.

Saudi Arabia is located in the heart of the Arabian Peninsula with an area of 2,215,000 square kilometres. The country's population in 2018 was 33,413,660 people living in 13 regions. The capital is Riyadh. Its government system is monarchy, and the country's official religion is Islam (Know About Kingdom, 2019).

Today, Saudi Arabia– as a member of G20 – has become a major player as the world's biggest producer and exporter of petrol and oil products and one of the wealthiest states due to its oil supplies. It is also the caretaker of the Islamic holy cities of Mecca and Medina, in which Islam began at the end of the sixth century AD, established under the Prophet Muhammad, and where this religion's holy book, the Qur'an, was revealed and written.

For one and a half billion Muslims around the globe, the cities of Mecca and Medina are holy places. Hundreds of millions of Muslims turn to Mecca to pray five times a day, and they go there as pilgrims in duty to their faith at least once in their lifetime if they can. All of this has offered Saudi Arabia a position of leadership in the Islamic world. It has also led to growth in Saudi Arabia's contribution to global affairs involving Arab and Muslim countries (AlMunajjed, 1997).

In this manner, trade relations with other countries and being the location of important holy sites not only raised Saudi Arabia's popularity but also led to increased societal welfare to a significant extent through national growth. However, to acquire detailed insight into the social changes brought in the Saudi region, it is necessary to delve into the historical aspects of the societal context of this country. The following section, therefore, elaborates on the historical elements regarding aspects of Saudi Arabia's social change.

2.5.1 The history of social change in Saudi Arabia

Saudi society has seen extraordinary changes over the last 80 years. It is still a largely conservative,

religious Arab Muslim society, but huge social and economic changes have swept the country. Islam plays a significant role in influencing the culture and regulating the customs, principles, thoughts, and practices of Saudi society (AlMunajjed, 1997). Graham and Wilson (1994) wrote that it appeared to be a nearly impossible task when King Abdulaziz sought to unite Saudi Arabia because the ties of family and tribe were paramount, and vast stretches of space separated the country's few scattered settlements and tribes during the 1930s (Graham and Wilson, 1994). Moreover, Islam played a significant role in maintaining family relations within Saudi society. Saudi society could not be defined as a modern society, as every village had its close community and relationships, and people built their relations with other tribes and villages based on common norms and shared values. Each tribe had its own leader or *sheikh* who headed the tribe or village and made decisions with the wise men of the tribe. The low incomes of Saudis at that time also compelled them to remain closer to their families and farms in order to grow food and acquire the necessities of life.

The Saudi people lived within community relationships during the reign of King Abdulaziz and when he united Saudi Arabia in 1932 (Graham and Wilson, 1994). To use the terms defined by German sociologist Ferdinand Tönnies (1957) and used to make a well-known distinction, in the beginning, Saudi society was based not on *gesellschaft* but on *gemeinschaft*. Society revolved around a close family and tribal life for each man (for Tönnies, it was only 'man'), who lived from birth to death in that community. Tönnies differentiated between two kinds of social groupings. *Gemeinschaft*, frequently translated as "community", signifies combinations based on feelings of closeness and shared ties. Members of these groups believe that their feelings are goals to be achieved, with group membership a means to this end. *Gesellschaft*, regularly translated as 'society', instead indicates groups exist to help their members reach individual objectives.

Gemeinschaft may be exemplified by a household or community in a pre-modern countryside society and *gesellschaft* by a cooperative standard company or by a state with a modern society (i.e., society as it was when Tönnies lived). *Gesellschaft* connections arise in metropolitan commercial settings symbolised by individualism and impersonal financial relations among people. Social connections are generally instrumental and superficial, with self-interest the norm, for example, for companies, countries, or charitable organisations (Greenfield, 2009). The Saudi individual, even if s/he lives in a city, may still be connected to his or her *gemeinschaft*, as the *gemeinschaft* is united by blood, religion, and established customs. Among its most significant values is continuous communication with the family as well as respect for and obedience to parents.

Initially, the Saudi people fell into three main social divisions: nomads or Bedouin, who lived in the desert in tents with their camels and sheep; villagers, who lived in small communities and worked on their farms; and townspeople, who lived in larger communities and had small shops and businesses. However, these three groups shared the same ideas about extended family and relationships with relatives (Graham and Wilson, 1994). Additionally, during the 1930s, differences existed in Saudi Arabia between the Nejd, Hijaz, Ahsa, and Asir regions. Each region had different tribes and social groups, with many religious and educational differences developing among them.

Yamani (2000) stated that the typical Saudi family has lived through the most crucial phases of Saudi Arabia's twentieth-century history: the founding of national unity, the oil period, and globalisation. She categorised current Saudi families into three main generations: grandparents, born in the 1930s; parents, born in the 1950s; and the new generation, born in the 1970s and 1980s. Throughout a historical segment of about sixty years, the perspectives of every succeeding generation have extended from being simply local to being bordered by the government and then to the present generation with a universal scope. The practical horizons of Saudi families' imaginations in the 1930s stayed within their village or hometown, and the only means of travel was on foot or by camel (Yamani, 2000). Saudi families were thus isolated from the world within their villages or small regions. The only distant destination to which Saudis would travel was Mecca, for the purpose of completing their pilgrimage (*hajj*).

The extended family was the basic building block of traditional Saudi society ('community', according to Tönnies), from the beginning of the kingdom in 1932 until a decade ago (Shaw and Long, 1982). All Saudis still believe that they are members of an extended family that has a shared heritage and ancestry and that promotes respect for elders and commitments and duty to nurture the prosperity of other family members. The Saudi extended family has been patriarchal, whereby family authority is concentrated among the elders (male and female); patrilineal, whereby ancestry is traced through the male line; patrilocal, with family members staying in close proximity to male elders; polygamous, having multiple wives; and endogamous, selecting partners from within the same extended family, tribe, or social group (Long, 2005). Saudi family members used to live with their families and work with their parents, farming, looking after the sheep, or running small trade business, each according to his or her social group.

Moreover, earlier Saudi Arabian societies were not considered modern because of individuals living in tribal areas or villages within closed communities to exchange values only between individuals. Over time, the extended family concept was introduced into the country to foster respectful behaviour towards elders and to help all members of the family flourish. However, the modern lifestyle was introduced recently in twentieth century within the Saudi region; thus, this needs to be investigated to understand the development and infrastructure as well as the technological advancement in this country. Therefore, the subsequent section is concerned with the modern lifestyle of society in Saudi Arabia.

2.5.2 Modern life and Saudi society

The most recent social changes began in the mid-twentieth century when the Saudi government instigated rapid modernisation, fuelled particularly by its growing wealth through oil revenues and influences from the West, particularly from the US. The isolated regions of Saudi Arabia, for the first time in the country's contemporary history, began to come into contact with the wider world. 'Saudi capitalism' began to change Saudi society with huge, rapid governmental projects. These developments can be understood using US sociologist Daniel Bell's analysis of the 'cultural contradictions' of capitalism. (Bell, 1976, p. 112), in his book, *The Cultural Contradictions of Capitalism*, stated that "the modern movement disrupts the unity of culture". In addition, (Berman, 1983, p. 83) claimed that "modernisation threatens and destroys everything we have, everything we know and everything we are".

In 1938, the US company Standard Oil of California (SOCAL) discovered oil in Saudi Arabia, but the first and largest infrastructure projects financed by oil began as recently as the 1960s. Between the 1950s and 1960s, Saudis began to work in the army, oil companies, government institutes, and more than 43,000 business establishments. Oil prices increased after 1973, which accelerated the development process, and they were associated with extensive migration to the cities. For the first time, Saudis from different social divisions, towns, villages, and tribes lived in the same neighbourhoods. For example, the Hijazi might move to Riyadh, in the heart of Nejd, or the Ahsa might work in the oil industry. Extended families spread across many different cities in contrast to earlier patterns where all family members had lived in one village or town. In 1970, around 80% of the Bedouin who used to live in the desert had at least one family member in the Saudi National Guard in the larger Saudi cities (Shaw and Long, 1982).

In 1902, less than 10% of the kingdom's inhabitants lived in cities. However, in the early 1960s, 30% of the Saudi Arabian population was urban. By 1990, urban dwellers comprised 75% of the Saudi population with Riyadh, Jeddah, and Mecca containing more than half of the country's urban population (Wilson, 1994). Oil revenue resulted in major shifts and changes in people's socio-economic conditions. For example, trade and construction jobs were created for the first time, attracting tribesmen and villagers to larger Saudi cities.

Referring back to Tönnies's societal categories, the Saudis began to lose their jointly owned *gemeinschaft* (community) and moved towards a new and unfamiliar *gesellschaft* (society), as Greenfield (2009) described these social units. Saudi regional communities had preserved many social and cultural norms and customs, even when faced with modern life. Now, social relations among extended families began to weaken because of communication difficulties. During the 1920s, in Mecca and Jeddah, mail was transported on camels and donkeys on crossings that took up to 14 hours, and it was carried once or twice each month by camels to places like Laith, Jazan, Abha, Najran and other southern cities. In Medina, mail was brought by camels to Jeddah (The Saudi Post History, 2018).

Saudi Arabia had no telephone lines until 1919, when the Turks built lines between Jeddah and Mecca (al-Ken, 1995). In 1934, the manually operated telephones used only 854 lines, and these telephones existed only in Riyadh, Mecca, Medina, Jeddah, and Taif. By 1975, the number of telephone lines had increased to about 130,000 lines (Brief History, 2011). However, telephone lines still did not reach all villages and towns. Thus, telephone services in the cities were vastly superior to those in rural areas, which caused a significant social disconnect between nuclear and extended families. Moreover, one of the chief methods of communication that the Saudis used in the 1980s was to record messages on cassettes and send them to their families. The tapes' senders would talk about their daily lives and news. Among those who used this system were students studying in the US at that time, because international phone calls were very difficult and expensive (Alnadr, 2009).

In 1986, the King Fahad Satellite Communications City on the Mecca–Jeddah Road began operations. This city contains four ground stations that work with Arabsat, Intelsat (Atlantic Ocean), Intelsat (Indian Ocean), and Inmarsat for navigational communications. One of the main aims of this network was to link Saudi Arabia with other countries worldwide through telecommunications facilities (Brief History, 2011).

In 1995, mobile phone services began operating in Saudi Arabia, and Saudis began to exchange mobile numbers with extended family members. I remember at that time, I myself had my aunts' and uncles' mobile numbers, and I tried to call them once a month to maintain my relationships with them. In this way, Saudi extended families tried to maintain familial relations through mobile phone services, but it did not necessarily follow that relationships began to grow stronger again (Long, 2005). Some Saudi individuals were already isolated from their extended families, and they found it too difficult to establish – or refresh – relationships with their relatives.

The introduction of modernisation ended the relative isolation of Saudi communities and blended them into a single, new Saudi society. This process, which took roughly five centuries to complete in the West, began in Saudi Arabia only in the mid-twentieth century. Modernisation changed relationships within Saudi extended families, weakening them. It also challenged traditional Saudi family cultural values that had guided interpersonal relationships for centuries (Long, 2005).

Based on the above information, modernisation brought significant growth and effective development in Saudi Arabia as a result of which, telecommunication services also developed. However, extended and nuclear families encounter problems of disconnection with closed ones because of the services. To investigate the broader effects of communication services on Saudi youth and their social behaviour, the following section focuses on internet and media usage among young people within the Saudi region.

2.5.3 Media and the internet in Saudi Arabia

The internet was first introduced into Saudi Arabia in 1994 in some medical and educational institutions. Then, in 1999, the internet was fully opened to public usage (Internet in Saudi Arabia, 2018). The country had 200,000 internet users in December 2000, which had grown to 2.54 million by 2006. As of December 2011, the number of internet users in Saudi Arabia had grown to 13 million, demonstrating that nearly half of the entire population uses the internet (Internet in Saudi Arabia, 2018). In its annual report in 2016, the Communication and Information Technology Commission (CITC) in Saudi Arabia reported that the estimated number of internet users in the kingdom was 24 million users at the end of 2016, representing 75% of the Saudi population (Annual Report, 2016). The 2018 Global Digital suite of reports from We Are Social and Hootsuite shows that there are 30.25 million internet users in Saudi Arabia of whom 25 million use social

media. In addition, Saudi Arabia is the first country in the world to report an annual growth rate of 32% in social media users while the global average is 13% (Kemp, 2018). The Social Clinic in its report titled 'The State of Social Media in Saudi Arabia 2013' stated that the country has the highest Facebook user rate in the GCC countries, with over six million Facebook users. Facebook is also the third most-visited website among Saudi Arabian users. This report also reveals that with more than 3 million active Twitter users, Saudi Arabia leads not only the GCC or the Middle East, but even the world in its growth rate. While the global average is 300% growth year-on-year, the number of Twitter users in Saudi Arabia grew by more than 3,000% from 2012 to 2013, and currently accounts for 50,000,000 tweets per month (The State of Social Media in Saudi Arabia 2013, 2014). Indeed, in a 2013 report, (Mari, 2013) stated that Saudi Arabia has the world's highest proportion of active Twitter users among its online population. In addition, the Social Clinic (2014) reported that "more than 90,000,000 videos are watched daily on YouTube on Saudi Arabian soil; that's more than any daily YouTube video viewership number worldwide". This source stated that the Arabic language is currently the most rapidly growing language on the internet and that Saudi Arabia accounted for 30% of this growth in 2013. Moreover, of the top ten celebrities on Keek, a famous online short video application, five are Saudi 'Keekers' with millions of views, followers, and subscribers (Top 10 accounts by views, 2013).

This increase in internet usage has led to some concerns being raised. Al-Tawil (2001) stated that "The concern for internet access in Saudi Arabia comes from its cultural and religious values and national security. Control and censoring in Saudi Arabia are justified on historical and socio-political grounds". In fact, the CITC is responsible for internet censorship. The sites that are most commonly blocked by CITC are those that are related to pornography, drugs, alcohol, gambling, and terrorism and those that insult the Islamic religion or the Saudi government's laws and regulations (Al-Khalifa and Garcia, 2013).

Kalathil and Boas (2010) argued that public access to the internet in Saudi Arabia was delayed until the Saudi authorities had created complex technological and institutional tools for censorship. One element of this filtering system is the Saudi block page, notifying the online user that a particular website's content is prohibited. In addition, Deibert et al. (2008) commented that rather than presenting the internet in its original system, "The Saudi authorities decided to establish a system whereby they could stop their citizens from accessing certain materials produced and published from elsewhere in the world". From the beginning, only one single entrance existed by which online users in Saudi Arabia could gain access to outside information.

In 2013, CITC blocked the Viber application due to its failure to meet local laws (Usher, 2013). In the same year, CITC also blocked voice and video calls in WhatsApp Messenger and voice calls in Skype. In its report, Reuters cited the CITC website, saying that “it has become evident that some communication applications through (the) internet don’t meet regulatory requirements” (Saudi orders telcos to ensure Skype Whatsapp meet local laws, 2013). However, in 2017, CITC lifted the ban on all applications that provide voice and video call services over the internet except Viber and WhatsApp (Saudi Communications Commission activates Internet calls WhatsApp still blocked, 2017). Currently, Saudi Arabia has one of the highest social media penetration rates worldwide, particularly for Twitter, YouTube, and WhatsApp. It also has higher online political efficacy than other Arab countries (Martin et al., 2018). These censorship measures affected online social communication but rescued the profits of local telecommunication companies in Saudi Arabia.

As the participants in this study were young undergraduate students and parents, it is relevant to present some aspects of social media use in higher education in Saudi Arabia. As in many other countries, several Saudi universities offer free Wi-Fi on their campuses. Moreover, new technologies, such as smartphones, offer students flexibility in communicating and sharing resources. This new way of socialising and sharing information is particularly attractive to students, as it offers a space for activities that are not possible in face-to-face situations (Lee et al., 2015). Wang et al. (2011) studied how undergraduates use social media and found that large numbers of undergraduates spend considerable amounts of time accessing social media sites.

Additionally, Saudi universities offer several online academic services that oblige students to have smartphones and laptops and to stay connected to the internet. During my teaching in King Khalid University in Abha, Saudi Arabia in 2016, I created a WhatsApp group for each class to communicate with students about the subject, assignments, quizzes, and tests. In fact, the university environment’s embracing of digital technologies helps the students to engage in more digital communication with their friends and families. About 97% of Saudi private and public educational institutes offer free Wi-Fi to students (Establishments Report, 2016). Thus, students can use the free Wi-Fi in their colleges to communicate with their parents or friends at zero cost.

Al-Sharqi et al. (2015) studied perceptions of the impact of social media on Saudi students’ social behaviour. They found that the main perceived benefits include the capacity to learn about people’s

diverse thinking styles, to connect to other individuals and communities, to develop open-mindedness, and to alleviate routineness and dullness. The main concerns include physical laziness, exposure to harmful ideas and bad friendships, unproductivity and disruption, shyness, and psychological darkness. Alsanie (2015) detected a negative relationship between students' use of social media and communication with their families, but it was not clear in which aspect.

In 2016, Saudi Arabia had more than two million students in different higher education institutions. Currently, the country has more than 66 public and private higher education institutions (Higher Education statistics in Saudi Arabia, 2016). The sample in this study was chosen from King Khalid University, which is the largest Saudi university in terms of the number of colleges. Over 80,000 students study at King Khalid University (Higher Education statistics in Saudi Arabia, 2016). The university offers an electronic system called 'Academia' to help students find online rooms in which to collaborate and communicate with their colleagues (Academia, 2015). In addition, some academic staff in Saudi universities use social media platforms in learning and communication for learning purposes. For instance, at King Abdulaziz University, Mrs. Hayat Alguraibi stated that she created a Facebook page with her social studies students to post and share ideas, mottos, and pictures that her students created to express ideas associated with some social issues in Saudi society (Aifan, 2015).

To summarise, with high media and internet service usage, Saudi-based young individuals used to connect more online than with their families. Moreover, due to heavy media usage, issues such as laziness, low productivity, poor friendship, and access to censored data became a huge challenge that caused disruption. To investigate these issues, it is essential to determine the perceptions as well as the attitudes of individuals about media usage to understand their reasons for their involvement in social media and how it affects family communication. Therefore, the subsequent section is about a study framework to elaborate on the theories about the perceptions and effects of media on individuals and the family system.

2.6 STUDY FRAMEWORK

Attitude, preference, and perception are three concepts that are used interchangeably, and sometimes it is difficult to differentiate between them. The term 'attitude' indicates a positive or negative feeling or emotion towards a particular issue and a belief in or emotion about a fact or idea. The term 'preference' is defined as choosing between different alternatives, while

'perception' is the impression or understanding that one forms as a result of studying something (Alanazi, 2015). However, several theories have been advanced with respect to people's attitudes towards an innovation or an idea. In this study, I propose the study hypotheses according to the media effect theory, the family system theory, Fishbein and Ajzen's theory of reasoned action (1975), the technology acceptance theory developed by Davis and Daft (1986), and Lengel's richness theory (1986). I selected these concepts specifically because these are useful for understanding the effects of social media on individuals, the reasons for individuals' action in using social media, the theoretical viewpoint about the acceptance of technology, complex family connections, and the potential of the medium of communication regarding information reproduction to understand distinct frames of information transmission. These theories are regarded as essential to satisfy the current research agenda of understanding social media's effects on connectivity and communication between families. More specifically, the highlighted theories relate directly to the research subject in terms of raising awareness of the perspective of young individuals on the acceptance and the high usage of social media that affect their family communication. Moreover, parents can also understand the way in which family communication can be assisted by social media in case they also become engaged with their children through social networks. These theories have not been utilised for this type of studies in the past, as these are only used to explore generalised media effects, technological acceptance, and family systems (Neuman and Guggenheim 2011; Alanazi 2015; Masrom and Hussein 2008). Therefore, these are found to be both unique and appropriate for satisfying the research problem.

2.6.1 Media effects theory (MET)

Media effects theory (MET) is related to my research in terms of dealing with the effects of social media platforms on social communication. I have indicated in this section the importance of this theory specifically in the field of family communication. Besides, insight into MET, its historical development, and the main implications of it in research reveal the theory's link with social media effects in the contemporary world.

MET is a concept that seeks to offer insight into the different ways in which media platforms influence the behaviours and attitudes of a given audience. The theory postulates that an individual's exposure to media platforms has a direct impact on his or her social communication in a given society (Scheufele 1999). The theory's primary focus is on how exposure to specific content from media platforms influences individual perceptions, thus making it ideal for the

individual to be selective on what to view in the media arena. Notably, exposure to the knowledge-oriented programs aired on different media platforms helps develop an urge to learn more about different aspects of life (Bryant & Oliver 2009). Exposure to social programs also plays a crucial role in setting the individual's social behaviour. Watching sexualised programs on media platforms also influences the individual's attitudes and behaviour in a given society (Valenzuela, Bachmann, & Aguilar 2019).

MET was developed by George Gerbner, Anderson, Meyer, Maxwell McCombs, Donald Shaw, Ball-Rokeach and DeFluer through a cumulative research model (Neuman, & Guggenheim 2011). The theorists gave their input on the different models that explained how exposure to media platforms influenced individual behaviour. Using the psychological influence of exposure to different content on the media platform, Gerbner contributed to MET by developing the cultivation theory in 1975 that sought to develop a theory that explains the different effects of media content on individuals (Scheufele 1999). Gerbner asserted that persistent long-term exposure to televised content gradually alters one's attitudes and perceptions based on the content relayed by the media platform (Scheufele, 1999). He asserted that the small but measurable effects on one's attitudes and perceptions after the exposure to media platforms create an exaggerated belief in a cruel and frightening world. He focused on the amount of time spent on media platforms and the change in attitude compared to other communication platforms. Through the experience, Gerbner compared the violence index in a community that had high exposure to violent content on media platforms. The outcome revealed that there was a high influence on the individual's violent behaviour through prolonged exposure to violent scenes on television.

Anderson and Meyer, on the other hand, contributed to MET by developing social action theory in 1988, which emphasised the participation of the audience in mediated communications (Neuman, & Guggenheim 2011). In social action theory, Anderson and Meyer argued that communication involved the different actors, intent, and receivers of the interpretation of the content relayed by the select media platform (Neuman, & Guggenheim 2011). The audience actively participates in communication based on the ways they interpret the information relayed by different media platforms. As such, the theorists argued that the influence of the media platform depends on how the target audience choose to interpret the message.

Maxwell McCombs and Donald Shaw also contributed to the MET using their agenda-setting model in 1972 (Anyidoho 2016). The agenda-setting theory postulates that it is not what a given

audience thinks that influences behaviour but rather what an individual thinks about a given message relayed on the media platform. The agenda-setting theory aligned with the social judgment where individual perception on a given message plays a crucial role in influencing the attitudes and behaviour (Anyidoho 2016). He asserted that the media agenda should be in line with the target audience judgment to achieve its intended outcome in influencing an individual in society.

Ball-Rokeach and DeFluer also contributed to the development of MET by asserting the high dependency levels of information from the media platforms. Though their media dependency theory of 1976, Ball-Rokeach and DeFluer asserted that audiences depend on information from the media to meet their needs and interests (Neuman and Guggenheim 2011). Media dependency theory postulates that social institutions and media platforms enhance the audience's interaction through the entertainment, education, and information relayed from important public institutions. The theorists assert that the public depends on media platforms for information and other social cohesion activities (Anyidoho 2016). The psychological mechanisms involved in the formulation of these theories contributed to the development of the MET, which sought to offer insight into the cumulative influence media platforms have on the target audiences' attitudes and perceptions.

MET makes a significant contribution to knowledge in communication studies. The theory offers important insights into the influence created by different media platforms. The insight from the theory using other models is of great importance in research, as it reveals the behavioural changes among the audience with prolonged exposure to a given content (Neuman & Guggenheim 2011). For instance, the theory can help the researcher to understand the changes in the attitudes of the target research population based on the effects of media on their behaviour (Prieler & Choi 2014). Most notably, MET is important in helping understand the changing dynamics of individual perceptions in communication studies (Bryant & Oliver 2009). With the topic of communication at the centre of the research, the media's role in guiding the judgment of individuals is important to achieve the desired outcomes. The theory can also help researchers unravel the influence of different media platforms in the changing communication dynamics in the contemporary world (Bryant and Oliver 2009). As such, researchers can understand the types of media relied upon by different audiences and how each of the platforms affect their behaviour (Valkenburg, Peter & Walther 2016). Thus, MET will have implications for research in communication studies.

Thus, technological innovations have changed how people interact and how information flows, and MET is closely linked to the social media effects in modern society. MET asserts that exposure to

a given content through different media platforms influences the attitudes and perceptions of the target audience (Prieler & Choi 2014). The theory accurately merits relevance in the technology-dependent generation in the modern world. In particular, the modern audience relies on social media platforms for entertainment, information sharing, and other social interactions. Traditionally, information was formed by a few selected media platforms like televisions and radio, which were highly regulated and offered educational, entertainment, and social content (Anyidoho 2016). However, in the technology-oriented world, there are many media platforms, with social media having a large share on influencing the attitudes, perceptions, and behaviours of its users. Spending a lot of time on social media platforms often leads to overdependence on the media platform for key updates and other entertainment services. Besides, the modern audience's perception of the information sharing has changed over time with the real-time sharing of the trending news in different social media platforms being the norm (Prieler, & Choi 2014). Social media platforms have influenced the attitudes and perceptions of many people upholding the assertions of MET. Thus, one can accurately conclude that MET has a strong link to the effects of social media on the behaviours of the audience, as it has altered the methods of communication.

Most often, technological innovations alter the communication and interaction patterns in the family. The evolution of social media platforms has dramatically affected the behaviour of siblings, couples, and parent-child relationships. The numerous social media platforms have adversely affected the effectiveness of interactions and communication at the family level. Many members spend much of their time interacting with other people, thus breaking the family bonds. Ideally, social media platforms should be used to enhance the efficiency of family members' interactions to strengthen their relationships. Instead, social media platforms often yield negative interactions between family members, thus making it necessary to formulate ideal policies to improve communication through the appropriate use of these platforms (Gjylbegaj & Abdi 2019). Besides, the high pressure in social media platforms has negatively affected the self-esteem of family members through the constant comparisons with other people's lifestyles. Furthermore, the communication breakdown in the family level brought about by social media platforms has a direct link to the interruptions caused by different gaming and online posts from other people from different parts of the world (Valenzuela, Bachmann & Aguilar 2019). Family members spend much of their time trying to post on social media platforms to comply with the peer pressure from other friends using the media, thus minimizing the time spent communicating with family members (Gjylbegaj & Abdi 2019). As such, social media platforms have altered the behaviour and attitudes

of many family members, making it hard for them to exhibit practical communication skills (Valenzuela, Bachmann & Aguilar 2019).

2.6.2 The family systems theory (FST)

The family systems theory (FST) was introduced by Murray Bowen; it suggests that individuals cannot be understood in isolation from one another but rather must be understood as part of their families (Kerr, 2000). This theory considers the family as an emotional unit and uses systems thinking to define the complex connections within the family (Alanazi, 2015).

A 'system' is defined as a set of objects that have similar characteristics and are related to one another within a shared network (Hazell, 2006). It is essential that each family and all its members are considered as interrelated, particularly from the aspect of emotion. Whether or not we acknowledge it, family members greatly influence other members' thought processes, emotional structures, and behaviours. This connection is felt intrinsically and requires family performance to be mutually dependent (Hazell, 2006). The connections are interdependent, and when one family member is dysfunctional or fails to connect with others, the family connection system will be weak.

Alanazi (2015) observed that FST's critical contribution is that if one member of the family is not functioning, this deficiency will affect the entire family. However, Bastedo (2004) stated that the advent of social media and its utilisation has seen a gradual change to an open system within which external influence has begun to gain acceptance, albeit in a limited way. The Saudi family framework relies on a closeness between several generations and the involvement of the extended family in individuals' affairs (Alanazi, 2015). This framework is gradually being loosened, with undergraduates opting for closer relationships with individuals outside their families. The influence of this development has led to individual decision-making, which in turn, influences the nature of family systems (Rajkhan, 2014).

While Miller et al. (2016) noted that FST calls for a collective family unit, young people use the tools provided by social media platforms to address family problems. Problems that are considered taboo are addressed in ways that are considered humorous and objective, while individuals may still lean on the family structure for support and in adherence to traditional norms (Miller et al., 2016). Family interplay and communication should be approached from a theoretical perspective to understand the elements of interaction (Epp and Price, 2008). As noted by Epp and Price (2008),

each family member is interdependent and is mutually influential on the family's other members. The family system is open, and the interaction varies depending upon the environment, which is continuously evolving.

According to Fife and Schrager (2011), like the inside of a well-oiled machine, when one family member does not function, the whole interdependence dynamic is put to the test. Everyone in the family is bound by a set of interlaced elements with the elements of the system being each member of the family. Each individual member of the family unit should be viewed not in isolation but rather as part of the interactions, transitions, and relationships at play within the family. Thus, the main key tenet of FST is the belief that what affects an individual affects everyone else in the family (Alanazi, 2015).

According to Morgaine (2001), families also interact in patterns that can be easily detected. These patterns emerge in family systems and are cycles that continuously repeat. Families also have boundaries in boundary systems that are either open or closed. (Alanazi, 2015) stated that the closed boundary system, which isolates members from the environment so that the unit is self-contained, seems to characterise Saudi families very well. However, with the arrival of social media and its phenomenal rise in Saudi Arabia, this may progressively develop into an open boundary system that allows elements and situations outside the family to influence it. In this way, Saudi families are already allowing external elements, such as social media sites, to influence their members. Fife and Schrager (2011) also highlighted that it is essential to note that the family system is merely a sub-system of a larger system – the community – and this community is a space with which they interact and that influences them. The family system, in turn, is also capable of influencing the community and contributing to the maintenance of certain behavioural patterns that are part of the community's norms and belief system (Alanazi, 2015). In another study that drew on FST, (Alanazi, 2015) found that social media has the potential to change Saudi Arabian family values but that the family structure is not changing significantly, and the youth continue to maintain traditional family values despite the proliferation of social media.

Based on this theory, the concept of 'rewarding behaviour' (RB) will be employed to examine whether parents reward their children for active engagement in online family discussions. Bavelas and Segal (1982) argued that if parents reward their child's behaviour by giving them their attention and concern, the child will persist in that behaviour to attract their parents' attention. In Saudi

society, the independence of children from their parents is delayed until they get a job or get married, so measuring this factor is important in my research.

2.6.3 Theory of reasoned action (TRA), technology acceptance model (TAM), and media richness theory (MRT)

These theories will be used in the data analyses to explain the attitudes of the participants towards the use of social media in familial communication.

The theory of reasoned action (TRA), developed by Ajzen and Fishbein (1980), argues that people's facultative behaviour is based upon a combination of the relative influences of their attitudes and subjective norms. In the social psychology literature, TRA defines the relationships between beliefs, attitudes, norms, intentions, and behaviour. When TRA is applied to explain the use of adopted behaviour, it embraces four fundamental concepts, including actual behaviour, behavioural intention, attitude, and subjective norm (Alanazi, 2015). According to TRA, as cited in Masrom and Hussein (2008), "Individual behaviour is driven by behavioural intention where behavioural intention is a function of an individual's attitude towards the behavioural and subjective norm surrounding the performance of the behaviour" (p. 7).

The technology acceptance model (TAM), which was developed by Davis (1989), has been applied to examine the perceived ease of use and perceived effectiveness of different technologies with respect to individuals' attitudes towards the adoption of technologies. TAM suggests that when users are presented with a new software package, several factors influence their decision regarding how and when they will use it (Masrom and Hussein, 2008). TAM states that individuals' adoption of information technology depends on two main factors: the perceived usefulness (PU) and perceived ease of use (PEO) of the technology.

Media richness theory (MRT) is a framework applied to explain a communication channel's capacity to reproduce the information transmitted over it. It was presented by Richard L. Daft and Robert H. Lengel in 1986 as an addition to information processing theory (Daft and Lengel, 1986). MRT argues that individual communication channels differ in their ability to allow users to communicate and to change how messages are interpreted (Dennis and Valacich, 1999). The theory emphasises that four factors affect media richness: the capacity of the medium to transmit various

social cues (e.g., voice, body language), immediacy of reaction, language variety, and the individual focus of the medium (Dennis and Kinney, 1998).

Several studies have been conducted to determine the factors that affect individuals when adopting and using emerging technologies. Rogers (2003) investigated the factors that influence users' attitudes towards the adoption of technology. The results indicated that the higher the PU, the PEO, and the compatibility of the technology, the more positive the attitude towards using the technology will be. Davis (1989) said that the PU had an important and strong influence on attitude, whereas ease of use had a weaker yet still significant influence on attitudes towards the adoption of electronic mail (email). Furthermore, in their investigation of the factors that influence users to adopt electronic collaboration technology, (Masrom and Hussein, 2008) found that PEO had a positive effect on PU. In addition, the results showed that the PU of this technology had an important influence on electronic collaboration technology use. Moreover, when they examined people's acceptance of online shopping using the TRA developed by Ajzen and Fishbein, the result showed that subjective norms clearly influence users' attitudes towards online shopping. Additionally, attitude was the most important predictor of online shopping behaviour. Furthermore, an examination of users' attitudes towards the adoption of online banking showed that users' attitudes were an important factor in behavioural intention towards online banking.

TRA identifies situations in which social media users willingly contribute to and participate in social media activities, and it is well cited in social media research. Indeed, Hsu and Lin (2008) found effective support for the model. The results showed that ease of use, pleasure, and knowledge sharing (predilection and reputation) were positively related to attitude towards the use of social media, for example, blogging, and were considered to account for four-fifths of the variation. Instead, social identification and attitude towards social media use, for example, blogging, considerably affected social media users' intentions to continue using social media platforms.

In a study of social media applying TAM, Casaló et al. (2010) aimed to clarify social media users' intentions to join online communities and other social media users' behavioural intentions, based on a model that combines the TPB, the TAM, and social identity theory. Furthermore, their study examined the relationship between the intention to join an online community and two behavioural intentions that might profit the host company: the intention to use the company's commodities/services and the intention to advocate on behalf of the host company to others. The study's conclusions show that the selected theories suggest an appropriate background frame for

clarifying the intention to join these online communities; this intention, in turn, has a positive influence on the other two behavioural intentions.

Moreover, Casaló et al. (2011) stated that data indicate a relationship between attitude towards recommendation, trust in the social media users who offer the recommendation, and the professed effectiveness of this information in determining the social media user's intention to follow a recommendation that they have been given by the online community. Additionally, trust and effectiveness have been shown to affect social media users' attitudes, and effectiveness is similarly directly influenced by trust in the online community that offers the recommendation. Finally, an exact personal attribute –consumer vulnerability to social influence – determines the outcomes of the antecedents of the intention to adopt the recommendation received in an online travel community on social media platforms. Furthermore, Kwon and Wen (2010) found that apparent encouragement and orientation notably influence the use of social media platforms.

In social media research that applied MRT, Koo et al. (2011) found that social media features of users were associated with media usage, while social factors, such as social influence, controlled the level of their relationships. Certain media and technologies appeared to perform better than others, though these are affected by the social aspects of the social media users. In addition, Shiue et al. (2010) found that media richness has a powerful impact on social ties and supposed risk to social media users.

2.6.4 Social media and the public and private spheres

The concept of the public sphere according to Habermas (1991, pp. 1 and 53) refers to a space that is 'open to all' in which the entire community can engage in 'public debate'. To understand what social networks have done in changing the overlap between the public sphere and the family as a private sphere, it is important to review Habermas's point of view that the traditional media provided a limited or restricted historical preparation as well as the involvement of only a small number of members of society. The debate over Habermas's views reflects some aspects of class analysis as well as the timing that Habermas deprived of the determined public sphere.

Youth and women and their social roles were neglected in Saudi Arabia in last three decades in the last century. Their participation in public and commercial media was limited and restricted by different controls of censorship, which disrupted the discussion of many significant issues for

society and the family. Frequently, a discussion takes place in the public sphere that moves to discussion within the family. Therefore, for the public domain to be effective, the media must be accessible to all members of society for information and communication. In addition, the public sphere must be free of any kind of control either by government or through private censorship. And, as Habermas stated, the task of the public sphere is to allow people to engage in a ‘critical public debate’ (Habermas 1991, p. 52). The public sphere, then, requires information and communication media and access for all. Saudi society, before the advent of social media, did not allow the participation of many groups to discuss public issues, which would have a role in forming visions and perceptions within the private sphere such as the family. In the past, the most important communication technologies in the public sphere were television, radio, and newspapers. On the other side, the private sphere has been defined as the particular surroundings of an individual’s societal life wherein they have the freedom or authority to enjoy their social life without any restrictions or governmental interventions. For instance, home and family life are noted as a private sphere for individuals (Papacharissi 2010). Previously in the private sphere, the most important technologies were telephone, mobile phone, and post mail. However, social media are new tools to be used in both the public and private spheres and have caused the boundaries to draw closer and overlap. What distinguishes social media is that it opens the door to expression and participation in public affairs to broad sectors of society in which expression has been limited to political and cultural elites. Moreover, social media platforms give everyone the opportunity to access and participate in the virtual sphere not just as readers but also as writers and creators of information. Additionally, social media give individuals the freedom of communication with different parties around the globe.

In addition, Yochai Benkler (2006) assumed that one of the effects of social networks on social relations is the strengthening of existing relationships between families, friends, and neighbours but also assumed that a type of relationship has emerged that is characterised by limited purposes and loose ties. However, this openness that has arisen between the public and private spheres may conceivably have changed the forms of family communication and its impact on it, or perhaps it may threaten the privacy of the private sphere, particularly in light of the ease with which occurrences in the private sphere are dispersed through the public sphere. Benkler also stated that “this thickening of contacts seems to occur alongside a loosening of the hierarchical aspects of these relationships, as individuals weave their own web of supporting peer relations into the fabric of what might otherwise be stifling familial relationships” (Benkler 2006, p. 357).

Before the advent of social media and the internet, the separation between the private sphere and public sphere was obvious and clear, but with the virtual sphere, it is different. Papacharissi (2002) believed that the virtual domain is simultaneously a public and a private space. It provides a new arena that differs from the old conflict between personal and group identity and between the individual and society. Additionally, Papacharissi mentioned that the internet affects the public sphere in the following three aspects. First, the data storage and retrieval capacity of internet-based technologies increases the political debate about information that is not available on the internet. Moreover, inequitable access to information and new media literacy harms the representation of the virtual space. But if we look at it from the social point of view, storing and retrieving data may have an effect on the communication between family members, especially since intense discussions remain present and preserved in the family members' devices, and this differs from if the discussion is face to face so that the conflict ends with the end of the situation. Second, internet-based technologies allow conversation between people all over the world, although these often distract from and disintegrate political discussions. Nonetheless, if we look at the social aspect, we find that this opens the horizons of family members to different ideas and opinions of their local culture, which may generate conflict in family dialogues as well as in the formation of individual identities. Third, internet-based technologies are likely to adapt to the current political climate rather than create a new one. Therefore, the internet is transforming the concept of the public sphere into a new domain that affects political and social communication.

Based on this, Benkler emphasised the arrival of a networked public sphere: "The easy possibility of communicating effectively into the public sphere allows individuals to reorient themselves from passive readers and listeners to potential speakers and participants in a conversation" (Benkler, 2006, p.75). Online users are different as participants in the public sphere; they affect the social and political discourse. For decades, the public sphere has been either closed to or too narrow for Saudi youth, so their discussion and dialogue spaces are limited to their close circles of friends and relatives. However, with the arrival of social media, increased opportunities for dialogue and discussion have opened up for Saudi youth, including discussions both in open and public applications and those in private family groups. These new spaces for dialogue and discussion are likely to affect family dialogues and the ways in which young people think within their families and how they view life, themselves, and their futures.

In contrast, Fuchs (2014) argued that social media platforms do not constitute a real public sphere and that to become so, they should be disassociated from companies and government control.

Media transformations are required for the creation of a social media sphere that transcends specific control and represents the public concern so that the media's social potential can be achieved. Additionally, Papacharissi (2002) observed that notwithstanding all the excitement surrounding the novel practices of the internet as a public channel, it is still a channel that has been created in a capitalist age. Accordingly, some companies use it to collect profits and control people's social data. The commercialisation of social media has affected the concept of freedom of speech in the public sphere, which raises questions as to whether or not the virtual sphere could be a public sphere. Additionally, government censorship of the internet could also raise the same questions. Thus, this aspect becomes explicitly linked to the idea about the undertaken research, as it highlights a clear barrier to using social media's concept for the purpose of family communication because of the lack of freedom and the restrictions posed by the government. Thus, although social media is notably an effective approach for parents to use for family communication, a clear privacy issue might cause a barrier for them whereas traditional methods of communication did not raise such barriers in maintaining family communication. Moreover, some questions may be raised about issues that appear in social media that have an impact on the family and regarding whether they are directed by certain parties that control raising certain social issues and ignore talking about other issues. This may raise the question of whether the issues raised in the public domain affect the family sphere, as they may be issues directed at political and social reasons by governments and other parties.

2.6.5 Family as a private sphere

Papacharissi (2010) stated that the private sphere is usually associated with the family or home to impose traditional and bilateral opposition between the public and private spheres. The private sphere is different from the public sphere; for instance, in the public sphere, strangers or unknown people engage in discussions to share ideas while in the private sphere, family people or close ones come together to share views and enjoy the freedom of expressing opinions and show authorities (Balme 2014). However, with the entry of social networks, family members may interact with strangers on a daily and continuous basis by following Twitter tweets, Facebook posts, YouTube videos, as well as comments and private messages. Similarly, many people post pictures of their private lives and stories and situations from their family life in front of strangers in social networks. Thus, there is an overlap between the public sphere and the private sphere brought about by social media networks.

The family, as a private space, involves several generations that communicate and interact within this sphere, and among the contemporary generations that are the focus of considerable research are Millennials and Generation Z. Millennials are those born between the early 1980s and late 1990s, as defined by Meister and Willyerd (2010), and Generation Z or Post-Millennials are those born between the late 1990s and early 2000s (Williams, 2015). These two generations, who were born in the globalisation era and during the information revolution, are commonly associated with the increased usage of and experience with electronic communications and media and digital technologies. Williams (2015) stated, “Generation Z is the first generation to be raised in the era of smartphones. Many do not remember a time before social media”. Generation Z is the first generation of children to have wide-scale access to digital communication technology in the form of mobile phones, Wi-Fi, and interactive computer games in their own homes. They are said to have been “born with a chip” (Bassiouni and Hackley, 2014). In this study, the first sample is the generation of children, who are the generation of Millennials and the generation of the Post-Millennial generation, who differ in their characteristics from the generation of their parents.

Over the last decade, the swift evolution of technology has completely transformed the ways in which people interact with one another and with the internet (Seo, 2012). In fact, people can collaborate, communicate, and work together online while living in different places and countries thanks to the affordances of the internet in this digital era. Unsurprisingly, young people of this millennium adapt to new methods of online communication more speedily than their elders, and the availability of free Wi-Fi in schools and universities gives them more opportunities to engage more actively in online communication with their others.

In fact, a gap exists between older and younger users of digital media (Prensky, 2009). Prensky adopted these digital categories by dividing people according to their early or late exposure to digital platforms or devices as Millennials and Generation Z or Generation X, who were born in the period between the early-to-mid-1960s and the late 1970s (digital immigrants).

Prensky described Millennials and Generation Z as ‘digital natives’ due to their early and continuous exposure to digital platforms. They are native speakers of technology, fluent in the digital language of computers, video games, and the internet. On the other hand, ‘digital immigrants’ are those who were not born into the digital world (Prensky, 2005). It is important to assist all young people to take advantage of new emerging technologies to support their familial communication. According to Prensky,

Our young people generally have a much better idea of what the future is bringing than we do. They're already busy adopting new systems for communicating (instant messaging), sharing (blogs), buying and selling (eBay), exchanging (peer-to-peer technology), creating (Flash), meeting (3D worlds), collecting (downloads), coordinating (wikis), evaluating (reputation systems), searching (Google), analysing (SETI), reporting (camera phones), programming (modding), socializing (chat rooms), and even laming (Web surfing). (Prensky 2005. p. 10)

However, researchers are familiar with a type of parents called 'helicopter parents', which refers to parents who become over-engaged in the life of their children. Currently, individuals from Generation-Z (now aged 16-22) are anxious regarding the high involvement of helicopter parents in their personal lives. Thus, it is analysed that social media adoption by parents for online family communication might raise issues regarding parents' high-engagement to monitor children's activities. As a consequence, the challenge regarding privacy disruption for children might be raised (Victoria 2019). Howe and Strauss (2003) described this parenting style as "always hovering, ultra-protective, unwilling to let go, and enlisting ... 'the team' (parent, physician, lawyer, other counsellors) to assert a variety of special needs and interests" (p. 1). This suffocating protection delays Millennials' and Post-millennials' adolescence and postpones the progress of independence (Price (2010) causing them to rely on their parents for financial stability (White, 2015) and emotional support (Raphelson, 2014).

Social media platforms satisfy essential needs for Generation Z and Millennials, which encourages their participation on them. Therefore, Millennials and Generation Z fulfil their needs for socialisation and information access through social media (Park et al., 2009). Millennials and Generation Z use social media to satisfy different intrinsic and extrinsic needs. However, they use various digital platforms, and one social media platform does not replace another (Quan-Haase and Young, 2010). Instead, numerous social media platforms have become combined in the individual's use of online forms of communication (Baym et al., 2004).

In familial communication, numerous reports by Gallup and Pew based on research among the Millennial generation attest to the considerable closeness between Millennials and their parents (Booher, 2016). In the broader context, this research work has covered the younger individuals who are studying undergraduate courses at university. Furthermore, the research has revealed elaborations in the broad context regarding the use of social media among segments of the adult

population as well as the younger individuals who are in the Millennial groups. The research has explicitly highlighted broader aspects associated with the use of social media among the Millennial population for establishing communication with their respective families more easily. Further, Arnett and Schwab (2012) stated that in the US, more than half of Millennials phone, text, or email their parents nearly every day. Another 25% reported contact several times a week. Statistics from the Netherlands showed that almost three-quarters of Millennials had at least weekly phone contact with their parents, and nearly as many saw them that often in person (Bucx et al., 2008). In contrast, during the 1980s, statistics from various studies showed that communication between young adults and parents happened less frequently; just fifty percent of parents reported any type of contact with an adult child once a week or more often (Fingerman et al., 2012).

In addition, Hughes (2018) reported that 75% of Millennials and Generation Z who participated in the report entitled 'The digital lives of Millennials and Gen Z' preferred to text rather than talk on the phone, and this should be taken into consideration when studying familial communication. Text messaging has become a powerful tool for communication, particularly among young adults, from adolescence through to college age (Lenhart, 2010). It is a convenient, easy-to-use, low-cost communication method; consequently, people have become reliant upon text messaging to maintain daily relationships with friends, family, and other acquaintances as well as using it as a significant vehicle for establishing their own identity (Long, 2018).

The rate at which people use technologies such as the internet varies between adults and young people. Czaja et al. (2006), in their study, found that older adults were less likely than younger adults to use computers and the internet as well as technology in general. Furthermore, the results indicate that computer anxiety, fluid intelligence, and crystallised intelligence were important predictors of technology use. The relationship between age and the adoption of technology was mediated by cognitive abilities, computer self-efficacy, and computer anxiety.

Adult people in the past had good engagement with traditional media (e.g., TV, printed newspapers, and radio) because these media channels function within the one-way communication system. Meanwhile, young people flock towards social media and engage with it enthusiastically because their participation on these media platforms allows their voices to be heard. In fact, the International Telecommunication Union (ITU) reported that 70% of younger people around the world have access to the internet (ICT facts and figures 2017, 2017). According to a new study from the Pew

Research Centre, 90% of young people in the US reported using social media in 2015, with 65% of adults in the US using social media in the same period (Perrin, 2015).

Boyd (2007) stated that young people love social media for many reasons. First, they enjoy participation; they find their friends there, so they participate and share their interests and ideas. Second, they enjoy creating their profiles; they do this when their friends ask them to join social media, and they spend time exploring others' profiles to choose a profile that allows them to express themselves. Third, they enjoy engaging in identity performance; young people use social media to try to improve their social skills by learning how to manage impressions and how to read social cues and react accordingly. Social media platforms also offer diverse social environments in which young people can develop these social skills. Fourth, social media allows young people to write their identities and communities into being; indeed, social media profiles can be seen as a form of 'digital body' the young people must create for themselves. Through their profiles, they can express salient aspects of their identity for others to see and interpret. However, young people hypothetically have the ability to behave differently online for the purpose of conveying a 'coolness' that they may not have offline with their friends. This issue may lead to conflict between the 'cool' image they exude among their friends and the good behaviours that their parents witness. Finally, social media platforms offer opportunities for 'creating MY space'; young people can create their own private spaces outside of their homes using social media. They can select who can see their content, and they can prevent their parents from following them. This allows them to enjoy their privacy while connecting with like-minded online friends. However, the control over online audiences is strict in comparison with that over offline audiences, as search tools cause the collapse of virtual walls, as Boyd (2007) stated.

On the other hand, adults use social media less than young people because of the greater demands on their time and their lack of experience with new technologies. This highlights a striking challenge for the present research work, as the low usage of social media among the population of adults can affect the rate at which the parents as well as their children interact with each other. Moreover, this challenge can also prove to be interesting for the present research because it may help in gaining useful information for identifying the problems related to the employment of the social media-based trend in the management of the communication-based tasks between adults and the young population. According to Czaja et al. (2006), although older adults in – for example – the US are increasingly using technology, data indicate that they typically experience greater difficulty than younger people in learning to use and operate current technologies, such as

computers, the internet, DVD and Blu-ray players, automatic teller machines, and telephone menu systems. However, adults are required to improve their technological skills, particularly with respect to social media, if they wish to emulate their children in online communication.

2.7 RESEARCH GAP

Most research conducted to date has studied the effects of social media in Saudi Arabia in areas other than social relations. For example, Al-Khalifa and Garcia (2013) studied the use of social media in higher education institutions in Saudi Arabia, while Teitelbaum (2011) investigated the political aspects of social media in Saudi Arabia. Research into the effects of social media on Saudi society itself remains practically non-existent. Exceptionally, Al-Saggaf (2004) conducted a study that found that the members of the young Saudi online community were neglecting their family commitments and were becoming less shy and more confused about their religion and culture. However, this study was conducted in Saudi Arabia in 2001–2002, that is, before the major wave of social media platforms such as Facebook and Twitter began in 2009. In another study, Al-Saggaf and Williamson (2004) stated that “the purpose of the study was to explore individuals’ participation in online communities in Saudi Arabia and also understand how online communities in Saudi Arabia are affecting participants’ offline culture”. They used semi-structured online interviews to report the perceptions of 15 participants (eight females, seven males) regarding their experience of the online community in Saudi Arabia. This study, which was conducted during 2001–2002, focused on a narrow aspect of society with an extremely small number of participants. Moreover, it focused only on anonymous web forum users.

Alolyan (2015) found in her study that the results indicated that there was evidence that the internet was seen to have led to significant changes in social relationships due to the displacement of time. However, from the interviews, it was evident that for many women in Saudi Arabia, the internet has provided a means of avoiding traditional restrictions on social interaction. While most of them reported no change in social attitudes, those with relatively heavy use reported an effect on both the acceptance of existing cultural norms and on social relationships.

Previous studies have focused on one sex or one group of participants, which left a gap to study parents and children from both genders. Therefore, this study is considered one of the first studies to examine the attitudes and perceptions of the parents and the children of both sexes toward using social media in familial communication.

2.7.1 Social media and familial communication in Saudi Arabia

A clear surge has been noted in the use of social media platforms in the Kingdom of Saudi Arabia. This surge has been attributed to the rapid development of the telecommunications industry both in the kingdom and globally. The use of social media platforms has since changed communication dynamics in the country due to the modernity of invention and traditional adherence to communication systems in the country (Samin, 2012). While still adhering to traditional values of communication within Saudi Arabia, family members have all been affected to various degrees and on different levels by the advent of new communication modes. The aim of this study is to understand these changes by focusing on undergraduates who study and reside in Saudi Arabia and have family connections in the same country. The kingdom is governed by the use of sharia law, which is influenced by Islamic rules that embrace traditional customs and lifestyles (Jahner, 2012). The kingdom adheres strictly to Muslim values, the traditions that these values impose, and the rich yet somehow gender-based culture that calls for adherence to the kingdom's moral and legal laws. Saudi Arabian culture promotes the family as a core and essential unit in the management of the society; its members' family structure has a traditional communication strategy that is valued and appreciated. However, the expansion of the education system has witnessed a rise in people attending universities and the use of social media as a primary tool for communication among family members.

The importance of respecting and adhering to hierarchical tendencies in Saudi Arabia is the key principle in communication that the family observes (Alsaedy (2015). The hierarchy model advises that young unmarried people should not have a voice in decision-making and should refer to the older family members to make a decision or to communicate an event of act of importance. Dadfar et al. (2003) stated that young people expressing opinions contrary to those of older family members is considered disrespectful. Communication between family members is universally ruled by intra- and inter-personality relationships (Koerner and Fitzpatrick, 2002). However, AlJabre (2013) noted that, before the era of social media platforms, adherence to hierarchy levels in Saudi Arabia made it impossible for young people to process and express their ideas while respecting the communication interplay within the family.

The education system in Saudi Arabia has embraced technology as a fundamental need in recognition of progress and innovation (Al-Faleh, 2012). To this end, the majority of undergraduates have access to various forms of technology within the education system, which has

applied diverse communication methodologies to communication. While the family is still an important aspect of the individual's life in Saudi Arabia (Reyaee and Ahmed, 2015), the advent of social media has altered communication participation within families, and undergraduates are willing participants in the change that is advocating for greater independence in decision-making and is challenging the traditional aspects of familial structure in Saudi Arabia.

However, this study is limited in the exploration of the viewpoints of the general Saudi Arabia-based population as well as younger adults regarding the usage of the communication and social media sources for establishing family-based communication. This research was seen to be focussed on the smaller segments of the sample of the young populace that falls under the category of undergraduate students. This research does not cover other samples of young participants apart from the undergraduates and thus there is the possibility of the research revealing repetitive opinions, as the students have a similar kind of lifestyle and follow the same pattern of using social media channels to communicate with the family members. Therefore, to fill this gap, a wide-scale stratum of a participant populace needed to be considered for the given research because this would help yield more diversified perceptions regarding the manner in which students establish contact with members of their family, while new information about the traditional aspects related to the family hierarchy of Saudi Arabia is obtained.

2.8 CHAPTER SUMMARY

To summarise, based on the findings of this chapter, the internet and social media have hugely affected the youth in the current time and consequently, the family system has been affected to a significant extent. Although the high level of technology acceptance strengthened young people's social skills and their standing in the public sphere, yet the disconnection with family members raised an important issue, which was a source of anxiety for parents. Parents' adoption of social media to re-establish family communication has been noted as effective. However, while observing the idea of helicopter parenting, it is noted that young individuals encounter disruption to their private life because of the huge involvement of parents on online platforms to track their activities. In this way, a barrier has been noted regarding social media's usage as the tool or latest technique employed by parents for family communication. Yet, to foster family bonds and inter-personal relationships, social media-based communication is noted as an effective alternative solution, but it is still challenging conventional methods of family communication and the structuring of families within the Saudi region.

In addition to this, to identify the main research gap based on the arguments raised in this research, it is recognised that previous researchers were limited in investigating the usage rate of the social media as well as the family perceptions around the social media channels in the Saudi Arabian context, as they focused on a particular form of social networking application. Therefore, to fill this gap, the present research emphasises the investigation of the perceptions of Saudi families as well as of undergraduate students towards using social media communication sources. Accordingly, the current study provides new information about the perceptions of other family members towards the use of social media platforms for communicating with each other.

Moreover, the research is also dedicated to mitigating the issue of revealing extensive data about the undergraduates as well as the related associates of the family regarding the use of social media for communicating with each other. The current research has considered large-scale strata for identifying the manner by which the students communicate with the members of their family under a traditional type of familial structure.

Chapter 3: METHODOLOGY

3.1 INTRODUCTION

As the aim of this study is to examine the implications of social media use for family communication in a context of traditional family structures, the focus of this chapter is to outline the procedures that were used to design a reliable research instrument for this study and the statistical procedures used to analyse the collected data. Informative descriptions of these procedures include the research questions, the research hypotheses, the research design, the study setting, the data collection procedures, a description of the variables, the study population (participants), the reliability and validity of the questionnaire and the interviews, and the data analysis.

3.2 RESEARCH QUESTIONS

To examine the implications of social media use for families in a traditional society such as that of Saudi Arabia, the following research questions were used:

First, the main research question of this study is as follows:

- What are the implications of social media use for family communication in the context of traditional family structures?

Second, the sub-research questions are as follows:

1. Do the attitudes of Saudi family members (parents and children) towards social media have an effect on their participation in family communication?
2. What are the barriers faced by Saudi families when utilising social media in their familial communication?
3. Do social media platforms provide new opportunities to enhance family communication in Saudi society?
4. Does social media use lead to changes in the traditional forms of communication used in Saudi society?
5. Does social media use lead to changes in traditional family roles?

3.3 RESEARCH DESIGN

For this study, a mixed-methods research approach was used to examine young Saudi people’s attitudes and intentions towards the use of social media to support their familial communication and explore Saudi parents’ attitudes towards their use of social media in familial communication. A mixed-methods approach brings together both qualitative and quantitative research methods. Creswell and Clark defined mixed-methods research as “a research design (or methodology) in which the researcher collects, analyses, and mixes (integrates or connects) both quantitative and qualitative data in a single study or a multiphase program of inquiry” (Creswell and Clark, 2007). While considering the application of a mixed-methods design for the current study, it was noticed that this design provided extensive and elaborated knowledge with the assistance of qualitative and quantitative evidence to offer rigorous insight into the research problem about the prospects of parents in Saudi families on the usage of social-media for maintaining family communication in the traditional society (Creswell and Clark 2007).

Onwuegbuzie and Leech (2005), amongst others, have advocated for the use of mixed methods within a single study because both methods have inherent strengths and weaknesses, so researchers should use the strengths of both methods to better understand social phenomena. Creswell (2009) explained that greater comprehension may be obtained by combining both qualitative and quantitative research than either form by itself. Moreover, he proposed that four basic features affect the design of mixed-methods research: timing, weighting, mixing, and theorising (see Table 3.1).

Table 3-1 Aspects of planning a mixed-methods design

Timing	Weighting	Mixing	Theorising
No Sequence Concurrent	Equal	Integrating	Explicit
Sequential- Qualitative first	Qualitative	Connecting	Explicit
Sequential- Quantitative first	Quantitative	Embedding	Implicit

Source: Adapted from Creswell (2009)

Creswell believed that researchers should consider the timing aspect of their mixed-methods data collection with respect to whether it is achieved in phases or stages (chronologically) or collected all at once (concomitantly). Concomitant data collection suggests that a researcher collects both quantitative and qualitative data and information simultaneously by applying a research tool that

asks for both quantitative and qualitative data. Accordingly, the weight or importance in this kind of research is given to both quantitative and qualitative research equally. Alternatively, when collecting the data chronologically, I blended both quantitative and qualitative questions by combining both datasets, transforming the qualitative themes into amounts and comparing the amounts with descriptive quantitative data.

This study applies two types of research methods, namely, quantitative and qualitative, but it does so concomitantly so that the results of the questionnaire were collected at the same time as the interviews with the participants in the study sample. When analysing the results, I examine the differences between the results of each method of research.

3.4 THE RESEARCH STRATEGY

The research strategy facilitates answering the research questions in a way that outlines the research structure to meet the purposes and aims of the research study (Smith and Albaum 1970). Data collection strategies contain case studies, experiments, surveys, forecasting role play, ethnography, and archive research (Pring 2014). For this study, online surveys as a quantitative method and interviews as a qualitative method were considered the most suitable strategies for data collection. The main purpose of using the quantitative method was to understand the participants' attitudes and intentions towards the use of social media to support their familial communication from a scientific angle through statistical and scientific tools. Meanwhile, the main purpose of using the qualitative method is to provide exploration of and insight into the research problem through exploring the underlying factors, attitudes, and viewpoints of the participants (Castellan 2010).

Moreover, the survey tool provides a methodical way of collecting the data extracted from the answers provided by the participants to the questions involving awareness, attitudes, and challenges related to the researched subject matter (Kolb 2008). In contrast, the qualitative method allows the collection of in-depth data, which provides better understanding of the participants' attitudes towards the use of social media to support their familial communication. This is because the qualitative data incorporates the researcher's observations on the body language of the interviewees and the factors influencing their responses, which cannot be observed through use of the questionnaire (Ormston, Spencer, Barnard, & Snape 2013).

In this study, I collected the questionnaire data through online questionnaires sent to children students and their parents through the university system and through social media networks to both parents and children of both sexes. At the same time, I interviewed 30 parents and children by communicating with some of the children and their parents. Some parents I searched for in public places, and after making sure that they had children at the university, I conducted the interviews with them.

3.4.1 Online survey as a quantitative method

The first method of collecting primary data from a large sample of the Saudi youth was an online survey. Denscombe (2014) defined a survey as follows:

When something is surveyed, it is ‘viewed comprehensively and in detail’, and the purpose of doing a survey is generally to ‘obtain data for mapping’... The principles have been used to good effect on mapping out the social world as well as the physical world and, indeed, surveys have emerged in recent times as one of the most popular and commonplace approaches to social research. (pp. 11-12)

According to Denscombe, surveys have three important features: (1) wide and comprehensive analysis (a panoramic view), (2) a grounding in a specific point in time, and (3) a focus on empirical research that “involves the idea of getting out of the chair, going out of the office and purposefully seeking the necessary information ‘out there’” (Denscombe, 2014).

Since communicative activity occurs increasingly on the internet, significant growth has also occurred in academic research on online populations, virtual relationships, and various other features of online communication (Wright, 2005). In this study, the target sample for the survey was young people who are digital natives; therefore, I decided to conduct an online survey as a means of reaching them more quickly and conveniently.

3.4.1.1 Advantages of online survey questionnaire

The questionnaire is practical, and large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost-effective manner. In addition, one of the advantages of the questionnaire is that it can be carried out by the researcher or any number of people with limited impact on its validity and reliability. Moreover, questionnaire results can usually be estimated quickly and easily by the researcher or by using a software package. It

can also be analysed more scientifically and objectively than other forms of research. The findings attained by the incorporation of the survey questionnaire are usually presented in tabular representations. These numerical findings can be expressed in the singular and an easily comprehensible format with the help of graphs and pictorial representations. The numerical results derived from the survey are also easily assessed with the aid of the statistical tests. Moreover, the survey results can hold a large number of experimental or observational research data in a quantified form that can later be appraised with the help of statistical software like SPSS or spreadsheet assistance tools like MS-Excel (Curtis and Drennan 2013). Moreover, when quantifying data, questionnaire results can be used in comparison with other data and can be used to measure change. Positivists believe that quantitative data can be used to create new theories and/or test existing hypotheses (Patten, 2016).

Wright (2005) identified many advantages to online survey questionnaire research, including that it provides access to groups and individuals who would be difficult to reach through other channels. In various situations, communities and groups exist only online. For instance, it would be challenging to find a large, concentrated group of individuals participating in face-to-face discussions on subjects such as sexual harassment, domestic violence, and the pros and cons of virtual dating.

The second advantage of the online survey questionnaire is that it is time-efficient for the researcher. Wright argued that online survey questionnaires allow the researcher access to thousands of individuals with similar behaviours in a short amount of time, despite their possibly being separated by immense geographic distances (Wright, 2005). In studies such as the present study, it would have been difficult for me to meet or approach students in their classes or on campus as a stranger to ask them personal questions about their familial relationships and communication practices. However, as the university sent the students an email through the official online system encouraging them to participate in this study as the targeted sample, the number of participants increased. Moreover, in this way, I was able to invite female students to participate without needing to approach them in person.

Llieva et al. (2002) argued that online survey questionnaires can additionally save time by allowing researchers to collect data while they work on other tasks. In my case, I was able prepare for interviews and formulate the main themes for them while the students responded to the questionnaires. More researchers have identified other advantages of online survey questionnaires,

such as Evans and Mathur (2005), who highlighted that online questionnaires are quite flexible. They can be sent through emails, posted on Twitter, or sent by WhatsApp message. Moreover, they observed that online survey questionnaires have come a long way from the simple, text-based, email surveys of the 1980s to the technologies available today. Accordingly, the researcher can conduct richer questionnaires with videos, interactive images, answer-ranking tools, and recorded audio clips to obtain more in-depth responses from the participants.

The present research targeted young people who would be aware of the usage techniques of digital technology and would be active on social media networking sources. A large population of young individuals are familiar with the use of social media channels. However, there are still some young individuals who do not have access to any of the digital technologies and social media. Thus, it seemed best to reach out to the majority population of younger users who had access to online social media channels. In place of the online sources of interaction, the offline sources were not used, as it could have been time-consuming to gather the viewpoints from the desired participant sample. However, Evans and Mathur (2005) also argued that online survey questionnaires offer convenience in several ways: participants can respond at times convenient to themselves, they may take as much time as they need to answer individual questions, and some online survey questionnaires allow participants to begin the questionnaire and then to return later to where they left off earlier.

3.4.1.2 Disadvantages of online survey questionnaire

Some disadvantages of the questionnaire include that it is insufficient to understand some forms of information, such as changes in emotions, behaviour, feelings, etc. Phenomenologists state that quantitative research is merely an artificial innovation created by a researcher because it requests only a limited amount of information without explanation. A further disadvantage of the questionnaire is that it lacks validity. Furthermore, it is impossible to determine the validity of the respondent sample to the questionnaire or to ascertain the respondents' extent of thinking. It is possible that the participant may be forgetful or may not consider the full context of the situation. Additionally, another disadvantage is that people may read the questions differently and thus respond based on their own interpretation of the question – that is, what is 'good' for one person may be 'bad' for another, and therefore an unrecognised level of subjectivity is present. The imposition of the researcher should also be considered: when developing the questionnaire, the

researcher makes their decisions and assumptions regarding what is important and what is not important and therefore may lose important data (Patten, 2016).

Online questionnaires have several shortcomings. For example, the researcher cannot control the participants' sample, and the online questionnaire may reach an inappropriate participant who is not from the targeted sample. In fact, it is difficult to prevent the participants from sharing the questionnaire with those of their contacts who do not meet the criteria for being included in the target sample. In paper questionnaires, the participants respond to the survey questions in face-to-face observation, and the researcher can ensure that nobody who is not from the target sample participates. However, this is hard or even impossible in online surveys. In the case of the present study, I could have asked each participant to indicate their University ID number, but this may have resulted in numerous students deciding not to participate to protect their privacy rights. However, it is rare for individuals to respond to questionnaires when they have been asked not to do so.

Evans and Mathur (2005) argued that another disadvantage of online questionnaires is "respondents' lack of online experience". While the online population is becoming more representative, difficulties may still arise due to participants' possible lack of familiarity with online questionnaire procedures. In this study, the targeted populations, who were Millennials and Generation Z, had sufficient experience in online and virtual technologies. In fact, those who were not online users were not part of this study's target sample.

Evans and Mathur (2005) highlighted another disadvantage of online survey involving security and privacy concerns. Survey participants' privacy concerns remain important, and the participants have the right to consider how their responses will be used and interpreted and how their digital identity will be protected or concealed. In this study, the survey was disseminated through King Khalid University's official email system, and I included a privacy consent clause at the beginning of the questionnaire explaining the importance of the participants' privacy, how I would use their information and responses, and how I would protect their online identity.

Another disadvantage of online survey mentioned by Evans and Mathur (2005) is their impersonal nature; no human contact takes place in online surveys. This can diminish the ability to conduct in-depth investigations as an experienced interviewer could do (Scholl et al., 2002). In my study, I applied an additional qualitative method to address this weakness. I interviewed 15 young people and 15 parents to explore their attitudes towards the use of social media in familial communication.

3.4.2 In-depth interview method

The second method used in this study is the in-depth interview method. Boyce and Neale (2006) stated that “in-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation” (p. 3). Berger (2015) identified four interview types: the informal interview, the unstructured interview, the structured interview, and the semi-structured interview. The latter, which was adopted in this study and in which the interviewer has a written list of questions and tries to maintain the casual quality found in unstructured interviews, should yield more information and internal insights that might not be covered by the questions originally posed by the researcher.

Face-to-face interviews were selected for many reasons. For instance, during interviews, the researcher can conduct truthful screening of the interviewees, check potential falsifications provided in the survey relevant to their demographics or professional capacities, and capture non-verbal signs and reactions to particular questions. Moreover, the researcher can always get the interviewees’ attention and keep them focused, and finally, capture their emotions (DeLyser 2010). The interviews were designed so that it would take from 30 minutes to 45 minutes to answer twelve questions. These questions helped to uncover hidden aspects of family communication that were not revealed by the questionnaires, such as the presence of some complaints about social media addiction, occasional poor face-to-face familial communication, or the emergence of the phenomenon of ‘bedroom culture’ in familial communication as well as other issues. They also helped to explore some new aspects of family communication through social networks, such as the role of ‘emojis’ in expressing emotions, how social networks helped solve some family problems, and how they opened new windows onto free expression for children and their participation in family decisions.

3.4.2.1 Advantages of in-depth interviews

Boyce and Neale (2006) said that “the primary advantage of in-depth interviews is that they provide much more detailed information than what is available through other data collection methods, such as surveys” (p. 3). In fact, the interviewer has more time to find answers to the research questions and explain the aims of the study through the interviews than in surveys or questionnaires.

Moreover, face-to-face communication in interviews offers researchers the opportunity to guide participants towards the main research issues that are pertinent to the research (Cohen et al., 2002). Thus, I believe that the human contact facilitated by face-to-face interviews can help to improve personal relationships of respect and confidence between the interviewer and the interviewees. This was expected to help me as a researcher to collect rich data and accurate opinions regarding the topics under investigation. In the present study, it was necessary to explore the parents' deep thoughts, perceptions, and attitudes towards their use of social media in familial communication.

Another advantage of in-depth interviews noted by Berger (2015) is that in-depth interviews allow academics to collect large amounts of data over longer periods, ranging from one to two hours or more. In in-depth interviews, the researcher enjoys a significant amount of liberty and flexibility to ask different questions, depending on the interviewees' different answers. Success in the interview depends on finding a harmonious relationship between the researcher and the researched (p. 119).

According to Tayie (2001), studies that adopt an in-depth approach should focus on a small number of interviewees and allow substantial time for these interviews with the emphasis on the quality rather than the quantity of information. This tactic was appropriate for this study (p. 65), and a small number of parents with considerable experience of using social media for familial communication with their children in Saudi Arabia were interviewed. Fewer interviews than questionnaires were required, and the interviews probed in greater depth than the questionnaires.

3.4.2.2 Disadvantages of in-depth interviews

The first disadvantage of in-depth interviews is that they are time-consuming. Denscombe (2014) argued that analysis of data from interviews can be difficult and time-consuming. Data preparation and analysis are 'end-loaded' compared to, for example, surveys, which are pre-coded with data that are ready for analysis once they have been collected. The transcribing and coding of interview data is a major task that the researcher must complete after the data have been collected (p. 193). In the present study, 30 interviews were conducted, and this number was manageable with respect to transcription and analysis. Moreover, I had sufficient time to analyse the data after the data collection period.

The second disadvantage of interviews is their weakness with regard to reliability. Denscombe (2014) argued that the influence of the interviewer and the context render consistency and objectivity difficult to achieve. The data collected from interviews are, to an extent, unique owing to the particular context and the particular individuals participating in the interviews. This has a contrary effect on reliability (p. 193). However, in this study, I conducted interviews with parents from different cultural and social backgrounds to ensure greater reliability.

Another weakness of interviews is the difficulty of testing hypotheses and theories (Johnson and Onwuegbuzie, 2004). In quantitative methods, testing or examining a theory or hypothesis is straightforward since the researcher can employ the methodological instrument that leads to specific outcomes; this is in contrast to qualitative methods such as interviews. However, in the section of this study that examines the parents, my aim is not to test any theory but rather to explore the parents' perceptions and attitudes towards their use of social media in familial communication.

3.5 STUDY SETTING

According to the statistics provided by the Ministry of Education in Saudi Arabia in 2018, there were 69,588 faculty members and 1,565,061 undergraduate students studying in the government universities. Among these universities is King Khalid University at Abha with 3,583 faculty members and 71,088 undergraduate students (29,030 male students and 42,058 female students) (Higher Education Statistics in Saudi Arabia, 2018).

The population selected for the surveys and interviews was divided into two groups. The first group included parents of both genders, and the second group included female and male young people aged between 18 and 25 years old. The sample of young people was selected from university students because this ensured diversity in this sample; the young people had diverse cultural and economic backgrounds, as they represented a cross-section of young people in Saudi Arabia. Furthermore, according to official statistics from the Saudi Ministry of Education (2019), 87% of Saudi youth study at universities, which means that the majority of young people attend public universities given that studying at Saudi universities is free, while universities also pay students monthly allowances, and admission is open to all sectors of society. This indicates that university students come from both rich and poor families.

For the qualitative survey, two sets of interviews were conducted. The first set of interviews were conducted with parents to ascertain their attitudes regarding the use of social media in familial communication, while the second set of interviews were conducted with young people to gain further insight into their attitudes to and intentions in using social media in familial communication. In total, 15 parents and 15 young people were chosen for the interviews, as for qualitative research that involves personal interviews, it is preferable for the sample size to be comparatively smaller than the quantitative one so as to obtain the required in-depth data for explaining a specific phenomenon (here, attitudes towards the use of social media in familial communication) (Baker & Edwards 2012).

For the survey of the young people, I chose undergraduate students in King Khalid University in Abha because King Khalid University was selected as one of the Saudi Arabian universities that included the target sample of Saudi young people aged 18–23 years. I selected my study sample from a single Saudi university for various reasons. The first reason was due to time constraints because the procedures were time-consuming, including seeking permission to conduct interviews or distribute surveys in public universities. The second reason was that reaching the target age group was easier in a university setting because the students are available on campus most of the time. In malls, for example, the age groups vary, and it may have been difficult to find a sufficient number of participants in the limited time that I had for the data collection. The procedures required to authorise the collection of research data from other institutions were lengthy; therefore, I focused on King Khalid University, as my work in the same university helped me to facilitate and expedite these procedures.

In 1998, HRH Crown Prince Abdullah Bin Abdulaziz ordered the merging of Imam Mohammad Ibn Saud Islamic University and King Saud University in the Southern Region into a single entity under the new identity of ‘King Khalid University’. Later that same year, a Royal Decree was issued to complete all the regulatory procedures necessary to effect the merger. The university’s first budget was issued in 1999 within the general state budget (About KKU, 2018). The university is in the Aseer region in the south western part of Saudi Arabia. The Aseer region is an area of around 80,000 square kilometres, and it is populated by more than 1,600,000 people distributed across 78 governorates and centres (About KKU, 2018).

In accordance with Saudi Arabia’s Islamic regulations, King Khalid University includes two separate campuses: one for males and the other for females. Each of these campuses is provided

with all necessary cultural, recreational, and athletic facilities. They also have libraries equipped with up-to-date technology to serve students and teaching staff.

Based on the university's vision, it offers a wide range of fields of study that cover all types of learning needs, providing Saudi society with expertise and experience that has rich potential for the provision of both theoretical knowledge as well as hands-on practical experience in the sciences, medicine, and the humanities. King Khalid University incorporates 29 different colleges in various fields in eight major cities of the Aseer region.

Table 3-2 King Khalid University colleges

Shariah and Fundamentals of Religion College in Abha	Computer Science College in Abha
Education College in Abha	Engineering College in Abha
Humanities College in Abha	College of Business in Abha
Sciences College in Abha	Languages and Translation College in Abha
Medicine College in Abha	Dentistry College in Abha
Pharmacy College in Abha	Applied Medical Sciences College in Abha
Community College in Al Mahalah	Nursing College in Khamis Mushait
Applied Medical Sciences College in Khamis Mushait	Sciences and Arts College in Dhahran Al Janoub
Sciences and Arts College in Muhail Asir	Community College in Muhail Asir
Sciences and Arts College in Tanumah	Community College in Abha
Home Economics College in Abha	Nursing College in Abha
Sciences and Arts College in Khamis Mushait	Applied Medical Sciences College in Muhail Asir
Sciences and Arts College in Rijal Alma	Community College in Rijal Alma
Sciences and Arts College in Al Majardah	Sciences and Arts College in Sarat Abidah
Sciences and Arts College in Ahad Rufida	

Source (www.kku.edu.sa/en/)

Having secured permission to conduct the present study at King Khalid University, I sent an email including both the study consent form and the link to the electronic survey to the Department of Graduate School at King Khalid University, which forwarded my email to the Department of Information Technology, which has all students' email addresses. The Department of Information Technology then distributed the email along with the consent letter and the link to the Arabic version of the electronic survey to all the students who used the university email account service. According to the Department of Information Technology at King Khalid University, more than 70,000 students had an active university email account.

3.6 STUDY SAMPLE

3.6.1 Sampling for the survey questionnaire

Participants in this study consisted of two groups: the first was young Saudi people who were students at King Khalid University, Abha, Saudi Arabia, and the second was their parents. The participants in this study included 530 young male and female young people and 118 male and female Saudi parents who participated in the face-to-face interviews and online questionnaires. The questionnaire participants included 103 parents (47 females and 57 males) and 515 young people (283 females and 232 males) who were university students aged 18–23 years old. The interview participants included 15 parents whose children were studying at King Khalid University and 15 young people who were studying at the university.

The participants of this research represented different backgrounds, social classes, and economic levels and both private and government sectors. Many of them lived in urban areas, such as Abha and Khamis Mushait; some in mountainous areas, such as Alsoudah; some in coastal areas, such as Alhuraidah and others in agricultural and rural areas like Tendaha. These participants were either single, married, divorced, or widowed. I attempted to involve young people and parents from different social backgrounds, as the Asir region is a tribal region that is composed of similar social groups.

3.6.2 Sampling for interview method

In addition to the survey, I interviewed several youths whose mothers were non-Saudi. This was useful, as their use of social networks in family communication and the social media platforms they used to communicate differed. For the parents, I visited malls in different cities of the Asir region; this ensured that they were selected at random and often from the middle class, because the malls were a preferred destination for this social class.

It is worth mentioning that I faced some obstacles and difficulties regarding obtaining the female participants' consent to take part in the interviews. For example, one of the obstacles that made it difficult to conduct interviews was reaching female interviewees in the first place due to cultural and religious restrictions. Saudi Arabia is a conservative country with a collectivist society, which means that individuals are not free from social pressure, and they all have to comply with the society's traditions and rules. Religion has a huge influence in determining what behaviour is accepted and what is not in the community (Markham (2014)). For example, males and females do not mix unless they are family members or married couples. Furthermore, Saudi Arabia is a Muslim country where all legislations and laws are based on the Islamic values and principles. Therefore,

it would not have been appropriate to approach strange women in public places like malls to ask them to participate in interviews, even for research purposes.

Therefore, I had to ask my wife for help. She approached some women and obtained their consent to take part in the interviews. The interviews were then conducted in a coffee shop. However, some interviewees felt nervous about answering some questions. In fact, some of the interviews were conducted in the presence of the women's fathers, and that made them feel embarrassed and hesitant about expressing their real opinions. Therefore, I disregarded some of the results of these interviews and decided to conduct other interviews over the phone to ensure that the women would be more comfortable and confident while providing their answers.

Similarly, it was particularly difficult or even impossible to find a large number of Saudi female students with whom to conduct face-to-face interviews or discussions regarding their use of social media in familial communication. Female and male students have separate campuses in the university, and it was not appropriate to go to the female campus to ask them to participate in the research. This obstacle was solved through contacting my female colleagues to ask any female students who were able to do the interview, and that method enabled me to have the adequate number of interviews with female young students.

Another obstacle that I noticed in the interviews was that some participants attempted to answer selectively to convey the impression that their families were perfect. However, from time to time, I made it clear that credibility was important in ensuring useful results that would help to resolve problems of family communication through social networks, that the participants' names would be concealed, and that, therefore, it was preferable for participants to answer accurately and clearly. One more difficulty that I faced when I interviewed several young people whose mothers were non-Saudi was that it was difficult for me to meet random mothers because of the cultural and religious obstacles described earlier. However, I asked some students to help me to convince their mothers to do the interviews, and so I had a sufficient number of participants for the interviews, too.

3.7 DATA COLLECTION PROCEDURES

3.7.1 Ethical approval

Having obtained my supervisor's approval regarding the survey and interview questions, I sent a request to the School of Journalism, Media, and Culture (JOMEC) Ethics Committee at Cardiff University to obtain their approval to commence the study and collect the research data. After reviewing the study applications, the JOMEC Ethics Committee granted its approval for the data collection. I then sent the documents to the Saudi Arabian Cultural Bureau (SACB) in London to obtain permission to commence the data collection trip to King Khalid University in Abha city, Saudi Arabia. The SACB contacted King Khalid University to inform them about my data collection trip and to secure permission from the university. Having obtained all the necessary permissions, I travelled to Saudi Arabia to collect the data.

Permission was obtained from both the SACB in London and King Khalid University in Abha, Saudi Arabia, to conduct the study and collect the data. A copy of the research survey, a letter of support from my academic supervisor at JOMEC, and other related documents were sent to the SACB to commence the field trip process. After securing permission from the SACB to conduct the field trip for the purpose of collecting data in December 2018, I sent copies of my academic supervisor's letter of support and the SACB's permission to conduct the field trip to the Graduate Studies Department at King Khalid University to secure permission to conduct the study at the university campuses and conduct the interviews with the students.

3.7.2 Back-translation technique

The back-translation technique is the process of translating a document or survey items that have already been translated into a foreign language (e.g., Arabic) back into the original language (e.g., English). It is recommended that this be performed by an independent bilingual translator. According to Bracken and Barona (1991) and Brislin (1970), back-translation is the most systematic and highly recommended translation technique, particularly in the cross-cultural use of measurements. The back-translation technique involves translating from the target language (e.g., Arabic) back to the source language (e.g., English) so the similarity between the source and target versions can be assessed. Furthermore, back-translation is convenient, whether the study objectives are comparative or operational, once the objectives had been determined.

Jones et al. (2001) argued that back-translation processes should be applied to the test tools as well as the items themselves. Consequently, the back-translator should be proficient in both the source and target languages. This means that he or she should be fluent in and familiar with the area under

investigation in the source materials (Bracken and Barona, 1991). Chen and Boore (2010) further argued that it is essential that the translators are fluent in both the original and the target languages and are experts in both cultures.

For this present study, I first gave the questionnaire and interviews questions to an experienced bilingual Arabic-English translator to translate them from English to Arabic. Next, I gave the translated Arabic versions to another bilingual translator to re-translate the questionnaires and interviews questions from Arabic to English in order to compare the two versions and ensure congruence between them. These steps were needed because the language of the target sample for this research is Arabic.

3.7.3 Pilot study

Prior to distributing the questionnaires, I conducted two pilot studies for the two questionnaires and for the two interviews. The term ‘pilot study’ is used in two different ways in social science research. It can refer to the so-called feasibility studies, which are “small-scale versions, or trial runs, done in preparation for the major study” (Polit and Beck, 2006). However, a pilot study can also function as the pre-testing or “trying out a particular research instrument” (Baker, 1994). One advantage of conducting a pilot study is that it may give advance warning about the main research project’s potential pitfalls, where research protocols may not be followed, or whether the proposed methods or instruments are inappropriate or too complicated (Van Teijlingen and Hundley, 2001).

To test the validity and reliability of the questionnaires, I sent the surveys to some of my relatives who were parents and young people and to some students in King Khalid University whom I had taught several years ago. More than 30 young people and more than 30 parents participated in the pilot studies. I wanted the participants to be from the same target sample because this is important for the success of both the pilot study and the study proper, as confirmed by Van Teijlingen and Hundley (2001) in their investigation into the importance of pilot studies.

In addition, I spoke to some pilot-study participants about the clarity of the statements in the survey and asked them to give me some feedback about their understanding of the survey. Some suggested that I add some new statements about family communication using social media. These pilot studies helped me to identify some ambiguous statements, which I subsequently rephrased or omitted. To pilot the interviews, I conducted five interviews with two Saudi friends as parents and three young

Saudi people in Cardiff as pilot interviews. This showed that the questions were comprehensible and adequate, so I made no major changes to the interview questions. Moreover, piloting the interviews offered me an opportunity to rehearse and improve my interviewing skills, providing the participant with sufficient time to answer and encouraging the interviewees to give feedback.

In brief, I actually learned from these pilot studies with respect to many aspects of my research, as they gave me an opportunity to review the research questions in addition to the research methods used. Moreover, the pilot studies helped me to learn how to access the required sample and determine the appropriate ways to distribute the questionnaire to the required sample in addition to knowing how to approach the appropriate sample in the research interviews.

3.7.4 Collecting data

As mentioned above, the data for this study were collected in two ways: first, by distributing an online survey among undergraduate students in King Khalid University and their parents and second, by conducting face-to-face interviews with 15 of the students and 15 of the parents. The Information Technology Department in King Khalid University distributed the online survey to all students' emails. For the parents' online survey, I used a networking technique and asked my relatives, colleagues (as a lecturer in King Khalid University), and students to distribute the survey to all their contacts, which helped me to collect more than 100 parent participants.

After reading the consent letter that described the nature of the study and how the collected data would be used, participants were asked to click on the link to complete the survey. The participants in this study were notified that participation in the study was voluntary and that they had the right to withdraw from the survey at any time. Moreover, they were assured that their answers would remain anonymous and that the data collected would be used only for research purposes in an effort to make the participants more comfortable in responding to the survey items.

I made a list of students from diverse areas and backgrounds and social and economic levels to participate in the interviews. I also asked them to ask their parents to volunteer to take part in the interviews for this study. Interviews with the young people were conducted face to face at the King Khalid University campus, in their homes, or in different public coffee shops. Interviews with the parents were carried out either face to face in public coffee shops or over the phone. The interviews were conducted in Arabic and all were recorded in full.

While the questionnaire was being completed by the participants, I interviewed the different sample groups that were required for this study. Accordingly, the two research instruments were used simultaneously, and the aim was to obtain different results from both tools and not to affect the results before the data collection process had been completed. I encountered some difficulties in the first month after the distribution of questionnaires, as the participation level was low among young people and parents. I decided to publish the questionnaires through my WhatsApp groups and my colleagues at King Khalid University as well as in the students' WhatsApp groups and my relatives' groups. This method succeeded in reaching 103 parents and 515 young people as participants in the two questionnaires.

In the interviews, I faced some difficulties in reaching the required number of parents, unlike the young people. Many of the parents I met in public were afraid to be interviewed because they did not know me personally. I also did not conduct interviews with those I knew personally so as not to be biased in my research results. Many of the young people that I interviewed helped me to convince their parents to do the interviews.

3.8 DESCRIPTION OF THE STUDY VARIABLES

This study has different variables that can be defined as independent or dependent variables. These variables can be identified as follows:

3.8.1 Dependent variables (DVs)

The DVs of the study that were derived from the research questions are described as follows:

1. attitudes (ATT) of Saudi families towards the use of social media to support their familial communication (DV1)
2. Saudi families' behavioural intentions towards the use of social media to support their familial communication (DV2)
3. barriers facing Saudi families when they intend to use social media to support their familial communication (DV3)

3.8.2 Independent variables (IVs)

The independent variables of the study that were derived from the research questions are demographic variables and other variables, described as follows:

1. level of experience with social media (IV1)
2. perceived ease of use (PEO) of social media (IV2)
3. perceived usefulness (PU) of social media (IV3)
4. students' ages (IV4)
5. students' gender (IV5)
6. other independent variables
7. families' attitudes (ATT) towards the use of social media to support familial communication

3.9 QUESTIONNAIRE

3.9.1 Sections of the questionnaire

The questionnaire form was designed to encompass different aspects of the study. It included six sets of questions. All the questions in the questionnaire were closed ended. Likert-scale responses were used in most items to rate on a five-point Likert-type scale the extent to which participants agreed or disagreed with each statement in the survey or the different durations of social media use in various parts of the study.

The questionnaire was intended to examine several aspects, such as the goals of Saudi parents and young people in using social networks, news sites, entertainment sites, and learning sites. Another question concerned the types of social networks they use – WhatsApp, Twitter, Facebook, Snapchat, YouTube, Instagram, and Telegram – to identify the most popular social media platforms among Saudis. One question examined the Saudi family members' experiences in using social media.

Some questionnaire items were adapted from earlier studies but modified to fit the study model. Each questionnaire packet was expected to take approximately 15–20 minutes to complete. The survey consisted of 61 items divided into six separate parts.

1. demographic information
2. social media usage and purposes

3. examples of social media and networking sites
4. experience with social media
5. attitudes towards using social media to support learning
6. factors in using social media for learning purposes

The demographic information part was designed to collect demographic information about Saudi students at King Khalid University and their parents, such as gender, social status, and age.

3.9.1.1 Social media usage purposes and duration of use

This second part of the survey consisted of one question involving four items. The question, Q1, was created to collect information about the purposes for which Saudi families use social media. These purposes include social networking, news, learning, and entertainment. The items were answered on a five-point Likert-type scale, which indicated the participants' level of usage for each purpose per day: 1 = do not use it, 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, and 5 = more than 3 hours.

3.9.1.2 Examples of social media and networking sites

The third part of the survey explored examples of the social media and social networking sites that Saudi families use and the frequency with which they use them. It included one question, Q2, with seven items answered on a five-point Likert-type scale: 1 = not used, 2 = less than one hour, 3 = from one hour to two hours, 4 = from two hours to three hours, and 5 = more than three hours. Examples of social media and networking sites used in this question were chosen according to the most popular social media platforms among Saudi families, as reported in Saudi Arabia Social Media Statistics report in 2018 (Global media insights, 2018). These tools include social networking sites (e.g., Facebook), microblogging (e.g., Twitter), media sharing (e.g., YouTube), text chat (e.g., WhatsApp and Telegram), and video chat (e.g., Snapchat and Instagram).

3.9.1.3 Experience with social media

The fourth part of the survey asked the participants to rate their experience levels with examples of social media, such as Facebook, Twitter, YouTube, WhatsApp, Snapchat, Instagram, and Telegram. It consisted of one question, Q3, with seven items answered on a five-point Likert-type

scale: 1 = I have no experience, 2 = weak, 3 = medium, 4 = good, and 5= excellent. This question was created according to earlier studies encountered in the literature review. For example, Dadfar et al. (2003) stated that expressing opinions contrary to those of older family members at a young age is considered disrespectful. Communication between family members is universally ruled by intra- and inter-personality relationships (Koerner and Fitzpatrick, 2002).

3.9.1.4 Attitudes towards using social media to support learning

The fifth part of the survey was created to investigate Saudi families' attitudes towards using social media to support familial communication. It consisted of three questions, Q4, Q5 and Q6, and included 20 items. The first question, Q4, asked the participants about their actual daily use of social media platforms in familial communication. This question was developed to examine the correlation between the Saudi families' attitudes towards using social media in familial communication and the result of their behavioural intention regarding the actual use of social media in familial communication.

This question consisted of six items answered on a five-point Likert-type scale: 1 = not used 2 = less than one hour, 3 = from one hour to two hours, 4 = from two hours to three hours, and 5 = more than three hours. This question explored the main social media platforms which Saudi families use in familial communication and the amount of their time spending in each platform daily in their familial communication.

Q5 was designed to collect information regarding Saudi families' attitudes towards using social media platforms to support their familial communication. This question consisted of nine items answered on a five-point Likert-type scale: 1=SA (Strongly Agree), 2=A (Agree), 3=N (Neutral), 4=D (Disagree), and 5= SD (Strongly Disagree). Items in this question were adapted from Masrom and Hussein (2008) book on user acceptance of information technology and modified for this study. Some items were also adapted from Davis (1993) published article on user acceptance of information technology specifically regarding system characteristics, users' perceptions, and behavioural impact.

Q6 in Part IV also measured students' attitudes towards social media during the last three years: 1 = become significantly more positive, 2 = become slightly more positive, 3 = remained the same, 4 = become slightly more negative and 5 = become significantly more negative.

3.9.1.5 Factors in using social media for familial communication purposes

The sixth part of the survey was created to explore the factors that affect Saudi families' attitudes towards using social media platforms to support their familial communication. This part consisted of five questions, Q7, Q8, Q9, Q10 and Q11; each was answered on a five-point Likert-type scale: 1 = SA (Strongly Agree), 2 = A (Agree), 3 = N (Neutral), 4 = D (Disagree), 5 = SD (Strongly Disagree), except for Q10, which had six multiple choices, 1 = Text, 2 = Voice note, 3 = Send a video, 4 = Send a photo, 5 = Video call through social media app, and 6 = Audio call through social media app.

The first question, Q7, measured one of the TAM factors that reflects Saudi families' PEO regarding social media or how easy it is to use social media platforms for familial communication purposes. It consisted of four items. Items 1 and 2 were adapted from Davis (1989); 1 and 2 were also adapted from Rogers (1995) and were modified for the study. Items 3 and 4 were adapted from Masrom and Hussein (2008) and Shittu et al. (2011) and were also modified for the present study.

Question 8 in Part VI was created to measure another factor –the PU of social media in familial communication. Consisting of four items, it investigated how Saudi families view the familial values and advantages of social media in their familial communication. Items 1 and 2 were adapted from Davis (1989) and Masrom and Hussein (2008) and modified for the study. Items 3 and 4 were developed according to a review of the literature in relation to the advantages of social media in familial communication.

Questions 9 and 10 in Part VI were created to measure another factor – MRT in familial communication. This part consisted of two questions, Q9 and Q10, with nine items. The first item was developed from Daft and Lengel (1986) article and modified for this study. The second and third items were adopted from Dennis and Kinney (1998) article about the factors that affect media richness in familial communication and were modified for this specific study. The other items were designed to measure the preferred digital media used in familial communication, such as text, voice note, video, or video and voice calls through social media.

Question 11 in Part VI was created to measure Saudi parents' RB towards their children in familial communication via social media. This question consisted of three items in the parents' survey and

four in the young people's survey. These items were adopted from Bavelas and Segal (1982) article about the FST and modified for this study.

I attempted through the questionnaire to ascertain the views of parents and children regarding their goals in the use of social networks in general, which social platforms were most commonly used, and which were used in family communication specifically. The questionnaires also included questions aimed at clarifying the Saudi family members' attitudes towards the use of social networks in family communication and identifying whether or not their attitudes were positive. The questionnaires were additionally designed to determine the impact of some factors on family communication through social networks; these included factors such as the PU and PEO of the social media, media richness, and the rewarding behaviour that parents show to their children. However, the results of the questionnaire remained general and required examination in greater depth, and this was achieved through the other research tool: semi-structured interviews.

The semi-structured interviews included twelve open questions, which probed further to obtain in-depth answers to the participants' attitudes towards the use of social networks in family communication and to understand any changes in the traditional Saudi family. The interview questions with similar aspects were grouped into basic themes. Three levels of themes were created in this regard. The first level contains the main issues that emerged from the answers in the interviews, then they were divided to four basic themes: family dynamics, family communication, family roles, and family concerns. These four themes were combined into two organising themes: family relationships and family values. Finally, these two organising themes were merged under one global theme: perceived change in family.

3.10 DATA ANALYSIS

3.10.1 Questionnaire results analysis

Following the data collection, the research questions were examined and the hypotheses analysed using different statistical tests and methods based on the type of data. The SPSS program was used to analyse the data according to the proposed questions and hypotheses of this study. All analyses were conducted using $p < .05$ as the level of statistical significance. Based on the research questions and hypotheses, various types of data analysis tests were conducted using various methods. The analysis will be detailed in the sections that follow.

Questions 2, 5 and 6 were designed to investigate the following: Saudi families' attitudes towards the use of social media platforms to support their familial communication, the purposes of social media use, examples of social media that Saudi families use and interact with and their frequencies of use, and the barriers that Saudi families face in using social media for familial communication. Descriptive statistical tests (mean) were computed to analyse these questions. This type of analysis provides information about the mean, standard deviation, frequencies, variance, and percentage of respondents per category.

Questions 3 and 7–11: Multiple regression tests were conducted to examine how well the independent variables (RB, PEO of social media, PU of social media, and experience with social media) predicted the overall attitudes of Saudi families towards the use of social media to support their familial communication. Green and Salkind (2007) stated, "With multiple regression analysis, each individual or case has scores on multiple independent variables (e.g., X1, X2, X3 if there are three independent variables) and on a dependent variable (Y)" (p. 285).

Question 4: A Pearson correlation coefficient was computed to determine whether there is a relationship between Saudi families' attitudes towards and their behavioural intention to use social media to support familial communication. The Pearson product-moment correlation coefficient (r) assesses the degree to which quantitative variables are linearly related in a sample, according to Green and Salkind (2007, p.275).

Questions 5 and 6: An independent-sample t-test was conducted to examine the differences between Saudi male and female family members in their attitudes towards the use of social media to support familial communication and the barriers that they face when using social media for familial communication purposes. According to Green and Salkind (2007), the independent samples t-test evaluates the difference between the means of two independent groups (p. 175).

However, for the demographic information in this study – Part I, Questions 1 to 3 – descriptive statistical tests (mean) were computed to analyse these variables. This type of analysis provides information about the mean, standard deviation, frequencies, variance, and percentage of respondents per category.

3.10.2 Analysis of interviews

The interview data analysis stage is essential in finding the correct results from the collected data. Numerous software products are available, such as ATLAS, NVivo, and others, which can be used to assist with interview analysis; however, “good quality analysis still relies on good analytic work by a careful human researcher” (Gibbs, 2002). As Minichiello et al. (2008) stated, data analysis can be described as “a process of systematically arranging and presenting information in order to search for ideas” (p. 258).

In this study, I coded the interviews into different elements. I then divided them into basic themes, then into organising themes, and then into one major global theme. This stage of analysis closely follows the methodological and analytical approach proposed by (Attride-Stirling, 2001). The intention was to use her hierarchy to create a thematic network so that the details of the individual answers could be considered and collected in a theoretical structure. This is an iterative process, as the researcher moves from the segmented data to the possible structure and returns again. Categories are created equally and removed or moved to a different attribute with a richer understanding of the features. Table 5-14 in the interview analysis chapter provides a detailed list of the contents of the three thematic levels.

Table 3-3

Codes	Basic Themes	Organising Themes	Global Themes
Parents power, affect and duties Save time and energy Text, voice, video Sharing secrets Daily news Asynchronous communication Fast communication Family group Bilateral communication Family conversations using social networks More female roles	Family dynamics	Family relationships	Perceived change in family
More trust between parents and children Children teach parents about technology Change in family values Bedroom culture: private world Family privacy Emotions expression Parents respect Communication misunderstandings Social media addiction Rewarding behaviour	Family roles	Family values	Perceived change in family
More trust between parents and children Children teach parents about technology Change in family values Bedroom culture: private world Family privacy Emotions expression Parents respect Communication misunderstandings Social media addiction Rewarding behaviour	Family concerns	Family values	Perceived change in family

The first step was to encode individual pieces of data to allow the identification and comparison of similar issues. This structure was then organised into larger groups that assembled similar concepts (i.e., basic themes) and finally into a small number of the largest thematic issues (organising themes). In Table 3-3 above, the first column shows the encoding structure derived from individual comments. These were then grouped into basic themes, organising themes, and two main global themes.

Minichiello et al. (2008) explained that thematic analysis is used in conditions wherein the researcher can categorise themes that emerge from the analysis of the interview transcripts. When transcribing the interviews, the first stage in analysing data employing this method is coding. This entails carefully reading the interview transcripts to identify shared ideas and key points for the purpose of arranging them and then creating themes. These common themes are sorted in a way that focuses on the research questions. Note that coding can be explained as the process of sorting and categorising data within the systematic analysis of the interview transcripts to obtain significant categories.

Keeping the research questions in the researcher's mind throughout the data analysis period is particularly important. This can assist in categorizing and arranging data to find the appropriate categories of themes to address the research questions. Hays (2004) showed that a researcher will find much remarkable and exciting pieces of data that have no association with the research questions. Such data must be overlooked while the researcher focuses on the research questions. Hays underlined that the main aim of the case study approach is not to offer a complete picture of the situation but to answer the research questions. Furthermore, analysing data with the intention of trying to sort, focus, organise, and reorganise data assists the researcher in obtaining accurate results and consistent conclusions. Hays stated that all of these applied procedures of sorting, resorting, organising, and reorganising data should result in a group of categories that answer the research questions meaningfully. Additionally, she emphasised that coding is a key process in analysing qualitative data to change these types of data into a standardised form.

Coding is “the heart and soul” of content analysis, according Ryan and Bernard (2003). As Ryan and Bernard stated, a researcher can apply a set of codes to a set of qualitative data. Other researchers have argued that qualitative methods focus on the quality and latent content of texts and that this helps in interpreting the context of the material under investigation (Titscher et al.,

2000). In a practical sense, content analysis changes qualitative data into convenient parts or categories of data – words, phrases, sentences or themes – and then investigates the data using thematic analysis, relational analysis, or both, if required (Kohlbacher, 2006).

The majority of qualitative studies that focus on identifying, describing, and evaluating attitudes employ a grounded theory approach. This commonly used methodology promotes a style of thinking more profoundly about data by allowing researchers to move back and forth within the data analysis to deliver more explanations regarding any correlations between repeated thoughts (Charmaz and Belgrave, 2007). More precisely, this is all accomplished to determine the best responses to the research questions and to draw final conclusions that are well matched to the findings obtained.

3.10.3 Questionnaire validity and reliability

3.10.3.1 Reliability

The term ‘reliability’ refers to the question of whether items’ scores on an instrument are internally consistent, whether they are stable over time, and whether there is consistency in test administration and scoring, according to Creswell (2009, p. 233). Cronbach’s alpha was computed to ensure that the instruments were reliable and had internal consistency. This procedure is commonly used to measure the reliability of any instrument. Cronbach’s alpha was calculated for six dimensions: attitudes, PEO, PU, media richness in familial communication through social media, behavioural intention, and RB.

Cronbach’s alpha was calculated separately for each dimension to measure the consistency of scores across items. Using the Statistical Package for Social Science (SPSS), the Cronbach’s alpha coefficient for the attitudes dimension was 0.795; for the PEO 0.756; for the PU 0.884; for the media richness 0.865; for the behavioural intention 0.849; and for the RB 0.855. Revisions and adjustments were made based on the findings of the reliability analysis.

A five-point Likert-type scale was used for most parts of the instrument, ranging from Strongly Agree =1 to Strongly Disagree = 5. The lower the score, the more positive the participants’ attitudes towards social media use to support their familial communication were. Lower scores indicate families’ more positive attitudes towards using social media to support their familial communication. However, the response options ranged from 1 to 5 to allow for adequate variability

to produce reliable results. Descriptive statistics are usually used to analyse data of this nature by calculating the means of the items M , the standard deviation SD , and the percentage of participants' responses in each response category.

3.10.3.2 Validity

The term 'validity' refers to whether or not one can draw meaningful and useful inferences from scores on particular instruments, according to Creswell (2009, p. 235). Frey (2006) defined validity as the extent to which the instrument measures what it is intended to measure. Items in the present study's survey were developed based on content validity. In addition, according to Frey (2006), content validity is the extent to which a specific set of items reflects a content domain. DeVellis (2016) argued that measuring beliefs or attitudes can be examined for content validity by having items reviewed by experts to assess their relevance to the domain of interest.

Therefore, to ensure content validity for the survey items contained in the instrument of this study, experts in social studies at King Khalid University reviewed the young people's and parents' questionnaires to ensure that the items accurately measured Saudi families' attitudes towards the use of social media to support their familial communication. In addition, an expert in research and survey design reviewed the survey structure. This expert helped me by providing feedback and offered several suggestions that helped to improve the quality of the survey items. Additionally, experts majoring in social media studies reviewed the survey items to ensure that these items were relevant to the present study's purpose.

Accordingly, I made several adjustments to the survey items and parts; I changed, deleted, or retained items with the aim of improving the survey's quality. DeVellis (2016) argued that the elimination of items from the survey can either increase or decrease the alpha coefficient, depending on how poor the items to be dropped are and the total number of items remaining in the scale.

Saudi graduate students majoring in Social Studies at Cardiff University reviewed the survey items and gave their feedback and suggestions. Consequently, I revised some survey items according to their suggestions. Some items in the questionnaire were also developed based on other previous studies mentioned in the literature review to ensure evidence validity. I followed item writing guidance from several books for the attitude scale to ensure argument validity, including the

chapter entitled ‘Guidelines for Developing Questionnaires’ in *Human Performance Engineering* (Bailey 1996, pp. 559-568).

3.11 STUDY LIMITATIONS

It is clearly difficult to adopt a research design that separates the impact of social media use from the impact of social media content. In addition, Saudi society is changing and is on the way to developing a new socio-economic culture in line with the globalised world. Changes in social media use do not occur independently, and therefore, the research design used in this study should focus on these considerations to avoid other variables that may affect the outcome.

The second challenge that makes it difficult to select a suitable research design in this study arises from the difficulty in measuring changes in family and social traits. For instance, personality traits such as extroversion are prime indicators of the social and information-seeking use of social media platforms (de Zúñiga et al. 2017, p. 545). For Saudi Arabia, it is difficult to apply such indicators in light of the Islamic societal setup that is inclined to reject extroversion and seeks to promote a traditional lifestyle (Alsharkh 2012, p. 4). The most likely solution to this challenge would be to carry out a longitudinal survey to elicit a wide range of opinions at various levels and to compare any changes in family communication to the differences in the use of social media (Houts et al. 2018). However, such a design requires a significant amount of time and lies beyond the scope of this research and is ultimately dependent on people’s beliefs and attitudes about the subject matter.

Equally, the evolution of the tools that have been used to access the internet over the years present another challenge that compels researchers in this field to settle on a given research design. During the early years of the twenty-first century, people accessed the internet through desktop computers and simple browsers (de Zúñiga et al. 2017). However, the recent proliferation of hand-held devices has facilitated quick and easy access to social media, allowing users, such as students, the freedom to use their devices to communicate from various social platforms from any part of the world (Hing Keung Ma and Pow 2011; Eldardiry and Elmoghazy 2018). Therefore, the changing nature of the use of the internet is another crucial factor that has caused a shift in research. Earlier studies in this area focused on aspects such as internet use and its influence on social behaviour, including internet addiction. However, as internet access has become easier with a greater potential to become pathological, it has become increasingly vital to evaluate its perceived influence on social norms (Hing Keung Ma and Pow 2011). This places greater emphasis on the attitudes and beliefs of the

society in question, and, in effect, this is the driving factor for conducting research in this area and adopting a research design that eliminates unforeseen variables.

Wesley and Yu-hao (2011), in a study conducted among wiki users, argued that it is difficult to assess the perceived influence of social media on familial communication (behavioural intention) while isolating other changes that have occurred in a given society. Changes in society, as explained in the unified theory of acceptance and use of technology (UTAUT), include experience, social influence, and facilitating conditions, among others (Wesley and Yu-hao 2011 p. 852). Therefore, this study will interrogate the attitude of Saudi Arabians in relation to the changes in family communication and the role played by social media in these changes.

The major challenge in conducting studies of this nature is the fact that social structures scarcely change as a result of an actor's behaviour. In addition, such studies are not amenable to a test-retest design that permits the examination of variations if a certain variable is absent. Additionally, the acquisition of appropriate data is problematic because it is difficult to measure people's attitudes through large-scale longitudinal research. This is because the variables that this study intended to measure were people's attitudes regarding behavioural changes and changes in social norms. Therefore, two primary limitations were encountered in carrying out this study:

- i. It is difficult to track changes in people's attitudes and changes in social norms due to the absence of a verified tool such as a test-retest approach. Consequently, I faced issues in this regard, as I was obliged to rely on the respondents' attitudes. Simply, this meant that I asked the respondents to confirm whether they believed that the changes in familial communication could be associated with the increased use of social media in Saudi Arabia. However, I had a different set of challenges and issues encountered by participants concerning social media use in family communication to further identify the most prominent challenges. I also investigated differences in their responses through the use of survey and interview for cross-verifying their beliefs and views. Overall, the issue of the reliability of respondents' views is present in the study, but through deep analysis and uncovering of differences, I have tried to address this limitation.
- ii. Second, a challenge arose from the combination of technology – social media and its means of access – and content – that is, the social customs and the type of data that social media makes available. In effect, this made it more difficult for the respondents to respond to the question of the perceived influence of social media, as it requires differentiation between the

technology – the time that one spends on social media – and the possible changes in attitude as a result of the data and accessible content.

3.12 CHAPTER SUMMARY

In this chapter, the research methodology was explained in detail, and the research questions and the research hypotheses were presented. A mixed-methods research approach was described to examine the attitudes and intentions of both Saudi parents and young people towards the use of social media to support their familial communication. The mixed-methods approach brought together both quantitative and qualitative research methods. For the quantitative data collection, an online survey questionnaire was designed and structured. The questionnaire included six sets of questions that covered demographics, experience in using networks, attitudes towards the use of social networks in family communication, reduction in face-to face communication, expected ease of use, and rewarded behaviour from parents. For the qualitative data collection, an interview form was created to obtain in-depth data.

The population selected for the survey was also detailed. Two groups of participants were selected for this study. The first group included parents of both genders, and the second group included female and male young people. The selected groups were from diverse cultural and economic backgrounds, as they represented a cross-section of young people in Saudi Arabia. The sample size contained 118 parents and 530 young people.

Furthermore, the data collection procedures including the pilot study and the data analysis were explained thoroughly, and the research questions were examined and the hypotheses analysed using different statistical tests and methods based on the type of data. The interview data analysis was explained through using numerous available software products. Finally, the questionnaire validity and reliability were explained using Cronbach's alpha ensure that the instruments were reliable and had internal consistency.

The next chapter will provide the results of the statistical analyses that were conducted for each of the research questions.

Chapter 4: ANALYSIS OF PARENTS' DATA

4.1 INTRODUCTION

In this chapter, a thorough analysis of the survey and interview findings has been undertaken. The survey responses are relevant for addressing the research objectives based on this study because these responses reflect the views of parents about social media usage and its effect on family communication. These responses have provided new insight into the parental viewpoints regarding social media's effectiveness or limitations to maintain family connections in a traditional society. Moreover, interview data has also been analysed to explore detailed reasons for the obtained results based on the survey findings. The interview findings helped address the research query on the parental views about using social media as a modern tool for managing family communication because it provided significant evidence by discussing reasons and causes regarding why parents' show certain attitudes towards social media usage. Thus, connections are formed between the interview findings as well as the survey results for informing the interview responses to discuss the results of the survey.

4.2 DEMOGRAPHICS

This study included 103 parents. Of these, 45.6% were females, and 54.4% were males. Most (86.4%) were married, 8.7% were divorced, and 4.9% were widowed. With regard to age, 21.4% were aged between 30 and 35 years old, 14.6% were aged between 36 and 40 years old, 21.4% between 41 and 45 years old, 21.4% between 46 and 50 years old, and 21.4% were aged 51 or more years old. Accordingly, about 60% of them were more than 40 years old and were considered to be traditional parents in Saudi society, as I explained in the literature review.

All were considered middle class, and all worked in the public sector. The large age gap between the parents' and children's generation may offer greater opportunities to understand the differences between parents' and children's use of social networks in family communication. This, in turn, may help us to understand in greater depth the impact of these differences on the quality of family relationships and whether any new patterns of communication between family members have emerged.

4.3 VERIFICATION OF THE VALIDITY AND RELIABILITY

4.3.1 Validity

In the context of this study, the internal validity of the research was whether the research proved the extent of the credibility of the answers among the different participants in the questionnaire. To ensure internal validity, the questionnaire employed in this study used customised statements that could be tracked to achieve the relevant research objectives and research questions. Second, incomplete questionnaires were excluded from the data analysis.

On the other hand, external validity is concerned with whether validated general data are based on insufficient studies or implies that a particular variable causes a discrepancy in the answers, without any real evidence to support this (Jugenheimer et al., 2015). It is reported that the majority of external validity problems in studies involving human participants can be attributed to three major issues. The first issue involves the use of small samples employed from a single geographical area. The second issue involves the recruitment of samples characterised by special features, such as participation by volunteering, rather than sample representation. Finally, forcing reluctant respondents to provide information also creates external validity problems (Jugenheimer et al., 2015).

For this study, external validity was ensured through the web management of the questionnaire, which overcame the potential problem of the respondents' restrictive geographical boundaries. As the respondents performed voluntary self-selection in the sample by the use of consent sampling, this helped to eliminate any opportunities to coerce the participants into completing the questionnaire. To determine the appropriateness of the questionnaire as it relates to and understands the claims, I conducted a pilot test with 30 respondents, including Saudi parents from the Saudi community in Cardiff and some parents from Abha city where I collected the data. Questions that seemed redundant or irrelevant were omitted, while apparently vague questions were rephrased.

4.3.1.1 Correlation the score of the statement and the score to each scale:

The correlation coefficients were calculated between the score of the sample members in each statement separately and the total score for each scale, with the aim of deleting statements that did not appear to be statistically significant in relation to their scale since they lacked an appropriate degree of validity. As Shortell (2001) stated,

There is no rule for determining what size of correlation is considered strong, moderate or weak. The interpretation of the coefficient depends, in part, on the topic of study. When we are studying things that are difficult to measure, such as the contents of someone's mental life, we should expect the correlation coefficients to be lower. In these kinds of studies, we rarely see correlations above 0.6. For this kind of data, we generally consider correlations above 0.4 to be relatively strong; correlations between 0.2 and 0.4 are moderate, and those below 0.2 are considered weak. (p. 34)

In this questionnaire, the correlation coefficients were statistically significant at higher than 0.2, so we may conclude that the statements of each scale are consistent and dependable. Table 4.1 below shows these correlations:

Table 4-1 Correlation of the score of the statement and the score to each scale

First scale		Second scale		Third scale		Fourth scale	
No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation
1	.763**	1	.729**	1.	.669**	1.	.733**
2	.657**	2	.615**	2.	.671**	2.	.904**
3	.871**	3	.777**	3.	.807**	3.	.882**
4	.677**	4	.815**	4.	.816**	4.	.741**
		5	.771**	5.	.748**	5.	.808**
		6	.778**	6.	.840**	6.	.703**
		7	.725**	7.	.745**		
Fifth scale		Sixth scale		Seventh scale		Eighth scale	
No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation
1	.633**	1	.825**	1.	.771**	1.	.905**
2	.438*	2	.793**	2.	.788**	2.	.884**
3	.653**	3	.814**	3.	.805**	3.	.936**
4	.573**	4	.786**	4.	.866**	4.	.823**
5	.388*	Ninth scale		Tenth scale			
6	.740**	No.	Pearson Correlation	No.	Pearson Correlation		
7	.475**	1	.862**	1.	.887**		
8	.261*	2	.945**	2.	.797**		
9	.456*	3	.899**	3.	.847**		

4.3.2 Reliability testing

All elements of the questionnaire recorded the Cronbach coefficient at above 0.70, as recommended by Tavakol and Dennick (2011) as the minimum for accepting reliability in multi-option questionnaires.

Table 4-2 Reliability statistics

Reliability Statistics		
Scales	Number of statements	Reliability of domain
Your goals in using social networks	4	.749
Examples of social networks	7	.722
Your experience in using social networks	7	.845
Your attitudes towards the use of social networks in family communication part 1	6	.849
Your attitudes towards the use of social networks in family communication part 2	9	.784
Expected ease of using social networks in family communication	4	.757
The usefulness of social networks in family communication	4	.884
Media richness for family communication	3	.865
Rewarding behaviour from parents	3	.855
General scale	47	.842

4.3.2.1 Analysis of answers based on the Likert scale:

Since most of the questions in the questionnaire required responses according to the five-point Likert scale, the data were coded and entered into the SPSS. Next, to determine the length of the five-point scale (minimum and maximum), the range was calculated ($5-1 = 4$) and subsequently divided by the number of cells of the scale to obtain the correct cell length ($4/5 = 0.80$), and this was added to the lowest value. The scale (or beginning of the correct scale) to determine the upper limit of this cell, and thus the cell length, is as follows:

- From 1 to 1.80 represents (1) towards each statement.

- From 1.81 to 2.60 represents (2) towards each statement.
- From 2.61 to 3.40 represents (3) for each statement.
- From 3.41 to 4.20 represents (4) towards each statement.
- From 4.21 to 5.00 represents (5) towards each statement.

4.4 USE OF SOCIAL NETWORKS

4.4.1 Parents' purposes in using social media

First, a question was asked about parents' purpose in utilising social media. Exploration of parents' purpose regarding their social media usage is important because in the digital age, to keep connected with family members, social media is considered an adequate tool that resolves communication issues between family members (Procentese, Gatti and Di Napoli 2019). This question is relevant for addressing the research objective about identifying the purpose and attitude of parents regarding social media usage.

These categories of social media are defined as seen in Table 4.3.

Table 4-3 Categories of social media

Social networking	Every activity for which they communicate with others from their relatives, friends, family, and co-workers through social media websites.
News	All processes are performed to search for news, whether local, regional, or international, on social media websites.
Entertainment	All activities are aimed at searching for or watching clips for entertainment, laughter, humorous images, texts, or other entertaining content in social networks.
Education	All activities are aimed at searching for scientific or educational content as well as communication for learning and education, such as study groups within social networking applications or watching tutorial videos on any aspect of life.

The data showed that parents' goals in using social media were as seen in Table 4.4.

Table 4-4 Parents' goals in using social media

Categories	Mean Value	Standard Deviation
Social Networking	3.13	1.33
Education	2.66	1.176
News	2.53	1.235
Entertainment	2.30	1.211

The substance of the overall responses is that for the majority of parents, social networking is the most popular aspect of social media. To assist in this aspect, the evidence from the statistical analysis shows that the majority of the parents (43%) used social networking. The mean value for using social networking is also highest, i.e., 3.13 while for news, education, and entertainment, mean values are

2.53, 2.66, and 2.30 respectively. The response is also supported by the interview and literature findings according to which parents make use of Facebook as well as WhatsApp mainly to keep connected with their children, monitor their activities, and maintain the entire family system (Procentese, Gatti and Di Napoli 2019). In this way, the survey response is aligned to the secondary notion that shows relevance for addressing the research question about social media's purpose and the implication in maintaining family communication within the traditional structures of the family.

Table 4-5 Parents' purposes in using social media

N								Mean	Std deviation	Rank
			1 = do not use it	2 = less than 1 hour	3 = 1 hour to 2 hours	4 = 2 hours to 3 hours	5 = more than 3 hours			
1	Social networking	No	18	13	28	26	18	3.13	1.333	1
		%	17.5	12.6	27.2	25.2	17.5			
2	News	No	23	35	21	15	9	2.53	1.235	3
		%	22.3	34	20.4	14.6	8.7			
3	Entertainment	No	34	28	23	12	6	2.30	1.211	4
		%	33	27.2	22.3	11.7	5.8			
4	Education	No	17	33	31	12	10	2.66	1.176	2
		%	16.5	32	30.1	11.7	9.7			

4.4.2 Examples of social networks used by parents

The agenda of the questionnaire was concerned with the highly popular sites of social networking and their application within Saudi Arabia. In this regard, a question was asked regarding the determination of parents' daily use of social networks. The importance of this question is that the parents' time spent and frequency of using social media were analysed to assist the research objective about the parents' attitude towards using social media in Saudi Arabia to establish and maintain family communication.

The overall substance of the responses reflected that among all the social networking, the social networking tool most frequently and popularly used by parents is WhatsApp followed by Twitter and Snapchat. To support this finding, the evidence showed the mean value for WhatsApp was 3.08, with a standard deviation of 1.194. For Twitter, the mean value was 2.73 with a standard deviation value of 1.285, and for Snapchat, the mean value was 2.31 with a standard deviation value of 1.291. The literature also indicated that WhatsApp is the most famous example of social networking platform on which parents establish communication with their children to fulfil the agenda of family communication and interaction and to maintain healthy relations as per family system theory (Procentese, Gatti and Di Napoli 2019). The findings are also aligned with the results of the Global Web Index report in 2018, which stated that WhatsApp is the most used social messaging application among Saudi internet users with 72% (KEMP 2019).

In this way, the response is directly linked with the research objective by showing that parents could have a positive attitude about the implications of using social media to maintain family communication within Saudi traditional society.

Table 4-6 Examples of social networks used by parents

N								Mean	Std deviation	Rank
			1 = not used	2 = less than 1 hour	3 = 1 hour to 2 hours	4 = 2 hours to 3 hours	5 = more than 3 hours			
1	Twitter	No	23	21	32	15	12	2.73	1.285	2
		%	22.3	20.4	31.1	14.6	11.7			
2	WhatsApp	No	6	34	26	20	17	3.08	1.194	1
		%	5.8	33	25.2	19.4	16.5			
3	Snapchat	No	36	26	25	5	11	2.31	1.291	3
		%	35	25.2	24.3	4.9	10.7			
4	Instagram	No	53	25	14	8	3	1.86	1.103	5
		%	51.5	24.3	13.6	7.8	2.9			
5	YouTube	No	28	41	18	12	4	2.25	1.100	4
		%	27.2	39.8	17.5	11.7	3.9			
6	Telegram	No	70	21	8	2	2	1.50	.873	6
		%	68	20.4	7.8	1.9	1.9			
7	Facebook	No	85	11	5	1	1	1.27	.689	7
		%	82.5	10.7	4.9	1	1			

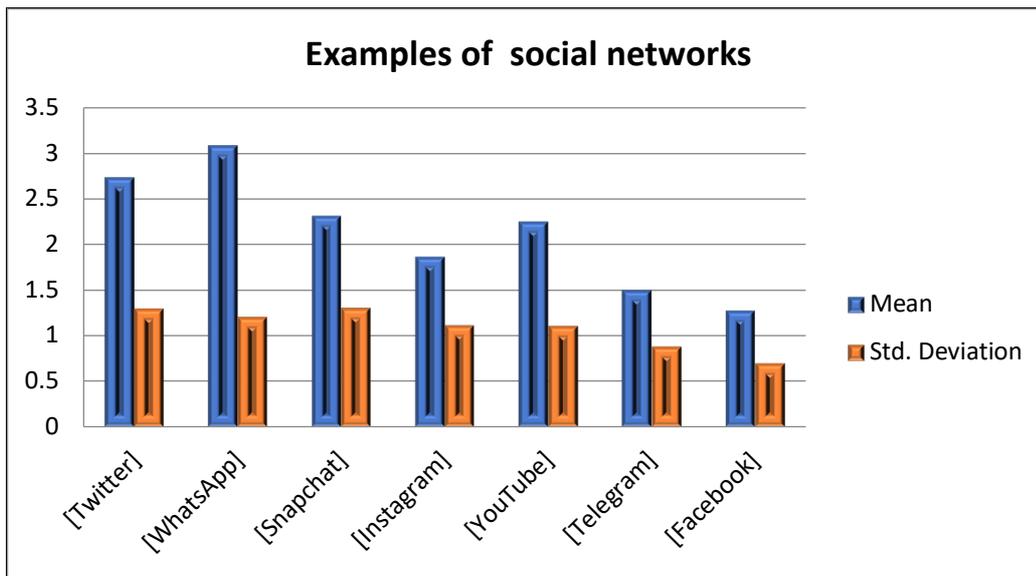


Figure 4-1 Examples of social networks

4.4.3 Parents' experience of using social networks

The question is related to identifying parents' experience of social network usage. This question was important to align with the research question, as it helped determine the effects on parents and their communication with their children while using social networks. The overall responses indicated that the parents had a good experience of using WhatsApp and Twitter to remain connected with their children. As seen in the figure, for WhatsApp and Twitter, the mean values identified are 4.18 and 3.58, respectively.

Further, Instagram provided parents with a medium level experience for maintaining family communication and connection. The interview responses also assisted the findings by determining the reasons for parents' effective experience of using social networks. For instance, parents responded that with the help of WhatsApp, they used to track the daily lives of their children, and the application also helped them to make video calls to communicate easily with their children. Therefore, the parents had effective experiences of using social media. Thus, the research objectives regarding the opportunities, consequences, and effects of social media on family-based communication were eventually fulfilled with the above responses.

Further, if the parent is skilled in using the application, they will know how to record a video and share it with their family, how to send a voice note, and how to use emojis. However, if they do not

know how to take advantage of these advanced features of the social media application, their experience may be limited.

Examining the experiences individually, parents' reporting of their positive experiences using WhatsApp, which is the most widely used social media application amongst parents, is a positive sign. WhatsApp allows the creation of family groups, which helps families to stay connected in terms of sharing photos and videos and simply conversing with one another in a single chat, which may contribute to strengthening familial bonds. Additionally, a positive experience of using social media applications, such as WhatsApp and Twitter, could be constructive in the sense that these platforms offer useful information on several issues, including family building, children's needs, and parenting techniques. As such, if parents' experiences of using these applications are positive, they may be more comfortable learning from these platforms.

Table 4-7 Parents' experiences of using social networks

N								Mean	Std deviation	Experience	Rank
			1= I have no experience	2 = weak	3 = medium	4 = good	5 = excellent				
1	Twitter	No	15	8	18	26	36	3.58	1.411	Good	2
		%	14.6	7.8	17.5	25.2	35				
2	WhatsApp	No	2	5	16	29	51	4.18	.998	Good	1
		%	1.9	4.9	15.5	28.2	49.5				
3	Snapchat	No	20	21	14	22	26	3.13	1.486	Medium	4
		%	19.4	20.4	13.6	21.4	25.2				
4	Instagram	No	30	14	22	15	22	2.85	1.517	Medium	5
		%	29.1	13.6	21.4	14.6	21.4				
5	YouTube	No	10	18	28	16	31	3.39	1.337	Medium	3
		%	9.7	17.5	27.2	15.5	30.1				
6	Telegram	No	48	23	12	6	14	2.17	1.424	Weak	6
		%	46.6	22.3	11.7	5.8	13.6				
7	Facebook	No	65	13	9	8	8	1.84	1.312	Weak	7
		%	63.1	12.6	8.7	7.8	7.8				

4.4.4 Parents attitudes towards the use of social networks in family communication

The question asked was intended to ascertain parents' attitudes towards the use of social networks in family communication, particularly with their children, which is evident from the extent of their use. The extent to which a tool is used is an important indicator of the person's attitude towards it. Thus, the research objective is well assisted by the responses gathered by posing this question. In this regard, it is evident that the substance of responses indicates that WhatsApp is the preferred application with more than 80% of parents using this social network to communicate with their children. This reinforces the results of the second question, which confirmed the prominence of WhatsApp use among Saudi parents in general and highlighted that WhatsApp is used mainly to communicate with children and family. Snapchat was in second place with 46% for occasional users and 7% for heavy users, indicating that more than half of all parents use Snapchat to communicate with their children. Finally, Instagram ranked third, with 30% of parents using it to communicate with their children.

As mentioned previously, the fact that parents are using WhatsApp more actively coupled with the fact that they use it mainly to communicate with their children is a positive indicator for several reasons. First, despite the possibility of long distances, which are likely once children go to college or get married, the instant messaging function of WhatsApp requires only a moderately strong internet connection. Furthermore, the use of Snapchat may suggest that children and parents update each other instantly with pictures and short videos of daily events. As such, it gives them more insight into the current happenings of their lives.

Table 4-6: Time spent daily using social networks to communicate with children

N								Mean	Std deviation	Time spend	Rank
			1	2	3	4	5				
1	WhatsApp	No	16	56	19	7	5	2.31	.980	less than one hour	1
		%	15.5	54.4	18.4	6.8	4.9				
2	Twitter	No	72	16	9	4	2	1.52	.948	Not used	3
		%	69.9	15.5	8.7	3.9	1.9				
3	Snapchat	No	49	26	21	2	5	1.91	1.095	less than one hour	2
		%	47.6	25.2	20.4	1.9	4.9				
4	Instagram	No	71	20	9	3	-	1.46	.777	Not used	4
		%	68.9	19.4	8.7	2.9	-				
5	Telegram	No	86	10	6	1	-	1.24	.602	Not used	5
		%	83.5	9.7	5.8	1	-				
6	Facebook	No	91	5	6	1	-	1.19	.578	Not used	6
		%	88.3	4.9	5.8	1	-				
General average								1.605	0.83	Not used	

Other questions participants were asked were about determining the usefulness and importance of social media with regard to maintaining family connections and relationships. This question shows the relevance for fulfilling the research's core objective about revealing the effects and implications of social media usage on family communication and ties.

The main substance identified of the responses shows that more than 60% of the parents agreed and strongly agreed that they liked to use social networks to connect with their children, as in statement 1, and more than half of the total number confirmed that social networks are prevalent in parent-child communication, as in statement 2. This is more applicable in cases where parents and children live far away from one another, so it can be said that social media communication helps to reduce the distance considerably and allows families to feel less distant. In addition, in statement 3, about 56% of parents agreed and strongly agreed that social media encouraged them to interact with their families. The interview-based data also highlighted the same view that social media channels like WhatsApp help parents to connect with children to monitor their regular lives and keep in touch.

By contrast, however, almost 70% of the parents agreed with statement 5 – Frequent networking with my children across social networks has reduced face-to-face communication – as seen in Chart 4-2. This response clearly indicates that some of the parents had a negative attitude towards social network-based communication because it hampers the physical meetings and face-to-face interactions that are essential for strong family bonding and ties. This view is also reflected in the interview findings that face-to-face communication is affected because of social media's usage and ultimately, free communication and their family connections are also negatively influenced. The ease of communication through social networks may engender the belief that the family is communicating enough through social media. However, this could also mean that parents and children alike have become so accustomed to using social media for communicating that face-to-face interactions are a second thought as some parents mentioned in interviews section.

Moreover, about 60% of the parents agreed and strongly agreed that they would like to return to the old days of family communication without social networks. This combined with the reduced amount of face-to-face communication suggests that parents desire more face-to-face communication. Children and parents, in the past, frequently interacted face to face. Interestingly, this contradicts previous findings that parents enjoy social media as a method for family communication. This suggests that while there is a desire for face-to-face interactions, social media communication may be necessary, as some parents mentioned in interviews section.

However, social networks offer opportunities to communicate with family members more swiftly and with richer content, such as various modes of video and audio communication, and the possibility of transcending the barriers of space and time. Several parents acknowledged the importance of social networks and the difficulty of getting rid of them in family communication.

For face-to-face communication, the parents noted – as I mentioned earlier – that social networks had weakened direct communication with their children. Furthermore, a large number of them – almost 60% – preferred to communicate face to face with their children rather than through social media, as indicated by statement 8. This may signal that social networks offer another means of familial communication to maintain family relationships but simultaneously diminish the role of face-to-face communication. It can be better analysed in the form of a cost-benefit analysis. The cost here is the sacrifice of personal interaction, which tends to offer deeper connections, and the benefit is the convenience and flexibility that social media platforms offer with respect to communication.

Table 4-7: Statements about young people’s attitudes towards the use of social media in familial communication

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I like to use social networking for family communication.	27.2	36.9	24.3	6.8	4.9
2	Social networking is important because it strengthens my family relationships with my children.	15.5	36.9	17.5	20.4	9.7
3	Social networks make me interact with my family.	23.3	33.0	22.3	12.6	8.7
4	Social networking gave my children the power to participate in various decisions within my family.	16.5	34.0	25.2	19.4	4.9
5	Frequent networking across social networks with my children has reduced face-to-face communication.	43.7	26.2	12.6	8.7	8.7
6	Family groups in social media are important for strengthening family relationships.	29.1	35.0	15.5	13.6	6.8
7	I hope that we will return to the days of family communication without social networks.	49.5	7.8	21.4	12.6	8.7

8	I prefer to communicate with my children across social networks rather than in face-to-face communication.	16.5	6.8	17.5	20.4	38.8
9	I communicate with my friends through social networking more than I communicate with my children.	29.1	28.2	22.3	12.6	7.8

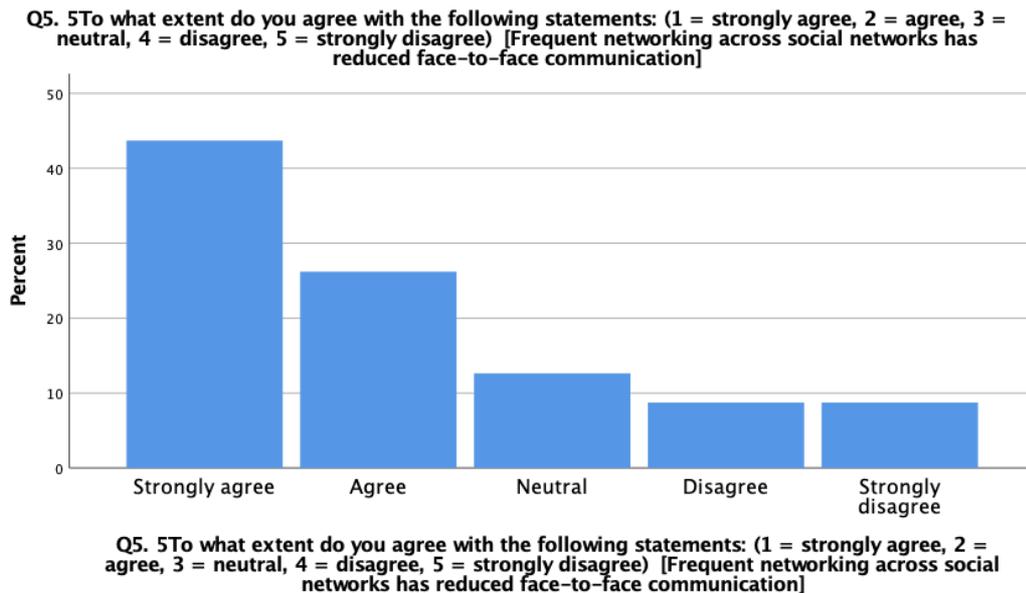


Figure 4-2 Frequent networking across social networks has reduced face-to-face communication

Another question that the parents were asked was related to their attitudes towards the use of social networks in enhancing their communication with their children over the last three years as in the statement below:

“My attitude towards social networks in family communication has become:

1 = more positive 2 = somewhat positive, 3 = unchanged, 4 = somewhat negative, 5 = more negative.”

The core substance of the themes formed within this question is directed towards investigating the use of social media among the parents and to determine whether or not the parents consider it respectful of their children to communicate adequately in the social networks. The below themes reveal important findings in regard to research objective two, which seeks to establish the parental attitude regarding the utilisation of social media as a significant tool for conducting familial communication. Therefore, in order to assess the core issue regarding the sense of respect in the mindset of the children associated with the use of social media, the information regarding the agreement and disagreement of the participants in correspondence to respectful use of the social media by the children is also retrieved by the application of the five-scale Likert response tool. The findings are represented as per the following scale:

1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.

The results show that more than half of the parents felt that their attitudes towards the use of social networks in family communication had become more positive. Indeed, a major shift in attitudes has occurred in the adoption of new communication tools in Saudi society. This positive shift in attitudes towards social networks must play a role in Saudis adopting and relying on them primarily in the life of the family and the individual. The interviews confirmed these findings, as this chapter will show below. The interview findings reflected that the attitude of the parents about the use of the social media channels had improved to a certain extent, and they had also started taking necessary initiatives to monitor the utilisation of the media sources used by their children. The literature has substantiated these findings by describing that a significant number of parents have identified effective ways to keep an eye on the activities of their children on social media and internet sources (Abid 2020).

Accordingly, family interaction through social media is not limited to communication itself, but it plays additional roles. For example, family communication through social networks is not only a matter of communication or entertainment but has become a functional tool that assists families in organising their lives and supports the quick transmission of information, ideas, and tasks among the family members. Social media platforms are also important tools for conveying the emotions and feelings that enrich family life and increase its stability, as confirmed in the interviews that will be presented later in this chapter.

It appears that some of the parents had become increasingly accustomed to using social media for communicating; while some initially believed that it was not helpful in bridging the communication gap with their children, steady and continuous use of social media over time had transformed their perspective. Thus, with time and increased use, they may come to recognise the flexibility and ease of communication offered by social media platforms and the enhanced opportunities to connect with their children from whom they may otherwise feel more detached. The parents' positive attitudes regarding the use of social media that were enhanced over the years may also be partially attributed to other advantages, such as the instant education/information and news such platforms provide while also functioning as viable communication tools.

Table 4-8 Parents' attitudes towards social networks in family communication in the past three years

Answers	No	Percent (%)
More positive	16	15.5
Somewhat positive	39	37.9
Unchanged	25	24.3
Somewhat negative	11	10.7
More negative	12	11.7
Total	103	100

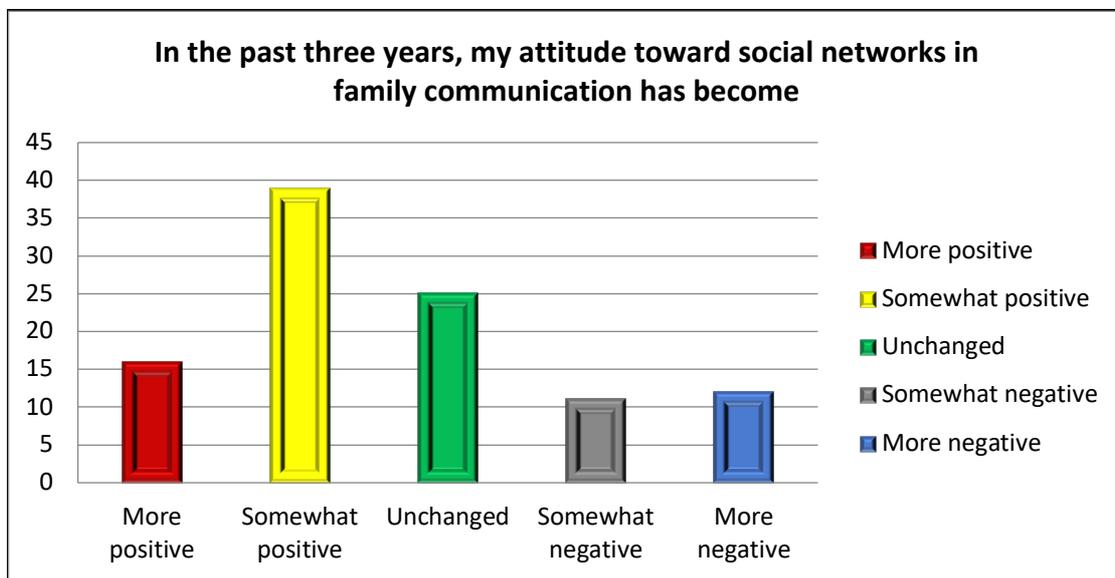


Figure 4-3

Parents' attitudes towards social networks in family communication in the past three years

4.5 FACTORS FOR USING SOCIAL NETWORKS FOR FAMILY COMMUNICATION

4.5.1 Expected ease of use

This question concerns the parents' expected ease of using social networks for family communication. Moreover, I attempted to ascertain what they thought about their experience of using social networks in communicating with their children. The question was

To what extent do you agree with the following statements? 1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.

Since about 60% of the parents in this questionnaire were aged over forty years old, they were part of the 'digital immigrants' generation. Accordingly, it is important to study the impact of technological challenges on their use of social networks and to understand their effects on familial communication and relations. As Table 4.9 below indicates and as shown in statement 1, 54% of the parents agreed and strongly agreed that the use of social applications in family communication is easy and that this ease had improved their ability to reinforce their relationships with their children. It is common knowledge that difficult and complex applications may render the user's experience challenging and difficult to take advantage of with the aim of meeting their social and other needs. However, the fact that more than half the people who completed the questionnaire reported that the complexity of the applications did not impede their ability to use them is highly positive. This, coupled with the motivations of older people who may regard social media platforms as a means of reducing their social isolation from apparently distant loved ones and increasing their social participation and autonomy, increases their desire to become more adept at using these applications. Moreover, most social media applications are designed to be user-friendly for a wider audience, including parental age groups, so that parents can navigate the applications and learn the basics that will allow them to communicate easily.

More than 70% of the parents believed that their children could use social media with ease, allowing them to communicate with their parents and family. In fact, the number of parents who agreed with this statement was higher than for the previous one, as these parents recognised that their children's digital skills were more developed than theirs. The fact that the parents recognised their children's abilities to use social media effectively in communicating with family means that they saw it as a viable opportunity to connect with them in a way that the digital native generation could more easily relate to. This is more applicable to those children who lack interpersonal skills and to their parents, as the use of social media for communication is particularly advantageous to them.

In both statements 3 and 4, about 48% of the parents agreed and strongly agreed that social networks facilitated their expression of feelings and emotions towards their children and facilitated the delivery of the parents' ideas to their children. In other words, social media gave them the opportunity to express love and kindness to their children, contributing to the growth of healthy relationships within the family. These interpretations were confirmed by some interview results, as will be shown in the interview analysis section in this chapter.

Table 4-9 Expected ease of use of social media

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	I think social networks are easy to use to strengthen my family relationships.	22.3	32.0	22.3	15.5	7.8
2	I think my children use social networks easily in family communication.	25.2	45.6	19.4	5.8	3.9
3	Social networks make it easier to convey my emotions – like love – to my children.	25.2	33.0	20.4	8.7	12.6
4	Social networks make it easier to communicate my thoughts to my children.	22.3	35.9	22.3	8.7	10.7

4.5.2 Perceived usefulness of using social networks in family communication

The benefit of using technology is an important factor in the individual’s continued use of it. This obvious benefit can assist individuals in facilitating their lifestyle and in performing their various roles in the community and society. Therefore, it is important to examine the impact of this factor on the parents’ performance and to explore the impact of the parents’ beliefs regarding the usefulness of social networks on their decisions to use these networks. While the previous question concerned the ease of use of social networks, this question focused on their usefulness. Both factors were mentioned as important factors in the TAM.

The parents were asked the following question: To what extent do you agree with the following statements 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree. The results are presented in Table 4-10.

Here, the PU of social networks for parents is evident at the level of social skills, solving family disputes, expressing thoughts and feelings, and understanding children’s personalities. Almost half of the parents reported that the use of social networks had helped to develop their family

communication skills, as in statement 1. More than 50% believed that social networks had helped them to resolve family disputes, as in statement 2. Additionally, in response to statement 4, more than 55% of the parents reported that communicating with their children through social networks had helped them to understand their children’s personalities better than before. Most responses could be related to the evident generation gap between parents and their children. As previously established, the children belonged to the digital native generation while their parents did not. Hence, the children could possibly understand messages conveyed to them through media that they were most familiar and comfortable with, such as social media platforms, and the parents recognised that they could possibly make more conscious efforts to communicate with their children and empathise with them as they tried to enter their children’s comfort zones. Such an attitude may give parents a gateway into understanding and communicating with their children more effectively. As far as dispute resolution is concerned, it is possible that the flexibility of social media communication gives parents more time to consider their responses, which is important in resolving conflict. This advantage is often absent in face-to-face communication, where the heat of the moment may derail entire conversations. Communication over social media allows users to sidestep that problem.

On the other hand, in response to statement 3, less than 40% of parents reported that social networks did not allow the same level of expression that face-to-face communication allows. It is true that it helped them to express their opinions and feelings, as noted in the previous question, but they acknowledged that communicating with their children face to face is better, as it involves body language, facial expressions, and tone of voice. Moreover, the parents experienced greater freedom of expression in face-to-face communication than children do. A surprisingly large portion – about 40% – of the parents believed that the PU of social networks afforded them greater freedom to express their opinions and feelings to their children. Perhaps these 40% of parents found they were able to formulate ideas clearly using social media. This is supported by the interview results presented later in this chapter.

Table 4-10 To what extent do parents agree with the following statements?

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	My family communication skills have evolved with my use of social networks.	20.4	29.1	23.3	16.5	10.7

2	I think social networks help solve family problems.	17.5	33.0	18.4	14.6	16.5
3	I express my views and thoughts with my family through social networks more freely than in face-to-face communication.	19.4	22.3	19.4	18.4	20.4
4	Communicating with my children through social networks helped me understand their personalities better.	20.4	35.9	19.4	13.6	10.7

4.5.3 Social media richness and family communication

As explained in Chapter 2, MRT is a framework applied to explain a communication channel's capacity to reproduce the information transmitted over it. The theory highlighted four factors that affect media richness: (1) the capacity of the medium to transmit various social cues (e.g., voice, body language), (2) immediacy of reaction, (3) language variety, and (4) the individual focus of the medium (Dennis and Kinney, 1998).

This question was aimed at understanding the impact of social networks on parents' communication with their children in view of the fact that social networks facilitate visual and audio communication in addition to traditional telephone calls. Social media also offers the possibility of collective family video or audio calls or recording and publishing a video or voice notes within family groups in social media applications. I asked the parents the following question: To what extent do you agree with the following statements? These statements were concerned with the advantages of diverse media, as well as the effectiveness of group features: 1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.

The responses to statement 1 indicated that about half of the parents agreed and strongly agreed with the statement that social media richness gave them the opportunity to strengthen their relationships with their children. Visual communication or video clips can convey body language, facial

expressions, and tone of voice to communicate ideas and feelings more fully for parents and children. Furthermore, social media communication allows photo and video sharing in addition to conventional texting, and, as mentioned before, they have a greater emotional and personalised feel to them than normal text messaging or even face-to-face communication. As such, they may help parents to express their love to their children more freely. This is particularly the case over long distances when children are living or studying away from home. Photo and video sharing from both ends allows the recipient to feel closer to the experience itself, which could be another possible reason why parents believe that the richness of social media strengthens their familial relationships. This relates to the first factor in MRT, as the interview results indicate.

In response to statement 3, more than 57% of parents agreed that groups within social networks had helped them to strengthen their relationships with their children. WhatsApp groups, as mentioned on the official WhatsApp website, can include up to 256 members. The connection of 256 persons with one click of a button represents a major shift in human communication in general (Adding and removing group participants, 2019). Groups allow families to discuss a multitude of topics simultaneously and together with everyone in attendance. Possible examples could include making decisions about meetups, planning trips, settling disputes, and discussing their daily lives. Not only is it effective, but it is also highly convenient since parents are not obliged to message each member of their family separately but can convey their messages to them all together.

Moreover, in response to statement 2, nearly 60% of the parents reported that 'emojis' in social network applications provided them with a quick and easy opportunity to express their positive emotions towards their children. Emojis tend to add more personality to plain text and can elicit empathy from users. Therefore, for those parents who fail to generate emotional context in face-to-face communication, social media communication can prove to be a much more expressive means of voicing their feelings.

Social networks offer parents ways of instantly communicating with their children using both facial and vocal expression. This is a new mode of human communication. Previously, voice communication or texting between two individuals was expensive. However, with social networks, free video calls emerged as well as collective video communication. Nowadays, families can meet in one digital room within an application and chat as though they are sitting in their own living room. These new characteristics create a new kind of family communication, changing the nature of communication itself.

Table 4-11 To what extent do parents agree with the following statements about social media richness for family communication?

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	I see that social networks with their diverse media (video, audio, image, text) have helped to strengthen family communication.	23.3	26.2	27.2	15.5	7.8
2	Emojis help me to express my feelings in family communication.	22.3	36.9	22.3	8.7	9.7
3	Groups in social networks have increased family communication.	23.3	34.0	26.2	5.8	10.7

4.5.4 Parents' preferred medium for communication with their children

Table 4-12 shows the parents' responses to the following question: "In communicating with my children through social networks, the best way is by text, voice note, send a video, send a photo, video call through social media app, Audio call through social media app or other".

About half of the parents preferred text in communicating with their children. Instant texting gives the individual the ability to communicate instantly with others without seeing their faces or hearing their voices. It relieves the pressure on them and gives them the best opportunity to express their ideas. Texting is short, direct, and time efficient. Apart from its convenience, some parents do not feel as comfortable voicing their thoughts over social media communication channels as they would in person, so they possibly opt for the most direct and easy method of communicating, which is texting, thus remaining within their comfort zones.

In addition, nearly one-fifth of the parents preferred to record voice notes to communicate with their children on a daily basis. This may be because several of the parents could not read or write well

and so required voice recording as an alternative means of communicating with their children, as some interview results confirm. Some of the children also recorded vocal notes if their parents could not read well. Another conceivable reason is that voice recording saves time because it requires less focus than texting. In light of parents' daily tasks or their children's college work, voice recording in familial communication offers a fast and efficient means of delivering messages among family members.

Additionally, video and audio calling were considered the third and fourth priorities, respectively, for parents in communicating with their children, with approximately 22%, and these are some of the most important free features offered by social networks. Before the availability social media applications, video calling was expensive and difficult to achieve successfully. The advantage of video calling is that it is closer to face-to-face communication, as facial expression, tone of voice, and body language are visible, which increases and enhances the quality of communication between those involved. For parents who do not prefer video calling, audio calling is a very close alternative, as it offers all the advantages of video chatting with the exception of the visibility of the other person. This is preferred by some, as it offers the convenience of it not being necessary for them to hold their device in a particular position and allows the speaker to remain mobile while talking, thus saving time, and so representing a convenient alternative.

Table 4-12 In parents' communication with their children through social networks, the best option is...

Answers	No	Percent
Text	49	47.6
Voice note	19	18.4
Send a video	4	3.9
Send a photo	3	2.9
Video call through social media app	13	12.6
Audio call through social media app	10	9.7
Others	5	4.9
Total	103	100.0

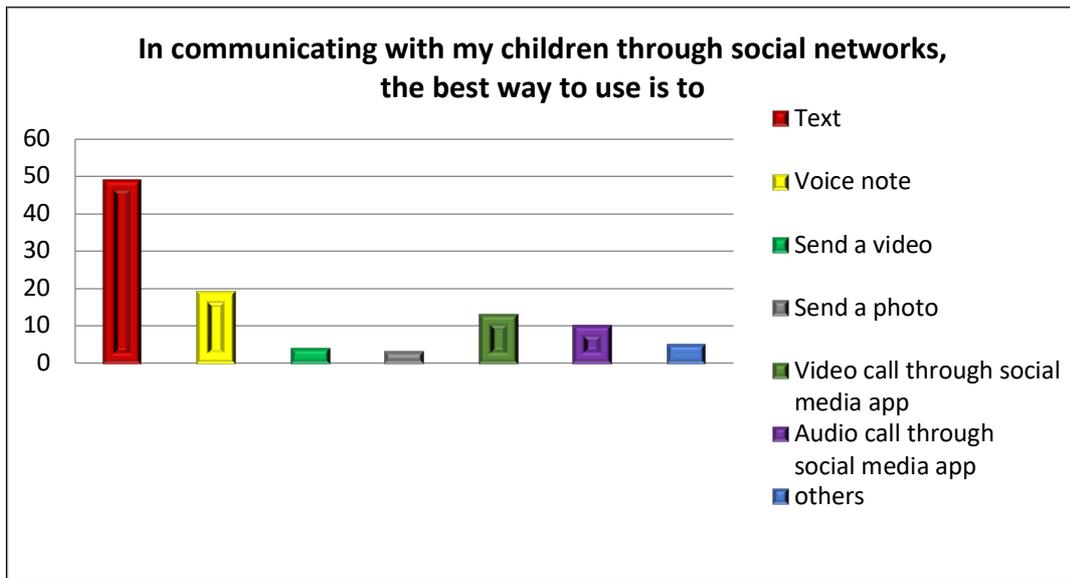


Figure 4-4

Preferred way for communication with my parents via social media networks

4.5.5 Rewarding behaviour from parents

Based on the FST that I mentioned in Chapter 2, I focused on an element of the theory model termed ‘rewarding behaviour’ (RB). I attempted to examine whether parents rewarded their children for their active participation in online family groups. In the Muslim Saudi society, parents are afforded a significant status, so in this theme, I wished to explore the core findings regarding the manner in which parents interact with children who are active in family communication using social networks and whether such children get more attention from their parents.

As is clear from the answers to the first statement (“I think it is a form of respect that my son or daughter communicates with me through social networks”), the parents’ general attitude was hesitant: almost one-third agreed, nearly one-third disagreed, and approximately one-third were reluctant to answer. The interviews clarified the reasons for this hesitation. Regarding their children’s continued communication through social networks, nearly 75% of the interviewees said they did not see it as a sign of respect for them as parents. Accordingly, they sought to make excuses for their children, such as that they are busy with their studies, in addition to the continuation of alternative face-to-face or telephone communication, as we will see in the interview results. The interview responses to this question also signified that the parents’ attitude towards the use of social platforms over the internet by their children was not considered respectful, and the parents showed a reluctant attitude and agreed that their children should minimise the use of the social media and stop disclosing their personal discussions on the internet, which the parents considered highly disrespectful.

Regarding the second statement, about 42% of the parents disagreed with the principle of giving more attention to the child who communicated with them constantly through social networks. They viewed it as a matter of principle to pay equal attention to all of their children. However, almost a third of the parents said that they paid more attention to the children who communicated with them through social networks, perhaps to encourage their other children to communicate more with them and the family through social media. Another possible reason why they may reward the children who used social media to communicate is that they appreciated the extra effort that they invested in strengthening familial bonds in whichever way they were comfortable with, as opposed to children who may not be doing the same.

The third statement (“I like that my children communicate with me through social networks”) yielded a surprising result. Almost 40% of the parents loved their children communicating with them through social networks because social networks have become a reality, and therefore, parents are happy to use them to strengthen their relationships with their children rather than being busy with their friends, for example. Parents’ eagerness to communicate here is helpful in strengthening their relationships with their children.

One-third of the parents said that they did not prefer their children to communicate with them through social networks. However, this may mean that they did not prefer to communicate remotely compared to using face-to-face communication, and they may have perceived direct communication as the best and most effective means of communication. One possible reason for this statement may be that the parents recognised that overindulgence in social media communications is not good for their children, as it dulls interpersonal skills, and if they generally discourage this, then that could possibly motivate their children to participate in more face-to-face communication with them. As evidence to support the above-mentioned research findings, the research found that the parents in Saudi Arabia are highly concerned about the exposure of their children to online media sources. About 23% of the parents did not have any consolidated information about the sources visited by their children on social media. Furthermore, 60% of the parents criticised their children’s overuse of web-based platforms. Moreover, the parents also felt that excessive use of the internet has harmed the relationships of the family (Abid 2020).

Table 4-13 To what extent do parents agree with the following statements?

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	I think it is a form of respect that my son or daughter communicates with me through social networks.	14.6	22.3	28.2	16.5	18.4
2	I give more attention to the child who communicates more with me via social networks than others.	11.7	17.5	28.2	18.4	24.3
3	I like that my children communicate with me through social networks.	16.5	23.3	29.1	12.6	18.4

4.6 INTERVIEWS WITH PARENTS

4.6.1 Interviewees' demographics

I interviewed 15 parents: 10 fathers and 5 mothers. Most of them worked in the government sector and were aged between 45 and 65 years. All of them belonged to the middle class and were predominantly traditional and conservative. Five of them were retired and seven were divorced or widowed. Ten interviews took place in the parents' homes after communicating with them, and five interviews were held in public cafés. Few mothers participated due to the difficulty in communicating with women in public places as well as their sensitivity to potential intrusions to their privacy.

4.6.2 Analysis of interviews

This stage of analysis closely follows the methodological and analytical approach proposed by (Attride-Stirling, 2001). The intention was to use her hierarchy to create a thematic network so that the details of the individual answers could be considered and collected within a theoretical structure. This is an iterative process, as the researcher moves from the segmented data to the possible structure

and returns again. Categories are created equally and are subsequently removed or moved to a different attribute as a richer understanding of their features is obtained. Table 4-14 provides a detailed list of the contents of the three thematic levels.

The first step was to encode individual data to enable the identification and comparison of similar issues. This structure was then organised into larger groups that assembled similar concepts (i.e., basic themes) and finally into a small number of the largest thematic issues (organising themes). In the table below, the first column shows the encoding structure derived from individual comments. These were then grouped into basic themes, organising themes, and two main global themes.

Table 4-14 Codes and themes

Codes	Basic Themes	Organising Themes	Global Themes
Save time and energy Text, voice, video Sharing secrets Daily news Asynchronous communication Fast communication Family group	Family dynamics	Family relationships	Perceived change in family
Bilateral communication Family conversations using social networks More female roles	Family communication		
Parents power, affect and duties More trust between parents and children Children teach parents about technology Change in family values Bedroom culture: private world Family privacy Emotions expression Parents respect	Family roles	Family values	
Communication misunderstandings Social media addiction Rewarding behaviour	Family concerns		

4.6.3 Perceived change in family

In the analysis of the interviews, the focus was on one global theme: the perceived change in family interactions. This global theme was formed of two organising themes, as shown in Table 4-14, and these two were divided into four basic themes. The different points within the interviews helped me to form this classification of the themes, which will be discussed in the section that follows.

4.6.3.1 Family relationships

During the interviews, the role of networks in changing family relationships emerged as a recurring theme, encompassing changes in the type and strength of relationships. I therefore decided to divide this global theme into two sub-themes: family dynamics and family communication. These two themes overlap one another; however, I preferred to consider each discretely to differentiate between them. The family dynamic influences and is influenced by factors such as family values, society, and the economic and social situation of the family. Moreover, by its nature, it also affects family communication. Regarding family communication, each family member can assess his or her own importance in influencing family relations. Communicating through social media may have begun to fill the communication gap, especially alongside the socio-economic transformations taking place in Saudi society. In particular, daily family meetings had become difficult because of the differences between the parents' working hours and the children's university study times. Hence social media communication may compensate for the time that parents wish they could invest in face-to-face interactions. They may also be using their social networking time to try to obtain useful parenting information and to connect with other parents who might be using effective parenting techniques that they are not.

4.6.3.1.1 Family dynamics

Family dynamics are defined as “the patterns and interactions we have with different members of our family. Each family has a unique set of dynamics, which will impact our development, ideas and ways of behaving as well as how we interact with others” (Miles (2015). Family dynamics govern how the family interact as a unit. This includes how they decide upon their own communication styles, decision-making, problem solving, and emotion sharing. Family dynamics highlight the type of interaction and the level of communication between the family members. Dynamics relate to how the family works despite difficulties and how it fulfil its roles and responsibilities (Thomas, 2018).

One theme within family dynamics is related to the convenience provided by social media communication in terms of saving energy and time. Each family has a different dynamic with a different pace that determines how social media becomes part of their communication. Generally, 10 out of 15 parents felt that using social media to communicate with their family was a means of saving considerable time and effort taking into account their family dynamics. Parent interviewee number 1 – said

I am a professor, and my wife also works as a medical professional. Apart from this, one of our sons, apart from having school, has football practice and games so has to stay out late at times, and my daughter is married and lives in a different area of the city, which is far from ours. Considering all of our busy schedules, having the ability to use the WhatsApp family group to let everyone know about our daily lives instantaneously blends in very well with how our family is.

However, some of the parents from rural areas believed that it did not make much difference. Parent interviewee 7 –said

I am a housewife, and my husband is retired. We have two sons, one who has a fixed work routine and comes back home around the same time every evening, and one teenage boy who isn't very social. We have dinner together every day and spend most weekends together too, so our WhatsApp family group stays inactive mostly.

Since family dynamics involves how a family decide upon their communication, networks applications such as texting and voice and video messages bring family members closer and help them feel more connected. Parent interviewee 15 , said

All of these different applications, WhatsApp, Instagram, Snapchat, Facebook messenger, open up the possibility of doing so much more than just texting our children. Now we can send them pictures and videos of whatever we are doing, and they can send us theirs, and that helps us feel much more connected.

Apart from enjoying these additional features, some of the parents felt that the photo/video sharing option made their children more responsive. Another parent interviewee 5, said

My children are mostly using Instagram and Snapchat as opposed to WhatsApp or Facebook, so they are fonder of photo/video sharing than they are of normal texting, and I can see that, as they tend to communicate more through these photo/video sharing applications than on the WhatsApp family group.

In addition, family dynamics also include problem solving and sharing emotions. More than half of the interviewees indicated that social networks enhanced the children's trust in their parents and said that they became more open with their parents about their private problems. Parent interviewee 1 stated, *"I noticed that my daughter trusted me more and told me her own problems, which I then helped her to solve."*

4.6.3.1.2 Family communication

Most of the parents who participated in the interviews agreed on the importance of social networks in strengthening family relationships. The reasons they gave varied; for example, parent interviewee 9 considered that free social networking applications are important and beneficial, saying, *"Social networking is a cheap alternative to mobile phone calls. Just as mobile calls are expensive, with free social applications, you can communicate with all your children at a very cheap cost"*. Thus, the accessibility of the internet via smart phones gives family members more chances to communicate at different times during the day.

Further, apart from being less costly, the internet-enabled connection is also relied upon by parents, as it allows users to establish interactions with each other in a face-to-face manner even when residing at distant locations. Internet-based platforms offer services like video calling. The communication platforms like WhatsApp and Snapchat enable services like video messaging, which has contributed to overcoming the hesitation of children as well as parents about interacting with each other in face-to-face form. Moreover, emoticons are also exchanged between parents and children on a frequent basis on the text messaging platforms, which allows them to provide details of their current feelings and emotions.

Moreover, the availability of social networks for group communication also contributes significantly to developing family relationships, as noted by the majority of the interviewees. For instance, parent interviewee 2 said, *"The family group within WhatsApp is a smart and really important tool to speed up the communication between family members, and this is something new and did not exist previously through technology."* Moreover, parent interviewee 5 explained the importance of 'family groups' in social media: *"WhatsApp groups save my time; in one message, I can say what I want to all my kids. This also saves my energy instead of repeating my instructions to them every time."*

Another aspect that the parents interviewed regarded as a positive aspect of social media communications as far as strengthening familial relationships is concerned is that it allows parents to relate to their children much better. When parents become successfully integrated into the digital era, children become more comfortable discussing things with them because now both parties are thinking along the same lines. A father, parent interviewee 5, said,

Before me and my wife started using WhatsApp and Facebook regularly for several purposes, including communication, we would constantly be complaining to our children for not communicating enough but turns out all we had to do was get with the times and start speaking their language. Once we did that, it feels as if we and our children are always connected, and it's a great feeling.

4.6.3.2 Family values

Some well-regarded online dictionaries describe “family values” as follows:

“the moral and ethical principles traditionally upheld and passed on within a family, as honesty, loyalty, industry, and faith” (Dictionary.com, 2019).

“values, especially of a traditional or conservative kind, which are held to promote the sound functioning of the family and to strengthen the fabric of society” (Merriam-Webster.com, 2019).

“values held to be traditionally taught or reinforced within a family, such as those of high moral standards and discipline” (Lexico.com, 2019).

To offer stronger support to this section of family values, I revisited the research by Alanazi (2015), which depicts that family values are recognised as an integral part of the family system and play an effective role for influencing the community. It also defines the practising of the specific form of behavioural patterns that determine norms of the society as well as the associated system of beliefs (Alanazi, 2015).

One of the most important family values in Saudi Arabia is respect for and obedience towards parents. This limits the freedom of children in their private lives. Other important principles are basic values, cooperation, and putting the interests of the family before the interests of the individual. In this section, I will analyse some of the outcomes of the interviews related to family values from two aspects: the roles of family members and some family concerns about the new changes that have taken place with the use of social networks.

4.6.3.2.1 *The family roles*

One of the important roles in the family is the control of decision-making and power. For example, power in traditional Saudi society was for a long time in the hands of fathers and young men. The use of social networks has narrowed this patriarchal traditional role in some areas where men can no longer decide what women should do about their futures. From the analysis of the interviews, it became clear that many of the female interviewees made their own decisions in certain aspects of their own lives. For instance, five parent interviewees came from rural areas that are known to deny girls access to medical studies because it would involve mixing with males; through discussion with them, I discovered that all five parents' daughters were medical students training to become future doctors. In addition, I found that they supported the freedom of their children to make decisions about their future. For example, one of the parents which is interviewee number 11 said

The freedom of discussion and decision-making is guaranteed to my children, especially to my daughters. The family group gave children the opportunity to express their views more freely than before. I have noticed that my daughters do not speak freely when we speak face to face, unlike if they text me through the WhatsApp.

Another sign of women's role in the family is the high authority of the mother. Social networks have given mothers more power within the family as a vehicle for orders and directions. One mother – parent interviewee 9 – said,

The social networks gave me the opportunity to organise my family and the clear distribution of tasks to children, and I noted that my husband's support for me increased within the family thus validating my role as mother and wife. I think I will suffer if social media is gone one day.

Many children often leave decision-making to their parents, but was noticeable through the interviews that the children had assumed more important roles within the family. For example, many of the children had chosen travel destinations and contributed to travel bookings, travel destination, and more. Parent interviewee 8 said:

Many times, my children are the ones who choose the family's destination to travel in the summer. The reason is the many discussions that take place in the family group in WhatsApp. In previous periods, the decision was often only for me and my wife. I do not know whether it is because my children are older or because social networks gave them the strength to participate in the decision.

Further, it is also recognised that apart from social media, the social class as well as education levels also perform a key role in decision making. Many of the parents considered this slight shift in family

roles as positive. They recognised that social media had enhanced their children's knowledge, skills and awareness regarding many things and had made them more capable of dealing with situations that parents during their younger years could not have faced. One of the mothers, parent interviewee 2, said

Because social media helps children stay connected to the latest trends and news from around the world, they have become much more knowledgeable. They tend to share whatever they learn on our family groups, which gives them a sense of pride, and I think because of that they have started feeling more confident and started to assume responsibilities in the family which they would not otherwise.

It is generally observed that the importance of children's roles in taking important decisions has increased, for instance, contributing to family expenses. In the past, as Luna (1989) stated, "The father is often the breadwinner and protector of the family, whereas the mother is often the homemaker and the primary caretaker of the children", but now some children participate in payments and expenses. Their financial payment from the university may also contribute to this. For example, the parent interviewee 1 said:

My eldest daughter has been contributing to important decisions such as moving to another city, etc. Perhaps because I am retired now and have no work, the priority is the children's future, which is important now. I think with the era of information and the social communication revolution we have to give them a bigger role.

Usually, it is the parents who teach their children about different things as they grow up so that they can get more accustomed to the outside world and can face newer challenges. This has always been a fixed parental role; however, with the advent of social media, even that role has changed to a certain extent. Because parents tend to be far less tech-savvy than their children, they look to their children for guidance whenever they are learning about a new social media application. This includes how to become familiar with the application and how to use it for communication more specifically. One of the mothers interviewed, parent interviewee 13, said

It feels a little odd if I am being honest. Parents are the ones who usually teach their kids how to adapt to new challenges and situations in life, but now our kids are old and wise enough to help us learn about these social media applications.

4.6.3.2.2 Family concerns

Some concerns among family members following the emergence of social networks include children's isolation, personal privacy and family privacy, social networking addiction, and

misunderstanding through social networks. The range of these problems and concerns may be due to the diversity of each family's dynamics, the different values in each family and differences in the strength of the family relations.

Another issue that the parents considered prevalent is that their children, although very active on social media, tended to stay inactive in family-related groups and conversations while they had no problems actively engaging with their peers. One mother, parent interviewee 14, said

My daughter has become very isolated and rarely responds to family messages in the family group on WhatsApp, and the problem is that she is active in communicating with her friends on Snapchat. There seems to be something wrong in our relationship with her, but her obsession with communicating with her friends through social networks has reduced her role within the family.

In some cases, the parents felt as if the child used social media for everything other than communicating with anyone, which made them worry that their child might become too introverted.

Another parent, interviewee 8, said

Whenever I see my son using his phone, he is always either watching videos on Facebook or looking at pictures of other people on Instagram. I rarely see him talking to people let alone anyone from our family on text or on call. I seriously worry that all this time spent mindlessly on social media and not communicating with anyone might dull his social skills and cause him problems later on.

One of the concerns that also emerged is the infringement of individual privacy and family privacy. Some playful children capture and publish some family conversations in open social networks, such as Twitter, Snapchat, or Instagram, causing embarrassment to parents or family members. For example, parent interviewee 10 stated

Once in my son's account on Twitter, I found he published a private conversation between me and him in WhatsApp. That conversation in my opinion was private and should not have been made public. I was very upset and asked him not to do it again.

The emergence of family information in the public sphere was not something previously known in Saudi society. For a long time, it was difficult for the observer to find even the most basic information about any Saudi family. In contrast, social networks are now full of family photographs, their places of travel, the schools they study at, and the jobs they do. Now, it is easy to get to know many details of many Saudi families' lives, and the irony is that it is family members who publish these images and information on social networks: *"I always warn my daughters not to publish my photos or their pictures in social networks. This is a taboo that cannot be transgressed"*, said interviewee 3. We

may assume that the accessibility of the internet via smart phones has contributed to the rise of such posts on various social networks. This increases the chances that the family's privacy will be breached, because they are sharing more details of their lives with online strangers.

Another issue encountered by parents is that of communication misunderstandings between them and their children. Since there was an evident generation gap between the two parties, it is understandable that they would have different communication standards that the other party might not understand every time. This concern was voiced by one of the fathers interviewed, interviewee 15, who said

Me and my wife do not use emojis because we do not understand their purpose or meaning. Our children often tend to use them in conversations on the family group, and my wife and I usually have to ask them what they mean, which they find annoying at times, and I feel that this makes them reluctant to talk on the family group more often.

Another parent, interviewee 3, said, *“Our children often use abbreviations and talk in ways that only people from their generation can understand. That often makes me think that maybe they don't want us to understand what they are talking about, but I could be wrong.”*

4.7 SUMMARY

The questionnaires presented interesting responses. The general trend of the world has moved to using social networks as a medium for communication. The findings show that many parents in Saudi Arabia are using social media as a tool to communicate with the family and enhance familial bonds. The ease and convenience of communicating through social media allow parents to engage with their children as well as with family members who may reside in a different country. The findings also show that, over the past three years, there has been a positive outlook on social media. This can be attributed to the fact that social media has become easier to use, and more parents have become accustomed to using it. However, when these parents were asked about communication before social media, the majority of them expressed a desire to return to that. Interestingly, this contradicts the findings that the parents like using social media as a method for communication and indicates that while there is a desire for face-to-face interactions, social media communication has become necessary.

Moreover the interviews provided in-depth data regarding family dynamics, communication, and traditional roles. The findings reveal that the use of social network applications has saved time and

energy and enhanced children's trust in their parents so that they have become more open with their parents about their private problems. The availability of social networks for group communication also contributes significantly to developing family relationships and strengthening familial relationships. Furthermore, the most interesting finding revealed by the interviews is the changes in traditional roles and power in Saudi society. Many children often leave decision-making to their parents, but it is noticeable through the interviews that children have taken more important roles within the family. Even the parental role of teaching their children about different things in life has changed. Parents now look to their children for guidance whenever they are learning about a new social media application. However, some concerns emerged among family members regarding social networks use, such as children's isolation, personal privacy and family privacy, social networking addiction, and misunderstanding through social networks.

Chapter 5: YOUNG PEOPLE DATA ANALYSIS

5.1 INTRODUCTION

This chapter analyses the data from the questionnaires completed by 515 young Saudi people and the interviews with 15 young males and females who attended King Khalid University in the Asir region of Saudi Arabia. All the respondents were relatively young (between 18 and 24 years old), and the aim was to gather information about the extent and nature of their use of social networks in family communication. In addition, their beliefs about the impact of this use on their family, personal, and social interactions were explored. This is the first stage of exploring (a) whether social networks have changed the form of young people's family relationships with their parents and, if so, (b) whether this change is due to the amount of use (i.e., time invested) or the exposure to different attitudes, systems, and beliefs.

This chapter begins by presenting the young people's demographic information so that the subsequent results are contextualised. The main arguments and findings set out in this section with consideration of the research-oriented fundamental aim to identify the extent to which social networks and young people's beliefs are used to influence the personal and family relationships in relation to the time spent on social networks. The final section examines whether any reliable changes in such relationships can be traced to the extent of use or access to new concepts and rules in family communication as a result of spending time on social networks.

5.2 QUESTIONNAIRE DEMOGRAPHICS

This questionnaire included 515 young people, 55% female and 45% male. Most (88.7%) were single, and 11.3% were married. In terms of age, 48.3% of them were aged between 21 and 23 years old, 33.6% between 18 and 20 years old, and 18.1% more than 24 years old. Accordingly, about 60% of them were younger than 24 years old and were considered digital natives in Saudi society, having been born while the internet was already present in most of Saudi homes. All were from the middle class, and their parents worked in the public or private sectors. This large age gap between the parents' and children's generation may give us a greater opportunity to understand the differences between the parents' use of social networks and the children's use of social networks in family communication. This, in turn, may help us to understand in more depth the impact of these differences on the quality of family relationships and whether any new patterns of communication between family members have emerged.

5.3 VERIFICATION OF THE VALIDITY AND RELIABILITY

5.3.1 *Validity*

External validity was ensured through the web management of the questionnaire, which overcame the potential problem of restrictive geographical boundaries for respondents. The respondents were allowed to volunteer for selection in the sample by consent sampling; this helped to eliminate any opportunities to coerce the participants into taking the questionnaire. To determine the appropriateness of the questionnaire as it relates to and its understanding of the claims, I conducted a pilot test with 30 respondents, including young Saudi people from the Saudi community in Cardiff and some young people from the Asir region where I collected the data. Questions that seemed redundant or irrelevant were omitted, while any apparently vague questions were rephrased.

5.3.1.1 Correlation of the score of the statement and the score to each scale

The correlation coefficients were calculated between the score of the sample members in each statement separately and the total score for each scale with the aim of deleting statements that did not appear to be statistically significant in relation to their scale, since they lacked an appropriate degree of validity as shown in Table 5.1 below.

Table 5-1 Correlation of the score of the statement and the score to each scale

First scale		Second scale		Third scale		Fourth scale	
No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation
5	.570**	8	.411*	8	.790**	7	.695**
6	.526**	9	.701**	9	.729**	8	.832**
7	.704**	1	.689**	1	.586**	9	.892**
8	.720**	1	.745**	1	.688**	1	.860**
		1	.472**	1	.613**	1	.490**
		1	.597**	1	.610**	1	.552**
		1	.646**	1	.651**		
Fifth scale		Sixth scale		Seventh scale		Eighth scale	
No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation	No.	Pearson Correlation
1	.537**	5	.771**	5	.771**	5	.875**
1	.710**	6	.688**	6	.788**	6	.916**
1	.762**	7	.935**	7	.805**	7	.921**
1	.469**	8	.890**	8	.866**	8	.926**
1	.559**					Ninth scale	
1	.804**					No.	Pearson Correlation
1	.773**					1	.899**
1	.572**					2	.921**
1	.533**					3	.761**
1	.464**					4	.693**

5.3.2 The reliability

An internal reliability test was performed for all elements of the questionnaire based on the Cronbach's alpha test (see Chapter 4). The reliability statistics are shown in the table below.

Table 5-2 Reliability statistics

Reliability Statistics		
Scales	Number of statements	Reliability of domain
The purposes of using social media	4	.743
Examples of social networks	7	.788
Experience in using social networks	7	.763
Time spent daily using social networks to communicate with parents	6	.799
Statements about young people's attitudes towards the use of social media in familial communication	10	.746
Expected ease of using social networks in family communication	4	.844
The usefulness of social networks in family communication	4	.817
Media richness for family communication	4	.930
Rewarding Behaviour from parents	4	.837
General scale	50	.849

5.4 USAGE OF SOCIAL NETWORKS

5.4.1 Purposes of using social media

The context of the question was related to the identification of reasons to access the social network. This question was essential to accumulate relevant content on the effectiveness and usefulness of utilising social media to satisfy the main research question. The substance of core responses reflects that regarding social media for social networking and connectivity purposes, social media is highly used by young people. This finding is supported with evidence from the survey-based statistics, which means the value concerned with social networking was highest, i.e., 3.72, with a standard deviation of up to 1.246. This value is more than the value for entertainment, with a mean of 3.33 and a standard deviation of 1.342. Education came third with a mean of 2.77 and a standard deviation of 1.136; and finally, news came last with a mean of 2.30 and a standard deviation of 1.103.

In this research, the heavy users – classed as those who use social media for more than two hours per day – used social media for social networking (about 56%) and entertainment (about 48%), while occasional users - who used social media for less than two hours per day – used social media for education (about 65%) and news (about 62%). The evidence to support this finding was revealed in the literature, which showed that social media has become the most frequently used method for social networking and for exploring the latest trends of communication and interaction among families and outsiders (Procentese, Gatti and Di Napoli 2019; Fuchs 2017). First, the majority of the heavy users used social media for social networking, which correlates to communication. This is good in the sense that these users were probably also using social media to communicate with people in their family. However, it is not uncommon for people of this age group to use social media primarily to communicate with their peers and colleagues. What is slightly more alarming is that almost half of the heavy users used social media mostly for entertainment purposes. The literature revealed that younger people mostly use social media to fulfil their goals of entertainment and to seek information whereas older adults have a fear of isolation and so use social media to maintain social contacts (Leist 2013; Leung 2013; Fuchs 2017).

A study by Khouli (2013) revealed that excessive engagement with social media by children might lead to their isolation and the severe impairment of family cohesion (Gil-Or 2014; Khouli 2013). For the occasional users, again, several interpretations of the obtained results are possible. The fact that most of them were using social media for educational and news purposes possibly indicates that they were more inclined towards face-to-face communication than social media communication. The interview data also confirmed this finding indicated that for communication, face-to-face communication is better for strengthening family ties, otherwise, the children fail to feel free during

this type of communication to enhance family bonds while always practising social-media communication.

Table 5-3 The purposes of using social media

N		Mean	Std deviation	Rank
1	Social networking	3.72	1.246	1
2	News	2.30	1.103	4
3	Entertainment	3.33	1.342	2
4	Education	2.77	1.136	3

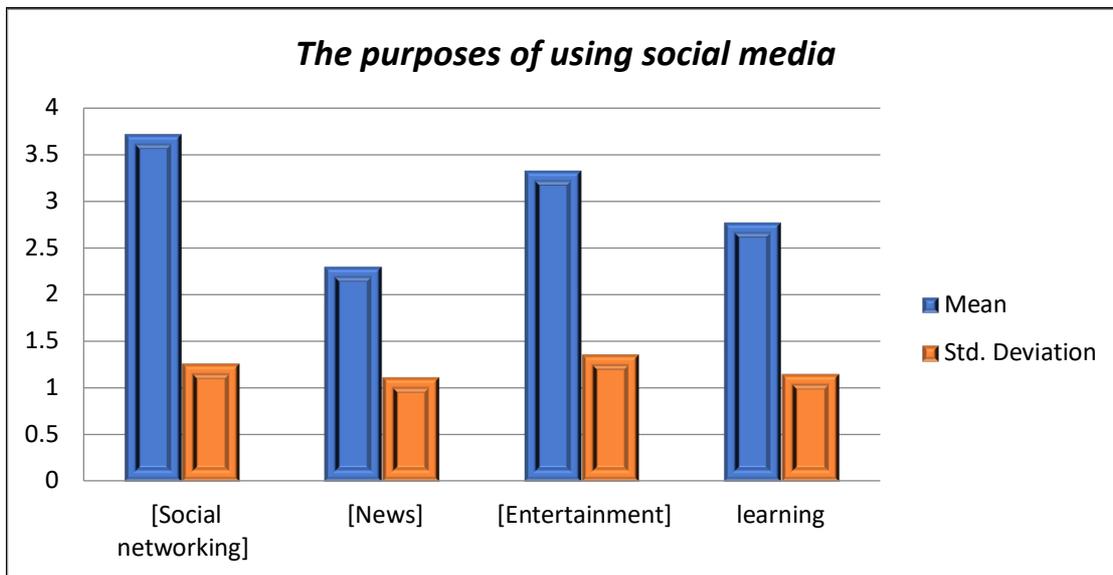


Figure 5-1

The purposes of using social media

5.4.2 Examples of social networks used by young people

This questionnaire focused on the most popular social networking sites and applications in Saudi Arabia. The question posed regarding daily usage of social networking among young people is essential for fulfilling the research aim and answering the research question by identifying individuals' perceptions about how frequently they used social media and whether they found it useful and effective in their daily lives.

The overall response showed that Twitter and WhatsApp are the social networks preferred and most frequently used by young people in Saudi Arabia. These data are supported by the statistical facts as follows: Twitter, with a mean of 3.20 and a standard deviation of 1.292; WhatsApp, with a mean of 3.05 and a standard deviation of 1.184; YouTube, with a mean of 3.04 and a standard deviation of 1.266; and finally, Facebook, with a mean of 1.15 and a standard deviation of 0.585.

The results indicate that the young people who were heavy social media users used Twitter (about 43%), YouTube (about 37%), and WhatsApp (33%) more than they used other applications and spent most of their time on social networks in these three applications. Their communication through Twitter seemed to consist of social networking with friends and strangers as a public sphere application, while they used WhatsApp for entertainment and communication with friends or family members. They used YouTube to watch videos rather than to engage in social networking with anyone. Consequently, Twitter was the main social application used by young heavy social media users in this research. This is a negative indicator, since Twitter was not the main social application in family communication in Saudi Arabia, as was shown in the previous chapter. However, WhatsApp was the leading application in social media among young occasional users by about 63%. This value is so high because many young occasional users spent three-fifths of their time on social networks using WhatsApp. Accordingly, this indicates the presence of family communication, since WhatsApp is the preferred social communication platform among 77% of young Saudi people. Thus, the research-oriented query clearly assisted with the results for family communication purposes, as social media usage, specifically WhatsApp, has been extensively popular among Saudi individuals.

However, if the results from the previous section were to be taken into account where it was observed that the heavy users mostly used social media for social networking and occasional users used it for learning purposes, then that would imply the possibility that most young people on average are not utilising the correct social media channels to strengthen their communication with their families.

Since Twitter is not the main application used for family communication, it could mean that these young people were mostly utilising social to communicate with their friends.

Table 5-4 Examples of social networks

N								Mean	Std deviation	Rank
			1 = not used	2 = less than 1 hour	3 = 1 hour to 2 hours	4 = 2 hours to 3 hours	5 = more than 3 hours			
1	Twitter	No	52	121	122	110	110	3.20	1.292	1
		%	10.1	23.5	23.7	21.4	21.4			
2	WhatsApp	No	26	178	147	72	92	3.05	1.184	2
		%	5	34.6	28.5	14	17.9			
3	Snapchat	No	69	146	129	75	96	2.97	1.309	4
		%	13.4	28.3	25	14.6	18.6			
4	Instagram	No	128	143	105	71	68	2.63	1.343	5
		%	24.9	27.8	20.4	13.8	13.2			
5	YouTube	No	57	143	122	106	87	3.04	1.266	3
		%	11.1	27.8	23.7	20.6	16.9			
6	Telegram	No	324	137	26	16	12	1.55	.903	6
		%	62.9	26.6	5	3.1	2.3			
7	Facebook	No	475	21	8	6	5	1.15	.585	7
		%	92.2	4.1	1.6	1.2	1			

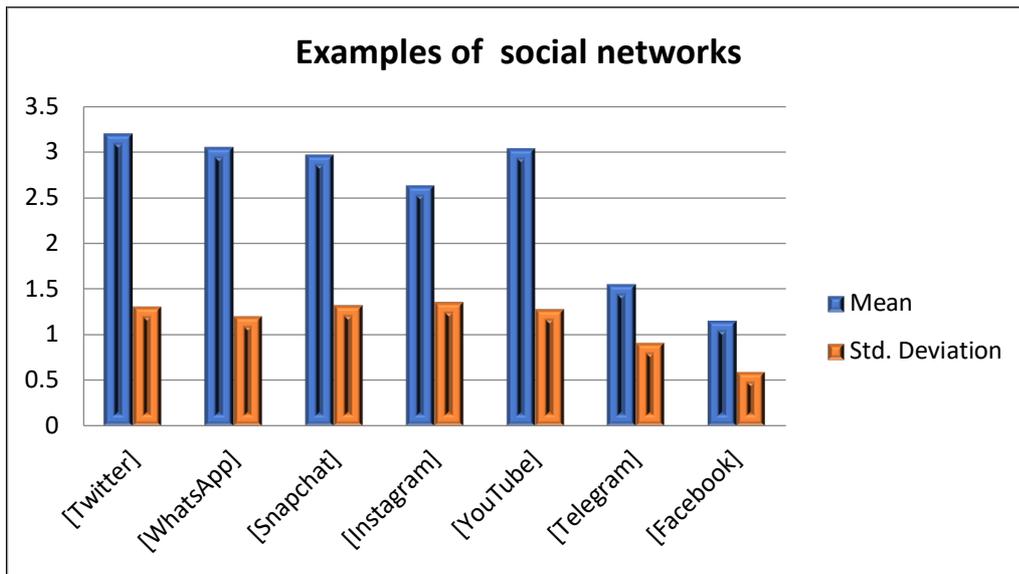


Figure 5-2 Examples of social networks

5.4.3 Young people's experience of using social networks

The question posed was aligned with the aspect of young people's experiences of social network usage. This question is significant to discover the attitudes and views of young people in the Saudi region regarding social networks' utility and effectiveness regarding how social media assists in family communication within the traditional structures of Saudi families.

The research results reflect that the young people had an effective experience of using social media, specifically WhatsApp. In this support, the statistical evidence found that WhatsApp's usage was approximately 84%, while 1% did not use WhatsApp, which is a negligible percentage. As mentioned earlier, this is a significant result in the sphere of family communication, as WhatsApp is one of the most important social applications among the Saudis; this finding is also supported by interview findings, which revealed that WhatsApp is the preferred form of social media communication among parents nowadays in Saudi Arabia. Twitter was in second place with around 75% of the young users reporting excellent and good experiences, followed by Snapchat and YouTube with about 70%. These high levels of skilful experiences with social media applications are indicative of the high degree of usage as well as the significance of these applications for young people in social and family communication, particularly WhatsApp. Hence, these young people's experiences in using social media applications increased the likelihood that they would use it for family communication, thereby enhancing their experience on these platforms. Significantly, about 79% of the young people did not use or were generally weak in using Facebook. As the interview

results showed, only one family out of the thirty interviewees reported using Facebook for family communication, because it provides a video calling service that is not available via WhatsApp in Saudi Arabia.

Table 5-5 Young people's experience in using social networks

N								Mean	Std deviation	Experience	Rank
			1 = I have no experience	2 = weak	3 = medium	4 = good	5 = excellent				
1	Twitter	No	16	41	73	98	287	4.16	1.128	Good	2
		%	3.1	8	14.2	19	55.7				
2	WhatsApp	No	6	12	62	110	325	4.43	.876	Excellent	1
		%	1.2	2.3	12	21.4	63.1				
3	Snapchat	No	27	37	84	111	256	4.03	1.192	Good	4
		%	5.2	7.2	16.3	21.6	49.7				
4	Instagram	No	56	57	82	96	224	3.73	1.395	Good	5
		%	10.9	11.1	15.9	18.6	43.5				
5	YouTube	No	21	39	93	110	252	4.03	1.158	Good	3
		%	4.1	7.6	18.1	21.4	48.9				
6	Telegram	No	199	89	79	64	84	2.50	1.501	Weak	6
		%	38.6	17.3	15.3	12.4	16.3				
7	Facebook	No	330	78	53	16	38	1.75	1.213	I have no experience	7
		%	64.1	15.1	10.3	3.1	7.4				

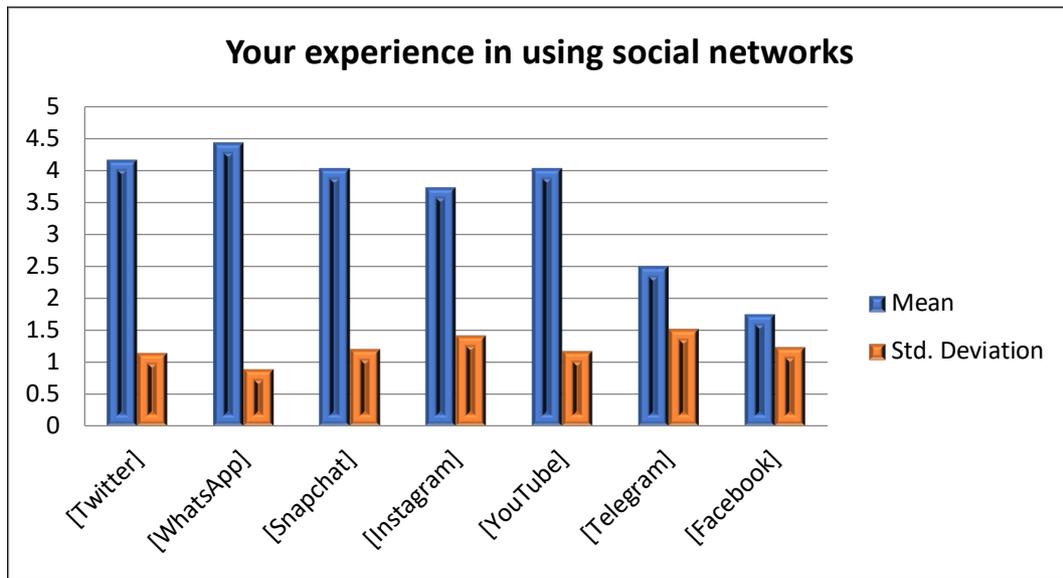


Figure 5-3 Young people's experience in using social networks

5.4.4 Young people's attitudes towards the use of social networks in family communication

5.4.4.1 Time spent daily using social networks to communicate with parents

This question was designed to ascertain the young people's attitudes towards the use of social networks in family communication, particularly with their parents, which may be evident from the extent of their use. The extent to which a tool is used is an important indication of the user's attitude towards it which is vital to assist the fundamental purpose and aim of the research.

The substance of the results shows that WhatsApp was the preferred application for the heavy users, who used it more than two hours per day, with 15% of the young heavy users favouring it. Moreover, of the occasional users – who used it less than two hours per day – 62% used it to communicate with their parents on a daily basis. Accordingly, more than 77% of the young people used WhatsApp to communicate with their parents. The interview also determined that parents and young people effectively maintained family communication by engaging in social media and easily conducting calls. This is a different result from that for the second question about the examples of social media, which confirmed the prevalence of Twitter among Saudi young people in general, and it was highlighted here that WhatsApp was mainly used to communicate with parents and family. Snapchat ranked second, with 33% of occasional users and 7% of heavy users, meaning that about 40% of all the young people used Snapchat to communicate with their parents, as some young people mentioned in the interview section. Finally, Instagram was in third place, with 18% of the young people using it to communicate with their parents.

Table 5-6 Time spent daily using social networks to communicate with parents

N								Mean	Std deviation	Time spend	Rank
			1 = non	2 = less than 1 hour	3 = 1 hour to 2 hours	4 = 2 hours to 3 hours	5 = more than 3 hours				
1	WhatsApp	No	116	250	73	36	40	2.29	1.124	less than 1 hour	1
		%	22.5	48.5	14.2	7	7.8				
2	Twitter	No	435	43	14	13	10	1.29	.804	not using it	4
		%	84.5	8.3	2.7	2.5	1.9				
3	Snapchat	No	310	123	47	14	21	1.67	1.029	not using it	2
		%	60.2	23.9	9.1	2.7	4.1				
4	Instagram	No	422	57	15	12	9	1.31	.789	not using it	3
		%	81.9	11.1	2.9	2.3	1.7				
5	Telegram	No	470	24	12	7	2	1.15	.550	not using it	5
		%	91.3	4.7	2.3	1.4	.4				
6	Facebook	No	485	15	7	4	4	1.11	.516	not using it	6
		%	94.2	2.9	1.4	.8	.8				
General average								1.47	0.802	not using it	

Statements about young people's attitudes towards the use of social media in familial communication

The question was posed regarding the young people's attitudes or beliefs regarding social media usage mainly for family communication. This question is critical and highly relevant to understand the effectiveness and values of social media perceived by Saudi young people to maintain family communication in support of the research's core query.

The final results show that more than half of young participants agreed and strongly agreed that they liked to use social networks to connect with their parents, as in statement 1, and more than a third of the total number confirmed that social networks played a significant role in communication with their parents, as in statement 2. However, almost 40% of the young people did not consider social networks important in strengthening their family relationships, while 30% of the participants – also a large proportion – opposed this statement. In their responses to statement 3, about 43% of the young people agreed and strongly agreed that social media encouraged them to interact with their families, while one third of them disagreed with that statement. It is possible that this group of young people found it difficult to interact with their families through social networks due to distraction in general, or the existence of estranged members of their families.

These results clearly show that the young people actively used social media apps to communicate with their parents. Meanwhile, the 40% of young people who said that social media did not bring their family closer also commented that the positive effects of social media cannot be ignored (i.e., that social media increased communications between the children and their parents). Continual and increased use could potentially strengthen relationships in the long run. The interview findings also indicate the same view that social media is a strong medium to foster family communication because of the ease of connecting with family members and keeping track of each other's daily lives by making video calls and phone calls.

By contrast, however, almost 65% of the young people agreed with statement 5 that frequent networking with their parents across social networks had reduced face-to-face communication (see Chart 5-4). This may indicate that interaction across social networks – as mentioned in statement 3 – satisfies family members' desires to communicate with each other. Moreover, it is possible that the family members were no longer committed to face-to-face communication due to their everyday circumstances, the difficulty of organizing daily family meetings, and the ease of communication offered by social networks, which may have engendered the belief that the family was

communicating sufficiently through social media. However, this could also imply that through social media, they could say whatever they wanted to conveniently, so they did not need to invest time and effort in face-to-face communication, which the young generation tends to find relatively more exhausting at times. Yet, while investigating the interview data in more depth, it was also noted that due excessive usage of social media, the young people did not feel independent or free to communicate with their parents during face-to-face communication. Therefore, this limitation regarding social media communication was identified from the interview data. Moreover, more than half the young people agreed and strongly agreed that they hoped for a return to the old days of family communication without social networks. This could possibly be because the young people recognised how time consuming social media can actually be as well as its potential to completely isolate people. This may be because they believed that once social media networks are not so important for communication, their families can bond in much more meaningful and permanent ways.

Regarding face-to-face communication, the young people recognised – as I mentioned earlier – that social networks had weakened their direct communication with their parents. Also, a large number of them – almost 65% – preferred to communicate face to face with their parents rather than through social media, as in statement 8. It was interesting to find out that the young people thought that social media networks were useful in communication with their parents but, at the same time, they would prefer face-to face communication. This suggests that while there is a desire for face-to-face interactions, social media communication may be necessary. This finding also emerged in some of the interviews, too.

The interview findings show alignment with the quantitative outcomes revealed via the questionnaire by highlighting that the young people were also feeling embarrassment in communicating with each other face-to-face. The interview-based findings help in revealing that social media provides opportunities to young people to establish a comfortable, face-to-face interaction by keeping the required levels of distance from the family members and offering an opportunity to have a closer link with members of their family. Apart from the above, the perceptions of interviewee 1 revealed that the parents had started to express themselves in an open manner with the aid of digital technology because they were capable of communicating through the interactive platforms that enabled video conferencing and promoted effective dissemination and conduction of the work and family responsibilities.

In statement 9, 61% of the young people said that they communicated with their friends more than with their parents through social networks. This result and the previous one show that there was some reservation amongst the young people about using social media for family communication. This aligns with the findings of the interviews, which we will see in interviews section.

In addition, more than half the young people agreed with the same statement towards their siblings. This could also mean that the young people believed that while they were from the digital era, their parents were not, and therefore, it was not particularly useful for them to invest effort in familiarising themselves with social media communication. However, among their peers, since they were all familiar with such communication media, they would spend most of their time on social media talking to them.

Table 5-7 Statements about young people's attitudes towards the use of social media in familial communication

N	Statements	strongly agree	agree	neutral	disagree	strongly disagree
1	I like to use social networks for family communication.	17.9	33.2	29.7	10.1	9.1
2	Social networks are important because they strengthen my family relationships with my parents.	10.9	21.4	27.6	20.4	19.8
3	Social networks make me interact with my family.	13.0	30.5	24.9	16.3	15.3
4	Social networks gave me the strength to participate in various decisions within my family.	14.6	26.4	28.9	16.3	13.8
5	Frequent networking across social networks has reduced face-to-face communication with my parents.	39.8	25.8	15.3	9.7	9.3
6	Family groups in social media are important for strengthening family relationships.	21.4	27.0	26.0	11.1	14.6
7	I hope there will be a return to family communication without social networks.	37.5	16.1	23.3	11.1	12.0
8	I prefer to communicate with my parents across social networks rather than communicating face to face.	11.1	10.3	14.0	16.9	47.8

9	I communicate with my friends through social networks more than I communicate with my parents.	32.4	28.9	14.8	11.7	12.2
10	I communicate with my brothers and sisters through social networks more than I communicate with my parents.	20.4	32.0	23.1	10.7	13.8



Figure 5-4 Frequent networking across social networks has reduced face-to-face communication

5.4.4.2 Young people’s attitude towards using social networks in family communication in the past three years

In this question, the young people were asked about their attitudes towards the use of social networks in their communication with their parents over the last three years:

“My attitude towards social networks in family communication has become 1 = more positive, 2 = somewhat positive, 3 = unchanged, 4 = somewhat negative, 5 = more negative.”

The findings show that around half of the young people who participated felt that their attitudes towards the use of social networks in family communication had become more positive. This positivity may be associated with their parents becoming more accustomed to the style of social media communication and so eliminating the pressures of communicating face to face. In this regard, the interviews conducted in the current project suggest that social media has made it comfortable for the distantly located parents and children to establish strong links with each other and to converse on important occasions in an easy way. The video chat option has further reduced the problems of miscommunication and misunderstanding. Some of the interview responses support the above aspects by revealing that according to young interviewee 15, the use of social platforms had strengthened family bonds and had gained agreement from the parents as, *“Expressive faces helped me to express my love and feelings towards my parents, and also helped me communicate ideas in a way that was not misunderstood.”* This is also re-iterated by young interviewee 8, who reflected,

Being away from home for half a year because of studies is tough, especially because of the distance from my parents because you miss out on many important occasions, but because of applications such as Instagram, Snapchat and photo/video sharing options on WhatsApp, we easily share live updates and collections of any such occasions with each other.

Moreover, as the parents had become more comfortable using social media to communicate, that level of comfort was shared by their children, thus creating a positive environment overall. However, around 20% of them said their attitudes were more negative towards the use of social networks in family communication. This may be for personal reasons that vary from one person to another, as emerged during the interviews. These negative feelings could stem from possibilities such as parents not communicating effectively through social media or investing much more time than they should, which left the children feeling less important.

Accordingly, the scope of social media communication among family members has taken further forms and become a tool for organising social tasks or sharing information. Social media platforms are also important tools for conveying emotions and feelings that enrich family life and increase its stability, as one interviewee mentioned that they found it hard to express their positive emotions, such as love, to their family members in face-to-face communication, but social media made that easier for them.

Table 5-8 Attitude towards social networks in family communication in the past three years

Answers	No	Percent (%)
More positive	82	15.9%
Somewhat positive	166	32.2%
Unchanged	160	31.1%
Somewhat negative	83	16.1%
More negative	24	4.7%
Total	515	100%

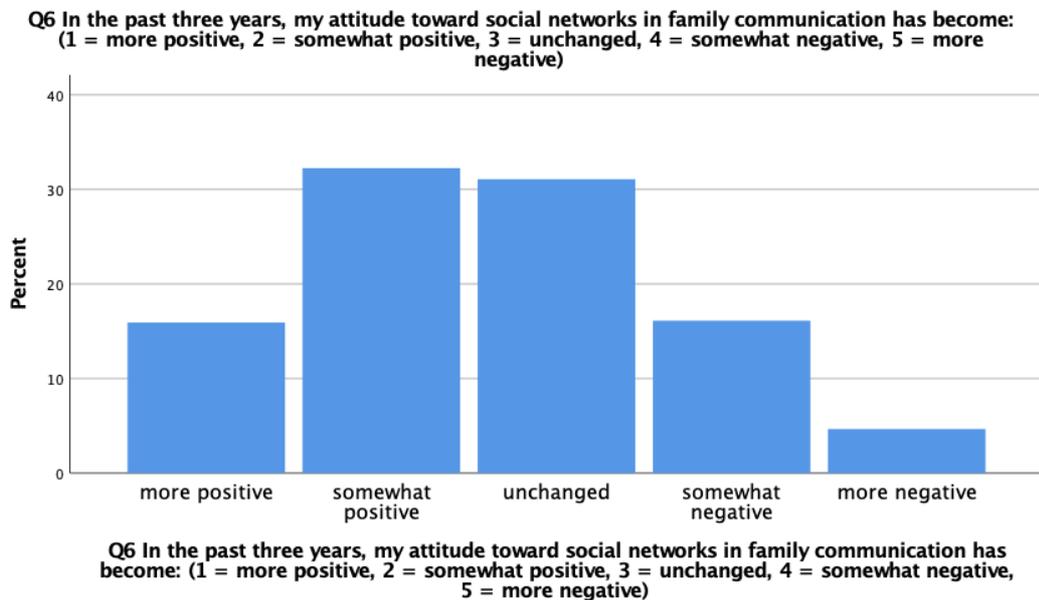


Figure 5-5 Attitude towards social networks in family communication in the past three years

5.5 FACTORS FOR USING SOCIAL NETWORKS FOR FAMILY COMMUNICATION

5.5.1 Expected ease of use

This question concerned young people’s expected ease of use regarding social networks in family communication and what they thought about their experience of using social networks for communicating with their parents. The question was:

“To what extent do you agree with the following statements? 1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.”

Since about 60% of the participants who completed this questionnaire were younger than 24 years old, they were from the 'digital native' generation. Accordingly, it is important to study the impact of the technical aspects on their use and understand their effects on familial communication and relations. In fact, as the table below indicates, in response to statement 1, 44% of the young people agreed and strongly agreed that the use of social applications in family communication was easy, and this ease improved their ability to reinforce their relationships with their parents. Surprisingly, the percentage of parents who agreed with this was higher than the number of young people; almost one in five young people felt that social networks are not easy in family communication. The reason behind this is depicted by the interview responses of interviewee 10, who stated that a child could be misunderstood by his or her parents during the group discussions conducted on WhatsApp. Similarly, parents could misunderstand a child and falsely perceive that the child is making fun of the parents. Interviewee 10 also highlighted that the media and communication platforms do not allow a child to reveal his or her real feelings, which remain undisclosed. More evidence for this finding is reflected by the arguments of the interview participants revealing that due to the perceived incompatibility of parents and children on social media communication channels, children probably find it difficult to converse in a manner that would be clear to their parents so that they would fully understand what they were trying to say. With their friends, they did not face the same issues, since they were all from the same generation and had similar speech patterns and thought processes, but because their parents came from a different generation, they could encounter this issue, which could possibly lead to difficulties in communicating. Moreover, more than half of the young people believed that their parents found it easy to use social media, which helped them to communicate with their children and family. More than half of the young people also believed that their parents found it easy to use social networks, while fewer – 44% – believed that networks were an easy method for young people to communicate with their families. Perhaps there are certain reasons for this belief, including addiction to social networks for purposes other than family communication. It was revealed earlier that the young people mostly used Twitter and YouTube and that these applications were less popular for familial communications, so addiction to or overuse of any of these applications might cause difficulties in communicating effectively.

In response to statement 3, about 40% of the young people agreed and strongly agreed that social networks facilitated their expression of feelings and emotions towards their parents while also about the same percentage of them disagreed and strongly disagreed with that statement. Moreover, almost 40% of them agreed that social networks had helped them to communicate their ideas to their parents. This indicates that social media gave young people the sphere to express their feelings to their

parents, contributing to the development of strong relations within the family. These interpretations were confirmed by some of the interview results, as young interviewee 8 stated, *“I am embarrassed to express my emotions face-to-face with my parents and I prefer to express them through social networks. Social networks gave me an opportunity to express my emotions, so I feel closer to my parents and family.”*

Table 5-9 Expected ease of use

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I think social networks are easy to use to strengthen my family relationships.	19.2	24.9	34.2	13.4	8.3
2	I see that my parents use social networking easily in family communication.	19.8	31.3	23.9	12.6	12.4
3	Social networking has made it easier to convey my feelings to my parents.	19.6	18.1	23.5	17.5	21.4
4	Social networking has made it easier to communicate my thoughts to my parents.	18.4	22.9	25.8	15.3	17.5

5.5.2 Perceived usefulness of using social networks in family communication

As defined in the previous chapter, the perceived usefulness refers to the degree to which an individual trusts that his or her performance would be improved because of the use of a specific system. The question examines the impact of this factor on the young people’s performance and explores the impact of their belief regarding the usefulness of social networks on their actual use of these networks. The previous question concerned the ease of use of social networks while this question concerns the usefulness of social networks. These two factors were mentioned as important factors in the TAM.

The young participants were asked the following question: “To what extent do you agree with the following statements: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree”, as in Table 5-10.

Here, the PU of social networks for young people can be seen at the level of social skills, solving family disputes, expressing thoughts and feelings, and understanding the personalities of parents. About 40% of the young people said that the use of social networks had developed their family

communication skills as in statement 1. Moreover, about 40% of them reported in response to statement 3 that social networks had given them greater freedom to converse with their parents compared with conversing face to face. This may give young people the opportunity to understand and communicate with their parents more comfortably. When a young person converses using text messaging, they are free from these heavily loaded social cues, while asynchronous text messaging gives them more time to think and respond than occurs in face-to-face communication. This is also beneficial, particularly for introverted or shy children who struggle generally to communicate. Due to the convenience offered by social media, they do not have to leave their comfort zones and can convey their thoughts and feelings much more easily. Social media communication also allows them to see their parents from a different perspective, and that different perspective can help them better understand their personalities.

On the other hand, in statement 2, the majority of young people agreed with the notion that social networks help in solving family problems, while more than 35% of the young people opposed this notion, which is a relatively high percentage. In some interviews, more than five young people confirmed that social networks could sometimes cause problems or exacerbate existing issues and that the best means of communication is face-to-face discussion. This was supported by the interviews, detailed below. The findings from the interviews support this result; young interviewee 1 stated, “*Social networks have given me the opportunity to express my concerns with my parents, especially, my mother*”. Young interviewee 9 also stated, “*It is nice to find someone who listens to your concerns at any time*”.

Surprisingly, around 44% of young people perceived that social networks did not help them to understand the ways in which their parents think or act in greater detail. Young people may conceivably see that through direct interaction with their parents, they can understand their personalities and mentality better than through messages or short voice notes. When trying to resolve family problems, body language, tone of voice, and facial expressions are crucial ways of fully judging the seriousness of the situation and handling it accordingly. In social media communications that are exchanged mostly through text, these factors are missing, which means that children may often misread the situation, leading to the problems remaining unsolved or at times becoming more intense than before.

Table 5-10 To what extent do you agree with the following statements?

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	My family communication skills evolved after my use of social networks.	15.1	25.2	30.1	13.2	16.3
2	I think social networks help to solve family problems.	11.7	20.4	32.6	19.4	15.9
3	I express my views and thoughts with my family through social networks more freely than in face-to-face communication.	17.5	22.1	24.9	17.9	17.7
4	Communicating with my parents through social networks has made me understand their personalities more.	11.3	17.7	26.4	22.3	22.3

5.5.3 Social Media Richness and Family Communication

This question was designed to assess the impact of social networks on the young people’s communication with their parents because social networks provide better visual and audio communication compared to simple telephone calls. Social media also facilitates collective family video or audio calls and the recording and publishing of videos or voice notes within family groups in social media applications. The participants were asked the following question: To what extent do you agree with the following statements? These statements were concerned with the advantages of diverse media, as well as the effectiveness of group features: 1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.

In response to statement 1, about 40% of the young participants agreed and strongly agreed with the statement that social media richness gave them the opportunity to strengthen their relations with their family. Visual communication or video clips convey body language, facial expressions, and tone of

voice to communicate ideas and feelings more clearly for parents and children. This was also observed in one of the interviews, like parent interviewee 1. Another reason why young people may feel that social media richness strengthens their familial bonds is because it helps them to feel closer to their parents. In the case of long distance separation, where they might be studying or living in a different city, they may rely on video chat to help them feel closer to their families. Since video relays all characteristics perfectly, it facilitates the clearer expression of feelings and emotions, and this may help young people to feel as though the distance between them and their parents is non-existent in that moment.

In response to statement 2, 54% of the young people agreed that emojis helped them to express their feelings in family communication. Expressive faces (emojis) allow recipients to understand the sender's feelings expressed through text. When you comment on a subject and add a laughing face, it suggests to the recipient that your tone is humorous, and they will interpret your comment as a joke rather than as mockery. Moreover, nearly 60% of the parents thought that emojis in social networks applications provided them with a quick and easy opportunity to express their positive emotions towards their children, which is similar to the young people's results here.

Moreover, in response to the third statement, 42% of young people agreed that family groups in social networks helped them to strengthen their relationships with their parents. Communicating with a group is easy and fast and saves time. Instead of communicating with each person individually, users can communicate with their entire family in a single digital space. This quality of collective communication allows children to feel equal because their parents are posting in front of everyone and express no preference for one child over another. Even if children have extremely busy schedules that do not allow them to spend much time with their families, this would be irrelevant in the case of group chats, since everyone can interact remotely, and thus it becomes possible for everyone to remain updated regarding each other's lives.

Almost 40% of the young people agreed with the fourth statement that swift communication through social networks helped them to strengthen their family relationships. This figure is slightly more than for those who replied that social media did not strengthen their family relationships, which means that the young people were quite divided on this question and there was no strong consensus. If a young person wishes to send a message or information to his parents and his/her family at the push of a button, he/she does not have to wait until he/she meets them in the evening or at the

weekend. Even beyond the barrier of the place, if he/she is away from them, he/she can communicate with them quickly at any time.

Table 5-11 To what extent do you agree with the following statements about social media richness for family communication?

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	I see that social networks with their diverse media (video, audio, image, text) have helped to strengthen family communication.	14.4	25.8	33.6	15.1	11.1
2	Emojis help me to express my feelings in family communication.	18.3	35.7	21.0	12.6	12.4
3	Groups in social networks have increased family communication.	13.0	29.3	33.0	13.8	10.9
4	The fast communication through social networks has helped strengthen my family relationships.	12.6	27.0	35.0	14.4	11.1

5.5.4 Preferred medium for Saudi young people to communicate with their parents

Table 5-12 shows the young people’s responses to the following question: In communicating with my parents through social networks, the best method is text, voice note, send a video, and send a photo, video call through social media app, audio call through social media app or other.

More than 55% of the young people preferred to use text in communicating with their parents. Instant texting gives the individual the ability to communicate instantly with others but without seeing their faces or hearing their voices, thus relieving the pressure on them and affording them the best opportunity to express their ideas. This was also observed in the interviews.

The preference for text and voice messaging may be attributed to the fact that young people often feel comfortable texting and voice messaging even with people of their own generation, and they try

to avoid video calling / chatting unless necessary. This is evidenced by the results of the interviews, which depict that the exchange of text and voice messages was supported by the parents because they felt more comfortable communicating with each other through text messages using emojis, which helps in expressing their feelings at the present time in a simple way. Moreover, the parents did not send video messages possibly because they did not find the technology easy to use. On the flip side, messages exchanged in text and audio format are understandable and easy to use as well. In this research, the reasons for the parents' tendency to use text and voice messages were expressed in the interview responses highlighting that text and voice communication also contains emoji facilities that provide for the use of emojis and also allow for the creation of appropriate interaction in the form of less misunderstanding. Text and voice messaging appeared to be the most relevant for both the young people and their parents. As revealed in the previous chapter, about half of the parents preferred text and voice messages when communicating with their children.

Additionally, nearly three quarters of the young people and 66% of the parents preferred the use of voice notes for children to communicate with their parents on a daily basis. One possible reason is that texting and voice recording saves time compared to calling. In light of the daily workload of young people in their jobs or in their colleges, text and audio recording in family communication provides a fast and effective way to convey messages between family members. It can also be seen that almost 20% of the young people preferred to make video and audio calls through social media applications. With the rapid development of smart phones and the widespread availability of high-speed internet, these features have become far more accessible and user-friendly than they were previously. As mentioned earlier, these forms of communication have a more personalised touch, as they allow vocal and facial characteristics to be conveyed, too. They are also easier for parents to use, so it can be said that they promote healthier communication between the two parties.

Table 5-12 In communicating with my parents through social networks, the best method is...

Answers	No	Percent
Text	288	55.9
Voice note	102	19.8
Send a video	15	2.9
Send a photo	8	1.6
Video call through social media app	32	6.2
Audio call through social media app	66	12.8
Others	4	.8
Total	515	100.0

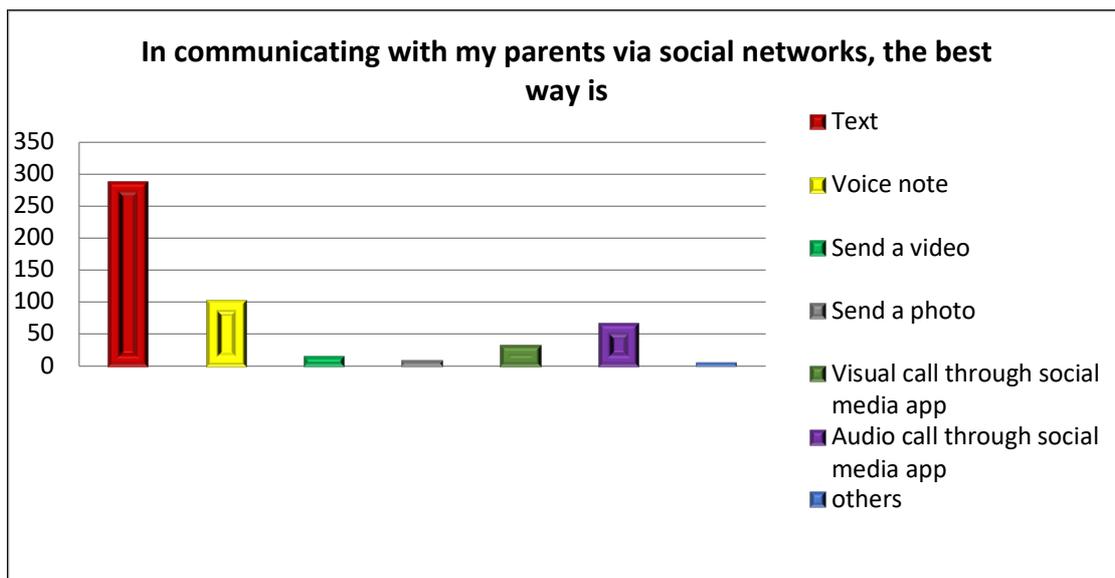


Figure 5-6

Preferred way of communicating with my parents via social media networks

5.5.5 Rewarding behaviour from parents

Based on the findings derived from the previous chapter regarding the FST that I mentioned in Chapter 2, I focused on an element of the theory model called ‘rewarding behaviour’ (RB) to examine whether the parents rewarded their children if they were active in online family groups. Saudi society, as a Muslim community, affords parents great importance, so with this question, I wanted to explore how young Saudi people interact with their parents in family communication in

social networks and whether such people receive more attention from their parents. Do young people consider communicating with their parents adequately through social networks as showing their parents respect? So, I asked the young participants the following question: “To what extent do you agree with the following statements: 1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree.”

As is clear from the answers to the first statement (“I communicate with my parents through social networking to satisfy them”), more than 44% of the young people considered that they did not communicate simply to please their parents, which means they recognised that family communication is a social need more than just a way to please their parents. Moreover, it may be because just pleasing parents is an artificial reason that cannot be considered reliable. On the other hand, a third of the young people saw their contact with their parents as a means of satisfying them. Accordingly, here they referred to the importance of communication as a form of respect for parents as a stable concept in Saudi culture as an Arab and Muslim society, as will be shown in the interviews section.

Approximately 50% of the young people interviewed agreed with statement 2 (“Networking with my family in social networks wins me my parents’ attention and makes them care more about me”). This means that the young people did not see themselves as communicating for the sake of gaining attention from their parents, considering such behaviour as amounting to selfishness. This will also be seen in the interview section as well.

In this context, as the findings in the previous revealed, individuals do not remain in an isolated state from each other; individuals are also in need of being understood as a close member of their related families (Kerr 2000). Further, FST theory also regards family members as the distinct emotional unit that is responsible for the definition of the complicated connections with associates of the family (Alanazi 2015). Moreover, a system is also recognised to comprise people with similar types of attributes who will be affected by each other's thought processes and behavioural traits along with the emotion-specific structures (Hazell 2006).

In response to the third statement (“My parents are interested in my participating in family groups on social networks”), 38% of the young people said that their parents were interested in their children’s participation in family groups on social networks. This high number is an indication of

the parents' enthusiasm regarding common interaction between family members through the family group in social networks.

In response to the fourth statement (“I consider communicating with my parents through social networking is part of showing respect to my parents”), a clear neutrality emerged in the participants' responses (agreement about 38% and disagreement about 37%), perhaps due to the lack of understanding of the question or the different views around it. Several participants indicated that respect for parents is not connected to social networking but to in-person interaction with them.

Table 5-13 To what extent do you agree with the following statements?

N	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1	I communicate with my parents through social networking to satisfy them.	14.4	15.1	26.0	22.5	21.9
2	Networking with my family in social networks gives me my parents' attention and makes them care more about me.	9.9	13.8	28.2	21.9	26.2
3	My parents are interested in my participating in family groups in social networks.	15.9	22.1	25.6	18.3	18.1
4	I consider communicating with my parents through social networking is a means of showing them respect.	15.1	23.5	24.1	15.5	21.7

5.6 INTERVIEWS WITH YOUNG PEOPLE

5.6.1 Interviewees' demographics

I interviewed 15 young people: 8 males and 7 females. All of them were studying at King Khalid University in Abha city in Saudi Arabia and were aged between 18 and 24 years old. All of them belonged to the middle class, as most of the upper-class children study in private colleges or outside Saudi Arabia. Moreover, the young people were mostly from traditional and conservative families, and all of them were single. Most of the interviews took place on the university campus or in public cafés. In light of the difficulty in communicating with females, I tried through my contacts within the university to reach a sufficient number of female interviewees.

5.6.2 Analysis of interviews

As the findings from the questionnaire revealed a number of critical points relevant to specific issues, for example, winning a parent's attention, expressing their feelings, and the best method of communicating with parents through social networks, these points needed to be explored further through the interviews.

The interview analyses started with encoding individual data to facilitate the identification and comparison of similar issues. This structure was then organised into larger groups that assembled similar concepts (i.e., basic themes) and finally into a small number of the broadest thematic issues (organising themes). In the table below, the first column shows the encoding structure derived from individual comments. These were then grouped into basic themes, organising themes, and two main global themes.

Table 5-14 Encoding structure

Codes	Basic Themes	Organising Themes	Global Themes
Parents' power, affect, and duties Save time and energy Text, voice, video Sharing secrets Daily news Asynchronous communication Fast communication Family group Bilateral communication Family conversations using social networks More female roles	Family dynamics Family communication	Family relationships	Perceived Change in Family
More trust between parents and children Children teach parents about technology Changes in family values Bedroom culture: private world Family privacy Emotional expression Respect for parents' Communication misunderstandings Social media addiction Rewarding behaviour	Family roles Family concerns	Family values	

5.6.3 Perceived change in family

In the analysis of the interviews, the focus will be on one global theme: the perceived change in family interactions. This global theme comprised two organising themes, as shown in Table 5-14, and these two were divided into four basic themes. The different points within the interviews assisted me in formulating this classification of the themes, which will be discussed in the following section.

5.6.3.1 Family relationships

A recurring theme in the interviews was the role of networks in changing family relationships, that is, a change in the type of relationship, its strength, and its level. I therefore decided to divide this global theme into two: family dynamics and family communication. These two themes overlap one another; however, I preferred to place each one alone as it was important to differentiate between them. Family dynamics influence and are influenced by factors such as family values, society, and the socio-economic situation of the family. In addition, family dynamics also affect family communication. A family that enjoys good relationships enjoys healthy and fruitful communication, while a family that has poor relationships has only weak and limited communication.

5.6.3.1.1 Family dynamics

As explained in the previous chapter, family dynamics refers to patterns and interactions family members have with each other. Families differ in terms of the set of dynamics that affect their development, views, and interaction behaviours including their decision-making process, the way they solve their problems, and how they share their feelings.

In contrast to the Saudi traditional norms, where the power and decisions are usually in the hands of male family members, such as the father and older boys, the analysis of the interviews shows that the interviewed females made their own decisions in some parts of their own lives. It clearly provided them with a degree of freedom in their personal decision-making that had been absent in the past. Young interviewee 1 said, *“There is a clear change in my freedom as a girl. I have a new space for discussion, which I got through social networking dialogue with my parents.”* The reason behind girls feeling more empowered when communicating their thoughts and feelings through social media is the awareness that social media has created and the vast knowledge and resources that are available

to them and which they can easily use to assert their position in their family and stand on equal terms with their male counterparts. One of these girls, young interviewee 3, said

I understand it was very difficult for my mother and other women of previous generations to stand on equal terms with men because they could not communicate their thoughts effectively, but the resources available on social media and the awareness it has created for us women has changed that for our generation and I can very comfortably back up whatever I convey to my father or brother which boosts my confidence.

As well as the rise of the role of children versus the role of the father, the interviews showed that some of the young people were more able to participate in family decisions than in the past, including decisions to relocate, travel destinations in the summer, as well as greater freedom in personal choices, such as study and travel with friends. Young interviewee 8 said

Social networks have given me a good opportunity to discuss and clarify my points of view more than before. I do not know what has changed but my father has become more communicative through social networks and listens to our views. I feel that my life has taken a new path in family communication.

However, some of the young people interviewed felt differently, as in their experience, their parents, due to their lack of familiarity or discomfort with social media communication, tended to disregard or not take it seriously when their children tried to convey their perspective. One of the young people interviewed, young interviewee 7, said

My parents are very traditional and do not really appreciate long conversations on social media, as they think it has the means to corrupt us, so whenever I try to talk to them about something via a social media application, I usually get shut down worse than I would if I talked to them in person.

Analysis with respect to the main theme of family relationships and sub-theme of family dynamics showed that the young females felt empowered by the use of social media platforms in familial communication in Saudi Arabian society which is male dominated in terms of power and decision making. This is reflected in the responses that showed that social media technologies helped them to convey important things to parents and to take part in the decision making, which improved their confidence level and helped them remain in touch with their father and other family members. On the other hand, the responses revealed that due to their parents' discomfort in using social media platforms, their parents tended to disregard the use of social media and did not pay attention to anything conveyed through social media so the young people had to opt for face-to-face communication.

5.6.3.1.2 Family communication

Most of the young people agreed in the interviews about the importance of social networks in strengthening family communication. I think it is clear that using social networking has created a new time and space in which to communicate; time is available to everyone, and the space is a digital room in your smartphone and in your hands. Young interviewee 5 stated,

Social networks are in my phone all the time, and everybody has enough time to communicate and strengthen our relationship with each other. In the past, meeting in one place was the only way for family communication, but now with the click of a button you can communicate with your family and greet them and follow their daily news.

Moreover, the availability of social networks for collective communication has placed great emphasis on the development of family relationships, as noted by most interviewees. For example, according to young interviewee 14, “*Group communication through the family group is useful and quick to strengthen our relationships with each other as a family, and I like to send voice messages from time to time to greet my family and hear about their daily events.*”

As discussed previously, for most people, social media applications allow the expression and conveyance of emotions more freely due to the amenities available, such as video/photo sharing and adding emojis to their text messages, which enhances the emotional feel of the message. Young interviewee 15 said, “*Expressive faces helped me to express my love and feelings towards my parents and also helped me communicate ideas in a way that was not misunderstood.*” This was further reaffirmed by another young male, young interviewee 8, who said,

Being away from home for half a year because of studies is tough, especially because of the distance from my parents because you miss out on many important occasions, but because of applications such as Instagram, Snapchat, and photo/video sharing options on WhatsApp, we easily share live updates and collections of any such occasions with each other, which makes us feel as if we were actually living in the moment with them, and I think that helps bring us a little closer.

Furthermore, another case in which social media has facilitated familial communication and perhaps strengthened it is in the case of shy and introverted children who experience difficulty communicating with their parents in person or with people generally due to their lack of interpersonal skills. Since no pressures are experienced in social media communication, and it can be done remotely, shy people can be more confident in expressing themselves to their parents and thus strengthen their relationships with them. This was confirmed by one of the young girls interviewed,

young interviewee 10, who said, *“I am embarrassed to express my emotions face-to-face with my parents, and I prefer to express them through social networks. Social networks give me an opportunity to express my emotions, so I feel closer to my parents and family.”*

It is deduced from those responses, which mainly highlight the benefits or positive role of social media in familial communication, that young people studying and living away from their parents find family groups created on WhatsApp or other popular social media platforms really useful in communicating and remaining in touch with their parents. In addition, it is noted that the use of social media in familial communication could help introvert or shy young individuals to express their emotions and feelings freely without any of the pressure that is commonly encountered in face-to-face communication. However, in some cases, misunderstandings can also occur during social media communication due to the misinterpretation of texts as highlighted in one of the responses. Overall, the young people’s responses indicated that social media helped in strengthening family relationships to a significant extent.

5.6.3.2 Family values

Family values as defined previously involve the morals and ethics passed on within the family from one generation to the next. Saudi family values insist that great respect be paid to parents and the elderly and that the family interest should be given priority. In this section, I will analyse some of the outcomes of interviews related to family values from two aspects: the roles of family members, and some family concerns about the new changes that have taken place with the use of social networks.

5.6.3.2.1 Roles of family members

The parents usually have the leading communicative roles in the family, but it was noticeable in the interview responses that some of the young people had noticed some changes in the parental communicative roles, for example, the lack of the father’s participation in family communication. Young interviewee 12 said

I have taught my father – 65 years old - how to use WhatsApp, and I wish that I had not. Literally, my father no longer communicates with us but with his friends. Even in family meetings, my father is sitting alone, busy with his mobile.

The weakness of the father’s communicative role within the family is one of the problems with communication networks and their impact on families. However, at the same time, some of the

young people had noticed that since they had taken the initiative and taught their parents the benefits of social media communication and how to take advantage of them, their parents had reaffirmed some of their roles much better than they would have without the help of social media. For instance, one of the young males, young interviewee 1, said,

My mother has been the quiet type for most of her life and never really involved herself with technology either, so it was a little challenging getting her used to social media applications, but I am glad that I did because now she expresses herself much better and assumes organisational responsibilities much better, just as a mother should.

One of the new communicative roles to have emerged in the family is the communicative moderator, one of the children, who is particularly keen to encourage his or her other siblings to express their views with their parents or to open topics of dialogue and discussion within the family. As young interviewee 5 stated,

I discovered over time that I was the one who was the trigger of dialogue in the WhatsApp family group, and I always encourage my brothers and sisters to talk in the family group and to express what is on their minds.

Moreover, young interviewee 13 said, “*My middle sister is actually the driving force of our family group at WhatsApp; she is the one who inspires debate and discussion between us.*” This demonstrates that access to this medium with which the current generation is clearly comfortable allows them to immerse themselves into roles and take initiatives that they would not have previously. This was reaffirmed by another female interviewee, young interviewee 12, who stated,

My eldest sister was very laid back and didn't seem to care much about anything before, but once we got an active family WhatsApp group, I noticed that she started to take the lead in terms of organising family trips and dinners and keeping a check on us younger siblings, which was a little surprising knowing how she was before.

It was evident from the interview responses that increased awareness and familiarity among family members of social networking sites had positively contributed towards evolving family roles and the fulfilment of family responsibilities. Family groups had given the opportunity of open dialogue, discussion, and constructive debate to parents, shy siblings, and the less interactive members of the family; thus, family roles are positively influenced through social media use for familial communication. Family members had started undertaking leading roles due to the increased communication on social networks. On the other hand, it was mentioned that fathers tended to isolate themselves and remain engaged on social media communicating with friends even during family gatherings, which clearly highlights the drawbacks or negative implications of social media in familial communication.

5.6.3.2.2 *Family concerns*

Some of the concerns expressed by the young people after the emergence of social networks included the isolation of some parents, weak face-to-face communication, social networking addiction, and the misunderstandings that may occur through social networks. The range of these problems and concerns may be due to the diversity of each family dynamic, the different values of each family, and the differences in the strength of family relationships.

One of the most prevalent issues is that social media has also consumed parents, who are usually more fascinated by this technology than are the younger generation. Once they familiarise themselves with these applications, they often tend to spend more time on social media than they should. Young interviewee 4 said, *“I noticed my parents’ addiction to social networks, especially to Twitter and Snapchat; they spend many hours of the day away from us, and the problem is that they blame us that we spend a lot of time on social networks.”* This was further reaffirmed by young interviewee 15, who said, *“I really hope that there are no social networks. My family has broken up, and we are no longer communicating in a real way. I am very upset about this.”* However, it is not always parents who become so addicted to social media that they relinquish all other connections. Some of the young people believed that their addiction prevented them from communicating effectively with their parents. This emerged in the responses of young interviewee 6, who said, *“My addiction to YouTube and Snapchat isolates me from communicating with my parents; I enjoy it and I cannot stop.”*

In addition, one of the concerns that also emerged is the weakness of face-to-face communication because some family members are able to communicate via social networks. Young interviewee 11 said, *“We talk a lot with each other through social networks, but when we meet, we stay silent for long periods of time, because we do not have anything to say.”* Moreover, young interviewee 2 stated, *“Social networks have extracted our speech energy. When we meet, we do not have anything to say; we have said everything in the family group in WhatsApp.”* Young interviewee 14 said, *“I’m talkative with my family on social networks, but in face-to-face meetings, they call me the silent girl.”*

Another complication is the misunderstandings that may occur in conversations over social networks, particularly discussion through texts. Texts do not show the mood of the speaker in the way that voice or video calls can. The different modes of communicating in social media tend to

leave some lines blurred. People often misunderstand one another because there is a lack of body language, facial expressions, and tone of voice, and sometimes emojis are not enough to express true emotions. This was expressed by young interviewee 5, who said,

I remember there was a problem with the family group with one of my brothers because I sent a laughing face, but he was serious about the topic he was texting about, so he got angry with me. I did not know he was serious in his conversation and thought he was joking.

Similarly, young interviewee 10 said,

I'm often misunderstood by my father and brothers in the group discussions on WhatsApp; they think I'm making fun of them, but I speak seriously. The problem is that writing text does not fully express what's inside you, so it's better for me to record my voice most of the time.

Another problem which was observed was that some of the parents tended to not fully understand the kind of content they were supposed to share and sometimes how to share it effectively too. This was related by young male, young interviewee 3, who said,

My parents get confused when using social media applications. Sometimes they send texts which they are supposed to send to each other or someone privately on the family group because of not understanding the application fully and it becomes a little awkward at times.

Regarding social media use for family communication, it was found that there could be social media addiction and isolation of either parents or children due to excessive engagement or the consumption of media-impaired family relations. Some of the parents tended to ignore their surroundings, as they had started enjoying digital technologies while young people agreed that addiction to YouTube and Snapchat had resulted in them being disconnected from their parents and other family members. In addition, the issues of text misinterpretation and awkwardness due to the lack of comfort with the use of technologies also arise with social media use in familial communication. Other than this, it was also found that some of the young people communicated easily with parents through social media but remained silent during face-to-face communication, which implies that social media can adversely influence the face-to-face communicative abilities of individuals.

5.7 SUMMARY

It is clear from the interview responses that communication through social networks has become a general trend for young people. The findings show that many young people in Saudi Arabia are using social media as a tool to enhance familial relationships and solve family problems. The findings also

show that most of the young people who participated in the research felt that their attitudes towards the use of social networks in family communication had become more positive. In addition, it seemed that the use of social networks had developed their family communication skills and given them greater freedom to converse with their parents. However, although the young people were actively using social media applications to communicate with their parents, they were probably doing so out of duty or because they felt obliged rather than because they wanted to, and they recognised that social networks had weakened direct communication with their parents.

Moreover, a new communicative role has emerged in the family: the communicative moderator who is particularly keen to encourage other family members to express their views, or to open topics of dialogue and discussion within the family. Besides isolation, weak face-to-face communication, social networking addiction, and the misunderstandings that may occur through social networks, the weakness of the father's communicative role within the family is one of the problems with communication networks and their impact on families

The interviews provided in-depth data regarding family dynamics, communication, and traditional roles. The findings reveal that the use of social networks applications has saved time and energy. The availability of social networks for group communication had contributed significantly to developing family relationships and strengthening familial relationships. Furthermore, although the children would often leave decision-making to their parents, it was noticeable through the interviews that they had taken more important roles within the family including teaching their parents how to use new social media applications. However, some concerns emerged among family members regarding social networks use, such as children's isolation, personal privacy and family privacy, social networking addiction, and misunderstanding through social networks.

Chapter 6: DISCUSSION

6.1 INTRODUCTION

This chapter reflects on the results acquired from the data collection and analysis phase. The discussion is based on the research questions. The chapter identifies the implications or significance of the findings for scientific and academic communities. The chapter also places the findings of the study in context by analysing the research findings in the context of the effects of social media in Saudi households. It cross-examines and compares the relationships between parents and social media in terms of them communicating with their children on the one hand and the relationship between young people and social networks in terms of communicating with their parents on the other. Given the nature of the research design, it is necessary to acknowledge the opinions given by the respondents when interpreting the findings. The views of the respondents will be employed to reveal the crucial role that social media plays in Saudi society and its impact on the communication between parents and children. The variables measured in the study include the perceived changes in social relations and families and the role of social media in triggering those transitions.

Five major themes emerged from the results of the study presented in Chapters 4 and 5: properties of internet use, internet use, family communication, family dynamics and roles, advantages and disadvantages of social networks in familial communications, and family values.

6.2 PROPERTIES OF INTERNET USE

In this section, the findings from the research study regarding the use of social media by family members will be discussed in terms of level of experience, purposes of using social networks, preferred methods of communication, ease of use, and attitudes towards the use of social media in familial communication.

Most of the parents and young people claimed that they had excellent and good skills in using social media. Approximately 80% of the parents reported excellent and good skills in using WhatsApp while they were found to be comfortable with the use of Snapchat and YouTube, which demonstrates that WhatsApp is the preferred platform of communication for Saudi parents in this study. Similarly, some of the interview findings also support the survey findings and reflect that the parents preferred

the use of WhatsApp family groups for communication. However, contrasting views were obtained in the interviews, as some of the parents faced issues in the use of social media technologies. The young people reported excellent and good skills in using WhatsApp with approximately 84% and with high percentages reporting the skilled use of YouTube, Twitter, and other platforms. Overall, analysis revealed that in comparison to their parents, the young people were more competent in the use of different social media platforms.

Examining the experiences individually, the parents' positive experiences using WhatsApp, which was the most widely used social media application amongst the parents, is a positive sign. WhatsApp allows the creation of family groups, which helps families to stay connected in terms of sharing photos and videos and simply conversing with one another in a single conversation, which may contribute to strengthening familial bonds.

Additionally, the positive experience of using social media applications, such as WhatsApp and Twitter, could be constructive in the sense that these platforms offer useful information on several issues, including family building, children's needs, and parenting techniques. As such, if parents' experiences of using these applications are positive, they may be more comfortable learning from these platforms. These parents' experiences in using social media applications increase the likelihood that they will use social media for family communication, thereby enhancing their experience in using these platforms. Parents who are experienced in using any social media application are more likely to find it beneficial in meeting their communication needs with their children. In fact, the experience of using social media platforms and applications is important in this context, as lack of experience may be the reason for some parents' limited use of the application for family communication.

Furthermore, the results from the questionnaires for both young people and parents revealed that the majority used social media networks for several reasons. Parents who were heavy users, spending more than two hours per day, used them for social networking (about 43%) followed by news, while occasional users, spending less than two hours per day, used them for education (about 62%) followed by news. The data showed that the parents used social media for news and social networking. Young people who were heavy users used social media for social networking (about 56%) and entertainment (about 48%), while occasional users used social media for education and news. The statistics indicate that the majority of the young people used social media for entertainment and social networking, which also complements the interview findings that

highlighted social media addiction among young users. The parents were most likely to use social media solely for entertainment purposes and then for news and education. Therefore, networking appeared to be the preferred purpose for using social media by both the parents and the young people.

The findings of this research confirm this statement showing that Saudi families use social media to communicate with relatives, friends, family, and co-workers and for news. Entertainment is another significant use of social media among Saudis to search for and watch clips for entertainment, laughter, humorous images, texts, or other entertainment material on social networking platforms. Finally, social media is used as a source of education. According to Alshehri and Meziane (2017), the internet has penetrated most Saudi households, and there are several reasons that motivate Saudis to use social networking sites (Alshehri and Meziane 2017).

The three social media platforms most preferred by parents according to the study outcomes are WhatsApp, Twitter, and YouTube, which were used more than other platforms. The parents admitted spending most of their time on these three social media applications. Most of the parents said that they communicated with colleagues, family members, and friends through WhatsApp, while Twitter allowed them to converse with strangers or friends. The same finding is supported in the interview results wherein parents mentioned the use of WhatsApp for family communication and interaction with friends. They also stated that they relied on YouTube to watch videos. Hence, WhatsApp appears to be the preferred social networking tool amongst the parents.

However, the platforms most preferred by the young people who were heavy social media users are Twitter, YouTube, and WhatsApp wherein Twitter accounts for the most usage. Their communication through Twitter consisted of social networking with friends and strangers as a public sphere application, while they used WhatsApp for entertainment and communication with friends or family members. They used YouTube to watch videos rather than to engage in social networking with anyone. Significantly, it is noted that some of young people did not use or were generally weak in using Facebook. As the interview results showed, only one family out of the thirty interviewees reported using Facebook for family communication, because it provides a video calling service that is not available via WhatsApp in Saudi Arabia.

Consequently, Twitter is the main social application used by the young heavy social media users. However, WhatsApp proved to be the leading application in social media among young occasional

users. Accordingly, the interview and survey results indicate that WhatsApp is the preferred social communication platform among young Saudi people.

Boyd (2007) noted that young people adore social media for various reasons: The first is that it facilitates social participation or the establishment of friendships among people who share similar ideas and interests. The second objective is to create a profile through which they can describe or express themselves. The third intention for joining social media is identity performance, which means that young people use these apps to enhance their social skills, such as determining how to manage impressions, read social cues, and respond accordingly. The positive experiences reported by the young interviewees reveal the significance of social media sites in their lives. This finding from the literature supports the interview results and survey statistics, which highlighted the importance and popularity of social media among young Saudi individuals, whose use of social media for entertainment is not observed in the literature.

6.2.1 Internet use in familial communication

This section explains, discusses, and evaluates internet use in familial communication in the light of the findings from the literature and primary data findings wherein behavioural attitude and intentions towards social media use is also assessed in detail.

This study's findings show that the use of the internet in familial communication is increasing among families in Saudi society. The majority of the parents agreed and strongly agreed that they liked to use social networks to connect with their children, and more than half of the young participants agreed and strongly agreed that they liked to use social networks to connect with their parents. One of the interviewees noted that social networks allowed him to discuss and explain his ideas better than he could in the past. The interviewee also noticed his father's new ways of communicating with his children through social media and listening to their suggestions. Moreover, another interviewee used to trigger dialogue in the WhatsApp family group and always encouraged his brothers and sisters to speak their minds. For a traditional and patriarchal society like Saudi Arabia, this represents a significant development in family relationships. Overall, the primary findings showed that social media and the internet allowed the parents to communicate with their children, so they tended to use them. In contrast, it is highlighted in the literature that Saudi Arabian society holds negative views regarding social media consumption and exhibits a negative attitude due to traditional values and culture.

However, the usage of the internet in familial communication differs from one family to another. Even though most participants agreed on the importance of social media in familial communication, a few of them stated that they did not use social media much in family communication. For instance, while parent interviewee 3 said, *“Yes, I use them daily because they are very helpful in familial communication”*, Young interviewee 7 said, *“Yes, I use social media in family communication but not much. I have a small family - me and my parents; we use calls most of the time.”* Likewise, while parent interviewee 7 said, *“Sure I do. We can’t have easier life now without social media especially WhatsApp. I manage my family through it”*, parent interviewee 12 said, *“In fact, I do not use them too much; I prefer to call my kids or talk to them face to face.”*

Some of the interview findings are supported by Unal (2018), who reported that almost all 500 participants (97%) had social media accounts into which they logged every day and on which they spent a significant amount of time. On the other hand, Woolley’s (2013) study contradicted these findings with interview data that stated that individuals prefer calling to communicating through social media. The study claimed that most people spend little time on social media since 73% of respondents admitted to using their mobile phones less than two hours a day. Nonetheless, it appears that the virtual world gives people a platform to perform activities that they cannot try in real life. The undertaken study adds meaningful findings to the existing literature by presenting views regarding Saudi individuals’ social media use and their attitudes towards social media use from the perspective of young people and parents.

The interviews revealed that some parents and children communicate with each other on social media on a daily basis. For example, young interviewee 8 said, *“On a daily basis. I use them for getting my family daily news, to say hi, to know our plans for the week like dinners out or picnics or if we have visitors.”* Similarly, parent interviewee 1 said,

Social media is more important in my family. My older son lives in another city and every day he says hi in our family group. After that, the daily discussion starts; some kids tell us about their plans for that day, and I remind them about what time we’ll meet in the evening after I finish work and they finish school.

The questionnaire results revealed that of the occasional users (those who were on WhatsApp for less than two hours per day), 73% used the platform to communicate with their children daily and 62% of the 15% heavy users among the youth participants communicated with their parents through social media every day. More than 77% of the young people used WhatsApp to communicate with

their parents, and over 80% of the parents admitted using WhatsApp to connect with their children. Overall, the use of WhatsApp is dominant among parents and young people in Saudi Arabia.

The ease of using social networks in family communication was also investigated. In fact, it was surprising to find out how familiar parents were with using social media. As a majority of the young people were from the 'digital native' generation, they agreed and strongly agreed that it was easy to use social media when communicating with family members. Moreover, more than half of the young people believed that their parents found it easy to use social media, which helped them to communicate with their children and family. The parents, on the other hand, recognised that their children's digital skills were more developed than theirs. As the parents came from a different generation, they encountered some technical difficulties that could disrupt meaningful communication. Young interviewee 3 said,

My parents get confused when using social media applications. Sometimes they send texts which they are supposed to send to each other or someone privately on the family group because of not understanding the application fully and it becomes a little awkward at times.

Some of the children, therefore, had taken the initiative to teach their parents the benefits of social media communication and how to make the best use of them. For example, parent interviewee 12 said, *"I have taught my father – 65 years old - how to use WhatsApp"*. Lack of skill is identified as the key reason behind less usage of social media for familial communication among parents. Similarly, it was highlighted in a study by (Al-Khalifa and Garcia, 2013) that social media use is affected by the traditional values and conservative nature of Saudi Arabian society. In addition, poor technology skills also influence the attitudes of individuals towards using new applications.

The literature review indicated that the use of internet-based technologies may provide positive results in terms of open communication, family cohesion, and adaptability among family members and may have a positive impact on the overall relationships (Romero-Ruiz et al. 2017). However, in this study, around 44% of the young people perceived that social networks did not help them to understand the ways in which their parents think or act in greater detail. In addition, almost one in five of the young people thought that social networks are not easy in family communication. The reason behind this is the perceived incompatibility of parents and children on social media communication channels; children find it difficult to converse in a manner that is clear to their parents so that they can fully understand what they are trying to say.

The findings show that young people use social media to connect with other people outside their families rather than to communicate with family members: a majority of young Saudis rely on social media to converse with their friends rather than their parents. Interviewee (youth) 21, lamented that her mother always blamed her for communicating with her friends more frequently than with her parents and other family members. Young interviewee 14 stated, *“I remember when I wanted to send a message - with inappropriate content - to my friends group but I sent it to my family group, and my parents got mad at me”*.

Young people prefer to communicate with their friends more than with their parents because, according to Boyd (2007), hypothetically they have the ability to behave differently online for the purpose of conveying a ‘coolness’ that they may not have offline, and this may lead to conflict between the ‘cool’ image they exude among their friends and the good behaviours that their parents witness. This allows them to enjoy their privacy while connecting with like-minded online friends. For example, Shields-Nordness (2015) argued that young people become independent from their families and start to explore their identity and world. On the other hand, parents still maintain direct communication with other relatives. They understand the importance of maintaining close familial relations, unlike the younger generation who, as they strive for autonomy, rely more on their peers than on their parents for emotional support. Young people also tend to spend more time with their friends than with parents. Thus, the observation that 61% of young people converse with their friends rather than with parents on social media is understandable. The author asserted that young people opt to talk to their peers rather than to parents about their problems. The quest for independence denies them constant communication both on social media and in person with their parents (Shields-Nordness 2015).

The large age gap between the parents and the children provided an opportunity to understand the differences between the parents’ and children’s the use of social networks in general. This, in turn, helped in understanding the parents’ different preferences for the types of media for communicating with their children, the impact of these differences on the quality of family relationships, and the emerging patterns of communication between family members. The vast majority of parents were aged between 35 and 50 years old, whereas about 60% of young people were less than 24 years old and were considered digital natives in Saudi society, having been born while the internet was already present in most Saudi homes. According to first name or surname (2019), Saudi Arabia is a powerhouse for social media, with youths aged 20–24 years being the largest user group, with 98.7% social media usage. Young people believe that while they are from the digital era, their parents are

not, and therefore, it is not particularly useful for them to invest effort in familiarising themselves with social media communication. However, among their peers, since they are all familiar with such communication media, they spend most of their time on social media talking to them. These negative feelings could stem from communicating effectively through social media or investing much more time than they should, which leaves the children feeling less important.

Regarding attitudes towards social media, the research sought to clarify the effects of social media on family relationships through investigating whether Saudi young people's attitudes towards the use of social media affect their intentions in familial communication. The findings indicate that the more frequent utilisation of WhatsApp and other social media platforms by parents and young interviewees in the study confirms that social media gives Saudis the opportunity to reinforce bonds with their families. Visual communication, for instance, through video clips, includes body language, facial expressions, and tone of voice, which enables parents and children to clearly communicate their ideas and feelings. This finding affirms the first factor of the MRT, which hypothesises that all forms of communication differ from one another based on their capacity to transfer understanding to another individual. Organisational scholars Lengel and Daft developed the theory in the mid-1980s, and it was popularised by the diffusion of electronic communication media, such as email, in the 1990s (Ishii, Lyons and Carr 2019). The theory advocates the proficient utilisation of a communication medium or channel by matching its effectiveness with the equivocality of the task.

Furthermore, the results show that more than half of the parents felt that their attitudes towards the use of social networks in family communication had become more positive. A major shift has occurred in Saudi society regarding the adoption of new communication tools that were unknown in previous years. This positive shift in attitudes towards social networks must play a role in then being adopted and relied on them primarily in the life of the family and the individual. The findings also show that around half of the young people who participated in this research felt that their attitudes towards the use of social media in family communication had become more positive; however, this positivity was associated with their parents becoming more accustomed to the style of social media communication and elimination of the pressures of communicating face to face. In this way, this study highlighted a new dimension of social media use in Saudi Arabian society and also supported the claims of previous studies and literature sources. As parents become more comfortable using social media to communicate, that comfort level is shared by their children, thus creating a positive environment overall. For instance, young interviewee 1, said,

My mother has been the quiet type for most of her life and never really involved herself with technology either, so it was a little challenging getting her used to social media applications, but I am glad that I did because now she expresses herself much better and assumes organisational responsibilities much better, just as a mother should.

Some of the young people said their attitudes were more negative towards the use of social media in family communication. Young interviewee 15 said,

We use social media very few times. Sometimes, my brother sends us some funny videos or some religious teachings on Friday. We meet every day after sunset and have coffee and dinner together. We use social media for ourselves, but we do not use them in familial communication.

Their responses are well explained by the TRA, which opines that behavioural intention is the driving force behind individual behaviour, as behavioural intention activates the attitude towards the behaviour and the factors surrounding the function of the behaviour (Mi, Chang, Lin, and Chang 2018). According to the theory, participants who found nothing positive about the usefulness of social media in family communication may have been motivated by two factors, namely, the PU and PEO of the technology. These interviewees saw no value in employing social media apps to communicate with their family members, perhaps favouring direct conversations instead. Alternatively, they may have failed to grasp how social media works due to illiteracy or non-exposure to modern media. They overlooked the fact that social media offers additional tools that help people convey feelings and emotions to improve family relations and stability.

Around 44% of the young people perceived that social media use did not help them to understand the ways in which their parents think or act in greater detail. In addition, almost one in five young people saw that social media use is not easy in family communication. The reason behind this is the perceived incompatibility of parents and children on social media communication channels; children find it difficult to converse in a manner that would be clear to their parents so that they would fully understand what they are trying to say. Therefore, although around half of the young people who participated felt that their attitudes towards the use of social media in family communication had become more positive, this positivity is associated with their parents becoming more accustomed to the style of social media communication and elimination of the pressures of communicating face to face. As parents become more comfortable using social media to communicate, that comfort level is shared by their children, thus, creating a positive environment overall.

In Procentese, Gatti, and Di Napoli's (2019) research concerning the role played by the perceptions of parents on social media in family systems when it involves open communication within the family, especially with adolescents, the results indicated that the perceptions served as an intermediary to openness during communication within families. This signifies that besides the influence of social media on the family systems, parents' perceptions also matter significantly.

6.3 FAMILY DYNAMICS AND ROLES

6.3.1 Family dynamics

Family dynamics refers to the patterns and interactions that affect family members' development, views, and interaction behaviours including their decision-making process, the way they solve their problems, and how they share their feelings.

As explained in the literature review, Saudi society is a collective rather than an individual society (Alotaibi, 2020) and is socially enclosed (AlMunajjed, 1997); the husband is responsible for his family and must be the bearer of the family's financial burden, even if his wife works or is wealthy, unless concessions are made, and women in traditional families are not expected to work outside the home. The use of social media platforms has changed communication dynamics in the country due to the modernity of invention and traditional adherence to communication systems in the country (Samin, 2012). In this section, the influence of modern communication methods on family dynamics and roles will be discussed in light of the finding of this study.

6.3.2 Communication behaviours

The study results reveal that age and internet experience determine the communication behaviours of the family members. The parents chose their preferred medium for communicating with their children from several options depending on their level of experience, such as texting, making a voice note, sending a video or photo, and making video or audio calls on social media apps. In fact, about half of the parents noted that they communicated with their children through texting. Parent interviewee 6 said, "*Sure, as mother I found good space to talk and discuss many issues with my kids in WhatsApp. I prefer to text and take my time to think and arrange my ideas*". Another parent also noticed that his daughters did not speak freely with him face-to-face, unlike when they texted him through WhatsApp. It seems that instant texting gives an individual the ability to communicate instantly with others without seeing their faces or hearing their voices. Thus, it relieves pressure on

the user and offers him/her the best opportunity to express ideas freely. One interviewee believed that texting allowed her children to communicate gently and helped them arrange and clarify their thoughts to reach reasonable conclusions to discussions.

Video calling was another preferred form of communication between parents and their children. In contrast to audio calls, video calling is considered to be an effective mode of communication that enables the participants to see the other person. It also eliminates space and time barriers, making communication more efficient. One youth interviewee mentioned that his parents preferred communicating through voice note and video:

My mother, every morning, sends us her voice saying hi and supplicates God to save us, and this is a very perfect start of our day. Also, my father sometimes records videos of himself talking or joking. Sometimes, we use social media to learn something new in religion, education, health, and different parts of life.

As explained by Bryant et al. (2017), text messaging is a convenient, fast, and economical way of communicating. Therefore, frequent use of WhatsApp messaging and texting by some of the parents shows the convenience to them of using different communication channels and their skills in using mobile technologies. Other parents, particularly those who could not read, preferred receiving messages from their children through recorded vocal notes. It would be ineffective to use other media to communicate with such parents. Besides, compared to writing or texting, vocal recording saves time because it requires less focus. Given the parents' busy schedule at work or of children at school, voice recording is a desirable and practical communication method, as it is swift in delivering messages between family members.

Furthermore, interesting results were recorded in terms of whether frequent networking across social networks reduced face-to-face communication among family members. Different views emerged in response to this statement. The majority of parents agreed with the statement though a large number of youths felt that communicating with their parents online was the same as doing so directly. As much as parents viewed social media as a means of communicating with their children, it is evident that online communication reduced the number of times they talked directly with their children. Roughly 60% of the parents agreed and strongly agreed that they hoped to return to the old days of family communication without social networks. Based on the study's findings, 60% of interviewees seemed to agree with Khalid (2017) that social media weakens family bonds, as people rarely meet physically anymore. Overall, mixed views are presented in the primary findings concerning social

media use in familial communication, but it is clear from the findings that social media is perceived to be having a negative effect on face-to-face communication.

This division was seen in the interviews as well; parent interviewee 4 said that social networks suggest that remote communication is the only right choice, and this is not the case. He added that the right thing was to talk to his children face-to-face daily and hear their voices, not just read cold messages in WhatsApp. Parent interviewee 13 confirmed,

Face to face communication is important and more effective in my opinion with my kids. You can see their response on their faces even if they do not say a word. Also, in face to face communication, you can touch them and hug them to make them calm.

This view was echoed by young people. Young interviewee 2 stated, “For me, I prefer talking face to face with my parents. I feel more comfortable being with them. I use social media when I am away at university to say hi or tell them about my day.” Young interviewee 5 said, “Social media have splintered our family and we no longer communicate well face to face. Everyone is busy with YouTube or Snapchat and spends a long time without sitting with the family and without communicating with them.”

On the other hand, other young people and parents preferred communicating face-to face sometimes and through social media at other times. Parent interviewee 5 said,

In fact, I prefer face to face talking but sometimes. We have to talk online when we get away from each other. Also, sometimes it is better to say something online not face to face. I like to give some advice to my kids through direct messages to not embarrass them.

Young interviewee 11 shared the same idea:

It depends. Sometimes, it is better to communicate through social media when it is not serious issue, but the serious issues, we have to discuss them face to face. In general, I like to talk to my parents face to face. You can see their faces; you can feel their emotions and can see their body language, but through social media you just see a dry text.

Half of all the parents confirmed the significance of social networks in interacting with their children implies that social media has disrupted communication within the traditional Saudi family. This division over whether social media has disrupted traditional communication has been reflected in the literature. Many studies confirm the finding established earlier that most parents and young people believed that social media allowed them to communicate effectively with each other. Moawad and Ebrahim (2016) found that a greater statistical correlation existed between technology and SSNs usage by adolescents and improved social interaction and communication with parents.

Aharony and Gazit (2016) confirmed that constant chat on the family WhatsApp groups enhanced familial communication. Alanazi (2018) agreed with that observation, claiming that the arrival of social media has altered communication paradigms of conversation centrality and conformity in families. The author continued to say that most parents use technology properly and comfortably, just like their children. Alanazi (2018) quoted DePaul University Chicago's professor, Paul Booth, who claimed, "There has been a shift in the way we communicate; rather than face to face interaction, we're tending to prefer mediated communication...we'd rather email than meet; we'd rather text than talk on the phone" (p. 113). Moreover, the socio-economic transformations in society make direct communication difficult because of the variances in young people's university study times and parents' working hours.

On the other hand, Khalid (2017) argued that the intense consumption of contemporary media has reduced social and familial activities because people spend too much time online and avoid interacting with family and friends. The decline in face-to-face interactions undermines the formation of strong social ties and relations (Khalid 2017). Subramanian (2017) agreed with the respondents by arguing that social media has affected different dynamics of contemporary life and has had a profound influence on interpersonal communication. Individuals interact to meet their social needs. Thus, social networking sites have become the preferred communication channels, particularly with the proliferation of mobile and digital technologies. Digitisation decreases direct human contact, as indicated by interviewee 3, who lamented that the media prevented them from communicating face-to-face, and, most of the time, all the family members scrolled through their smart phone screens. Hence, mobile phones have introduced a social situation where people rely on them to communicate and avoid face-to-face conversations.

6.3.3 Power position and decision-making

In Saudi Arabia, the significant dynamic in the family is the control of power and decision-making. Being traditional, Saudi society maintains power in the hands of the fathers and older sons. This feature has been changing following the arrival of social media. Males are no longer the exclusive holders of the decision-making role in familial communication. The research participants also noted some changes in parental communication. Parent interviewee 11 admitted,

My role as a father has changed from the person who is responsible for everything to a supervisor and coordinator of various tasks in the family. Social networks have facilitated the distribution of tasks between children and parents and have also become more

understanding and closer to my children than before. The role of the father in control of everything changed and became more empowering and encouraging for children to participate in the work of the home.

Moreover, many young participants mentioned that social media allowed them to express their views to their parents more openly and to initiate discussions within their families. Parents also agreed with the young participants that social media has changed family decision-making in Saudi society. One parent interviewee said that his children were often the ones who chose the family's travel destination in the summer. He associated his children's involvement in decision-making with the many discussions that occurred in their family group on WhatsApp. In previous instances, the decision had often been left to him and his wife. However, he could not tell whether his children participated in the decision because they were older or because they felt newly empowered by the freedom offered by social media networks.

Interviewee 1 conveyed similar sentiments when he said that his eldest daughter contributed to important decisions, such as moving to another city, among other matters. He attributed the change to his retirement and lack of employment. This parent thought that the era of information and social communication revolution compelled parents to give their children greater roles in decision-making. Another parent confirmed that he gave his children, particularly his daughters, the freedom of discussion and decision-making. According to him, the family group on WhatsApp provided his children with the opportunity to express their views more freely than they previously did. Other parents also stated that they gave their daughters the liberty to study and participate in family decision-making.

This finding aligns with a study done by Alsharkh in 2012 in Saudi Arabia aimed at establishing the impact of social media usage on the youth and its effect on familial communication and their traditions. The study results indicated that there was prospective impact of the social media networks on the youth, their families, and communication. However the young people's involvement in social media also helped them to gain ability in self-decision making as well as having the ability to consider opposing opinions from family members and their peers.

6.3.4 Family roles

Social media has led to a breakthrough in the restricted traditional family relations where family roles and power positions are changing. Social media has empowered women to improve their social

status on various occasions. For instance, women have initiated Twitter hashtags, such as #EndMaleGuardianship, with the aim of ending gender segregation in conventional public debates and spaces in the kingdom (Thorsen and Sreedharan 2019). Even with the existence of traditional norms, women are using social media to break down barriers and attain their freedom in Saudi society. The results show that social media has affected male-to-female relations in families. Saudi young females were previously forbidden from expressing their views to their parents; they did not have the capacity to participate in family affairs. Young interviewee 14 said,

I noticed that my role as a girl changed, and I became more present in the discussions within the family group. I began to express my views more freely, even in choosing my personal decisions, I became more free and courageous.

Moreover, it was evident, based on the results of this study, that Saudi women are getting more empowered in making decisions regarding some areas of their lives. For instance, interviewee 3 pointed out that Saudi women from previous generations did not enjoy such liberty. Today, Saudi women can communicate their feelings and opinions and obtain vast resources and knowledge from social media. In this way, they are empowered to assert their positions in their families. Unlike in the past, the modern Saudi woman can convey her thoughts to her father or brothers, and this has boosted her confidence. Five female interviewees who were medical students admitted to mingling freely with their male counterparts in class.

Young interviewee 1 mentioned that social media had allowed her to communicate more freely with her parents. She cited a clear change in her freedom as a girl because she now had a new space in which to discuss issues, network, and dialogue with her parents on social media. Her sentiments were echoed by young interviewee 8, who noted that social networks had helped her to discuss and clarify her perspectives more than she had previously. She could not explain what had changed, but her father had also started communicating more with her through social networks and listening to her opinions. Thus, she felt that her life had taken a new path with respect to family communication. Long hours invested in social media seem to give women a chance to exchange their views. In the past, Saudi women did not have the luxury of communicating with anyone, but mobile apps have provided increased opportunities for social encounters. Even as young people spend the majority of their time on social media, this technology has positively and negatively influenced the ways in which they communicate with their families.

Additionally, social networks have increased mothers' influence in the household as a source of directions and orders. This perception was supported by parent interviewee 9, who stressed that

social networking sites enabled her to organise her family and distribute tasks clearly to her children. She also noted that her husband's support for the family had increased and had validated her roles as mother and wife. According to her, the end of social media would negatively affect her life. This kind of freedom permits Saudi women to fully engage with their families and with society at large. Likewise, parent interviewee 9 mentioned, *"Yes, I noticed that my role as a mother has become more influential and supportive for children. I became closer to them, and they considered my opinion important in their lives"*. Parent interviewee 4, a mother of six children, admitted that social media sites helped her follow-up on home tasks with her daughters, arrange the boys' duties at home or elsewhere, and know their whereabouts and activities, particularly when they were out of the house. She further stated that social media assisted her in planning her children's chores before she arrived home from work.

Saudi women think that social media has given them a greater voice in their families, particularly when their husbands support their efforts to use social media during family discussions. However, these women still face many barriers when using social media. Women who lack the freedom to use social media due to societal constraints are forced to embrace anonymity. According to Abbas and Mesch (2015), anonymity aids in escaping social restrictions. As a result, female social media users could hide their identities when communicating with their male counterparts online.

It was found that social roles had remained the same in some families even after the arrival of social media. Young interviewee 7 observed that his parents had maintained their traditional roles, and their use of social media was limited. In 2018, Alanazi conducted another study in Saudi Arabia to explore the impact of social media utilization as a tool for family communications on family relationships. The results of this study indicated that there was no substantial effect by social media on associations and communication between members of a family, including parent-children and husband-wife relations in Saudi Arabia. This was quite interesting following the findings of the study done by Alsharkh in 2012 in Saudi Arabia. Similarly, Makki and Lin-Ching Chang (2015) argued that internet and social media use in Saudi Arabia had increased significantly in the recent past. In this regard, the country's decision to adopt new communication channels while simultaneously retaining traditional customs and beliefs is proving to be a Herculean task, particularly for the younger generation.

Furthermore, some parents admitted to denying their daughters permission to study on medical courses to prevent them from mixing with male students. This means that although the country has

adopted some elements of modernity, ancient practices and traditions continue to be key pillars of the country due to the influence of Islam (al-Ken, 1995). Al-Talhi and Maarop (2018) argued that Saudi women only interact with their male counterparts when they know that such behaviour will not violate their moral standards and Islamic beliefs. The Islamic religion treats gender segregation as a legal requirement. The veil, gender segregation practices, and the values associated with these practices remain unchanged, and no clear desire for change in this regard is evident because these practices are based on basic family tribal values. Al-Saif (1997) also mentioned that social and economic changes in Saudi Arabia since 1970 have brought about changes in the roles and social statuses of many individuals and jobs in society. However, he stressed that the relationship between role and status is not always positive. For example, the role of women in society may change positively though their situation may remain traditional.

Nonetheless, these restrictions have not dampened Saudi women's spirit in pursuing their freedom. The study's findings show that social media gives women a voice in their families. Altouaimy (2018) acknowledged the use of social media platforms, such as Facebook and Twitter, by women's rights activists. These barriers will continue to be eroded over time as parents allow their daughters to chart the paths of their own lives and give their children more freedom in making future decisions.

6.3.5 Sharing emotions

Another family dynamics factor involves sharing emotions. Most participants mentioned that they enjoyed sharing emotions even in a society with traditional parent-child relations. For example, parent interviewee 6 said, *"Also, social media gave me more chances to express my emotions and love to my kids."* Similarly, parent interviewee 1 stated, *"We share expressing our good emotions towards each other. Sometimes, one of my kids will contact me through direct messages to express his or her love."* The young people also used social networks to express their emotions. Young interviewee 1 enjoyed expressing her emotions directly to her parents by hugging them, but social media had enabled her to do so in an organised manner. She said, *"I like to express my emotions face-to-face with my parents, and I love the hugs, but for ideas, social networks have given me an opportunity to express my thoughts in a well-ordered way."*

Social media has also facilitated expressing feelings for young people who showed their inability to display their emotions face-to-face. For example, young interviewee 8 stated, *"I am embarrassed to express my emotions face-to-face with my parents, and I prefer to express them through social*

networks. Social networks gave me an opportunity to express my emotions, so I feel closer to my parents and family.”

Young interviewee 7 recognised the benefits of emojis in expressing her feelings: *“In fact, the emojis have given me more freedom to express my love for my father, because I am shy to express my feelings face to face.”* Similarly, parent interviewee 1 said,

Yes, the emoji is important for communicating and it reduces a lot of time and writing. I love emojis and it is useful for expressing feelings. In the past, we used to draw a heart when we wanted to express our love in the written letters to a friend or relative. In fact, many of my texts in WhatsApp are better understood when I use emojis, because texts are sometimes misunderstood.

Many interviewees also stated that emojis or expressive faces allowed them to share their feelings in family communication. Such visual aids allow the receiver to infer the sender’s emotions from a written text; adding a laughing face while commenting on a subject suggests to the recipient that the sender is joking so that the receiver takes the comment as a joke instead of mockery. However, some interviewees did not find much benefit from emojis, parent interviewee 9 expressed, *“For me, I did not find much benefit from emoji and I do not know its importance explicitly, I can use the red heart emoji to express my feelings, but I often express my feelings face to face with my children.”* Young interviewee 12 said, *“In fact, emojis are sometimes useful and sometimes not. Occasionally, my mom asks me about the meaning of some emojis, and sometimes she understands it in the opposite way.”*

The findings of the study also introduced the issue of time displacement, which meant the amount of time spent on social media instead of in face-to-face interactions. From the interviews, Young interviewee 11 said, *“We talk a lot with each other through social networks, but when we meet, we stay silent for long periods of time, because we do not have anything to say.”* Moreover, parent interviewee 2 stated, *“Social networks have extracted our speech energy. When we meet, we do not have anything to say; we have said everything in the family group in WhatsApp.”* Young interviewee 14 said *“I’m talkative with my family in social networks, but in face-to-face meetings they call me the silent girl.”*

To an extent, most respondents agreed that they spent most of their time online and used social media as a major communication tool. The widespread use of social media has created undeniable concerns, with some parents claiming that their children ignore their roles in the family due to spending so much of their time on social networking sites. Time displacement, as discussed in Chapter 5, implies

that the extended utilisation of social media could adversely affect family relations. Similar results were found in a comprehensive study of face-to-face interactions on 869 Macedonian families carried out by Keverski and Iliev (2017), showing that this form of communication is being displaced by technologically-mediated interactions. The study found that pupils communicated with their parents face to face on average just 1 hour a day. Furthermore, these interactions included a lot of misunderstandings, fear, and officiality.

6.4 ADVANTAGES AND DISADVANTAGES OF SOCIAL NETWORKS IN FAMILY COMMUNICATION

The finding of the interviews revealed that social networks have numerous advantages in terms of sharing problems and concerns, participation, and interactivity, and saving time.

6.4.1 Sharing problems and concerns

Regarding the use of social media for sharing problems and concerns, parent interviewee 14 stated,

I use social media with my family to solve some family disputes. Once we had big discussion about travelling in the summer, and everyone suggested a different place. We did the vote through WhatsApp, and finally we agreed. Some of my kids showed us photo and videos in the WhatsApp family group to convince us with their favourite summer destinations.

Similarly, parent interviewee 12 said,

Through social networks, I have come to know one of my children was going through a problem because he was away and did not send me WhatsApp messages for a long time, so I contacted him directly, and knew that he had a problem. Therefore, social networks gave our children an opportunity to express their concerns and ask for help from us at any time.

Likewise, parent interviewee 2 mentioned, “*My daughter was studying away from home, and she was constantly communicating with me through voice messages in WhatsApp, and this communication helped her get over the pressure of studying.*”

Parent interviewee 10 also recognised the advantages of social media in avoiding family disputes:

In social media, we have more choices in communication; we have videos, voice, photo and texts. Also we have more time to respond not like talking face to face which needs immediate response. And this feature can help to avoid many family disputes.

The young people had also found a space for expressing their concerns through social networks. Young interviewee 1 stated, *“Social networks have given me the opportunity to express my concerns with my parents, especially, my mother. Texting her helped me a lot in overcoming my fears during my studies abroad.”* Young interviewee 9 also stated, *“It is nice to find someone who listens to your concerns at any time. Through WhatsApp, I express my concerns to my father, and he listens to me and comforts me constantly.”*

6.4.2 Participation and interactivity

In their responses, about 43% of the young people agreed and strongly agreed that social media encouraged them to interact with their families, while one-third of them disagreed with that statement, and 61% of young people said that they communicated with their friends more than with their parents through social networks. Young interviewee 7, said

My parents are very traditional and do not really appreciate long conversations on social media as they think it has the means to corrupt us, so whenever I try to talk to them about something via a social media application, I usually get ignored than I would if I talked to them in person.

These results mean that although young people are actively using social media applications to communicate with their parents, most of them do so out of duty or because they feel obliged rather than because they want to. The 40% of people who said that social media did not bring their family closer supported this theory. On the other hand, about 56% of the parents agreed and strongly agreed that social media enabled them to interact with their families. Parent interviewee 14 noted, *“Group communication through the family group is useful and quick to strengthen our relationships with each other as a family.”*

Nevertheless, the positive effects of social media cannot be ignored. Continual and increased use strengthens relationships in the long run. The interviews show that communication through family groups had brought families closer. They had become more active in exchanging ideas and thoughts and sharing jokes and laughs. For example, Parent interviewee 9 stated, *“In my family group, we talk about the daily home tasks and about the kids’ school news. Also, sometimes we share some educational and healthy stories or topics, especially as most of my kids are students in the medical field.”* Parent interviewee 14 said, *“In our group we share religious teaching clips, some funny clips or jokes from social media. And we talk about our daily issues.”* Similarly, Young interviewee 8 said, *“Sometimes we use family groups to discuss political issues or sport issues especially Saudi*

football league. I remember once we had a hot discussion about women rights in Saudi Arabia and governments' new decisions in that issue." Furthermore, Young interviewee 6 stated, "We talk about everything literally. Most of the time we make jokes on each other when one's favourite team is defeated". In addition, Youth 2 mentioned discussing "different issues, like family daily news, family future events, football matches and some public issues that appeared in Twitter."

Moreover, interactivity proved to have increased through social media communication. For instance, Young interviewee 6 said, "Yes. I noticed my mother being more active with us in conversations about public sphere issues like women driving and women's rights." Similarly, Young interviewee 15 mentioned, "Yes, as a girl, social media gave me more space to be more active in my family and share my family in different decisions." The parents also realised that they had become more active in social networks communication. Parent interviewee 11 said, "Social media gave me more time to ask about my kids and to be more active father".

Rudi et al.(2015) argued that internet-based technologies allow family members to make plans in real time and to keep in touch, and they allow for communication in emergency situations. Internet-based communication may also strengthen family ties, encourage parent-child interactions, and promote and facilitate discussions on a wide range of issues. However, the results of this study show that the participants were divided on the influence of social media in strengthening family relationships. The quantitative data revealed that 60% of the parents agreed and strongly agreed that social media had helped improve their relationship with their children. This means that around approximately 40% of parents did not feel that social media had strengthened their family relationships. The study found that occasional users also did not perceive social media as important for strengthening their relationships, either social or familial.

On the other hand, 40% of the young participants agreed and strongly agreed with the statement that social media richness gave them the opportunity to strengthen their relations with their family. This means that 60% of young people did not agree that that social media had strengthened their family relationships. The participants who agreed that social media richness had strengthened their familial bonds because it helped them to feel closer to their parents were mostly those who spent time away from their families for studying or those living in a different city. Since visual communication or video clips convey body language, facial expressions, and tone of voice, it facilitates the clearer expression of feelings and emotions, and this helps children to feel as though the distance between them and their parents is non-existent in that moment.

6.4.3 Time saving

Another advantage found from the interviews is that social media communication saves family time.

Young interviewee 15, for example, stated,

Yes, you do not have to wait to meet your parents in the evening to say something to them, you can send what you want anytime. Also, the place is not important now with social media. I can deliver my thoughts to parents and they have more time to read the text or listen to them if I recorded them by voice.

Young interviewee 3 added, “Quick communication by a simple message in the group on WhatsApp reassures our parents about us when we get late for home”. Parents also confirmed this advantage; parent interviewee 10 stated,

Fast communication is a feature of social networks. With one message, I can know where my child is, what he's doing, and whether he's okay. Important news is transmitted at once on WhatsApp family group that everyone can see in a short time without telling each one alone.

However, Parent interviewee 9 disagreed:

There is not always a speed in communicating via social media, as one time I sent a message to my daughter while she is in university and she did not reply until after two hours due to her busy lectures, because of that I was worried about her. So, here the communication became a cause of fear.

Although most of the participants viewed the implementation of social media in family communication positively, this does not mean that social media communication has no weaknesses or disadvantages. The young people referred to a number of disadvantages for social media in familial communication such as it being time consuming. One of the interviewees argued that spending too much time on social networking sites consumed a lot of time for both children and parents and that it prevented families from connecting through gatherings or family meetings according to the Saudi traditional norm.

Misunderstanding is another disadvantage that may occur in conversations over social networks, particularly discussion through texts. Texts do not show the mood of the speaker like voice or video calls can. Hence, the different modes of communicating in social media tend to leave some lines blurred. Therefore, people often misunderstand one another because there is a lack of body language,

facial expressions, and tone of voice, and sometimes emojis are not enough to express true emotions. Young interviewee 10 said,

I'm often misunderstood by my father and brothers in the group discussions on WhatsApp; they think I'm making fun of them, but I speak seriously. The problem is that writing text does not fully express what's inside you, so it's better for me to record my voice most of the time.

Likewise, Young interviewee 14 mentioned, *"Sometimes, my father sends me a message when I am online, but I do not respond, and he gets angry because I forgot to respond."*

Addiction seems to be the most serious disadvantage revealed from the findings of this study. Some respondents were merely connected to social media apps as illustrated by young interviewees 2, 6 and 13. Young interviewee 2 argued that he spent most of his time on Twitter and Snapchat but that he did not communicate with his family and parents. A similar addiction was also demonstrated by young interviewee 13, who alleged that his addiction to YouTube and Snapchat isolated him, as he had stopped communicating with his parents. However, he added that he enjoyed it and was not planning to stop.

What is slightly more worrying is that almost half of the heavy users used social media mostly for entertainment purposes. This is a negative indicator because people who dedicate most of their time to entertainment often isolate themselves from personal connections including their families. El Khouli (2013) explored the negative effect of social media use on UAE families. The study involved 125 families, who were interviewed by the researcher. Statistical analyses were used to measure the relative weight of the negative factors of social media use. The author revealed that excessive engagement with social media may lead to isolation of the children and severe impairment of family cohesion. This literature finding contradicts the primary data findings highlighting the positive implications of social media on familial communication.

In addition, the findings revealed that addiction was not exclusive to young people, as parents also experience such issues. Young interviewee 4 said, *"I noticed my parents' addiction to social networks, especially to Twitter and Snapchat; they spend many hours of the day away from us, and the problem is that they blame us that we spend a lot of time on social networks."* In fact, such an outcome was also found in Ante-Contreras's (2016) survey, which concluded that there was a statistically significant association between hours spent on social media and authoritarian parenting styles. Excessive social media usage causes parental distraction in families hence affecting parent-child communications.

This consequence can be explained in light of the results of Christensen's research in 2018 aimed at investigating social media usage and its impact on the emotional well-being of individuals in close relationships in a family. The study's results indicated that the more time an individual spent on SNSs, the more likely he or she was to experience a destructive effect on their emotional happiness as well as a decreased quality of familial communication. The top three responses given in this research for the negative effect of social media utilisation on emotional happiness were depression, frustration, and social comparison.

Social media's role in time displacement is explained to some extent by Putnam's theory. In 2000, Putnam conducted a study in which he concluded that television reduced social capital (Siraj 2018). The time displacement model posits that new communication forms substitute old ones and decrease the time left for direct connections. In a way, social affairs determine people's level of contentment and, in light of digital media, individuals who vigorously use social networking sites are more likely to enjoy connectedness and feel happier than medium or non-users. Siraj (2018) asserted that people turn to trusted contacts on social media in times of personal crises. Moreover, social media platforms allow users to access comprehensive information regarding their associations, environments, locations, well-being, and musical preferences. Generally, it is assumed that the patterns of new media usage associated with information acquisition and community building are important at the individual level.

6.4.4 Family values

It is noticeable from the interviews conducted in this study that social media has also affected the Saudi values. One of the most crucial family values in Saudi Arabia is respect for and obedience to parents. This requirement limits children's freedom in their private lives, as it puts the interests of the family before those of the individual. Previously, Saudi parents usually occupied the leading communicative roles in the family, but this expectation has changed. Some young people cited the weakness of the communicative role of the father within the family as one of the problems caused by online social communication networks that have an adverse impact on families.

Moreover, in terms of whether parents see that it is respectful of their children to communicate with them adequately through social networks, the study sought to understand the RB that Saudi parents exhibit towards their children when communication is established through social media. In Saudi

culture, parents enjoy immense admiration and respect from their children. Evidence from the study indicates that most parents were hesitant to answer the question, but almost a third agreed with the statement. Nearly 75% of the interviewees did not consider children's continued communication through social networks as a sign of respect for their parents. Accordingly, some parents excused their children for being busy with their studies or stated that they maintained continuous communication face-to-face or via the telephone.

Not every parent agreed with the idea of rewarding their children for communicating with them often. These parents felt that their children had a responsibility to check up on them without expecting anything in return. For instance, parent interviewee 10, a father, said that he did not perceive the abundance of communication as a sign of respect. On the contrary, the father asserted that sometimes parents should take the initiative to ask about their children's assignments and take care of them, particularly because they have more leisure time than the children. However, for some mothers, their children's delay of more than a few days in communicating with them was considered a lack of respect and appreciation. For example, parent interviewee 4, a mother, claimed that, as a mother, she deserved to have her son, who was studying at a university in Riyadh, communicate with her and tell her his news. Therefore, communication with parents was viewed as a necessary action that did not require rewards. Furthermore, some parents felt that rewarding children for communicating with them was a bad idea. Parent interviewee 10 argued that parents should communicate with all their children, including those do not communicate well with them, and should understand the reasons for such estrangement.

Some of the young study participants also felt that they had a duty to chat to or communicate with their parents without expecting any compensation. For example, young interviewee 10 claimed he communicated with his parents because he believed communication played a significant role in sharing family news as well as being assured about their wellbeing and their health. By contrast, some of the interviewees believed that communicating with their parents directly showed their respect. For example, young interviewee 4 wrote, "*Constant communication with my parents through social networks is not a sign of my respect for them. I prefer to serve them and sit with them and talk to them face to face.*" In general, the lack of communication with parents via social media was not considered a sign of disrespect, and nor did constant communication via social media require any compensation.

6.5 ANSWERS TO RESEARCH QUESTIONS AND SUMMARY

The five themes discussed in this chapter originated from Chapters 3, 4 and 5, which form the basis of this study. The themes involved internet use, the use of social media in familial communication, family dynamics and roles, the advantages and disadvantages of social media use in familial communication, and family values. The outcome of this discussion is used to answer the research questions.

1. Do the attitudes of Saudi family members (parents and children) towards social media have an effect on their participation in family communication?
2. What are the barriers faced by Saudi families when utilising social media in their familial communication?
3. Do social media platforms provide new opportunities to enhance family communication in Saudi society?
4. Does social media use lead to changes in the traditional forms of communication used in Saudi society?
5. Does social media use lead to changes in traditional family roles?

RQ 1: Do the attitudes of Saudi family members (parents and children) towards social media have an effect on their participation in familial communication?

Despite the disadvantages of social media raised by the participants for familial communication, such as time consuming, misunderstanding, addiction by both parents and young people, and time displacement, which affect parent-child communication, it was evident that social media has encouraged family participation and interactivity. The findings show that communication through family groups facilitated sharing problems and concerns, saved time, and brought the family closer. Since social media provides various fast and convenient types of communication channels, such as texting, video calls, voice messages, and sharing photos, family members had become more active in exchanging ideas and thoughts and in sharing emotions.

However, the participants were divided over the influence of social media in strengthening family relationships. The quantitative data revealed that most parents agreed that social media had strengthened their family relationships, while most of the young people did not agree with that. Furthermore, the participants who agreed that social media richness had strengthened their familial

bonds because it helped them to feel closer to their parents were mostly those who spent time away from their families for studying or those living in a different city.

Another division emerged over the impact of social media in reducing face-to-face communication among family members, as the majority of the parents agreed with the statement, while the majority of the young people felt that communicating with their parents online was the same as doing so directly. Therefore, it can be concluded that although social networks have changed the norms of familial communication, a significant portion of parents and children wish to maintain less disruptive forms of face-to-face communication.

RQ 2: What are the barriers faced by Saudi families when utilising social media in their familial communication?

Saudi women still face many barriers when using social media. Social roles remain the same in some families even after the arrival of social media, as some parents admitted to denying their daughters access to education in specific scientific fields to prevent them from mixing with male students. This means that the relationship between role and status is not always positive. In other words, the role of women in society may change positively though their situation may remain traditional. Therefore, one of the most important obstacles that still exist in family communication is the weak power of women in general and girls in particular, and traditional structures still play a major role despite the transformations that have arisen since the emergence of social networks. One of the barriers that still exist is that many children are satisfied with communicating through social networks and do not pay attention to the significance of face-to-face communication and physical contact with their parents.

RQ 3: Do social media platforms provide new opportunities to enhance family communication in Saudi society?

The emergence of social media within Saudi Arabia has transformed family interactions. The status of Saudi fathers as having the leading communicative role in the family has changed. Young people have gained a voice to express their opinions and desire for decision-making opportunities. In addition, respect and obedience to parents still exists. Parents enjoy great admiration and respect from their children, and their children still believe that they have a responsibility to communicate with them without expecting anything in return.

Moreover, social media has made a breakthrough in the restricted traditional family relations where family roles and power positions are changing. Saudi women are being given a greater voice in their families, particularly when their husbands support their efforts to use social media during family discussions.

RQ 4-5: Does social media use lead to changes in the traditional forms of communication used in Saudi society? Does social media use lead to changes in traditional family roles?

Both parents and young people reported excellent and good skills in using social media. Their positive experience of using social media applications was directed to remaining connected with family groups. Therefore, this good experience on both sides enabled the reinforcement of family communication and strengthened relations between family members while providing respectable spaces for freedom of expression whereby children could express their opinions and feelings. It similarly provided them with greater powers to participate in significant family decisions.

The results highlight that social media gives Saudis the opportunity to strengthen bonds with their families. Visual communication, for instance, through video clips, includes body language, facial expressions, and tone of voice, which enables parents and children to clearly communicate their ideas and feelings. This finding affirms the first factor of the MRT, which hypothesises that all forms of communication differ from others based on their capacity to transfer understanding to another individual. Organisational scholars Lengel and Daft developed the theory in the mid-1980s, and it was popularised by the diffusion of electronic communication media, such as email, in the 1990s (Ishii, Lyons and Carr 2019). The theory advocates the proficient utilisation of a communication medium or channel by matching its effectiveness with the equivocality of the task.

From the answers to the research questions and analysis of interview and survey findings in the light of previous research studies, it can be concluded that social media contribute to strengthening family relations and fostering communication between family members. The majority of participants considered it to be a useful medium to interact with other family members and to share their feelings, which contributed to the evolution of their family roles and dynamics.

Chapter 7: CONCLUSIONS

7.1 INTRODUCTION

The emerging technologies have revolutionised primary communication, creating borderless connection and reducing the influence of time and location on information sharing. Saudi Arabia has developed immensely as far as interaction with and the dissemination of information via modern and current communication methods is concerned. The proliferation of social media usage has affected how people spend their leisure time (Gaikwad 2015, p. 251). Ultimately, the development of information technology has compelled Saudi Arabia to keep pace with other parts of the world.

The number of internet users in Saudi Arabia is projected to increase to 35 million people by 2023 (Eldardiry and Elmoghazy 2018). Such exponential growth has been the subject of concern among various stakeholders in Saudi Arabia. Some view it as a way of westernising the country by corrupting it and detaching it from its social and religious traditions. Adolescents and young adults are the most frequent visitors to social media sites. The growing prevalence in social media use is inducing the younger population to become more dependent on online relations and is alienating them from their familial and social ties.

Findings from other studies indicate that spending long periods on the computer negatively affects face-to-face relations. Gaikwad (2015) asserted that social media use negatively affects children in familial communication (p. 252). As a result, excessive internet use is linked to weakened familial relations and reduced social engagements. In sum, face-to-face engagements and familial relations are significantly affected by increased internet use. Furthermore, frequent internet use has been blamed for rising levels of depression among users. However, the impact of internet use among the Saudi population remains unclear, including the use of social media as a means of communication at family level.

The aim of this study was to identify the consequences of social media use for family communication in the context of traditional family structures in Saudi Arabia. To achieve this aim, the attitude of parents and young people towards the use of social media in family communication was explored, and the growing use of social media in the changing familial communication was considered. Furthermore, the extent to which these new modes of communication are influencing changes around

familial communication were examined in order to evaluate the influence of social media networks on traditional social structures.

7.2 CONCEPTS DRAWN FROM THE EXISTING LITERATURE AND BACKGROUND MATERIAL

In line with the initial objective, the findings confirm that social media significantly influences family communication within Saudi traditional families to an effective extent. In this regard, it is evident from the statistics and the interviews that social media tools, mainly WhatsApp, support parents to get involved with their children and to track their regular activities easily. Moreover, from the literature, the theory regarding the family system also indicates that proper communication among family members is required to maintain family ties and exchange values, something to which social media makes a vital contribution. While linking the findings with the second objective, some nuanced notions were found to suggest that parents' attitude regarding social media is positive to an effective extent because they find it essential to keep connected with their children and monitor their activities. Social media has become embedded in society and contributes to social aspects, including education. The private sphere and the public sphere have merged into one virtual environment through social media (Papacharissi 2002). The acceptance of social media in collaboration and communication is evident in higher education where institutions go the extra mile to facilitate social media use through the provision of internet access. The use of social media in learning institutions influences the research because most of the users of social media in family communication are students. The profiling on social media use highlights the fact that the younger generation have embraced social media in Saudi Arabia more than the older members of society, who prefer traditional forms of communication. Several reasons for this have been proposed, including the digital migration and the social culture of the twenty-first century.

In support of the research-centred third objective, the study has highlighted that the barriers like degraded face-to-face communication and feelings of social isolation that are raised because of social media eventually hamper overall family communication. However, since Saudi Arabia officially allowed the use of the internet in 1997, the population of users has steadily grown (Internet in Saudi Arabia 2018). More than 75% of people use the internet, and the country is identified as having the fastest-growing population of social media users. The research on social media in Saudi Arabia should serve as a case study for other regions across the globe, owing to the statistics showing a growing trend. Internet use in Saudi Arabia is also interesting because of the regulations used.

Censorship is one controversial topic pertaining to internet use in Saudi Arabia. Strict checks are performed on content because of religious and cultural concerns. However, these restrictions have not hindered the growing use of YouTube, WhatsApp and Twitter, which are the preferred social media platforms in the country. Saudi Arabia ranks fourth in the use of WhatsApp Messenger worldwide (Internet in Saudi Arabia 2018).

Many theories have been used to explain social media use in family communication. First, FST explored the response and reward patterns resulting from successful family interaction and discussion on social media. In alignment with the research objectives, it is further noted that social media had effectively resulted in altering ways of communication and family roles in traditional family structures. This is because social media allowed smooth and easy communication and helped parents to play an effective and essential role to monitor and control children's activities to assist them all the time. The interviews also revealed a contradiction between parents' and young people's attitudes to the use of social media. A majority of the young people enjoyed the use of online platforms to correspond with family and friends, yet parents complained of their children being distant due to the same reason. This difference in perception emanates from the difference in attitudes towards social media and family communication, confirming that the rigid Saudi culture limits the freedom of young people and hinders the full realisation of the benefits of social media platforms. The young people are identified as being fonder of social media than are the older generation, who are only influenced by their children. However, the Saudi people are receptive to the changes arising from social media use because even the adults admitted to using social media to communicate with their children, who prefer it to telephone calls (Khalid 2017).

Other approaches aim to evaluate the acceptance of social media by society and what the effects of rampant social media use in family communication could be. Technology acceptance, media richness, and reasoned action theories are also applied in this connection. These theories were used to explain the cultural constraints affecting family use of WhatsApp in Saudi Arabia, particularly the cultural hierarchy, which limits the social contribution of young unmarried members of society during discussions (Alsaedy 2015). It was found that social media could be a driver of cultural change. Various studies on this domain were examined to compare whether the outcomes of this research confirm or reject the findings of previous studies.

7.3 METHODOLOGY

This research established five research questions that the study explicitly explored and examined using the mixed-methods design adopted by me. Those are as follows:

1. Do the attitudes of Saudi family members (parents and kids) towards social media have an effect on their participation in family communication?
2. What are the barriers faced by Saudi families when utilising social media in their familial communication?
3. Do social media platforms provide new opportunities to enhance family communication in Saudi society?
4. Does social media use lead to changes in the traditional forms of communication used in Saudi society?
5. Does social media use lead to changes in traditional family roles?

A mixed-methods research approach was designed to examine the attitudes and intentions of both Saudi parents and young people in using social media platforms for family communication and the impact that this has on their connection to the family and on society at large. The mixed-methods approach brought together both quantitative and qualitative research methods. For the quantitative data collection, an online survey questionnaire was designed and structured. The questionnaire participants included 103 parents of whom 47 were females and 57 were males and 515 young people (283 females and 232 males) aged 18–23 years old, all of whom were university students. The questionnaire facilitated data collection related to demographics, experience in using networks, attitudes towards the use of social networks in family communication, the reduction in face-to face communication, expected ease of use, and rewarded behaviour from parents was collected.

For the qualitative data collection, an interview form was created to obtain in-depth data not included in the questionnaire. The qualitative data were obtained from interviewing 15 young people and 15 parents. The questions aimed to assess the social media experience from the perspective of the two parties. This approach added a human touch to the research and gave me a chance to observe the interviewees' cues for falsehood or exaggeration. Also, I had the opportunity to emphasise integrity while conducting the study. I identified the challenges and how they were solved, which showed the practicality of the study. The respondents' opinions were used to shape the findings and to draw conclusions. Pilot studies were carried out to ensure that the interview questions were iteratively corrected. I ensured the validity and reliability of the design of questionnaires as described in Chapter 3.

7.4 Data analyses

The data analyses in Chapters 4 and 5 are summarised in terms of whether the outcomes of this research confirm or reject the findings of previous studies, as well as the existing theories and concepts. The disruptive character of new technologies and the clash between social media communication and the traditional family structure and values is also discussed in order to determine to what extent social media platforms are exactly disruptive.

7.4.1 Participants' attitudes towards social media use

The research sought to clarify the effects of social media on family relationships through investigating whether Saudi young people's attitudes towards the use of social media affect their intentions in familial communication. The results show that for four in five of the young people, their attitudes were more positive towards the use of social media in family communication, and indeed, most participants felt that their attitudes towards the use of social networks in family communication had become more positive. In addition, most participants showed they had a positive experience in using social media applications, such as WhatsApp and Twitter, as these platforms offer useful information on several issues, including family building, children's needs, and parenting techniques. The findings show that the parents' purpose of using social media involved networking, education, and news reception. They used WhatsApp for corresponding with family and friends, Twitter for news, and YouTube for educational purposes. The young people thought that WhatsApp provided an avenue for bonding through the creation of family groups. It also gave the young people a freedom of expression that had been hard to achieve with previous forms of communication. These findings indicate that the more frequent utilisation of WhatsApp and other social media platforms by parents and young people confirms that social media gives Saudis the opportunity to reinforce bonds with their families.

From the research, parents use these applications to try and build relationships with their children, while young people prefer to communicate with their friends rather than their parents. Many young users use the platforms for peer-to-peer communication more than they use them for family communication. From the interviews, a contradiction was noticeable. A majority of the young people enjoyed the use of online platforms to correspond with family and friends, yet parents complained of their children being distant due to the same reason. This difference in perception emanates from the difference in attitudes towards social media and family communication.

7.4.2 The impact of social media on familial communication

The introduction of social media in the Kingdom of Saudi Arabia has modified the ways in which parents and young people perceive familial communication. Although it does not seem to be the preferred form of communication, the participants understood that social norms are shifting with the continued advancements in technology. The participants were divided over the impact of social media in reducing face-to-face communication among family members, as the majority of parents agreed with the statement that social media has reduced face-to-face communication. Most of them agreed and strongly agreed that they hoped to return to the old days of family communication without social networks. On the other hand, it was found that most young people felt that communicating with their parents online was the same as doing so directly, yet many young people agreed with the observation that it limits face-to-face communication. The young people felt freer to discuss personal issues on social media than during real conversations. Additionally, the young people believed that they could contribute freely to family concerns, unlike during family gatherings.

Moreover, as much as parents viewed social media as a means of communicating with their children, half of all the parents confirmed that social media has disrupted communication within the traditional Saudi family, as online communication had reduced the number of times they talked directly with their children. Based on the study's findings, 60% of interviewees seemed to agree with Khalid (2017) that social media weakens family bonds, as people rarely meet physically anymore. Therefore, the study concludes that although social networks have changed usual familial communication norms, a significant proportion of parents and children wish to maintain less disruptive forms of face-to-face communication.

The literature review demonstrated that the use of internet-based technologies may provide positive results in terms of open communication, family cohesion, and adaptability among family members and may have a positive impact on the overall relationships (Romero-Ruiz et al. 2017). However, in this study, around 44% of the young people perceived that social networks do not help them to understand the ways in which their parents think or act in greater detail. Almost one in five of the young people thought that social networks are not easy in family communication. The reason for this is the perceived incompatibility of parents and children on social media communication channels; children find it difficult to converse in a manner that would be clear to their parents so that they would fully understand what they are trying to say.

Furthermore, despite the various advantages of social media networks in terms of bringing family members closer, increasing participation and interactivity, sharing emotions and concerns, and saving time, social media communication has not entirely helped in strengthening family relationships. Some parents observed that social media had helped to strengthen their family, though most of the young people did not agree to that.

7.4.3 Traditions, roles and values

Various demographic aspects, such as culture, age, gender, and education, influence the ways in which people are receptive to social media. Some believe that young people becoming active participants in discussions and family decisions amounts to an erosion of culture. However, other interviewees, particularly from the younger generation, claim that their lives have improved because the restrictive traditions were not fair. Indeed, age is a significant factor in social media use in Saudi Arabia. Young people between the ages of 20 and 24 are avid users with almost 100% of them on social media (Mohammed 2019). An irresistible online trend compels parents to yield to the influence of their children, who are accustomed to these forms of communication. Despite resistance by a majority of the believers in conservative Islam, the more liberated the community, the higher the chance of acceptance because they embrace modern concepts of freedom

Social media has had a significant impact on social interactions and has altered traditions. The findings of the study indicate a significant shift in the Saudi enclosed tribal society. The position of Saudi parents as the leading communicative roles in the family has changed. Young people have gained a voice to express their opinions and their desire for decision-making opportunities. Many of the young participants mentioned that social media allowed them to express their views more openly to their parents and initiate discussions within their families. The parents also agreed with the young participants that social media has changed family decision-making in Saudi society.

Therefore, family roles have altered giving the children leadership roles, including spearheading conversations on family groups and introducing contentious issues (Khalid 2017). This finding aligns with a study done by Alsharkh in 2012 in Saudi Arabia aimed at establishing the impact of social media usage on the youth and its effect on familial communication and Saudi family traditions. The study results indicated that there was a prospective impact of the social media networks on the youth, their families, and communication. However, the young people's involvement in social media

also helped them to gain an ability in self-decision making as well as having the ability to consider opposing opinions from family members and their peers.

The Pew Research Centre (2018) observed that change in social structure was inevitable with the emergence of social media. Technology brings about various capabilities, which makes its use for family communication better than other channels. Parents have learned this, and a majority have decided to embrace the change and correspond with their loved ones using these connection tools. Despite the few alterations to the traditional structure, specific values and aspects of the Saudi family set up have been improved. According to Khalid (2017), the use of technology weakens the social ties that are embedded in the traditional forms of communication and that encourage physical reunion. However, modernisation is inevitable, and having a way to share videos, send images, and conduct conversations despite the distance and the time helps retain the family connection.

Social media platforms have made a breakthrough in the restricted family roles and power positions. They have given Saudi women a greater voice in their families, particularly when their husbands support their efforts to use social media during family discussions. Saudi women have become active on social media because they are more liberated and can air their opinions on sensitive matters. Moreover, social media has empowered women to defend their rights through initiating Twitter hashtags, such as #EndMaleGuardianship, with the aim of ending gender segregation in conventional public debates and spaces in the kingdom (Thorsen and Sreedharan 2019).

Al-Talhi and Maarop (2018) observed that Saudi women are cautious in their interactions with male counterparts for cultural and religious reasons. Despite the recent efforts regarding emancipation, segregation in Islam is still a controversial issue. However, some interviewees observed that the same is not applicable online where modernisation has created a new social structure and an online culture centred on freedom. Nonetheless, this change is limited to some families, as a few of the interviewed parents admitted denying their daughters access to education in specific scientific fields to prevent them from mixing with male students even after the arrival of social media, and women still face many barriers when using social media. Hence, in some families, social roles have remained the same despite the arrival of new technologies. This means that the relationship between role and status is not always positive. In other words, the role of women in society may change positively though their situation may remain traditional.

Saudi values have been through some changes in terms of respecting obedience to parents and respect to the elderly. Many parents have learned to use social media to participate in family groups because Saudi culture emphasises respect and gives the elders the final word in discussions. Technology may have reduced direct interaction among family members, but apps such as WhatsApp and Telegram seem to rectify this by facilitating virtual meetings.

In addition, although viewed as impolite in Saudi society, young Saudis can now communicate with the older generation without fear. Yet respect for and obedience to parents is maintained. Parents enjoy great admiration and respect from their children, and the children still believe that they have a responsibility to check up on them without expecting anything in return. Therefore, it can be concluded that there is some disruption of traditional family relations, where family roles and power positions are changing, but traditional structures are not entirely overturned by social media.

7.5 Research contribution

This research will contribute to the understanding of social change in Saudi Arabia where few studies have addressed the issue of the social impact of technology (Furstenberg 2019). This is partly because the evaluation of such changes relies considerably on opinion, which makes analysis hard.

This research also confirms the refutation of previously conducted studies. For instance, some previous studies have revealed that parents use social media mainly for controlling their children and that the older generation uses social media for being connected with society to prevent themselves from feeling isolated (Procentese, Gatti and Di Napoli 2019; Leung 2013; Leist 2013). However, the current study refutes the findings of these studies and reveals that social media is used not only for parents' social connections and for monitoring children, but it is also used by parents to enhance family communication and to strengthen internal ties and bonds to maintain the family system.

Moreover, the study also addresses some essential aspects of this topic, such as the effect of social media not only on family communication but also on traditional family structures within the Saudi region to spread awareness among young people and parents regarding the adoption of social media to strengthen family ties and positively alter the family structure to maintain healthy relations. Further, the study also contributes to ensuring the interaction between advanced technologies of communication and the social structures of Saudi families. For instance, the use of WhatsApp has

enabled young people to conduct open communication with their parents, and family functions and relations has also become smoother due to media technologies. The study also significantly reveals the way in which families have easily adopted social media to foster interaction and mutual bonds. In addition, the research provides interesting statistics on social media use. The comparison between the young people and their parents gives a new perspective on how to evaluate online behaviour. Many previous studies have concluded that the internet has limited physical interactions. However, its use in promoting communication has been side-lined. Apart from entertainment and education, social media is a cheaper means of communication, particularly when trying to reach a broader audience, such as a family WhatsApp group. The research categorises the uses according to the frequency of use and the amount of time spent online, which highlights the kind of users who prefer only specific applications when on social media. Other demographics, such as gender and age, are isolated and analysed to answer specific research questions that are commonly asked about the online culture.

In addition, this study has isolated attitudes as a determining factor in culture and the way it has changed, and this can inform other studies to explore different aspects of technology. The findings of this research indicate that most of the participants felt that their attitudes towards the use of social networks in family communication had become more positive, specifically towards WhatsApp family groups. This confirms that the more frequently parents and young people utilise WhatsApp and other social media platforms, the more bonds with their families are reinforced. This result confirms previous research on family perceptions and attitudes, such as Procentese et al. (2019) and Ngonidzashe (2016). The authors indicated that parents' positive perceptions regarding this technology can significantly improve family efficacy and could be used to create participative and educational spaces that make communication between parents and children wider and more open. Similarly, Procentese, Gatti, and Di Napoli (2019) emphasised that perceptions emerged as an intermediary in openness during communication within families. However, this study partly disagrees with the previous research, as it found that one in five of the young people had more negative attitudes towards the use of social media in family communication. Almost half of the young people perceived that social networks did not help them to understand the ways in which their parents think or act in greater detail and one in five young people considered that social networks are not easy in family communication.

A significant finding emerged from this research that was not included in previous research, and this was regarding the impact of social media in reducing face-to-face communication among family

members. This finding concludes that although social networks have changed usual familial communication norms, a significant proportion of parents and children wish to maintain less disruptive forms of face-to-face communication. From the research, the majority of parents agreed with the statement that social media has reduced face-to-face communication, and they hoped to return to the old days of family communication without social networks. Many young people agreed that social media limits face-to-face communication. As much as parents viewed social media as a means of communicating with their children, half of all the parents confirmed that social media has disrupted communication within the traditional Saudi family, as online communication had reduced the number of times they talked directly with their children. Based on the study's findings, 60% of interviewees seemed to agree with Khalid (2017) that social media weakens family bonds, as people rarely meet physically anymore. They also agreed with Miles (2015) that this attitude makes the traditional family ties weaker because people rarely meet one another in person.

Another interesting finding indicates that social media use has altered some traditional roles, and this research explores these changes. Saudi tradition emphasises respect and obedience, which makes young people less active in family gatherings. However, many parents, in the qualitative interview, described the growing role of children in decision-making. They observed that children have accessed more information and can contribute to such decisions as travel destinations. This finding aligns with Alsharkh's (2012) study on young people's perceptions, which indicated that young people's involvement in social media also helps them to gain ability in self-decision making as well as improving their ability to consider opposing opinions from family members and their peers.

However, some of the parents blamed social media for their strained relationship with their children, stating that the children spent most of their time online and were more willing to communicate online than face-to-face, with social media being used more with peers and other social interactions than with family. Many of the young people interviewed confirmed that they, at times, would communicate with their parents through WhatsApp. However, they also observed that they would correspond online with peers and other external links more than with family members. This indicates that many young people are reluctant to use social media with their elders. They would rather use social media sites for entertainment and to share content with friends. Some interviewees said that social media helped them to express their emotions and thoughts better than physical contact. A contradictory observation emerged whereby others said it limited their expression of feelings, thus distancing them from their parents. The second claim was common among those parents who were

more affiliated with the traditional modes of communication through which they could patronise their children.

The study also explored gender roles and how social media has influenced them both positively and negatively. Girls have gained more freedom and can share in discussions with elders online, which was not previously the case in a physical family gathering because the culture would not allow it. The research also contributes to the understanding of Saudi culture and how modernisation is influencing the structure of the family and society. It was found that social roles remain the same in some families even after the arrival of social media. The results of this study indicated that there was no substantial effect by social media on associations and communication between members of a family, including parent-children, and husband-wife relations in Saudi Arabia. This result agrees with Alanazi (2018), but contradicts Alsharkh (2012).

7.6 Recommendations for further work

The study highlighted some gaps that require further investigation. As observed above, several factors influence social change. This study only evaluates social media and the respondents' attitudes in shaping family interaction. First, other effects of social media could be explored individually, including how it contributes to education. Points for discussion and debate have arisen from this study regarding the view of the internet as useful in research and other educational applications, while others have pointed out that young people get distracted by social media, and thus their studies suffer.

Another recommendation is to investigate the use of social media in a different population sample. The topic of this study, which used undergraduate students, could be further investigated in a different environment, among, for example, high school students, postgraduate students, or technical training institutes, to obtain a different perspective. It is also essential to review the attitudes of those who are not scholars. Additionally, other surveys could investigate these samples for other social changes, such as online culture and internet access, and how they alter specific social values.

It is evident from this study that Saudi culture has been affected by social media. The interviews present a variety of insights, including changing gender and age roles, reduced face-to-face interaction, and increased participation on the part of young people in family discussions. These insights are striking but leave several questions unexplored because of the limitations mentioned

above. For instance, several parents raised concerns about the restriction of internet access on some occasions and to some sites. Generally, the overall attitude towards social media use is positive, with the number of Saudis online growing. While conducting research in Saudi Arabia, it is recommended that some basic social structures and boundaries be understood to improve the quality of feedback from respondents.

Appendices

Appendix A

Parents' questionnaire design

Saudi parents' attitudes toward using social media in familial communication

This questionnaire is for parents who have a son or daughter studying at King Khalid university. It is part of the research of the doctoral thesis of researcher Easa Alqahtani the lecturer at King Khalid University and PhD student at Cardiff University. The research is entitled "Saudi youth attitudes towards the use of social networks in familial communication" and is being carried out under the supervision of Dr Arne Hintz, University of Cardiff.

Your participation in this questionnaire is important to contribute to understanding the social and familial aspects of the networks. Please note, you will not be asked to write your name or any information that reveals your identity, so be sure to share honest and expressive results. This questionnaire will be used for purely research purposes and will not be shared with anyone else. You can leave the questionnaire at any time and you do not have to complete it.

To communicate with researcher Easa Alqahtani

AlqahtaniES@cardiff.ac.uk

And to communicate with the supervisor Arne Hintz

HintzA@cardiff.ac.uk * Required

1. Sex *

Mark only one oval.

Male

Female

2. Social status *

Mark only one oval.

Married

Divorced

Widowed

3. Age *

Mark only one oval.

- 30-35
- 36-40
- 41-45
- 46-50
- 51 or more

Your goals to use social networks

4. Below are some people's goals for using social networks. Explain how much you use social networks per goal per day: (1 = do not use it 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, 5 = more than 3 hours) *

Mark only one oval per row.

	1	2	3	4	5
Social networking	<input type="radio"/>				
News	<input type="radio"/>				
Entertainment	<input type="radio"/>				
Education	<input type="radio"/>				

Examples of social networks

5. How often do you spend each day using the following social networks: (1 = not used 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, 5 = more than 3 hours) *

*

Mark only one oval per row.

	1	2	3	4	5
Twitter	<input type="radio"/>				
WhatsApp	<input type="radio"/>				
Snapchat	<input type="radio"/>				
Instagram	<input type="radio"/>				
YouTube	<input type="radio"/>				
Telegram	<input type="radio"/>				
Facebook	<input type="radio"/>				

Your experience in using social networks

6. How do you see your experience in using the following social networks: (1 = I have no experience 2 = weak, 3 = medium, 4 = good, 5 = excellent) *

Mark only one oval per row.

	1	2	3	4	5
Twitter	<input type="radio"/>				
WhatsApp	<input type="radio"/>				
Snapchat	<input type="radio"/>				
Instagram	<input type="radio"/>				
YouTube	<input type="radio"/>				
Telegram	<input type="radio"/>				
Facebook	<input type="radio"/>				

Your attitudes towards the use of social networks in family communication

7. How much time you spend daily using social networks to communicate with your children: 1 = not using it 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, 5 = more than 3 hours) *

Mark only one oval per row.

	1	2	3	4	5
WhatsApp	<input type="radio"/>				
Twitter	<input type="radio"/>				
Snapchat	<input type="radio"/>				
Instagram	<input type="radio"/>				
Telegram	<input type="radio"/>				
Facebook	<input type="radio"/>				

8. To what extent do you agree with the following statements: (1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I like to use social networking for family communication	<input type="radio"/>				
Social networking is important because they strengthens my family relationships with my children	<input type="radio"/>				
Social networks make me interact with my family	<input type="radio"/>				
Social networking gave my children the power to participate in various decisions within my family	<input type="radio"/>				
Frequent networking across social networks has reduced face-to-face communication	<input type="radio"/>				
Family groups in social media are important for strengthening family relationships	<input type="radio"/>				
I hope that the days will return to family communication without social networks	<input type="radio"/>				
I prefer to communicate with my children across social networks than face-to-face communication	<input type="radio"/>				
I communicate with my friends through social networking more than communicating with my children	<input type="radio"/>				

9. In the past three years, my attitude toward social networks in family communication has become: (1 = more positive 2 = somewhat positive, 3 = unchanged, 4 = somewhat negative, 5 = more negative) * *Mark only one oval.*

- 1
- 2
- 3
- 4
- 5

Factors for using social networks for family communication

A. Expected Ease of Use:

10. To what extent do you agree with the following statements: (1 = strongly agree

2

= agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I think social networks are easy to Use to strengthen my family relationships	<input type="radio"/>				
I think my children use social Networks easily in family communication	<input type="radio"/>				
Social networks made it easier to Convey my feelings to my children	<input type="radio"/>				
Social networks made it easier to Communicate my thoughts to my children	<input type="radio"/>				

B. The usefulness of using social networks in family communication:

11. To what extent do you agree with the following statements: (1 = strongly agree

2

= agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
My family communication skills Evolved after my use of social networks	<input type="radio"/>				
I think social networks help solve Family problems	<input type="radio"/>				
I express my views and thoughts With my family through social Networks more freely than face-to-Face communication	<input type="radio"/>				
Communicating with my children Through social networks made me understand their personalities more	<input type="radio"/>				

Media richness for family communication

12. To what extent do you agree with the following statements: (1 = strongly agree 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I see that social networks with their Diverse media (video, audio, image, text) have helped to strengthen Family communication	<input type="radio"/>				
Emojis helped me to express my Feelings of family communication	<input type="radio"/>				
Groups in social networks have increased family communication	<input type="radio"/>				

13. In communicating with my children through social networks, the best way to use is to: *

Mark only one oval.

- Text
- Voice note
- Send a video
- Send a photo
- Video call through social media app Audio call through social media app Other:
- _____
- Rewarded Behaviour from parents

14. To what extent do you agree with the following statements: (1 = strongly agree

2

= agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I think it is a kind of respect that my son or daughter communicates with Me through social networks	<input type="radio"/>				
I give more attention to the child who communicates more with me via social networks than others	<input type="radio"/>				
I like that my children communicate with me through social networks	<input type="radio"/>				

Appendix B

Young people's questionnaire design

Saudi young people's attitudes towards using social media in familial communication

This questionnaire is for Saudi young people. It is part of the research of the doctoral thesis of researcher Easa Alqahtani, a lecturer at King Khalid University and PhD student at Cardiff University. The research, titled "Saudi Youths attitudes towards using Social Media in familial communication", is under the supervision of Dr Arne Hintz, Cardiff University.

Your participation in this questionnaire is important to contribute to understanding the social and family aspects of the networks. You will not be asked to write your name or any information that reveals your identity, so be sure to share honest and expressive results. This questionnaire will be

used for purely research purposes and will not be shared with anyone else. You can leave the questionnaire at any time, and you do not have to complete it.

To communicate with researcher Easa Alqahtani

AlqahtaniES@cardiff.ac.uk

And to communicate with the supervisor Arne Hintz

HintzA@cardiff.ac.uk * Required

1. Sex *

Mark only one oval.

Male

Female

2. Social Status *

Mark only one oval.

Single

Married

3. Age *

Mark only one oval.

18-20

21-23

24 or more

Your goals of using social networks

4. Below are some people's goals for using social networks. Explain how much you use social networks per goal per day: (1 = do not use it 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, 5 = more than 3 hours) *

Mark only one oval per row.

	1	2	3	4	5
Social networking	<input type="radio"/>				
News	<input type="radio"/>				
Entertainment	<input type="radio"/>				
Learning	<input type="radio"/>				

Examples of social networks

5. How often do you spend each day using the following social networks: (1 = not used, 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, 5 = more than 3 hours) *

Mark only one oval per row.

	1	2	3	4	5
Twitter	<input type="radio"/>				
WhatsApp	<input type="radio"/>				
Snapchat	<input type="radio"/>				
Instagram	<input type="radio"/>				
YouTube	<input type="radio"/>				
Telegram	<input type="radio"/>				
Facebook	<input type="radio"/>				

Your experience in using social networks

6. How do you see your experience in using the following social networks: (1 = I have no experience 2 = weak, 3 = medium, 4 = good, 5 = excellent) *

Mark only one oval per row.

	1	2	3	4	5
Twitter	<input type="radio"/>				
WhatsApp	<input type="radio"/>				
Snapchat	<input type="radio"/>				
Instagram	<input type="radio"/>				
YouTube	<input type="radio"/>				
Telegram	<input type="radio"/>				
Facebook	<input type="radio"/>				

Your attitudes towards the use of social networks in family communication

7. How often do you use social networks to communicate with your parents (one or both) daily?
(1 = not used, 2 = less than 1 hour, 3 = 1 hour to 2 hours, 4 = 2 hours to 3 hours, 5 = More than 3 hours) *

Mark only one oval per row.

	1	2	3	4	5
WhatsApp	<input type="radio"/>				
Twitter	<input type="radio"/>				
Snapchat	<input type="radio"/>				
Instagram	<input type="radio"/>				
Telegram	<input type="radio"/>				
Facebook	<input type="radio"/>				

8. To what extent do you agree with the following statements: (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I like to use social networking for family communication	<input type="radio"/>				
Social networks are important because they strengthen my family relationships with my parents	<input type="radio"/>				
Social networks make me interact with my family	<input type="radio"/>				
Social networks gave me the strength to participate in various decisions within my family	<input type="radio"/>				
Frequent networking across social networks has reduced face-to-face communication	<input type="radio"/>				
Family groups in social media are important for strengthening family relationships	<input type="radio"/>				
I hope that the days will return to family communication without social networks	<input type="radio"/>				
I prefer to communicate with my parents across social networks than communicating face to face	<input type="radio"/>				
I communicate with my friends through social networking more than communicating with my parents	<input type="radio"/>				
I communicate with my brothers and sisters through social networking more than communicating with my parents	<input type="radio"/>				

9. In the past three years, my attitude toward social networks in family communication has become: (1 = more positive, 2 = somewhat positive, 3 = unchanged, 4 = somewhat negative, 5 = more negative) * *Mark only one oval.*

- 1
- 2
- 3
- 4
- 5

Factors for using social networks for family communication

A. Expected Ease of Use:

10. To what extent do you agree with the following statements: (1 = strongly agree

2

= agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I think social networks are easy to use to strengthen my family relationships	<input type="radio"/>				
I see that my parents use social networking easily in family communication	<input type="radio"/>				
Social networking made it easier to convey my feelings to my parents	<input type="radio"/>				
Social networking made it easier to communicate my thoughts to my parents	<input type="radio"/>				

B. The usefulness of using social networks in family communication:

11. To what extent do you agree with the following statements: (1 = strongly agree

2

= agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
My family communication skills evolved after my use of social networks	<input type="radio"/>				
I think social networks help solve family problems	<input type="radio"/>				
I express my views and thoughts with my family through social networks more freely than face-to-face communication	<input type="radio"/>				
Communicating with my parents through social networks made me understand their personalities more	<input type="radio"/>				

Media richness for family communication

12. To what extent do you agree with the following statements: (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I see that social networks with their diverse media (video, audio, image, text) have helped to strengthen family communication	<input type="radio"/>				
Emojis helped me to express my feelings in family communication	<input type="radio"/>				
Groups in social networks have increased family communication	<input type="radio"/>				
The fast communication through social network helped strengthen my family relationships	<input type="radio"/>				

13. In communicating with my parents via social networks, the best way is:

Mark only one oval.

- Text
- Voice note
- Send a video
- Send a photo
- Visual call through social media app
- Audio call through social media app
- Rewarded behaviour from parents

14. To what extent do you agree with the following statements: (1 = strongly agree

2

= agree, 3 = neutral, 4 = disagree, 5 = strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
I communicate with my parents through social networking to satisfy them	<input type="radio"/>				
Networking with my family in social networks gives me my parents' attention and makes them care more about me	<input type="radio"/>				
My parents are interested in my participating in family groups in social networks	<input type="radio"/>				
I consider communicating with my parents through social networking is part of showing them	<input type="radio"/>				

Appendix C

Interview Guide

Interviews with young people about their attitudes and motivations toward using social media for familial communication:

1. Do you use social media for familial communication? Why?
2. How do you use social media in familial communication?
3. Do you think that using social media is supporting your familial communication?
Why and How?
4. Do you prefer to chat with your parents through social media than face-to-face?
Why?
5. Do you think that social media give more chance to be more active in your family? How?
6. What are the main issues that you discuss in the family group? What is the main reason behind creating the family group?
7. Do you think that social media causing problems in your family? How?
8. Do you use social media a lot every day? For how long?
9. Do you intend to use social media for familial communication in future? Why?
10. Do think your parents limit your opinions in family group? Why?
11. Do you prefer your parents talk about your studying issues in the family group or in private? Why?
12. Do you think that you have more confidence to express your opinions with your parents through social media communication more than face-to-face communication? Why?

Interviews with parents about their attitudes and motivations toward using social media for familial communication:

1. Do you use social media for familial communication? Why?
2. How do you use social media in familial communication?
3. Do you think that using social media is supporting your familial communication?
Why and How?
4. Do you prefer to chat with your kids through social media than face-to-face?
Why?

5. Do you think that social media give more chance to be more active in your family? How?
6. What are the main issues that you discuss in the family group? What is the main reason behind creating the family group?
7. Do you think that social media causing problems in your family? How?
8. Do you use social media a lot every day? For how long?
9. Do you intend to use social media for familial communication in future? Why?
10. Do think your kids have limited opinions in family group or freedom of speech? Why?
11. Do you prefer your kids talk about their personal issues in the family group or in private? Why?
12. Do you think your kids have more confidence to express their opinions with you through social media communication more than face-to-face communication? Why?

Appendix D

Ethical approval form and field trip approvals

**JOMEK ETHICAL APPROVAL FORM for PhD JOURNALISM
PRINT FORMAT PRACTICE-BASED DISSERTATIONS**

Title of project: Saudi young people' attitudes and intentions toward using social media to support their familial communication

Name of researcher: Easa Alqahtani

Name of supervisor : Arne Hintz

The purpose of this form is for you to think about ethics issues in your dissertation research. Please answer 'YES' or 'NO' to each of the following questions.		
	YES	NO
Have you read and understood the Press Complaints Commission Code of Practice?	x	
Will you identify yourself and make the purpose of your investigation known to participants?	x	
Will you obtain written consent from participants including agreement on whether or not they are to be identified?	x	
Does your research involve any potential challenges under the Code particularly with regard to the clauses on		X
Privacy?		X
Harassment?		X
Children under-16?		X
Hospitals or other medical establishments?		X
Clandestine devices and subterfuge?		X
Victims of sexual assault?		X
Discrimination?		X
Financial journalism?		X
Confidential sources?		X
Payment to witnesses or criminals?		X
Is there a public interest justification as defined in the Code for any departure from standard practice?	X	
Have you taken into account any health and safety measures your research might necessitate in accordance with University policy and School requirements (including the health and safety of you as a researcher, and the health and safety of your research participants).	X	

IF YOU HAVE ANY TICKS **OUTSIDE** OF THE GREY BOXES IT IS POSSIBLE YOUR RESEARCH MAY BE ETHICALLY PROBLEMATIC. IN ADDITION TO ISSUES COVERED HERE YOU **MUST** BRING TO THE ATTENTION OF YOUR SUPERVISOR ANY ISSUES WITH ETHICAL IMPLICATIONS NOT CLEARLY COVERED BY THE ABOVE CHECKLIST

THE DISSERTATION SUPERVISOR MUST INITIAL ONE OF THE FOLLOWING STATEMENTS:

A. The supervisor believes this research project has **no** ethical implications and the student can proceed with the research immediately.

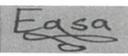
B. The supervisor believes this research project has **some** ethical implications. In Box 'B' the student should provide a brief description of participants and their research methods. In addition, the supervisor should list guidelines/recommendations to follow and/or issues that the student needs to address in order for the research to proceed. If the supervisor initialled **Statement B**, please give a description of participants and procedures in up to 150 words

C. The supervisor believes this project may have **significant** ethical implications and should be brought before the Ethics Committee. Further details about the project will be provided, see statement 'C' overleaf. The student **SHOULD NOT** proceed until the project has been approved by the Ethics Committee.

Box C

1. Title of Project
2. Purpose of project and its academic rationale
3. Brief description of methods and measurements
4. Participants: recruitment methods, number, age, gender, exclusion/inclusion criteria
5. Consent and participation information arrangements - please attached consent forms if they are to be used
6. A clear but concise statement of the ethical considerations raised by the project and how you intend to deal with them
7. Estimated start date and duration of project

All information must be submitted, along with this form to the Departmental Ethics Committee practice-based dissertation panel for consideration

Signed  _____ Date 07/09/2018
Postgraduate Researcher

Signed  _____ Date 13/9/2018
Dissertation Supervisor

Signed _____ Date _____
MA Journalism Course Director for Practice-based Ethics panel

STATEMENT OF ETHICAL APPROVAL

This project had been considered using agreed Departmental procedures and is now approved

Signed  _____ Date 11/10/18
Chair, School Ethics Committee

Cardiff School of Journalism, Media and Cultural Studies
Ysgol Newyddiaduraeth, y Cyfryngau ac Astudiaethau Diwylliannol Caerdydd

Dr Arne Hintz
Director MA Digital Media and Society
School of Journalism, Media and Cultural Studies
Cardiff University
Bute Building
King Edward VII Avenue
Cardiff CF10 3NB

Email: HintzA@cardiff.ac.uk
Tel: +44 (0)29 208 76281



September 10, 2018

PhD research by Easa Alqahtani: Field trip for data collection

To whom it may concern,

as the PhD supervisor of Mr Easa Alqahtani, I would like to confirm that he will need to conduct an extended field trip to King Khalid University in Saudi Arabia in order to collect data and conduct necessary research for his PhD project. The field trip will last from 06/01/2019 to 05/04/2019.

Regards,

A handwritten signature in cursive script that reads 'Arne Hintz'.

سعادة الملحق الثقافي السعودي في بريطانيا

حفظه الله

وبعد : السلام عليكم ورحمة الله وبركاته

إشارة إلى الطلب المقدم عبر بوابة سفير رقم (١٩٤٤٢٤٢٣) والمتضمن طلب المبتعث إلى جامعة Cardiff University في بريطانيا / عيسى بن سعد علي القحطاني برحلة علمية إلى المملكة العربية السعودية "جامعة الملك خالد" لجمع البيانات اللازمة لإكمال بحثه لدرجة الدكتوراه لمدة تسعون يوماً اعتباراً من ١٤٤٠/٠٥/٠١ هـ الموافق ٢٠١٩/٠١/٠٧ م.

نفيدكم بالموافقة على قيام المبتعث / عيسى بن سعد علي القحطاني برحلة علمية إلى المملكة العربية السعودية "جامعة الملك خالد" لجمع البيانات اللازمة لإكمال بحثه لدرجة الدكتوراه لمدة تسعون يوماً اعتباراً من ١٤٤٠/٠٥/٠١ هـ الموافق ٢٠١٩/٠١/٠٧ م، على أن يكون تحت إشراف القسم مع الرفع في نهاية الرحلة العلمية بالتقرير العلمي اللازم عن الرحلة حسب المادة (١٥).

وتقبلوا أطيب تحياتي وتقديري ،،،



وكيل الجامعة

للدراستات العليا والبحث العلمي

أ.د. سعد بن عبد الرحمن العمري

الرقم: ٢٤١٩٨٤٠ / ٩ / ٤ / ٤٠ هـ المرفقات :

أبها - ☒ : ٩٦٠ : ☎ : ٢٤١٩٠٩٠ : 📠 : ٢٤١٩٨٤٠ [E- mail scholarship@kku.edu.sa]

References

- Aadfar, A. et al. 2003. *Intercultural aspects of doing business with Saudi Arabia*. Linköping: Linköping University.
- About KKU*. 2018. Available at: <http://www.kku.edu.sa/en/kku/about/info/> [Accessed: 2018].
- About WhatsApp*. 2017. Available at: <https://www.whatsapp.com/about/> [Accessed: 2017].
- Academia. 2015. *Academia*. King Khalid University. Available at: <https://registration.kku.edu.sa/kku/ui/home.faces;jsessionid=0a64091730d5b40e6f5e874e426690c4a3c1afbb897f.e3qLcheTah8Le3qKbN8NbhyMe0> [Accessed: 2018].
- Achoui, M.M. 2006. The Saudi society: Tradition and change. In: Georgas, J. et al. eds. *Families across cultures: A 30-nation psychological study*. Cambridge: Cambridge University Press.
- Adding and removing group participants. 2019. *Adding and removing group participants*. Available at: <https://faq.WhatsApp.com/en/web/26000157/?category=5245251> [Accessed: 2019].
- Ahmad, I. 2014. *Timeline of Instagram from 2010 to present*. Available at: <https://www.socialmediatoday.com/content/timeline-instagram-2010-present-infographic> [Accessed: 2017].
- Aifan, H.A. 2015. *Saudi students' attitudes toward using social media to support learning*. University of Kansas.
- Ajzen, I. and Fishbein, M. 1980. Understanding attitudes and predicting social behaviour.
- Akram, W. and Kumar, R. 2017. A study on positive and negative effects of social media on society. *International Journal of Computer Sciences and Engineering*, 5(1), pp. 351–354.
- Al-Faleh, N.A. 2012. The use of digital technology in Saudi Arabia' schools. *ICoFCS* pp. 76-82.
- Al-Ken, A. I. 1995. *The Hajj: Past, present and future: The communication aspect*. University of Leeds.

- Al-Khalifa, H.S. and Garcia, R.A. 2013. The state of social media in Saudi Arabia's higher education. *International Journal of Technology and Educational Marketing (IJTEM)*, 3, pp. 65–76.
- Al-Khariji, A. 1983. *Systems of the Muslim society with application on the Saudi Society* (Arabic Text). Jeddah: Ramta.
- Al-Masaad, A. 1995. *Social change and neighborhood relationship: An empirical study in Al-Malz area in Riyadh City* [Arabic Text]. Unpublished Master's Thesis, College of Social Sciences, Al-Imam Saud University.
- Al-Saif, M. 1997. *Introduction to the study of Saudi society* [Arabic Text]. Riyadh: Al-Khariji.
- Al-Sharqi, L. et al. 2015. Perceptions of social media impact on students' social behavior: A comparison between arts and science students. *International Journal of Education and Social Science* 2, pp. 122–131.
- Al-Tahli, M. and Maarop, N. 2018. Understanding social media usage by females in Saudi Arabia: A descriptive finding. *Journal of Fundamental and Applied Sciences* 10(25), pp.151–161. doi: <http://dx.doi.org/10.4314/jfas.v10i2s.13>
- Al-Tawil, K.M. 2001. The internet in Saudi Arabia. *Telecommunications Policy* 25, pp. 625–632.
- Alanazi, N. 2015. A study of the influence of social media communication technologies on family relationships in the kingdom of Saudi Arabia.
- Albarran, A.B. 2010. The transformation of the media and communication industries.
- Alexander, B. 2006. Web 2.0: A new wave of innovation for teaching and learning? *Educause Review* 41, p. 32.
- AlJabre, A. 2013. Social networking, social movements, and Saudi Arabia: A review of literature. *ARPN Journal of Science and Technology*, 3(2), pp. 161–168.
- Allan, S. 2007. Citizen journalism and the rise of 'mass self-communication': Reporting the London bombings. *Global Media Journal*, 1(1), pp. 1–20.

- Allan, S. and Thorsen, E. eds. 2009. *Citizen journalism: Global perspectives* (Vol. 1). Peter Lang.
- Allen, M. 2013. What was Web 2.0? Versions as the dominant mode of internet history. *New Media & Society* 15, pp. 260–275.
- Almosaed, N. 2008. Money and power in Saudi family. *JKAU: Arts & Humanities* 16, pp. 61–87.
- AlMunajjed, M. 1997. *Women in Saudi Arabia today*. London, UK: Macmillan.
- Alnadr, J. 2009. Audio recording of a Saudi student in America in 1981.
- Alolyan, A.A. 2015. *The perceived impact of the internet on family and social relations in the Kingdom of Saudi Arabia*. Manchester: Manchester Metropolitan University.
- Alotaibi, N. 2020. A suggested model for confronting the problem of silent divorce in Saudi society from the perspective of the way to work with groups. *The Journal of Humanities and Social Sciences*.
- Alsaedy, F.M.H. 2015. *Parent-child communication: The impact of globalisation and rapid social transformation in Khulais–Saudi Arabia* Doctoral dissertation, Queensland University of Technology.
- Alsanie, S. I. 2015. Social media (Facebook, Twitter, WhatsApp) used, and it's relationship with the university students contact with their families in Saudi Arabia. *Universal Journal of Psychology* 3, pp. 69–72.
- Alshahrani, H. 2016. A brief history of the internet in Saudi Arabia. *TechTrends: Linking Research & Practice to Improve Learning* 60(1), pp. 19–20, Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=tfh&AN=112815176&site=ehost-live>
- Alsharkh, Y.N. 2012. *The social media effect on the families of the Saudi society from the perspective of the youth*. PhD dissertation, Arizona State University. Available at:
https://repository.asu.edu/attachments/93616/content//tmp/package-9oc5Q8/Alsharkh_asu_0010N_11662.pdf

- Alshehri, H. and Meziane, F. 2017. Current state on internet growth and usage in Saudi Arabia and its ability to support e-commerce development. *Journal of Advanced Management Science* 5, pp. 127–132. Available at:
https://pdfs.semanticscholar.org/3333/9716352987b9d20c214db0c7255743f5ad9e.pdf?_ga=2.193363176.439088600.1574359201-2124353420.1572243206
- Altoaimy, L. 2018. Driving change on Twitter: A corpus-assisted discourse analysis of the Twitter debates on the Saudi ban on women driving. *Social Science*, 7(5), pp. 81–109.
- Amichai-Hamburger Y. et al. 2002. ‘On the Internet no one knows I’m an introvert’: Extroversion, neuroticism, and internet interaction. *Cyber Psychology and Behavior* 5(2), pp. 125–128, Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=6778226&site=ehost-live>
- Amichai-Hamburger, Y. and Ben-Artzi, E. 2003. Loneliness and internet use. *Computers in Human Behavior* 19(1), p. 71. Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=8620395&site=ehost-live>
- Anders, G. 2014. *Facebook’s \$19 billion craving, explained by Mark Zuckerberg*. Available at:
<https://www.forbes.com/sites/georgeanders/2014/02/19/facebook-justifies-19-billion-by-awe-at-whatsapp-growth/#22a00ac453a8> [Accessed: 2017].
- Anyidoho, P. 2016. Pope John Paul II and media effects theory: Audiences and messages interface. *International Journal of Scientific Footprints*, 4(2), pp.1–11.
- Arab News. 2017. *Saudi Communications Commission activates Internet calls, WhatsApp still blocked*. Available at: <http://www.arabnews.com/node/1164956/saudi-arabia> [Accessed: 2018].

- Arnett, J.J. and Schwab, J. 2012. *The Clark University poll of emerging adults: Thriving, struggling, and hopeful*. Worcester, MA: Clark University.
- Asian News International (2017). *Spending too much on social media can lead to brain imbalance, finds study*. Available at <https://www.hindustantimes.com/health-and-fitness/spending-too-much-time-on-social-media-can-lead-to-brain-imbalance-finds-study/story-tGwdiNUbqLOpIsBwwoXXWJ.html>
- Attride-Stirling, J. 2001. Thematic networks: an analytic tool for qualitative research. *Qualitative Research* 1, pp. 385–405.
- Babbie, E.R. 2013. *The basics of social research*. Cengage Learning.
- Bailey, R.W. 1996. *Human performance engineering: Designing high quality, professional user interfaces for computer products, applications, and systems*. Prentice Hall PTR.
- Baker T. 1994. *Doing social research*. New York: McGraw-Hill Inc.
- Baker, S. E., and Edwards, R. 2012. *How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research*. Southampton, United Kingdom.
- Bargh, J.A. and McKenna, K.Y. 2004. The Internet and social life. *Annu. Rev. Psychol.* 55, pp. 573–590.
- Barrie, C. et al. 2019. The digital divide among parents and their emerging adult children: Intergenerational accounts of technologically assisted family communication. *Social Science* 8, pp. 83–113.
- Bassiouni, D.H. and Hackley, C. 2014. ‘Generation Z’ children’s adaptation to digital consumer culture: A critical literature review. *Journal of Customer Behaviour* 13, pp. 113–133.
- Bastedo, M.N. 2004. *Open systems theory*.
- Bavelas, J. B. and Segal, L. 1982. Family systems theory: Background and implications. *Journal of Communication* 32, pp. 99–107.

- Bavels, J.B. and Segal, L. 1982. Family systems theory: Background and implications. *Journal of Communication* 32(3), pp. 99–107. <https://doi.org/10.1111/j.1460-2466.1982.tb02503.x>
- Baym, N. K. et al. 2004. Social interactions across media: Interpersonal communication on the internet, telephone and face-to-face. *New Media & Society* 6, pp. 299–318.
- Bell, D. 1976. *The cultural contradictions of capitalism*. New York: Basic Books.
- Benkler, Y. 2006. *The wealth of networks: How social production transforms markets and freedom*. Yale University Press.
- Berger, A.A. 2015. *Media and communication research methods: An introduction to qualitative and quantitative approaches*. Sage Publications.
- Berman, M. 1983. *All that is solid melts into air: The experience of modernity*. Verso.
- Bijia, Z. 2017. A comparative study of emergency coverage on People’s Daily Newspaper and its Sina Weibo account – In the case of the ‘ Tianjin Explosion’.
- Booher, D. 2016. *What Matters Most In Managing Millennials? Communication*. Forbes. Available at: <https://www.forbes.com/sites/womensmedia/2016/01/14/what-matters-most-in-managing-millennials-communication/#6f5e16b77000> [Accessed: 2018].
- Bouwman, H. et al. 2005. *Information and communication technology in organizations: Adoption, implementation, use and effects*. Sage.
- Bower, J.L. and Christensen, C.M. 1995. *Disruptive technologies: Catching the wave*.
- Boyce, C. and Neale, P. 2006. Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input.
- Boyd, D. 2007. Why youth (heart) social network sites: The role of networked publics in teenage social life. In D. Buckingham. ed. *The John D. and Catherine T. MacArthur foundation series on digital learning—Youth, identity, and digital media volume*. Cambridge, MA: MIT Press, pp. 119–142.

- Boyd, D. 2009. *Social media is here to stay...Now what?* Washington: Microsoft Research Tech Fest. Available at: <https://www.danah.org/papers/talks/MSRTechFest2009.html> [Accessed: 2017].
- Boyd, D. and Ellison, N. B. 2007. Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication* 13, pp. 210–230.
- Bracken, B.A. and Barona, A. 1991. State of the art procedures for translating, validating and using psychoeducational tests in cross-cultural assessment. *School Psychology International* 12, pp. 119–132.
- Bragg, A.B. 2006. Reflections on pedagogy: Reframing practice to foster informal learning with social software. Retrieved 1, 2014.
- Brislin, R.W. 1970. Back-translation for cross-cultural research. *Journal of Cross-cultural Psychology* 1, pp. 185–216.
- Bryant, J. and Oliver, M.B. eds. 2009. *Media effects: Advances in theory and research*. Routledge.
- Bryant, J. et al. 2017. Imaging, text messaging, and adolescent networks. *Journal of Computer-Mediated Communication* 11(2), pp. 577–592.
- Bryman, A. and Burgess, B. 2002. *Analyzing qualitative data*. Routledge.
- Bucx, F. et al. 2008. Intergenerational contact and the life course status of young adult children. *Journal of Marriage and Family* 70, pp. 144–156.
- Bussell, J. 2011. Explaining cross-national variation in government adoption of new technologies. *International Studies Quarterly* 55, pp. 267–280. doi: 10.1111/j.1468-2478.2010.00644x.
- Casaló, L.V. et al. 2010. Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioral intentions. *Tourism Management* 31, pp. 898–911.
- Casaló, L.V. et al. 2011. Understanding the intention to follow the advice obtained in an online travel community. *Computers in Human Behavior*, 27, 622–633.

- Cassidy, J. 2006. Me media: how hanging out on the Internet became big business. *The New Yorker*, p. 50.
- Castellan, C. M. 2010. Quantitative and Qualitative Research: A View for Clarity. *International Journal of Education* 2.
- Charmaz, K. and Belgrave, L.L. 2007. Grounded theory. In: *The Blackwell encyclopedia of sociology*.
- Chen, H.Y. and Boore, J.R. 2010. Translation and back-translation in qualitative nursing research: Methodological review. *Journal of Clinical Nursing* 19, pp. 234–239.
- Chen, Y. 2017. WeChat use among Chinese college students: Exploring gratifications and political engagement in China. *Journal of International and Intercultural Communication* 10, pp. 25–43.
- Chiu, C. et al. 2012. Understanding social media in China. *McKinsey Quarterly* 2, pp. 78–81.
- Clement, J. 2020. Most popular global mobile messaging apps 2020. Available at: <https://www.statista.com/statistics/258749/most-popular-global-mobile-messenger-apps/> [Accessed: 18 December 2020].
- Cohen, L. et al. 2002. *Research methods in education*. Routledge.
- Cole, D.P. 1973. The enmeshment of nomads in Saudi Arabian society: The case of Murrah. *Research Series* 21, pp. 113–128.
- Communication and Information Technology Commission (CITC). 2016. *Establishments Report*. Available at: <http://www.citc.gov.sa/ar/reportsandstudies/studies/Documents/IT023A-PublicReportForEstab.pdf> [Accessed: 2018].
- Communication and Information Technology Commission (CITC). 2018. *Internet in Saudi Arabia*. Available at: <http://www.internet.sa/ar/internet-in-saudi-arabia/> [Accessed: 2018].
- Creswell, J. W. 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.

- Creswell, J.W. 2017. *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Creswell, J.W. and Clark, V.L.P. 2017. *Designing and conducting mixed methods research*. London: Sage publications.
- Curran, J. 2010. Technology foretold. In: Fenton, N. ed. *New media, old news: Journalism and democracy in the digital age*. pp. 19–34.
- Czaja, S. et al. 2006. Factors predicting the use of technology: Findings from the Center for Research and Education on Aging and Technology Enhancement (CREATE). *Psychology and Aging* 21(2), pp. 333–352. doi: 10.1037/0882-7974.21.2.333.
- Dabbagh, N. and Kitsantas, A. 2012. Personal learning environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education* 15, pp. 3–8.
- Dabbagh, N. and Reo, R. 2010. Impact of Web 2.0 on higher education. In: *Technology integration in higher education: Social and organizational aspects*. pp. 174–187.
- Dadfar, A. et al. 2003. *Intercultural aspects of doing business with Saudi Arabia*. Linköping: Linköping University.
- Daft, R.L. and Lengel, R.H. 1986. Organizational information requirements, media richness and structural design. *Management Science* 32, pp. 554–571.
- Dane, F. C. 2010. *Evaluating research: Methodology for people who need to read research*. Singapore: SAGE Publications.
- Davis, F.D. 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, pp. 319–340.
- Davis, F.D. 1993. User acceptance of information technology: System characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies* 38, pp. 475–487.

- De Zúñiga, H.G. et al. 2017. Personality traits and social media use in 20 countries: How personality relates to frequency of social media use, social media news use, and social media use for social interaction. *Cyber Psychology, Behavior & Social Networking*, 20(9), pp. 540–552, Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=125259514&site=ehost-live>
- Deibert, R. et al. 2008. *Access denied: The practice and policy of global internet filtering*. MIT Press.
- DeLyser, D. 2010. *The SAGE handbook of qualitative geography*. SAGE.
- Dencik, L. and Leistert, O. eds. 2015. *Critical perspectives on social media and protest: Between control and emancipation*. Rowman & Littlefield.
- Dencik, L. et al. 2019. Exploring data justice: Conceptions, applications, and directions. *Information Communication and Society* 22(7), pp. 873-881.
- Dennis, A. R. and Kinney, S. T. 1998. Testing media richness theory in the new media: The effects of cues, feedback, and task equivocality. *Information Systems Research* 9, pp. 256–274.
- Dennis, A. R. and Valacich, J. S. 1999. Rethinking media richness: Towards a theory of media synchronicity. *Systems Sciences, HICSS-32. Proceedings of the 32nd Annual Hawaii International Conference on*, 1999. IEEE, pp.10.
- Dennis, A.R. and Kinney, S.T. 1998. Testing media richness theory in the new media: The effects of cues, feedback, and task equivocality. *Information Systems Research*, 9, pp. 256–274.
- Dennis, A.R. and Valacich, J.S. 1999. Rethinking media richness: Towards a theory of media synchronicity. *Systems Sciences*, 1999. HICSS-32. *Proceedings of the 32nd Annual Hawaii International Conference on*, 1999. IEEE, pp.10.
- Denscombe, M. 2014. *The good research guide: For small-scale social research projects*. McGraw-Hill Education (UK).

- Devellis, R. F. 2016. *Scale development: Theory and applications*. Sage Publications.
- Diamond, L. 2010. Why are there no Arab democracies? *Journal of Democracy*, 21(1), pp. 93–112.
- Dictionary.com. 2019. *family values* [Online]. Available:
<https://www.dictionary.com/browse/family-values?s=ts> [Accessed 2020].
- Donelan, H.M. et al. 2010. *Online communication and collaboration: A reader*. Routledge.
- Drago, E. 2015. The effect of technology on face-to-face communication. *The Elon Journal of Undergraduate Research in Communications*, 6(1), pp. 13–17.
- Eldardiry, D.H. and Elmoghazy, Z.A. 2018. The impact of the internet on students' enhancement of cultural aspects in design projects: a case study on interior design graduation projects, University of Dammam, Saudi Arabia. *International Journal of Technology & Design Education* 28(1), pp. 287–302, Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=128053832&site=ehost-live>
- Epp, A.M. and Price, L.L. 2008. Family identity: A framework of identity interplay in consumption practices. *Journal of Consumer Research* 35, pp. 50–70.
- Evans, J. R. and Mathur, A. 2005. The value of online surveys. *Internet Research*, 15, pp. 195–219.
- Evgeny, M. 2011. *The net delusion: The dark side of internet freedom*. New York: Public Affairs.
- Fadaak, T.H. and Roberts, K. 2018. *Youth in Saudi Arabia*. Springer.
- Fergie, G. et al. Social media as a space for support: Young adults' perspectives on producing and consuming user-generated content about diabetes and mental health. *Social Science & Medicine* 170, pp. 46–54
- Fife, R.S. and Schragger, S. 2011. *Family violence: What health care providers need to know*. Jones & Bartlett Publishers.
- Fingerman, K.L. et al. 2012. Relationships between young adults and their parents. In: *Early adulthood in a family context*. Springer.

- Fioravanti, G. et al. 2012. Adolescent internet addiction: Testing the association between self-esteem, the perception of internet attributes, and preference for online social interactions. *Cyber Psychology, Behavior & Social Networking* 15(6), pp. 318–323, Available at: <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=76605965&site=ehost-live>
- Fischer, C.S. 1994. *America calling: A social history of the telephone to 1940*. University of California Press.
- Frey, B. 2006. *Statistics hacks: Tips & tools for measuring the world and beating the odds*. O'Reilly Media, Inc.
- Fuchs, C. 2014. Social media and the public sphere. *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 12, pp. 57–101.
- Fulk, J. 2017. Social construction of communication technology. *Academy of Management Journal*.
- Furstenberg, F. 2019. *Family change in global perspective: How and why family systems change*. University of Pennsylvania Population Center Working Paper (PSC/PARC). Available at: https://repository.upenn.edu/psc_publications/22
- Gaikwad, P. 2015. Effects of social media on family culture and communication—A study of selected families in Pune. *KHOJ: Journal of Indian Management Research and Practices*, pp.251–259. Available at: <http://khoj.mitsom.edu.in/index.php/KHOJ/article/download/107769/75838>
- General Authority For Statistics. 2020. *Economic activity rate*. Kingdom of Saudi Arabia.
- Gibbs, G. 2002. *Qualitative data analysis: Explorations with NVivo (Understanding social research)*. Buckingham: Open University Press.
- Gjylbegaj, V. and Abdi, H.M. 2019. The effects of social media on family communication in the UAE. *Media Watch* 10(2), pp. 387–397. Available at:

https://www.academia.edu/39207524/The_Effects_of_Social_Media_on_Family_Communication_in_the_UAE

Global Media Insights 2018. *Saudi Arabia Social Media Statistics 2018*. Available at:

<https://www.globalmediainsight.com/blog/saudi-arabia-social-media-statistics/> [Accessed 2020].

Graham, D. and Wilson, P. 1994. *Saudi Arabia: The coming storm*. New York: ME Sharp.

Green, S. and Salkind, N. 2007. *Using SPSS for Macintosh analyzing and understanding data* (5. Baski) Upper Saddle River, NJ: Pearson Prentice Hall.

Greenfield, P.M. 2009. Linking social change and developmental change: shifting pathways of human development. *Developmental Psychology* 45, p. 401.

Hays, P. A. 2004. Case study research. In: *Foundations for research: Methods of inquiry in education and the social sciences*. pp. 217–234.

Hazell, C. 2006. *Family Systems Activity Book*. AuthorHouse.

Hendi, A. 2017. Globalization and contemporary fertility convergence. *Social Forces* 96, pp. 215–238.

Higher Education Statistics in Saudi Arabia. 2018. Available at:

<https://departments.moe.gov.sa/PLANNINGINFORMATION/RELATEDDEPARTMENTS/EDUCATIONSTATISTICSCENTER/EDUCATIONDETAILEDREPORTS/Pages/default.aspx> [Accessed: 2018].

Hintz, A. 2011. From media niche to policy spotlight: Mapping community media policy in Latin America. *Canadian Journal of Communication*, 36(1), pp.147–159.

Hintz, A. 2012. Challenging the digital gatekeepers: International policy initiatives for free expression. *Journal of Information Policy*, 2, pp.128–150.

- Hintz, A. and Brown, I. 2017. Digital citizenship and surveillance: Enabling digital citizenship? The reshaping of surveillance policy After Snowden. *International Journal of Communication*, 11, p. 20.
- Hintz, A. and Milan, S. 2011. Age: Communications policy according to 'netizens'. In: *The Handbook of Global Media and Communication Policy*. p. 230.
- Hintz, A. and Milan, S. 2011. Exploring information governance activism: Action repertoires, strategies, and agendas.
- Houts, C.R. et al. 2018. Scale development with small samples: a new application of longitudinal item response theory. *Quality of Life Research* 27(7), pp. 1721–1734, Available at: <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=130126177&site=ehost-live>
- Howe, N. and Strauss, W. 2003. *Millenials go to college: Strategies for a new generation on campus*. Great Falls, VA: Lifecourse Associates.
- Hsu, C.-L. and Lin, J.C.-C. 2008. Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management* 45, pp. 65–74.
- Hughes, J. 2018. *Communicating with Generation Z: Everything you need to know*. Available at: <https://www.keystoneacademic.com/news/communicating-with-generation-z-everything-you-need-to-know> [Accessed].
- International Telecommunication Union. 2017. *ICT facts and figures 2017*. Available at: <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf> [Accessed: 2018].
- Internet in Saudi Arabia, 2018. *Internet in Saudi Arabia*. The Communication and Information Technology Commission (CITC). Available at: <https://www.internet.sa/ar/internet-in-saudi-arabia/> [Accessed: 2018]

- Ishii, K. et al. 2019. Revisiting media richness theory for today and future. *Human Behavior and Emerging Technologies* 1(2), pp. 124–131.
- Jadhav, J. 2019. *What are the main differences between Web 1.0 and Web 2.0?*. Available at: What are the main differences between Web 1.0 and Web 2.0? [Accessed: 2020].
- Jahner, A. 2012. Saudi Arabia and Iran. The Struggle for Power and Influence in the Gulf. *International Affairs Review* 20.
- Jenkins, H. 2006. *Fans, bloggers, and gamers: Exploring participatory culture*. NYU Press.
- Johnson, M. 2013. *The history of Twitter*. Available at: <https://socialnomics.net/2013/01/23/the-history-of-twitter/> [Accessed: 2017].
- Johnson, R.B. and Onwegbuzie, A.J. 2004. Mixed methods research: A research paradigm whose time has come. *Educational Researcher* 33, pp. 14–26.
- Jones, P.S. et al. 2001. An adaptation of Brislin's translation model for cross-cultural research. *Nursing Research* 50, pp. 300–304.
- Jugenheimer, D.W. et al. 2015. *Advertising and public relations research*. Routledge.
- Kalathil, S. and Boas, T.C. 2010. *Open networks, closed regimes: The impact of the Internet on authoritarian rule*. Carnegie Endowment.
- Kaplan, A.M. and Haenlein, M. 2009. The fairyland of Second Life: Virtual social worlds and how to use them. *Business Horizons* 52, pp. 563–572.
- Kaplan, A.M. and Haenlein, M. 2010. Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons* 53, pp. 59–68.
- Karaganis, J. 2007. *Structures of participation in digital culture*.
- Karasavvidis, I. 2010. Wiki uses in higher education: Exploring barriers to successful implementation. *Interactive Learning Environments* 18, pp. 219–231.
- Kear, K. 2011. *Online and social networking communities: A best practice guide for educators*. Routledge.

- Keek. 2013. *Top 10 accounts by views*. Available at: www.keek.com/top100-/views [Accessed: 2019].
- Kemp, S. 2018. *Digital in 2018: World's internet users pass the 4 billion mark*. Available at: <https://wearesocial.com/uk/blog/2018/01/global-digital-report-2018> [Accessed: 2018].
- Kenney, M. and Zysman, J. 2020. The platform economy: Restructuring the space of capitalist accumulation. *Cambridge Journal of Regions, Economy, and Society*, 13(1), pp.55–76.
- Kerr, M.E. 2000. *One family's story: A primer on Bowen theory*. Available at: <https://thebowencenter.org/theory/> [Accessed: 2018].
- Khalid, A. 2017. Impact of internet on social connections in family system: A survey study of residents in Lahore. *Arts and Social Sciences Journal* 8(270), pp. 1–6. doi:10.4172/2151-6200.1000270.
- Kim, H.N. 2008. The phenomenon of blogs and theoretical model of blog use in educational contexts. *Computers & Education* 51, pp. 1342–1352.
- Know About Kingdom*. 2019. Available at: <https://www.my.gov.sa/wps/portal/snp/aboutksa/aboutksa> [Accessed: 2019].
- Koerner, A.F. and Fitzpatrick, M.A. 2002. Toward a theory of family communication. *Communication Theory* 12, pp. 70–91.
- Kohlbacher, F. 2006. The use of qualitative content analysis in case study research. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 2006. Institut für Qualitative Forschung, pp. 1–30.
- Kolb, B. 2008. *Marketing Research: A Practical Approach*. SAGE. 184920490X, 9781849204903.
- Koo, C. et al. 2011. Examination of how social aspects moderate the relationship between task characteristics and usage of social communication technologies (SCTs) in organizations. *International Journal of Information Management* 31, pp. 445–459.
- Kukulka-Hulme, A., 2010. Mobile learning as a catalyst for change.

- Kumar, R. 2011. *Research methodology – A step-by-step guide for beginners*. New Age International. 3rd ed. SAGE Publications.
- Kwon, O. and Wen, Y. 2010. An empirical study of the factors affecting social network service use. *Computers in human behavior* 26, pp. 254–263.
- Lawrence, L. 2004. *Free culture: How big media uses technology and the law to lock down culture and control creativity*. New York: Penguin Press, 68, pp. 237–259.
- Lee, L. et al. 2015. Understanding new media literacy: The development of a measuring instrument. *Computers & Education* 85, pp. 84–93. <https://doi.org/10.1016/j.compedu.2015.02.006>.
- Lee, S.-J. and Chae, Y.-G. 2007. Children’s Internet use in a family context: Influence on family relationships and parental mediation. *Cyberpsychology & Behavior* 10, pp. 640–644.
- Lenartz, A. J. 2012. *All my rowdy ‘friends’: The use of social media in higher education*. Northern Arizona University.
- Lenhart, A. 2010. *Teens, Cell Phones and Texting*. PewResearch Center Publications.
- Lexico.com. 2019. *family values* [Online]. Available: https://www.lexico.com/en/definition/family_values [Accessed 2020].
- Lidsky, D. 2010. *The brief but impactful history of YouTube*. Available at: <https://www.fastcompany.com/1514469/brief-impactful-history-youtube> [Accessed: 2017].
- Llieva, J., Baron, S. and Healey, N.M. 2002. Online surveys in marketing research: Pros and cons. *International Journal of Market Research* 44, pp. 361.
- Long, D. 2005. *Culture and customs of Saudi Arabia*. Westport, CT: Greenwood Publishing Group.
- Long, D. W. 2018. *Exploring generational differences in text messaging usage and habits*. Nova Southeastern University.
- Luna, L.J. 1989. Transcultural nursing care of Arab Muslims. *Journal of Transcultural Nursing* 1, pp. 22–26.

- Ma, H.K. et al. 2011. The relation of internet use to prosocial and antisocial behavior in Chinese adolescents. *Cyber Psychology, Behavior & Social Networking* 14(3), pp. 123–130,
Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=59355272&site=ehost-live>
- Mari, M. 2013. *Twitter usage is booming in Saudi Arabia*. Available at:
<https://blog.globalwebindex.net/chart-of-the-day/twitter-usage-is-booming-in-saudi-arabia/>
[Accessed: 2018].
- Martin, J.D. et al. 2018. Media use predictors of online political efficacy among internet users in five Arab countries. *Information, Communication & Society* 21, pp. 129–146.
- Masrom, M. and Hussein, R. 2008. *User acceptance of information technology: Understanding theories and models*. Venton Pub.
- Matei, S. and Ball-Rokeach, S.J. 2001. Real and virtual social ties connections in the everyday lives of seven ethnic neighborhoods. *American Behavioral Scientist* 45, pp. 550–564.
- McGrath, S. 2012. The impact of new media technologies on social interaction in the household. *Electronic Culture and Social Change*.
- McLoughlin, C. and Lee, M. 2007. Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era.
- Meister, J.C. and Willyerd, K. 2010. Mentoring millennials. *Harvard Business Review* 88, pp. 68–72.
- Merriam-webster.com. 2019. *family values* [Online]. Available: <https://www.merriam-webster.com/dictionary/family%20values> [Accessed 2020].
- Mesch, G.S. 2012. Technology and youth. *New Directions for Youth Development* 2012(135), pp. 97–105, Available at:

<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=82730329&site=ehost-live>

- Mi, C. et al. 2018. The theory of reasoned action to CSR behavioral intentions: The role of CSR expected benefit, CSR expected effort and stakeholders. *Sustainability* 10, p. 4462.
- Miles J. 2015. *Family dynamics and the roles we play*. Available at: <https://www.counselling-directory.org.uk/counsellor-articles/family-dynamics-the-roles-we-play>
- Miles, J. 2015. *Family dynamics and the roles we play*. Available at: <https://www.counselling-directory.org.uk/counsellor-articles/family-dynamics-the-roles-we-play> [Accessed 2019].
- Miller, D. et al. 2016. *How the world changed social media*. London: UCL Press.
- Millward, S. 2016. WeChat still unstoppable, grows to 697m active users. *Tech in Asia* 17.
- Minichiello, V. et al. 2008. *In-depth interviewing: Principles, techniques, analysis*. Pearson Australia Group.
- Ministry of Communications and Information Technology. 2011. *Brief history*. Available at: <http://old.mcit.gov.sa/english/AboutMCIT/BriefHistory/> [Accessed: 2018].
- Ministry of Education in Saudi Arabia. 2016. *Higher education statistics*. Available at: <https://departments.moe.gov.sa/PLANNINGINFORMATION/RELATEDDEPARTMENT/EDUCATIONSTATISTICSCENTER/EDUCATIONDETAILEDREPORTS/Pages/default.aspx> [Accessed: 2018].
- Mohammed, I. 2019. *Social media usage in Saudi Arabia at its peak: CITC*. Saudi Gazette. Available at: <http://saudigazette.com.sa/article/562919>
- Molloy, M. 2017. *Who owns Snapchat and when was it created?* Available at: <http://www.telegraph.co.uk/technology/0/owns-snapchat-created/> [Accessed: 2017].
- Morgaine, C. 2001. *Family systems theory*. Unpublished manuscript, Portland State University. Available at: <http://web.pdx.edu/~cbcm/CFS410U/FamilySystemsTheory.pdf>
- Negroponte, N. et al. 1997. Being digital. *Computers in Physics* 11, pp. 261–262.

- Neuman, W.R. and Guggenheim, L. 2011. The evolution of media effects theory: A six-stage model of cumulative research. *Communication Theory*, 21(2), pp.169–196.
- O'Reilly, T. 2005. *What is web 2.0? design patterns and business models for the next generation of software*. Available at: <http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html> [Accessed: 2017].
- Onwegbuzie, A.J. and Leech, N.L. 2005. On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology* 8, pp. 375–387
- Ormston, R. et al. 2013. The foundations of qualitative research. In: Ritchie, J. et al. eds. *Qualitative research practice: A guide for social science students and researchers*. p. 26.
- Papacharissi, Z. 2002. The virtual sphere: The internet as a public sphere. *New Media & Society* 4(1), pp. 9–27.
- Park, N. et al. 2009. Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior* 12, pp. 729–733.
- Patten, M. L. 2016. *Questionnaire research: A practical guide*. Routledge.
- Perrin, A. 2015. *Social Media Usage: 2005–2015*. Pew Research Centre. Available at: <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/> [Accessed: 2018].
- Pew Research Center. 2018. *Social media use continues to rise in developing countries, but plateaus across developed ones*. Available at: <http://www.pewglobal.org/wpcontent/uploads/sites/2/2018/06/Pew-Research-Center-Global-Tech-Social-Media-Use-2018.06.19.pdf>
- Polit, D.F. and Beck, C. T. 2006. *Essentials of nursing research: Methods, appraisal, and utilization*. Lippincott Williams & Wilkins.

- Pons, A. 2004. E-Government for Arab countries. *Journal of Global Information Technology Management* 7(1), pp. 30–46. <https://doi.org/10.1080/1097198X.2004.10856365>.
- Prensky, M. 2005. Listen to the natives. *Educational Leadership* 63, pp. 8–13.
- Prensky, M. 2009. H. sapiens digital: From digital immigrants and digital natives to digital wisdom. *Innovate: Journal of Online Education* 5, p. 1.
- Price, C. 2010. Why don't my students think I'm groovy?: The new 'R' s for engaging millennial learners. *Essays from E-xcellence in Teaching (Volume IX)*. p. 29.
- Prieler, M. and Choi, J. 2014. Broadening the scope of social media effect research on body image concerns. *Sex Roles*, 71(11–12), pp.378–388.
- Pring, R. 2014. *Philosophy of educational research*. USA: Bloomsbury Publishing.
- Quan-Haase, A. and Young, A.L. 2010. Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society* 30, pp. 350–361.
- Rajkhan, S. 2014. Women in Saudi Arabia: Status, rights, and limitations.
- Raphelson, S. 2014. *Some millennials – and their parents – are slow to cut the cord*. National Public Radio. [Accessed: 2018].
- Rasheed, A.A. and Akkurt, M.N. 2020. Marriage and family counseling in Saudi Arabia. *Intercultural Perspectives on Family Counseling*.
- Reuters. 2013. *Saudi orders telcos to ensure Skype, Whatsapp meet local laws*. Available at: <https://www.reuters.com/article/saudi-telecoms-ban/saudi-orders-telcos-to-ensure-skype-whatsapp-meet-local-laws-idUSL5N0CN0DH20130331> [Accessed: 2018].
- Reyae, S. and Ahmed, A. 2015. Growth pattern of social media usage in Arab Gulf states: An analytical study. *Social Networking* 4, p. 23.
- Rogers, E. 1995. Diffusion of innovations. 4th ed. ACM The Free Press (Sept. 2001). *New York*, pp. 15–23.

- Rogers, E.M. 2003. *The diffusion of innovation*. 5th ed. New York: Free Press.
- Ryan, G.W. and Bernard, H.R. 2000. *Data management and analysis methods*.
- Sakr, N., 2013. Social media, television talk shows, and political change in Egypt. *Television & New Media*, 14(4), pp.322-337.
- Salanova, R. 2012. Social media and political change: The case of the 2011 revolutions in Tunisia and Egypt. *International Catalan Institute for Peace, Working Paper* (2012/7).
- Samin, N. 2012. Saudi Arabia, Egypt, and the social media moment. *Arab Media & Society*, 15, pp. 146–165.
- Saudi Ministry of Education. 2019. *Admission indicators in public universities exceed 87% of the number of male and female students – more than 311 thousand government seats waiting for high school graduates*. Available at: <https://www.moe.gov.sa/ar/news/Pages/m-r-1440-2.aspx> [Accessed: 2020].
- Saudi Post. 2018. *The Saudi Post History*. Available at: <https://sp.com.sa/en/about/Pages/History.aspx> [Accessed: 2018].
- Scheufele, D.A. 1999. Framing as a theory of media effects. *Journal of Communication*, 49(1), pp.103–122.
- Scholl, N. et al. 2002. On-line qualitative market research: Interviewing the world at a fingertip. *Qualitative Market Research: An International Journal* 5, pp. 210–223.
- Scholz, T. 2008. Market ideology and the myths of Web 2.0. *First Monday* 13.
- Seo, K. 2012. *Using social media effectively in the classroom: Blogs, wikis, twitter, and more*. London: Routledge.
- Shang, S.S. 2011. Understanding Web 2.0 service models: A knowledge-creating perspective. *Information & Management* 48, pp. 178–184.
- Shaw, J. and Long, D. 1982. *Saudi Arabian modernisation: The impact of change on stability*. New York: Georgetown University.

- Shields-Nordness, E., 2015. Social Media, Relationships, and Young Adults.
- Shim, Y.S. 2007. The impact of the internet on teenagers' face-to-face communication. *Global Media Journal* 6.
- Shirky, C. 2008. *Here comes everybody: The power of organizing without organizations*. Penguin.
- Shittu, A. et al. 2011. Investigating students' attitude and intention to use social software in higher institution of learning in Malaysia. *Multicultural Education & Technology Journal* 5, pp. 194–208.
- Shiue, Y.-C. et al. 2010. Exploring and mitigating social loafing in online communities. *Computers in Human Behavior* 26, pp. 768–777.
- Shortell, T. 2001. *An introduction to data analysis & presentation*. Available at: <http://academic.brooklyn.cuny.edu/soc/courses/712/chap18.html>.
- Shuen, A. 2008. *Web 2.0: A strategy guide: Business thinking and strategies behind successful Web 2.0 implementations*. O'Reilly Media, Inc.
- Siraj, S.A. 2018. Impact of Internet use on social capital: Testing Putnam's theory of time displacement in urban Pakistan. *The Journal of Social Media in Society* 7(1), pp. 456–468.
- Skog, D.A. et al. 2018. Digital disruption. *Business & Information Systems Engineering*, 60(5), pp.431–437.
- Smith, G. 2016. By the numbers: 78 amazing WeChat statistics. *DMR*.
- Smith, S. M. and Albaum, G. S. 1970. Research Methods. In: *An Introduction to Marketing (Vol. 86)*. Mexico, pp. 21–24. <https://doi.org/10.1111/j.1478-4408.1970.tb02927.x>
- Spar, D.L. 2001. *Ruling the waves: Cycles of discovery, chaos, and wealth from the compass to the internet*. Harcourt.
- Srnicek, N. 2017. *Platform capitalism*. John Wiley & Sons.
- Standage, T. 1998. *The Victorian internet: The remarkable story of the telegraph and the nineteenth century's on-line pioneers*. Weidenfeld & Nicolson London.

- Stauss, K., et al. 2018. Letters to children: findings of a program to enhance communication of incarcerated mothers and their children, *Corrections*, 3(4), pp. 225-247,
DOI: [10.1080/23774657.2017.1381054](https://doi.org/10.1080/23774657.2017.1381054)
- Subramanian, K. R. 2017. Influence of social media in interpersonal communication. *International Journal of Scientific Progress and Research* 109(38), pp. 70–74.
- Sultana, S. 2017. Social networking sites (SNS) and family relationship: A study on youths of Dhaka city. *IOSR Journal of Humanities and Social Science* 22(04), pp. 46–52. Available at: <http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2022%20Issue4/Version-2/G2204024652.pdf>
- Tang-Mui, J. and Teng, C.E. 2017. Impacts of social media (Facebook) on human communication and relationships: A view on behavioral change and social unity. *International Journal of Knowledge Content Development & Technology* 7(4), p. 27. Available at: <http://ijkcdt.net/xml/12711/12711.pdf>
- Tavakol, M. and Dennick, R. 2011. Making sense of Cronbach’s alpha. *International Journal of Medical Education* 2, p. 53.
- Tayie, S. 2001. *Communication research*. Cairo: Dar Al-Nahad Al-Arabia.
- The Social Clinic. 2014. *The State of Social Media in Saudi Arabia 2013*. Available at: <http://www.thesocialclinic.com/the-state-of-social-media-in-saudi-arabia-2013/> [Accessed: 2018].
- Thomas, B. 2018. *What does family dynamics mean?*. Available at: <https://www.quora.com/What-does-family-dynamics-mean> [Accessed: 2020].
- Thorsen, E. and Sreedharan, C. 2019. #EndMaleGuardianship: Women’s rights, social media and the Arab public sphere. *New Media & Society* 21(5), pp. 1121–1140. doi: <https://doi.org/10.1177/1461444818821376>.
- Titscher, S. et al. 2000. *Methods of text and discourse analysis: In search of meaning*. Sage.

- Tonnies, F. and Loomis, C. P. 1957. *Community and society*. Courier Corporation.
- Ünal, S. 2018. The effect of social media use to the time spent with family members. *International Journal of Eurasia Social Sciences* 9(31), pp. 550–578.
- Usher, S. 2013. *Saudi Arabia blocks Viber messaging service*. BBC. Available at:
<http://www.bbc.co.uk/news/world-middle-east-22806848> [Accessed: 2018].
- Uzelac, A. and Cvjeticanin, B. 2008. *Digital culture: The changing dynamics*.
- Valenzuela, S. et al. 2019. Socialized for news media use: How family communication, information-processing needs, and gratifications determine adolescents' exposure to news. *Communication Research*, 46(8), pp.1095–1118.
- Valkenburg, P.M. et al. 2016. Media effects: Theory and research. *Annual Review of Psychology*, 67, pp.315–338.
- Van Dijck, J. et al. 2018. *The platform society: Public values in a connective world*. Oxford University Press.
- Van Dijck, J., Nieborg, D. and Poell, T. 2019. Reframing platform power. *Internet Policy Review*, 8(2), pp.1–18.
- Van Teijlingen, E.R. and Hundley, V. 2001. *The importance of pilot studies*.
- Venkatesh, V. et al. 2011. Extending the two-stage information systems continuance model: Incorporating UTAUT predictors and the role of context. *Information Systems Journal* 21(6), pp. 496–505. <https://doi.org/10.1111/j.1365-2575.2011.00373.x>.
- Wang, Q. et al. 2011. *The effects of social media on college students*.
- Waterloo, S. et al. 2018. Norms of online expressions of emotion: Comparing Facebook, Twitter, Instagram, and WhatsApp. *New Media and Society* 20(5), pp. 1813–1831.
<https://doi.org/10.1177%2F1461444817707349>.

- Wenzlhuemer, R. 2017. The telegraph and the control of material movements: A micro-study about the detachment of communication from transport. *Technology and Culture* 58, pp. 625–649.
- Wesley S. and Yu-Hao, C. 2011. The behavior of wiki users. *Social Behavior & Personality: An International Journal* 39(6), pp. 851–864, Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=62718753&site=ehost-live>
- West, J.A. and West, M.L. 2009. *Using Wikis for online collaboration: The power of the read-write web*. John Wiley & Sons.
- Wheeler, D. 2009. Working around the state: Internet use and political identity in the Arab world. In: Chadwick, A. and Howard, P. N. eds. *Routledge Handbook of Internet Politics*. London: Routledge, pp. 305–323.
- White, G.B. 2015. *Millenials who are thriving financially have one thing in common...rich parents*. Available at: <https://www.theatlantic.com/business/archive/2015/07/millennials-with-rich-parents/398501/> [Accessed: 2018].
- Williams, A. 2015. *Move over, millennials, here comes Generation Z*. Available at:
<https://www.nytimes.com/2015/09/20/fashion/move-over-millennials-here-comes-generation-z.html> [Accessed: 2018].
- Williams, A.L. and Merten, M.J. 2011. iFamily: Internet and social media technology in the family context. *Family and Consumer Sciences Research Journal* 40, pp. 150–170.
- Wilson, P.W. 1994. *Saudi Arabia: the coming storm*. ME Sharpe.
- Woolley, S. 2013. Constantly connected: The impact of social media and the advancement in technology on the study abroad experience. *The Elon Journal of Undergraduate Research in Communications* 4(2), pp. 36–43.

- Wright, K.B. 2005. Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication* 10, JCMC1034.
- Yamani, M. 2000. *Changed identities: The challenge of the new generation in Saudi Arabia*. London: Royal Institute of International Affairs.
- Yin, X. and Ke, Y. 2016. Using Social Media to Recruit Students in China.
- Yusuf, N. et al. 2016. Social media as a tool in learning and social behavior in Saudi Arabia. *International Journal of Higher Education Management* 3(1), pp. 65–74.
- Zhou, R. et al. 2014. Internet use and its impact on engagement in leisure activities in China. *PLoS ONE*, 9(2), pp. 1–11, Available at:
<http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=94731196&site=ehost-live>