

**SOCIAL AND TASK-ORIENTED COMMUNICATION ON INSTANT
MESSAGING PLATFORMS: A NETNOGRAPHIC STUDY OF FARMERS’
WHATSAPP GROUPS IN KENYA**

BY

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF
PHILOSOPHY IN COMMUNICATION STUDIES, DEPARTMENT OF
PUBLISHING, JOURNALISM AND COMMUNICATION STUDIES,
SCHOOL OF INFORMATION SCIENCES**

MOI UNIVERSITY

ELDORET

2022

DECLARATION

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ABSTRACT

Instant messaging platforms have become one of the most popular channels of communication globally. Communication of social and task messages on these platforms has attracted the interest of scholars but recent literature provides conflicting and inconclusive results about the interaction of those messages on online groups. This study aims at understanding the communication of task and social messages in farmers' WhatsApp groups in Kenya, with a view to providing recommendations for policy and practice on messaging practices that can enhance effective communication in task-oriented instant messaging groups. It specifically aims at finding answers to three research questions: How do members of farmers' WhatsApp groups in Kenya communicate social and task messages in their forums? What are the farmers' responses to the communication of social and task-oriented messages on their WhatsApp groups? What are the farmers' perceptions of communication of social and task-oriented messages posted on their WhatsApp groups? Informed by an interpretivist philosophical worldview, the study employed a qualitative approach to seek answers to the research questions. A netnographic research method was adopted and purposive sampling procedure used to pick study participants. Participant observation of five farmers' WhatsApp groups was the main data generation technique of the study. Semi-structured interviews were also conducted with twenty-five individual group members. Thematic analysis was used to make sense of the data. The results of the study show that communication of task and social messages takes place under a set of communication rules, stipulating that group conversation should be centred on task-oriented messages only. However, in spite of the clearly stated rules and regulations in favour of task-oriented messages, group members still posted social messages arguing that the social messages gave them a sense of belonging, unity of purpose and companionship, thereby motivating them to remain engaged in their tasks. Another finding shows that group members stated that some social messages played a key role in motivating them to remain engaged in their communication on task accomplishment. The conclusion is that there is an inextricable connection between task and social messages. While it is important for communicators in work environment to focus on task-oriented communication, it is equally important to give space for social communication as the bonhomie created by such communication acts as a cog in the wheel towards accomplishment of task. The study contributes to literature on social media communication in organisational settings, specifically with regard to WhatsApp group platforms, which have become ubiquitous in both formal and informal settings. It also contributes methodologically to the advancement of netnography in the study of communication on WhatsApp groups. There is need for communication managers of WhatsApp groups to abandon the single-minded, task-oriented rule they root for, since there are other competing relational needs to be met through the communication of social messages.

DEDICATION

Dedicated to the people who have had the greatest influence in my life: Lucy Mwangi, Roseann Mwangi, Joy Mwangi, Emmy Mwangi, Paul and Rose Macharia.

ACKNOWLEDGEMENTS

This thesis is a product of selfless commitment by many people, without whom it would not come to fruition. My two thesis supervisors, Dr Abraham Mulwo and Dr Jared Obuya deserve a special mention in this endeavour. Dr Mulwo made me develop a passion for the theory and practice of Communication for Development as well as netnographic research design. Dr Obuya walked me through the baby steps that made me read, reread and master the skills of conducting qualitative research. I will always remember the contribution of these two gentlemen in my academic pursuit.

I also benefited immensely from the support of Moi University, particularly from the leadership and teaching staff at the School of Information Sciences and Department of Publishing, Journalism and Communication Studies. My classmates in this course deserve a special mention for the collaboration and encouragement that brought this exercise to fruition. Several of my colleagues at Strathmore University deserve accolades for their encouragement throughout this journey.

I am also indebted to the administrators and many members of farmers' WhatsApp groups who allowed me to access their messages as a participant observer for academic research. To all the WhatsApp group members that I interviewed, I am grateful. Most importantly, I thank the Almighty God for the strength, inspiration and grace He has showered me with to complete this work. Last but not least, I acknowledge Lucy, Roseann, Joy and Emmy for their unwavering encouragement and support. I would like to issue a disclaimer that although I received expert advice from many people, the errors, mistakes and deficiencies on this thesis are mine.

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LIST OF ABBREVIATIONS AND ACRONYMS

AoIR	The Association of Internet Researchers
CAK	Communications Authority of Kenya
CMC	Computer Mediated Communication
FAO	Food and Agriculture Organisation
FtF	Face-to-face
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IM	Instant Messaging
IMG	Instant Messaging Group
KNBS	Kenya National Bureau of Statistics
MRT	Media Richness Theory
NGOs	Non-Governmental Organisations
RQ	Research Question
SIPT	Social Information Processing Theory
SP	Social Presence
VG	Virtual Group

OPERATIONAL DEFINITION OF TERMS

Instant Messaging Groups: Refer to collectives with a membership of five or more people to transact social or task-oriented agenda. The groups are formed through mobile phone mediated platforms.

Netnography: A term coined from the words internet and ethnography, referring to the qualitative study of interactions within archived and synchronous online communication.

Participation: Refers to the volume of user activity, in terms of the number of messages posted on the group. These can be new messages or a reply to a previously posted message. This excludes the act of reading without making comments (lurking).

Posting: Placing or sending a text, graphic, audio or audio-visual message on an online communication platform.

Social communication/messages: relational messages that convey information of an interpersonal nature.

Social presence: Is the ability of online group members to act in a manner similar to interpersonal or face to face communication, through interactions that express emotional/affective expressions, self-disclosure and other social, non-task related messages in a task-oriented group.

Task communication: Refers to posting of relevant messages that relate to the accomplishment of a specific task within an instant messaging group. In the context of this study, these messages relate to farming. Task communication is comprised of questions and answers aimed at completing a procedure and are assumed to have a neutral affective valence (Peña & Hancock, 2006).

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

This chapter presents the key tenets of this study. It provides a background on the historical, contextual and academic issues that have warranted the study to be conducted. It also focuses on defining the key concepts in the study as well as explaining the connection between mediated group communication and effective farmer-driven agricultural extension, besides indicating the benefits that farmers accrue from collaborating through WhatsApp groups. The essence of this chapter is a demonstration of the need to understand the interaction of members of mediated groups with a specific aim of understanding the communication of social and task-oriented messages in farmers' WhatsApp groups. The chapter also highlights the gap to be filled as well as research questions that guided the study. It also provides the scope, limitations, rationale and significance of the study.

1.1.1 Academic Context of the Study

In this study, the researcher investigated the communication of social and task messages in instant messaging (IM) groups, with a specific focus on farmers' groups on the WhatsApp platform in Kenya. The researcher adopted Peña and Hancock's (2006) definition of task-oriented communication as messages comprised of opinions, questions and answers aimed at completing a procedure and are assumed to have a neutral affective valence. Task messages relate to important group objectives and outcomes and have also been referred to as instrumental communication (Keyton, 2000).

On the other hand, a social message is a statement or part of a statement not related to the formal content of subject matter (Henri, 1992). Social messages comprise relational communication, meant for recreation and tension release with information of an interpersonal nature (Walther & Burgoon, 1992). They have also been referred to as relational messages, affective messages and non-task communication (Kraut, Fish, Root, & Chalfonte, 1990; Walther, Bunz, & Bazarova, 2005; Yoo & Alavi, 2001). The content of communication within instant messaging groups comprises task and social messages.

With the advent of messaging applications with the group platform such as WhatsApp, farmers have joined such collectives essentially to discuss matters related to farming. Although interaction in such groups should ideally be based on matters related to the task-oriented communication, more often than not, texting on WhatsApp has evolved to a much richer environment for communication, where members are constantly bombarded with social messages. Communication within mediated groups is argued to take two forms regarding content namely task-oriented and social interaction (Keyton, 1997).

Group communication on instant messaging platforms differs from face to face communication. Biocca, Harms, and Burgoon (2003) affirm that unlike in interpersonal communication, virtual communication is built on constrained social cues. In the absence of social cues, which according to (Reio & Crim, 2013) increase social presence, feelings of acceptance and motivation to participate are reduced.

Greater social presence in a group is associated with higher participation (Daft & Lengel, 1986; Short, Williams, & Christie, 1976). Social presence appreciates social cues as having a powerful influence on member participation in a group. Instant

messaging communication devoid of social messages may lead to a sense of disconnection, isolation and absence of personal attention (Caspi & Blau, 2008; Palloff, R. M., & Pratt, 1999). Such an outcome may affect motivation for participation in a group. To increase social presence in task-oriented virtual groups, members engage in posting messages that contain humour, emotions, self-disclosure, online introductions and provision of social spaces hence translating to an increase in participation through posting of messages by members (Mokoena, 2013). An indicator of community success is when interaction among course members is frequent and consistent, and course members are engaged in active reading and writing messages (Johnson & Johnson, 2003; Harasim, 2002);

A challenge of communication on IM groups is how members can and should maintain social ties and remains focused on the task. Although social messages may translate to an increase in task participation, online groups form norms and rules that regulate their conduct and posting behaviour. These rules constrain members in their interactions especially requiring them to post more on task and less on social communication (Uysal, 2016). These rules are set at the inception of the group or are developed as the group grows. Even in the presence of rules guiding the content to be posted, group members will sometimes post social messages in a task-oriented group. It is argued that social presence in virtual groups must make personal but purposeful relationships (Garrison & Arbaugh, 2007). Feelings of depersonalisation may account for lower levels of satisfaction (Straus & McGrath, 1994).

Extant studies support the regulation of the type of messages posted in IM groups (McMillan & Chavis, 1986; Walther et al., 2005) while other scholars, especially proponents of interaction theories of communication advocate for the integration of

social messages to enhance task communication (Daft & Lengel, 1986; Short et al., 1976). The influence of social messages on task communication, therefore, remains an empirical gap. Wang, Sanjay and Leskovec, (2012) invite scholars for further investigation into the relationship between the content of group messages and interaction geared towards meeting the objectives of the group.

Within the now globally ubiquitous instant messaging groups, the format of interaction has been characterised by a blend of social and task messages. Early ideas on communication in those groups had tended to focus on the deficiency of social cues and had projected that interaction in those groups would be formal and task-oriented (Sproull & Kiesler, 1986). It is worth noting that the mediated group messages then were transmitted through the telegraph which had limited capacity for sharing social messages. Later development and widespread use of these platforms has seen a shift in the type of messages transmitted through the modern-day channels.

The effectiveness of communication in task-oriented environments has previously been a matter of interest to scholars (Darics, 2014; Rice, 2016). It is in the best interest of group leaders and members to ensure that they engage in posting messages that add value to the objectives of the group through increased task participation. Understanding the nature of communication practices in these groups can inform contemporary theory in the area of mediated group communication as well as help promote effective practical utilization of these groups in agricultural extension.

1.1.2 Social Context of the Study

From a historical perspective, the landscape of internet-supported real-time platforms of mediated communication has developed from bulletin boards, list serves, chatrooms and newsgroups to the modern apps that include WeChat, Telegram

Messenger, BlackBerry Messenger, Viber Messenger, Line and WhatsApp among others. Since their inception globally, instant messaging platforms have become one of the most popular channels of communication.

Multiple instant messaging apps have gained prominence at different rates in different countries. Nomad (2022) indicates that in the Asian continent, WeChat is the most popular instant messaging app in China, with WhatsApp being the dominant messaging platform in Singapore and Indonesia while Iran, Iraq and Japan have Telegram, Viber and Line as the most popular apps respectively. In the United States of America and Canada, Facebook Messenger is regarded as the most popular while in Europe, Viber is the dominant platform in Ukraine and Greece. In the United Kingdom, Germany, Switzerland and Spain, WhatsApp is the most popular. Nomad (2022) further provides statistics on the African continent with WhatsApp as the most popular across the continent in countries such as Nigeria, Namibia, Ghana, Egypt and South Africa among others. Ethiopia is an exception with Viber as the most popular. Similar to Kenya, all the other East African countries such as Uganda, Tanzania and Uganda have WhatsApp as the most dominant app.

It is therefore clear that although there are numerous instant messaging platforms in the world, WhatsApp is the most widely used (Othman & Menon, 2019). Statistics by Statista (2019) indicate that WhatsApp ranks as the most used IM application in the world with an excess of 1.6 billion daily users across the world with over five hundred active daily users. This platform has become central in the lives of many people across the world.

Globally, the use of IM has grown rapidly and overtaken the use of SMS in popularity (Tang & Hew, 2017). IMs have become trendy, fast-growing and have attracted billions of users across the world. Although IMs were at their inception used in the communication of social messages, users have over the years used them for task-oriented communication. Over time, they have not only impacted on personal social communication but have also significantly changed the way organizations communicate internally and externally (Ip & Ho, 2015). Task-related communication has been migrated to IMs, resulting in online communities that bring people together without the restrictions of geographical boundaries.

In consistence with the rising growth in the number of internet users globally, the African continent has also recorded an exponential growth with instant messaging platforms becoming popular tools of communication. A report by Nendo (2019) indicates that African nations dominate the list of countries with the fastest-growing internet communities. Although the same report by Nendo shows that Facebook is the top social media platform in Africa in 2019 followed by You-tube, on a different category, it indicates that with a fast-growing user base, WhatsApp is the most downloaded mobile application.

Social media and instant messaging platforms in Africa have created avenues for citizens to generate news and collaborate more effectively in their political, social and economic spheres. Africans have utilised the potential of these tools to realise various social-economic gains. For instance, on the political front, the continent made a mark in the world after the use of social media led to the uprising referred to as the Arab spring. On the economic front, the same tools have been used in sectors such as education, rural development, security and farming among others. Examples of its use

in formal circles include professional settings (Saudiah & Salamah, 2017); religious charity groups (Azmi, Hanif, & Mahamood, 2017) and educational settings (Bouhnik, Deshen, & Gan, 2014; Cansoy, 2017; Nedungadi, Mulki, & Raman, 2018).

1.2 Instant Messaging in Kenya

Kenya ranks first in Africa in terms of internet use (Statista, 2020). As internet penetration continues to rise in the country, digital media has also become widespread. According to a report by the Bloggers Association of Kenya (BAKE, 2020), WhatsApp was the most downloaded instant messaging application in Kenya in 2019, with millions of users daily. The report by BAKE indicates that WhatsApp leads in penetration rates of social media in Kenya ahead of YouTube (8 million), Facebook (7.1 million) and Instagram (4 million), among others. Another recent report by Social Media Lab (SIMElab) indicates that a majority of Kenyans in the rural areas, where farming is mainly practiced, use WhatsApp (Wamuyu, 2020). The popularity of WhatsApp can be attributed to its ease of use and affordability.

According to Communications Authority of Kenya (CAK 2019) reports, internet usage in Kenya continues to soar, boasting more than 46 million mobile phone subscribers and 42 million data/internet subscribers. People have formed online groups to maintain friendship and family ties, seek entertainment and exchange thoughts and ideas. These diverse areas of usage affirm the centrality and capability of the WhatsApp platform to foster socio-economic development in the country. According to the Kenya National Bureau of Statistics (KNBS) the use of IMs, specifically WhatsApp rose significantly in 2018 leading to a decline in the use of international telephone traffic as well as mobile short messaging service (KNBS, 2018). In the previous year, statistics indicated that over 55 per cent of Kenyans were

using WhatsApp IM platform (KNBS, 2017). This is a testament to the popularity of IM use in Kenya, which cuts across all the sectors of development.

The decentralized nature and ability to share information with a large number of people have made new ICTs, such as instant messaging apps, well suited for grassroots mobilization (Ndlela & Mulwo, 2017). With the burgeoning popularity of WhatsApp in Kenya, it has become a tool for not only social communication but also for interaction within formal and task-oriented activities in areas that include health communication, education, business and government ministries among others. An estimated half of mobile phone users in the country use WhatsApp to communicate either one on one, one to many or many to many levels in the country (Henry, Winters, Lakati, Oliver, Geniets, & Mbae, 2016). WhatsApp is also used for both task and social purposes. When used in task-oriented contexts, the question of whether messages should be task-related, socially-related, or whether both will suffice arises.

1.3 Statement of the Problem

This study investigates the communication of social and task messages in instant messaging (IM) groups, with a specific focus on farmers' groups on the WhatsApp platform in Kenya. IM platforms have become an integral part of everyday life in the achievement of both task and social purposes (Kaufmann & Peil, 2020). Savicki and Kelley (2000) stress on the need for scholars to study communication in these virtual groups to provide our increasingly network-based society with information that will augment the functioning of computer mediated communication.

Extant literature points at two inconclusive and conflicting seminal positions regarding the communication of social messages in task-oriented groups. On one hand, scholars have advocated for group interaction containing task messages

exclusively and devoid of any social interaction (Hercheui, 2011; Nicholson, 2016; West, 2017). An earlier study on learning groups suggested that social messages interfered with task communication in online communities (Rourke & Anderson, 2002).

On the other hand, scholars have outlined social presence, through posting social messages, as an important source of impetus for group members to post messages (Bezerra & Hirata, 2011; Ertiö, Ruoppila, & Thiel, 2016). Studies on online groups have shown that the presence of social messages has a positive impact on task communication (Garrison, Anderson, & Archer, 1999; Jelfs & Whitelock, 2000; Li & Cox, 2016). Social messages are seen to be supportive of the process of interaction in a task-oriented setting. Also, Beck, Paskewitz, Anderson, Bourdeaux, and Mueller (2017) view relational (social) messages as essential for maintaining relationships that are an effective foundation for effective accomplishment of a task. From those conflicting research findings, it is unclear whether messages in task-oriented IMs with heterogeneous membership should be task-related, socially-related, or whether both will suffice. Existing literature has given mixed findings on this and this study seeks to increase scholarly understanding of the communication of social and task messages in IMs.

Recent research on online group interaction indicates that these collectives are normally rule regulated (Klonick, 2018; B. Thomas & Round, 2016). Gatekeeping through content moderation rules is meant to make group members stick to task interaction and meet the expected outcomes of the group (Hercheui, 2011; West, 2017). In the face of such rules, Church and de Oliveira, (2013) are calling for studies that promote understanding of the expectations of members of IM groups regarding

the content to post and read. Similar calls for more understanding of social interaction and members need fulfilment are echoed by (Karapanos, Teixeira, & Gouveia, 2016). This study intends to fill this gap in knowledge. This call for further studies in this area is also reiterated by Gordon (2017) who states the need for more research on specific relational and task-related interactions, how and when they are exercised in a virtual team and how they are blended and communicated.

IM platforms such as WhatsApp allow members to form groups to facilitate communication. Membership criteria and composition of WhatsApp groups characterize the qualities and dynamics of communication between participants (Lambton et al., 2019). In that regard, farmers' WhatsApp groups in Kenya are unique as they are composed of a heterogeneous membership, comprising of participants with different interests, levels of education and age among other demographics. Contemporary scholars indicate that group composition has an effect on communication (Yang, Luo, & Sun, 2020; Yaylacl & Beauvais, 2017), suggesting that the unique composition of farmers' WhatsApp groups has a bearing on the messages posted on their forums.

Methodologically, previous studies investigating the practice of posting messages in IM platforms predominantly use cross-sectional study designs (Garrison & Arbaugh, 2007; Shen & Khalifa, 2008; Zhou et al., 2016). Instant messaging communication has dynamics that change over time. The evolving nature of group communication requires a longitudinal study (Iriberry & Leroy, 2009). Since group communication occurs on an on-going and often regular basis, it is difficult to understand the forces shaping the effects of the content without examining it at various times (Riffe, Lacy, & Fico, 2013). A clear understanding of how social presence shifts or evolves in a

purposeful online community is required (Garrison & Arbaugh, 2007). Contemporary scholars (Malinen, 2015; Park, Cho, & Lee, 2014) have pointed out that group processes demand a longitudinal approach to observe changes in communication patterns over time. This methodological gap needs to be filled by conducting related studies through a netnographic study design.

1.4 Aim of the Study

The aim of this study was to investigate social and task-oriented communication on instant messaging platforms by members of farmers' WhatsApp groups in Kenya with a view to providing recommendations for policy and practice on messaging practices that can enhance effective communication in task-oriented instant messaging groups.

1.5 Research Questions

1. How do members of farmers' WhatsApp groups in Kenya communicate social and task messages in their forums?
2. What are the farmers' responses to the communication of social and task messages on their WhatsApp groups?
3. What are the farmers' perceptions of communication of task and social messages posted on their WhatsApp group forums?

1.6 Assumptions of the Study

In relation to the process of collecting and analysing data as well as formulating research questions, several assumptions were made in this investigation. Based on the first research question, there was an assumption that for successful WhatsApp groups, there must be regulations that stipulate the messages that should be posted on the groups. Further to that, there was an assumption that a successful group is one where

members follow those rules by adhering to posting task-oriented messages exclusively.

Secondly, from the research question on how members of farmers' WhatsApp groups in Kenya communicate social and task messages in their forums, there was an assumption that among the chosen groups, there was a varying pattern of communication based on the type of messages posted on the groups. The groups that were investigated had varying levels of adherence to the rule that prohibited members from posting social messages in their task-related groups. There was also an assumption that there is a difference between communication on task-related WhatsApp groups and face-to-face group communication.

Also from the second research question that focused on the group members' responses to communication of social and task messages on their WhatsApp groups, the assumption was that members would respond differently to the two types of messages posted on the forums. In relation to the question of perceptions of group members about the type of messages posted, the assumption made by the researcher was that the perceptions of the interviewed respondents from different groups would reflect a common pattern that would point to a conclusion on the general perception of group members.

1.7 Scope of the Study

The scope of this study had a content, geographical and methodological component. The content scope was informed by the research questions. The study focused on the communication of messages posted in the farmers' WhatsApp forums, namely social and task as well as the kind of content of messages that group members preferred to post and read from their forums.

To answer the first research question, the researcher focused on observing how members of farmers' WhatsApp groups in Kenya communicate social and task messages. The researcher observed the following: the regulations guiding the posting of task and social messages, how and whether those rules were adhered to in different groups, as well as responses by group members to the task and social messages that were posted. The scope also involved observation of how the pattern of communication of task and social messages evolved with time in those different groups.

The scope of the second question included investigation of how a member(s) responded when another member of a WhatsApp group posted task-oriented messages as well as the benefits of such messages to the member, both as an individual and collectively as a group. It also investigated the response of members when a member of a WhatsApp group posted social messages and the benefits of such messages to an individual and the group.

Based on the third research question, the scope also covered answers to the issues raised in the third research question which included the perceptions of a member on the messages posted on the group and their opinion about posting of messages that were strictly farming-related and those that allowed members to combine social and task-oriented messages. The scope also related to the opinion of members on the content of messages that should be posted on the groups and how their preferred messages would be beneficial to the group. Besides that, the scope of the question involved understanding of how the perceptions of farmers towards the communication of task and social messages changed with time.

In terms of the geographical scope, although membership of WhatsApp groups is not confined by geographical boundaries, the groups of interest in this study were limited to those formed in Kenya. Unlike traditional ethnography, in a netnography, which is the research method used in this study, geographical boundaries are replaced by websites, bulletin boards, Facebook groups, WhatsApp groups or any other platform that forms an online community (Kulavuz-Onal & Vásquez, 2013). Considering that there are numerous IM group platforms used by farmers, this study focused on WhatsApp groups in Kenya only. Both collocated and geographically dispersed WhatsApp groups were subjects of interest. The groups involved members who interact predominantly on farmers' WhatsApp groups in Kenya. The WhatsApp groups on focus had been initiated to bring together farmers to exchange ideas in line with the practice of farming. The main objective of these groups was to provide peer-to-peer agricultural extension services.

Participation in a WhatsApp group can be through viewing messages and posting or commenting on messages sent by other members. Measuring participation through viewing(lurking) was outside the scope of this study. Observing the act of lurking is inappropriate where a researcher is interested in active participation in an online group (Kozinets, Dolbec, & Earley, 2014). The participation activity of interest in the current study was through the act of members posting and commenting on the social and task messages posted on the platform. The messages of interest included text, audio, visual and emoticons. Data under investigation focused on phenomena that exist online, and within the online lives of the members of these groups.

By choosing to study WhatsApp groups only and exclude farmers' groups on other IMs, the researcher recognized the medium theory (McLuhan, 1977) that affirms the

relationship between a medium and message and assumes that different results would be realised if different media were used. Different IM platforms were likely to exhibit communication practices that deviated from the one under focus. WhatsApp groups have been used for development and social group activities but the study confined itself to those used by farmers in their peer to peer exchange of information. The membership of these groups was drawn from varying cultural backgrounds. The researcher was aware that the use of a medium in communication may be affected by variations in culture (Goodrich & de Mooij, 2014) which was a limitation of this study. In spite of this limitation, the study provided a worthwhile contribution to the understanding of communication of social and task-related messages in task-oriented IM group over a period of time.

The methodological scope of the current investigation required the researcher to consider contemporary communication on a digital platform. Literature in digital literature has favoured digital ethnographic methods (Hine, 2015; Kozinets, 2012; Logan, 2015). Being a study on communication on a digital medium, the nature of research questions and data required to answer those questions demanded and a netnographic approach. From the perspective of a netnography, the scope involved using observation, participant observation and semi-structured interviews for data gathering. Netnography is discussed in-depth in Chapter 3.

1.8 Justification of the Study

The purpose of this study was to investigate the communication of social and task messages in IMs, specifically WhatsApp groups for farmers in Kenya. The study was prompted by the popularity of the use of IMs as a significant media of communication used in almost all sectors of development. Effective communication is a vital tool,

necessary for the success of the objectives of a group (Marlow, Lacerenza, & Salas, 2017). Despite the rise in the use of IMs, scholars of communication have not investigated the content of messages posted on the platforms and the preferences of users regarding the messages to be posted. Understanding social and task communication has the potential to optimize interaction and collaboration through an IM, which is imperative in efficient information exchange and improving a group's responsiveness and member satisfaction (Ogara, Koh, & Prybutok, 2014).

Since the dawn of IM groups on the WhatsApp platform, farmers in Kenya have formed and joined such collectives to exchange ideas on agricultural extension. Frequent participation in those groups is seen as a measure of success and sustainability of virtual collectives (De Melo Bezerra & Hirata, 2011; Malinen, 2015; Walther & Burgoon, 1992; Walther et al., 2005) and encouraging it is a frequently cited challenge (Koh, Kim, Butler, & Bock, 2007; Ling et al., 2005). Scholars have underscored the importance of increasing task participation through frequent communication among interactants on IM platforms, to an extent of recommending training of members (Holtbrugge, Schillo, Rogers and Friedmann, 2011; Berg, 2012; Gilson, Maynard & Bergiel, 2013). It is therefore in the interest of every IM group leader and member to anticipate the opportunities and threats to effective task participation, which is a driver to the success of interaction in a group.

Effective communication in IM groups has been singled out as the most important contributor to high performance in online settings (Marlow et al., 2017). From a social perspective, there are concerns among members of IM groups that social messages are distractive and may derail group members from the purposes of communication. As people embrace IM channels as a medium to transact task-oriented communication,

people using them need to understand the type of messages that lead to the desired outcomes. Understanding the communication of task and social messages in IM groups is beneficial to understanding the messages that generate the right atmosphere for the sustenance of interaction that leads to the accomplishment of the objectives of the group (Beck, Paskewitz, Anderson, Bourdeaux, & Mueller, 2017).

In an ideal situation, users and group leaders of an IM such as a farmer's WhatsApp group should be able to build an atmosphere that motivates members to participate constantly and frequently on the task or objectives of the group (Malinen, 2015; Marlow et al., 2017). In such a context, the messages posted on the platform should suit the farmers' preferences and remain geared towards meeting the objectives of the group (Klonick, 2018; Nicholson, 2016; West, 2017). Despite the need to create such a conducive atmosphere, IM communication has a limitation compared to face to face communication. The interaction that occurs within IMs can be challenging as members may struggle to develop relational or social intimacy without face-to-face interaction (Berry, 2011; Marlow et al., 2017; Paskewitz & Beck, 2018). To overcome these limitations, IM group members employ the use of social messages. The presence of social messages in task-oriented IM groups has over time raised practical challenges which have led WhatsApp group members to develop rules to block such messages from the groups.

While motivations for participating in IM groups had been identified and studied in previous research, the area of the content of messages (social and task) posted by group members had not been the focus of attention despite its centrality in helping the groups meet their objectives. Scholars have had an interest in social and task communication in such groups but have provided inconsistent and contradictory findings.

On one hand, studies supported task only messages with Nicholson (2016) insisting that an environment with reduced social information led to equal status effects and greater information sharing. Expectations of members of such groups is that all messages posted should be task-oriented (Tsai & Bagozzi, 2014b). Leaders of such groups act as gatekeepers to enforce rules on the content to be posted in favour of task-oriented messages (Klonick, 2018; West, 2017).

In contrast to that position, other scholars root for a blend of task and social messages in IM groups, arguing that such messages accrue invaluable benefits for the group such as developing social relationships, positive group climate and trust among group members all of which inspire social-emotional interactions (Kwon, Liu, & Johnson, 2014) and building trust and cohesion (Greenberg, Greenberg, & Antonucci, 2007). In support of IM environment that is rich in social cues, Ogara, Koh, and Prybutok (2014) emphasize that group members constrained in their interaction may go through a diminished perception of richness and knowledge which may contribute to reduced immediacy, less social presence and low user satisfaction and participation. The value of investigating social factors that impact communication online platforms has been emphasized in recent studies (Addeo, Delli Paoli, Esposito, & Bolcato, 2019; Dobosh, Poole, & Malik, 2019; Tseng & Hsieh, 2018).

Previous studies have focused on Western contexts and have provided mixed results with the communication of social and task messages. No such studies have been conducted on WhatsApp groups in Kenya. The absence of clarity on the communication of task and social messages from this literature warranted this study which aimed at broadening the body of knowledge in effective communication in IM groups. Therefore, this study intended to fill gaps in knowledge on the communication

of task and social messages in IMs, specifically WhatsApp groups of farmers in Kenya.

1.9 Significance of the Study

A study on the communication of social and task messages in farmers' WhatsApp groups has both theoretical and practical value to scholars and practitioners in the agriculture sector respectively. From a practical perspective, Ogara, Koh, and Prybutok (2014) explain that it is important that IM users familiarize themselves with best practice in the use of those applications, especially regarding the potential benefits associated with the richness of those media. In consistence with that recommendation, this study meant to give invaluable insights to communication for development practitioners with an interest in enhancing the process of communication within an IM group, to eventually enhance the outcomes of interaction in the online set-up. The results will guide practitioners using those groups to decide how and whether to regulate the social messages posted on task-oriented groups.

In an era where the use of IM is surging and gaining popularity in most sectors of development, understanding the interactions on these platforms can also inform theory in the area of mediated group communication. The study expanded scholarship in communication of task and social IMs and responded to calls by several scholars for more research in understanding the connection between the two types of messages (Beck et al., 2017; Ogara et al., 2014). This was in addition to contributing to the literature on communication for development, specifically on the understudied discipline of agricultural extension (Lie & Servaes, 2015). To scholars of communication, this research added to the existing empirical work on the application of netnographic research design to the study of WhatsApp groups. Although

netnography has gained prominence in the study of online communities over the years, little has been done on its application to the understanding interaction within WhatsApp groups.

Administrators of WhatsApp groups for farmers will also benefit as the study provides knowledge on the role of social presence in enhancing or inhibiting participation by members of the group. It is imperative to understand the process and motivation to participate in a virtual group to manage it and gain maximum benefit from its use (Malinen, 2015). The study also built on the body of knowledge in communication studies through contribution to the budding literature on the improvement of interaction within CMC (Computer Mediated Communication) environments.

1.10 Limitations of the Study

The researcher acknowledges that just like any other study, there are a few limitations in the current one. Although a netnographic study such as this one has numerous benefits, the researcher was conscious of some flaws which are discussed in this section.

Firstly, the sample size is not representative of the population of farmers using WhatsApp group for communication in Kenya. Owing to constraints of time and resources, the researcher observed communication in five WhatsApp group for farmers. That small sample size was inconsistent with expectations of quantitative researchers who favour studying large samples for generalisability of results. The generalisability of findings in this study is therefore not valid. Being a qualitative study, the researcher did not attempt to form generalisations that will hold in all contexts but to create a working hypothesis that may be transferred from one context

to another hence there was no need of defined sample size (Guba, 1981) As a qualitative study, this investigation focused on transferability and extrapolations as opposed to generalizability of research findings (Patton, 2002). Kozinets (2010) also emphasizes that ethnographers and netnographers, among other qualitative researchers, lack a clear and measurable standard of determining sample size. Nevertheless, given the rigour and size of data collected, this qualitative study has maintained the trustworthiness expected from such a study.

In addition to that, the respondents to the interviews conducted were purposively selected, meaning the researcher could have left out some key informants for the study. Also, during the face-to-face interviews, the presence of the researcher could have affected responses to the questions. To reduce subjectivity in the responses received from those interviews, the researcher interviewed a large number of respondents (n=25), until qualitative saturation was reached. The interviews, which took between forty five minutes and one hour, ensured that the researcher obtained an enriched understanding of communication of social and task-oriented messages and provided a chance for to probe the interviews deeply.

Despite those limitations of the study, the researcher was cautious to ensure that the findings remained trustworthy. The findings provide a more nuanced understanding of communication of social and task-oriented messages in WhatsApp groups for farmers in Kenya.

1.11 Conclusion

This chapter demonstrated that effective communication is an integral part of IM groups. The need to foster the effectiveness of interaction within these groups is especially crucial at the current moment when the use of IMs has become prevalent in

all sectors of development. This popularity necessitated a deeper of understanding of how communication across those platforms takes place. The chapter has highlighted the gaps in knowledge regarding communication of task and social messages and indicated how previous research in this area has produced inconclusive and inconsistent results. To address these gaps, the researcher did a review of the existing literature and pointed out the methodology that was used in the next two chapters.

1.12 Structure of Thesis

This thesis is presented in six chapters. The chapters are further divided into topics and subtopics as follows:

Chapter One provides a background on the historical, contextual and academic issues that have warranted the study to be conducted. Definition of key concepts in the study, the statement of the problem and the research questions that guided the study are provided. It also provides the scope, limitations, rationale and significance of the study.

Chapter Two presents a systematic review of literature that was necessary in providing an in-depth review of the concept of IM, situating the study within the field of group communication and exploration of various theories that inform the study as well as the research gaps to be filled. The review is based on existing journal articles, books, dissertations and articles on this subject which the researcher searched manually and electronically.

Chapter Three presents the research methodology used in the study. The section highlights the philosophical paradigm, approach, as well as the research method. The study sample, data collection, data analysis and reporting are also presented.

Chapter Four presents the findings of the study. It is structured into three main sections that provide details on the findings for each research question. The findings are presented through a narrative analysis. Direct quotes from interview transcripts are used as well as screenshots of messages posted on the WhatsApp group to provide evidence for the analysis made.

Chapter Five focuses on a discussion and conclusion of the study. It presents a summary of the key findings and an in-depth exploration of each of them. Besides that, the chapter presents a conclusion of the study as well as implications to scholars and practitioners. The researcher also provides suggestions for future studies and finally a reflection as a doctorate scholar.

Chapter Six summarises the findings of the study through three main themes that reflect each of the research questions. It also provides a conclusion of the entire study, recommendations for practice and policy, suggestions for further studies and finally, the researchers' reflections as a qualitative scholar.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on previous scholarly works, related to the investigation of social and task-oriented communication on instant messaging platforms. It specifically explores two theories that inform the study, provides an in-depth review of the concept of IM, and situates the study within the field of group communication and points out the gaps to be filled by the study. The literature reviewed in this study aims to identify current and relevant knowledge as well as existing empirical evidence on communication in IM groups that previous studies have brought to the fore. The review is based on existing journal articles, databases, books, and dissertations on this subject which the researcher searched manually and electronically. The chapter examines the communication of social and task messages on online groups, importance of task participation in IM groups as well as an analysis of the role of social presence in that participation. Previous netnographic research studies have also been reviewed in this chapter. The extant studies reviewed in this area highlight the dynamics of the relationship between social and task messages and lay the basis for further investigation on the communication of social and task messages in farmers' WhatsApp groups.

2.2 Theoretical Framework

A theoretical framework is an empirical or quasi-empirical theory of social and/or psychological processes that can be applied to the understanding of phenomena (Given, 2008). In this study, Social Presence and Media Richness Theories guided the study by providing the researcher with the lenses with which to view, understand and guide the research process. Besides enabling the researcher to understand several

aspects of communication of task and social messages, the two theories provided a framework for interpreting and reporting findings and conclusions.

Media Richness and Social Presence theories guided this study. It is necessary to understand the background of these theories before delving into their details. The two theories relate to the question on the role of social messages in task-oriented mediated communication. A rich medium is high in social presence. The theories seek to match the understanding of the capacity of a medium to respond to the communication process to increase its effectiveness. The two theories also indicate that such a relationship between the medium and the communication process may vary over time. In the context of this study, the two theories work together to describe the concept of social messages since Media Richness Theory describes the social non-verbal cues used while Social Presence Theory describes the verbal cues.

2.2.1 Media Richness Theory

Media richness is defined by Daft, Lengel, and Trevino (1987) as the degree to which a medium can facilitate shared meaning which could increase social rewards in online interactions (Jack, Heng, & Choi, 2013). The theory gives the lenses to examine and redress issues related to social messages in group communication. Although the proponents of the theory associated it with properties of communication media, latter-day scholars have expanded its scope to the context and content of communication with an argument that users of a medium can make it richer or leaner (Ferry, Kydd, & Sawyer, 2001). The theory implies that on online platforms alter and inhibit communication, making it inferior to face to face communication. In line with that argument, Gunawardena (1994) identifies three unique attributes of CMC that affect online communication and group dynamics. These are an asynchronous or time-

independent feature, text-based communication and computer-mediated interaction. In that regard, online communication is therefore viewed as having a low social presence and devoid of social cues since it mainly relies on textual messages.

Extant literature indicates that media richness serves various purposes that include predicting a user's choice of media (Lee, Kozar, & Larsen, 2009), user satisfaction (Ogara et al., 2014) and quality of decision making (Kahai & Cooper, 2003). Media richness provides positive outcomes in group communication (Korzenny, 1978). The theory views communication media and context as a variable on a continuum between lean and rich media and it describes communication media in terms of their effectiveness.

Richness is determined using four characteristics of a medium namely: 1) Its ability to send multiple communication cues, 2) supporting use of language variety, 3) ability to give immediate feedback and 4) supporting a high degree of 'personalness' or personal focus (Daft & Lengel, 1986). The more a medium demonstrates those characteristics, the richer it is seen to be. It is the first and fourth characteristic of this theory that mostly inform this study. The first characteristic describes the first research question in relation to the presence of both social and task messages in the communication of farmers within the groups. The fourth characteristic relates to social messages which are part of the focus of all the research questions in the study. Lean media, on the other hand, is impoverished of those attributes. Limitations of media in a virtual environment, such as virtual groups, may limit the quantity and quality of information (Lin, Standing, & Liu, 2008). Owing to the limitations of online communication, Lipnack and Stamps (2008) have found that group members within virtual teams tend to be more task-oriented.

Different contexts may require different levels of social presence. In educational groups, extant literature indicates that media richness needs to be carefully considered, noting that too low levels or very high levels of richness have either improve or produce negative outcomes in communication (Mihaescu, Vasiliu, & Andone, 2014). Communication of social messages is a quality of a rich medium and richness plays a role in achieving positive social outcomes in a group (Korzeny, 1978). At the centre of this theory is the argument that lean media, such as IMs inhibit the conveying of task messages (Dennis, Kinney, & Hung, 1999). This is corroborated by Paskewitz and Beck (2018) who assert that in the context of IMs the interaction that occurs can be challenging as members may struggle to develop relational intimacy without face-to-face interaction. IMs hence fall in the category of lean media. MRT further indicates that task performance will improve when task processing requirements are matched with a communication medium's ability to convey information richness (Daft & Lengel, 1986).

Different CMC platforms are ranked in terms of their leanness. In that regard, compared to the other social media platforms WhatsApp is considered most appropriate in the expression of emotion (Waterloo, Baumgartner, Peter, & Valkenburg, 2018). Daft and Lengel (1986) arrange face-to-face communication, telephone, personal documents such as letters and memos, impersonal written documents and numeric documents in order of richness from the highest to the lowest and explain that a rich medium supports more social interaction which is characterized by visual cues, non-word sounds, as well as immediate and personal communication. The richness of an IM is associated with the ability to convey meaning and personness in communication through the use of non-word utterances, visual cues and symbols (Ogura et al., 2014).

The personal or social nature of rich communication makes MRT more of a property of the act of interaction itself than the medium used. The theory further posits that in CMC, channels that are personal are insightful. It also states that written communication, in a channel such as what is contained in IMs, is too lean for much task-related communication (Dennis et al., 1999). All communication media weaken to at least some degree the social context cues available in face-to-face conversation (Sproull & Kiesler, 1986). However, some media allow more social cues than others. For instance, the telephone eliminates visual cues while WhatsApp eliminates oral cues. MRT further offers categories of communication channels based on richness or leanness using characteristics such as the feedback capability; the number of channels used; whether it is personal or impersonal and language variety used in terms of verbal and non-verbal (Daft & Lengel, 1986). Communication through IMs is considered lean since it is devoid of social cues such as gestures and facial expressions.

This theory has been challenged by Walther (2011) whose social information processing theory confronts this limited view of IM communication that is devoid of social messages. Walther explains that using whatever information is available to them, individuals will adapt their language, style and other cues to form impressions and develop relationships with others. A richer medium may derail discussions from the objectives of the group while a leaner one may either enhance or inhibit participation. This contradiction is a knowledge gap that warrants further investigation in the context of IMs and specifically WhatsApp groups.

Media richness is connected to perceived social usefulness and use in IMs which is a motivation for users to consider a broader range of variables delivered by media

richness (Anandarajan, Zaman, Dai, & Arinze, 2010; C. Tseng, Cheng, Li, & Teng, 2017). These values include social messages. Although MRT evolved before the advent of IMs, latter-day studies have used it in the study of these platforms (Dennis et al., 1999; Shen & Khalifa, 2011; Tsai & Bagozzi, 2014a; Yus, 2017). Such previous studies have mainly been concerned with the properties of the medium in terms of richness or leanness and not by examining the content of the messages communicated through the medium. The message content in terms of social and task and how richness based on social messages relates to communication of task messages is an untested area that the researcher sought to shed light on through this study.

MRT is instrumental in this study. It informs the first research question on the exploration of the communication of social and task messages. Although this theory recognises the role of immediate feedback in enhancing the richness of a medium, it fails to account for the ability of social messages in a medium such as IMs in improving the effectiveness. In this context, the researcher tested the theory in its proposal that in some contexts, a richer medium is more effective in conveying messages. The researcher tested this in the context of WhatsApp groups. Also, MRT basis its main argument on a proposal that performance improves when team members use a richer medium for equivocal tasks (Dennis et al., 1999). Although a richer medium allows for multiple messages to be conveyed, a higher amount and variety of messages conveyed may cost the group time in attending to the task. Based on this argument, from a methodological point of view, the theory informs this study by guiding the selection of a sample. The WhatsApp groups the researcher choose to study were purposively selected with the level of richness, in terms of whether the group allows social messages to be posted, in mind.

2.2.2 Social Presence Theory

Joinson and Littleton (2002) define social presence as a quality of the communications medium that relates to the capacity of that medium to transmit social information. Social Presence Theory is originally associated with Mehrabian's (1968) idea of immediacy, which he explained as the communication acts that promote closeness or resemblance to non-verbal communication with each other. Since then, the idea of social presence has evolved in meaning and application over the years. The scholar argued that non-verbal cues enriched and stimulated the senses of interlocutors. This would in turn lead to more intense interactions.

Later on, Short et al. (1976) built on this notion by explaining that the inability of a medium to convey nonverbal cues had a negative effect on interactions. After the MRT, latter-day scholars theorized that far from the idea of CMC being impersonal, it is better thought out, better organised and even richer than face-to-face group meetings as experienced users make up for the missing social cues by using written words (Rice & Love, 1987). These scholars came up with the term social presence to mean “the salience of the other in a mediated communication and the consequent salience of their interpersonal interactions.” Biocca et al. (2003) have proposed that social presence should be tied to specific measures of user responses to mediated others.

Social messages create a social environment within IM groups. Coppola et al., (2004) identify a positive social atmosphere, coupled with predictable communication patterns as essential ingredients for group success. Howirtz, Bravington and Silvis express similar views (2006). Nov (2007) identifies making fun, which is an indicator of social presence as a motivator for participation in IM groups. Messages that

emphasize social interaction have been found to significantly increase participation (Harper et al., 2007; Sahib & Vassileva, 2009; Violi et al., 2011). Malinen (2016) observes that members of an IM group value interesting content and people and are unlikely to visit online sites when these are not achieved. Reduced social cues in online group communication as compared to face-face communication is likely to inhibit frequent participation since feelings of acceptance and belonging are not available in the context of virtual groups (Chang & Hsu, 2016; Reio & Crim, 2013; Riegelsberger, Sasse, Angela, & McCarthy, 2005).

In relation to MRT, Social Presence Theory advocates that the design of an IM should be as close to face-to-face communication as possible (Pavlou, Liang, & Xue, 2007). MRT relates to social presence through the fact that both theories place the sociable trait of communication through a medium at the centre of focus. The point of convergence between the two lies in Sivunen & Nordbäck (2015), assertion that media high in information richness does not always guarantee high social presence between participants. Ramirez et al., (2008) observe that nearness of presence is an essential but often neglected aspect of mediated communication that accounts for the level of satisfaction of individuals interacting in an online conversation. This is a position advanced by another scholar who explains that the first approach for sustaining and enabling online group discussions is to advance and maintain a social presence in the communication done in the group forums (Rovai, 2007).

Increased social presence has been linked to many facets of the value of communication such as quality, appropriateness, richness and accuracy (Sheer & Chen, 2004). WhatsApp allows group members to present themselves socially through emojis and social messages but the level of social cues remains below that

available in face-face communication. In such a context, the Social Presence Theory predicts that farmers will concentrate on farming-related messages rather than social messages. Joinson and Littleton (2002) observe that if the visual channel is removed (as in the case of the telephone), what remains is simply the capacity to transmit the task-oriented material, not the social, interpersonal information.

Walther concurs with the MRT that CMC has low social presence compared to FtF communication. Towards that end, he observes that there is absence of clarity from the theory on whether the actual characteristics of a medium are the causal determinants of communication differences or whether user's perceptions of media alter their behaviour (Gunawardena, 1995). Social Presence Theory is seen as useful lenses for attempting to explain what exactly people perceive when communicating with others through digital platforms (Pittman, 2018).

2.2.2.1 Indicators of Social Presence

Social presence has previously been studied through the lenses of a model developed by (Rourke & Garrison, 2001). The model classifies this concept into three main categories, each with its specific set of indicators. Recent scholars have called for the examination of social presence through a multi-dimensional construct with three sets of indicators (Lu, Fan, & Zhou, 2016; Ogara et al., 2014; Sivunen & Nordbäck, 2015).

The first category is named as the affective social presence. Although (Short et al., 1976) focused on the medium as the source of social presence, other scholars have found out that the content of communication in an online environment can also contribute to social expressions that demonstrate affection (Anderson & Kanuka, 1999; Angeli, Bonk, & Hara, 2000; McDonald & Gibson, 1998; Weiss & Morrison,

1998). These scholars have identified the use of humour, self-disclosure, expression of emotions through conspicuous capitalisations, use of emoticons. Other expressions that demonstrate affective social presence include self-introductions, compliments and greetings.

Interactive social presence is the second category. This category was previously referred to as open communication by (Garrison et al., 1999). Interactive category refers to chains of threaded interchanges combined with messages of a socially appreciative nature (Rourke & Garrison, 2001). Within this category, indicators include expression of awareness of each other's contribution (Garrison et al., 1999). Such messages boost the self-esteem of interactants as well as increase the perception of the member posting a message that others are 'listening' and responding to their comments. The evidence that 'the other is attending' is a critical social factor as explained by (Short et al., 1976).

The third category of indicators according to (Rourke & Garrison, 2001) are cohesive responses whose indicators include goodwill messages(phatics) and salutations, addressing people by names or initials (vocatives), and addressing the group as 'we,' 'our,' or 'us.'. The table below shows the indicators of social messages and provides examples that will guide the researcher in distinguishing between social and task-oriented messages.

Online communication has advanced since the development of this theory. It has moved from the 'traditional' email, listserve and bulletin boards to the more recent social media and instant messaging platforms. This study will shed light on whether the theory is still relevant for application in explaining communication in newer platforms such as WhatsApp groups.

2.2.2.2 Relationship between Social Presence and Task-Oriented Messages

Previous studies have also made a significant contribution to the understanding of how social presence enhances task-oriented participation within online environments (Joksimovic et al., 2015; Malinen, 2015; Mokoena, 2013; Ogara et al., 2014). These studies have singled out various indicators of social presence as direct contributors to task participation.

Social presence has been singled out as a significant contributor to participation (Malinen, 2015). Social presence creates a warm, sociable and collegial environment that motivates group members to participate in an IM. A study by (Zhao, Sullivan, & Mellenius, 2014) indicated a contrast in participation between the groups with the highest and lowest level of social presence.

From extant literature on social presence, it is evident that this theory is central in informing the issue of social messages. It provides a series of indicators that help in distinguishing between social and task messages. It also informs the basis for studying the first research question on the communication of task and social messages by providing a framework for identifying groups with a high social presence from groups with less social presence. From the literature on this theory, it is apparent that social presence and task participation, that the relationship between the two is intertwined. It, however, remains to be understood how task communication within groups with a high social presence compare with those with low social presence. This study intends to provide a broad picture of the communication that takes place in such groups.

In conclusion, this study is conceptually driven by an eclectic framework of theories which relate to communication of task and social messages in a group. By integrating media richness, social presence and social information processing theories, the

researcher applied the theories and increases understanding of communication of social and task messages in IMs.

2.3 Communication of Social and Task-Oriented Messages

In contemporary workplaces, group communication is frequently taking place through online platforms such as WhatsApp groups. Effective communication in online groups has been identified by scholars as essential to the success of such collectives (Cleary, Slattery, & Flammia, 2019; Marlow et al., 2017). Research has examined the content of messages communicated within groups on online platforms over the years. Gilbert and Moore (1998) have been often cited in that literature in their observation that such interaction is normally both social and task-oriented. The interplay between those two types of messages has attracted the attention of scholars in the field of online group communication (Cleary et al., 2019). Group communication on instant messaging platforms differs from face to face communication. Biocca, Harms, and Burgoon (2003) affirm that unlike in interpersonal communication, virtual communication is built on constrained social cues. In the absence of social cues, which according to (Reio & Crim, 2013) increase social presence, feelings of acceptance and motivation to participate are reduced.

Communication in online groups comprises of social or task-related messages (Mikkelsen, Sloan, & Hesse, 2019). When used in task-oriented contexts, the question of whether messages should be task-related, socially-related, or whether both will suffice arises. Extant literature has indicated two contradicting positions on this matter. To understand the quality of communication in online groups, it is important to understand the interplay of social and task-oriented messages to create sustainable member participation that will lead to the accomplishment of the objectives a group.

On one side, literature on online groups emphasizes the importance of clear, task-oriented communication (M. D. Hercheui, 2011; Kezsbom, 2000; Nicholson, 2016; West, 2017). A similar idea is expressed by William (2010) who notes that members of workplace online groups form trust by focusing on communication related to task and actions rather than forming relationships. Hart and McLeod (2003), underscore the value of communicating task-related messages exclusively by observing that social relationships in online groups are not built through messages containing personal messages but through frequent and intense task-related messages. That indicates that although social relationships are important in enabling an online group achieve its objective, such a relationship emerges when members interact on task-oriented matters.

In educational circles, more evidence indicates better outcomes in groups where the discussion is content-focused and not purely socially oriented with social presence viewed as a necessary but insufficient precondition for creating a community of inquiry and encouraging deep approaches to learning (Garrison & Cleveland-Innes, 2005). A study by Yükseltürk and Top (2004) revealed that communication in an online discussion list is generally task-oriented. In their study, they observed that instructors in an educational group accepted the necessity of social- and task-oriented messages, but they emphasized the importance of task-oriented ones more. They also observed that task-oriented messages are more important to understand a topic and social-oriented messages or messages which are not directly related to course topic help them to create a friendlier environment in CMC.

On the other hand, previous studies have indicated the value of social messages in virtual group communication (Connelly & Turel, 2016; Flammia, Cleary, & Slattery,

2010). Although such previous studies in this area have focused on student learning online groups, they indicate the need for groups to engage in both social and task-oriented communication especially in the early stages of the group (Brewer, Mitchell, Sanders, Wallace, & Wood, 2015; Cogliser et al., 2013). Those scholars have observed that a medium with high social presence would tend to be rated as more warm, personal and sociable than a medium with low social presence. Similar observations by other scholars (Flammia, Cleary, & Slattery, 2010) indicate that teams which establish strong task-related communication together with social interaction are more likely to develop trust and to function effectively.

A limitation of the reviewed literature on communication of task and social messages in virtual groups is that it has focused almost exclusively on studies of groups composed of a homogenous membership and fails to pay attention to differences in group membership composition. This limitation suggests that future studies focus on this gap in knowledge. In the context of communication on online groups, as Aitken, Smith, Fawns and Jones (2020) conclude, the balance of social- and task-oriented communication must be carefully and reflexively managed without any party crossing too far into the social sphere of the other. To create this balance, understanding the social and task dimensions of communication in online groups is therefore an issue of interest to scholars of communication.

2.4 Communication on Instant Messaging Groups

Communication on instant messaging platforms has become a ubiquitous practice since the development of the internet. Although the concept gained popularity in the 1990s, it dates back to the 1960s when Massachusetts Institute of Technology created a platform with 30 users to log in and send messages at the same time thereby setting

the stage for the modern internet enabled group platforms (Petronzio, 2012; Ratemo, Ikoha, & Micheni, 2016).

Instant messaging has been an evolving practice and concept over the years. Ip and Ho (2015) note that although the concept of IM has existed since the 1960s, it had not become ubiquitous until the advent of the internet. Later in 1996, an Israeli based firm, Mirabilis, started a text-based instant messaging platform named, 'I Seek You' (ICQ) which grew fast and reached a vast widespread group of users (Wang, 2019). Further developments saw newer instant messaging platforms such as Yahoo Messenger in 1998, Microsoft's MSN Messenger in 1999 and Skype in 2003 (Wang, 2019). In the early days of instant messaging, messages were sent on desktop computers but over time, especially in recent years, instant messaging platforms have become mobile phone-based and added different social networking features (Wang, 2019).

Instant messaging, from that short history, can be seen as an evolving concept that has drawn the attention and participation of billions of people across the world to meet various gratifications. Initially, IMs were popular among social or recreational users but they have become media of communication in task-oriented contexts over the years. Currently, IM platforms are becoming an authentic media for facilitating information sharing and communication for personal as well as formal purposes (Ahmed, Ahmad, Ahmad, & Zakaria, 2019). Since the advent of the internet, IMs have developed various features that have made them versatile through the capability of multiple users to form online groups. The mobile phone has become an integral part of everyday life and instant messaging (IM) is replacing conventional voice calls.

Instant messaging platforms provide some benefits to users such as the provision of several services namely; chatting, voice calls, video calls and multimedia sharing, enabling users to connect without time or place constraints (Alsulami & Aama, 2019) ability to communicate synchronously (Kaufmann & Peil, 2020), claiming that end-to-end encryption is implemented (Sutikno, Handayani, Stiawan, Riyadi, & Subroto, 2016). In addition to that, instant messaging platforms that include WhatsApp, Viber, Signal, Facebook Messenger, WeChat, and Telegram among others provide users with control over who can see the content they share, and, more importantly, create a trusting sharing environment for exchanging and discussing matters related to all areas of human interest (Vermeer, Kruikemeier, Trilling, & Vreese, 2020). IM keeps written records where one may reread and reuse everything that has been posted instead of rewriting it (Pielot, Oliveira, Kwak, & Oliver, 2014).

In addition to those benefits, a feature that enables users to utilise graphical icons representing emotions, referred to as ‘emoticons’, makes IMs unique. Emoticons make IMs socially and psychologically closer to the users than other internet-enabled media such as email and traditional short text messaging (Tseng & Hsieh, 2018). Another characteristic of IMs is that they allow synchronous text communication between two or more people through the Internet (Huang & Leung, 2009). Over the last decade, instant messaging has developed to become a popular global phenomenon as it progressively substitutes the traditional Short Message Service (SMS) platforms (Kaufmann & Peil, 2020). Apart from replacing SMS, it is also substituting conventional voice calls (Mars et al., 2019).

With the widespread adoption of computer-mediated interaction across the world, the phenomenon of IM has attracted the interest of contemporary scholars in the field of

communication studies (Cameron & Webster, 2005; Ogara et al., 2014; Piwek & Joinson, 2016). Despite this interest by scholars of digital communication, there is no universally agreed-upon definition of IM communication. Nevertheless, scholars have delineated several features and characteristics of phenomena that describe the concept. From the word ‘instant’, Ishtaiwa and Fayeze (2013) argue that IMs enable users to share messages in real-time through internet-enabled devices such as mobile phones, computers and tablets. A similar view is expressed by Edney and Maximo (2007) who define IM as a way of communicating with one or more people in real time. Based on those features and characteristics that extant scholars have used to describe the concept, in the context of this study, the researcher used a working definition of instant messaging as a type of online communication that offers real-time exchange of text, images, emoticons, audio and audio visual transmission over the internet.

Scholars have investigated various aspects of IMs namely: the unintended consequences of instant messaging as emerging communication technologies workplace (Cameron & Webster, 2005); factors affecting the social presence and user satisfaction with Mobile Instant Messaging (Ogara et al., 2014) and patterns of use in time-limited instant messaging service with a focus on what Snapchat users post about (Piwek & Joinson, 2016).

Previous studies on IMs have mostly focused on technical aspects such as users’ perceptions of storage management features (Alsulami & Aama, 2019). The question of how people use instant messaging platforms and they make sense of the messages shared are pertinent to using such platforms effectively and it is one of the core questions in media and communication studies (Mars et al., 2019). Understanding

communication in IMs is particularly important in the current landscape of communication due to their popularity and potential to advance task-oriented communication.

2.4.1 WhatsApp as an Instant Messaging Platform

WhatsApp is a mobile phone and computer-based instant messaging program that enables users to exchange text, photo, audio and audio-visual material. It also provides a platform where users can form closed groups for meeting social, task or both social and task needs. Currently, IM platforms are becoming a veritable media for facilitating knowledge sharing and communication on personal as well as organisational levels (Ahmed et al., 2019). WhatsApp allows a maximum of 256 members in a group and permits these individuals to chat simultaneously. The information that is shared on the group platform is automatically archived. WhatsApp provides an official web-based application that runs on a Windows desktop environment (Sutikno et al., 2016). It has simple to use features that include individual chatting and group chatting with privacy enhancement settings (Alsulami & Aama, 2019). WhatsApp is available for use on different smartphones with varying operating systems such as iPhones, Blackberry and Android.

WhatsApp dates back to 2009 when it was introduced by Brian Acton and Jan Koum who were employees of Yahoo (Malecela, 2016). Although there are many instant messaging platforms, WhatsApp has gained more popularity across the world (Sutikno et al., 2016). It is one of the most utilized instant messaging tool in the world with roughly 1.5 billion people users (Damanik, 2020).

Kaufmann & Peil, (2020) cites being offered free of charge and being advertisement free as some of the reasons behind the popularity of WhatsApp. WhatsApp has become a ubiquitous channel of communication that allows users to send each other multiple modalities of content such as text messages, images, video and audio messages (Aharony, 2015; Church & de Oliveira, 2013). It offers other benefits and services such as Voice over Internet Protocol (VoIP), it is available free of charge and provides cross-sectional messaging (Purkayastha & Chanda, 2018).

The features of WhatsApp that are consistent with the earlier definition of IMs as a type of online chat that offers real-time exchange of text, images, emoticons, audio and audio-visual transmission over the internet qualify it to be an IM platform. WhatsApp allows users to post messages to individuals or groups privately, as opposed to public social networking sites such as Twitter, Instagram and Facebook (Waterloo et al., 2018). Compared to the social networking platform, Facebook, WhatsApp has been found to provide higher levels of social needs fulfilment (Karapanos et al., 2016). The uniqueness of this instant messaging platform from other social media platforms makes the expression of emotion to be considered most appropriate due to the closeness of members to each other (Waterloo et al., 2018). Just like other IMs, WhatsApp is IM was a tool for fast synchronous communication (Yus, 2017).

In Kenya, WhatsApp platforms have transformed digital communication ecosystems by providing an avenue for people to form groups and interact without being affected by geographical and time barriers. WhatsApp messaging platform has a 'groups' feature where members exchange ideas through sending short texts, photos and video clips, on matters related to their trade. That feature brought has about a possibility for

people to relate with others through a virtual group and debate issues that affect their social and economic lives. On WhatsApp, groups can be created, people can be added or removed, and participants have equal posting rights in the groups (Bouhnik et al., 2014). In recent years, scholars have expressed interest in understanding the social, contextual and academic issues related to communication within WhatsApp and other instant messaging groups (Bouhnik et al., 2014; Gan, 2016; Wu, Lu, Gong, & Gupta, 2017).

Purkayastha and Chanda (2018) observe that WhatsApp is an instant messaging service that users easily come to know many issues through and it is used for both social and professional purposes. Although it started as a forum for communication of personal or social messages, WhatsApp has been used in a variety of contexts for formal purposes. These include educational purposes (Bouhnik et al., 2014; Cansoy, 2017; Nedungadi et al., 2018) professional purposes (Saudiah & Salamah, 2017), agriculture (Devanand & Kamala, 2019; Nain, Singh, & Mishra, 2019) and health communication (Ganasegeran, Pukunan, Abdul, & Al-Dubai, 2017; Rathbone et al., 2020) among others.

WhatsApp has become an integral part of everyday life. For example, WhatsApp is currently used by farmers for communication on matters related to their trade. There are diverse applications of WhatsApp in agriculture (Devanand & Kamala, 2019) which include sending messages to their peers, exchanging ideas on best practice in farming and seeking or giving advice. Since it provides a feature for people to form online groups, communication in WhatsApp is not limited to interaction between two individuals. With the increasing use of WhatsApp groups in development-oriented activities, the need to understand the communication behaviour that drives its

effectiveness and sustainability becomes more pressing. This study will investigate how members of WhatsApp groups communicate, with a particular focus on task and social messages.

WhatsApp group platform has recently triggered scholarly focus in communication studies about its potential for encouraging bottom-up communication in a variety of economic sectors. For instance, it has been identified as a powerful tool for peer to peer extension services among farmers (Naruka et al., 2017; Seufert, Hoßfeld, Schwind, Burger, & Tran-Gia, 2016; Thakur, Chander, & Sinha, 2017). Farmers accrue several benefits from using instant messaging platforms such as; improved access to information, overcoming time and space constraints as well as enjoying lower costs of communication. Previously, farmers would discuss agricultural extension related issues face to face but they are now enabled by IM group platforms to supplement or even replace the face to face meetings with online conversations.

The growing importance and levels of usage of WhatsApp for task and social purposes have led to a rise of interest to understand communication in those platforms among scholars of communication (Kamani K C, Ghodasara Y R, Soni N V, & Parsaniya, 2016; Kaufmann & Peil, 2020; O'Hara, Massimi, Harper, Rubens, & Morris, 2014; So, 2016). Given the potential that communication through WhatsApp groups has on development through digital communication, the limited amount of scholarly work in this area is a pointer to the need for more studies to be conducted. For leaders or administrators of online communities, understanding the dynamics of WhatsApp group communication is important for sustaining and promoting interaction.

2.5 Situating this Study in the Field of Group Communication

Communication Studies as a discipline is concerned with human communication. The study of online groups is firmly grounded in communication scholarship. Traditionally, the field has comprised of subfields that include organisational, interpersonal, group, public, and mass communication (Allard, 2020). Madrid-Morales and Ireri (2021) explain that in the context of group communications, mobile phones enable users in Africa to use popular apps such as WhatsApp, exchange texts, and to access social media sites like Facebook for information, entertainment, communication, and social interaction. Several descriptors situate this study within the territory of group communication within communication studies. The basic definition of group communication is a dynamic process where a small number of people engage in a conversation (McLean, 2005). When this engagement occurs in an online environment, we might consider this as an online group communication (Ersoz, 2019). The descriptors that situate this study within the field of group communication also include the nature of communication channel or infrastructure investigated (Ramola, 2014), the methodology used (Kozinets, 2010a) and the theoretical underpinnings used which are related to group communication within online settings (Daft & Lengel, 1986; Short, Williams, & Christie, 1976). This study discusses each of these descriptors briefly on this section.

Firstly, in terms of the platform the researcher investigated, online groups share some similarities with face to face groups and this leads to a tendency among group members to transform their offline group behaviours to online environments such as greetings (Ersoz, 2019). The broad field of communication studies has expanded over the years in consistence with technological advancements which have heralded the era of communication through online groups. The concept and practice of groups has

evolved from face to face to mediated groups. WhatsApp groups have extended the utility of peer support offered through face to face interactions. Previous studies in communication studies such as Khanna, Sambandam, Gul, & Mounasamy (2015) and Seufert et al. (2016) have situated online group communication within the field of group communication and this study is no exception.

Secondly, new research methodologies and contextual settings for studies on group communication have emerged in the era of the internet. The research method used in this investigation, namely netnography, is used in the study of online group interaction and experience from a human perspective (Kozinets, 2019). In using this research method, the study is further anchored within the field of communication studies which deals with human interaction. Garcia et al., (2010) identify netnography as one of the ethnographic approaches to the internet and computer-mediated communication further demonstrating that a netnographic study is mapped within the territory of communication studies.

Thirdly, the theories underpinning this study have previously been used by scholars in communication studies, specifically in the study of group communication. These include the Social Presence Theory, used in similar studies by Ersoz (2019); Kehrwald (2008) and Savicki and Kelley (2000). Also, the study uses the Media Richness Theory of Daft and Lengel (1986) which relates to features of communication technology and the messages shared on those platforms. While MRT is concerned with whether messages on a technological platform are rich or lean, Social Presence Theory relates to social messages which create a social presence in online communication. The two are key theories studied in communication studies. This study is therefore firmly situated in the field of communication studies

specifically within group communication, both in terms of content, theoretical foundations and the methodology that was selected to investigate it.

2.6 Review of related Studies on Task and Social Messaging in IMs

Currently, IM platforms are becoming a veritable media for facilitating knowledge sharing and communication on personal as well as organisational levels (Ahmed et al., 2019). Research has examined motivations for the use of IMs and singled out several benefits that have led to the popularity of the use of IM in both social and organisational contexts. These include lower cost of communication (Henry et al., 2016; Ogara et al., 2014; Ou & Davison, 2016), flexibility in terms of the type and content of messages posted (Oghuma, Chang, Saenz, Park, & Rho, 2015), speed of delivery and immediate feedback (Oseni, Dingley, & Hart, 2018), ability to facilitate group conversations (Church & de Oliveira, 2013) and portability through mobile phones (Tang & Hew, 2017). IM is said to be a channel for quick synchronous communication (Yus, 2017).

IM groups are used as platforms to carry out various activities that are related to both maintenance of relationships and development (Quan-Haase & Young, 2010). These activities include social undertakings as well as task-oriented issues such as academic discussions, medical support groups, agricultural extension and organisational communication among others. Previous research has mainly focused on the purposes of using an IM in communication between teachers and students (Bouhnik et al., 2014), its role in supporting teaching and learning (So, 2016), rhetorical sensitivity in communication in government offices (Saudiah & Salamah, 2017) and patterns of usage in time-limited IM (Piwek & Joinson, 2016) among other purposes.

Besides studies that mainly focus on the way people are communicating through IM for various purposes, other scholars have focused on the reasons behind motivating people to participate in discussions held on IM platforms. These scholars have singled out a absence of active participation as a threat to the sustainability of online communities (Amichai-hamburger et al., 2016). Further investigations in this area indicate that administrators of IM groups often struggle to attract and retain significant numbers of contributors to their sites, citing the main reason behind this as issues of anti-social behaviour (Brandtzæg & Heim, 2008; Malinen, 2015). Member participation has therefore been identified as a key ingredient that fuels the accomplishment of objectives by members of IM groups.

Extant research has indicated that IM groups are unlikely to be sustainable unless members are properly stimulated to participate in discussions (Koh et al., 2007). Stimulation is done in form of motivating factors. Bezerra & Hirata (2011) observe that if motivation decreases or ceases, it may not be easy to obtain the participation of members in virtual communities. Similar studies in this area have shown that participation is related to and determined by motivation (Easterbrook & Vignoles, 2013; Guo & Cheng, 2016 & Ogara et al., 2014). There are some key motivators that build ties between members and motivate them to participate in the groups. Understanding these motivators is important for sustaining IM groups (Aristeidou, Scanlon, & Sharples, 2017; Nov et al., 2014). The motivators are in the form of four principles that characterize a successful virtual group (Kim 2000) namely; a clear purpose in the lives of its members that meets the fundamental goals of its owners, the establishment of the roles of members, leadership and offline/online relationships.

Understanding these motivations by scholars of communication is becoming a multifaceted effort. A study by (Guo & Cheng, 2016) focused on creating a sense of belonging, based on novel posting as a motivator towards participation. Novel posting involves individual sending messages that are original and distinctive from what others have written. The results of the study indicated that when participating in virtual communities, members may primarily pursue social interactions and a sense of achievement, that is, self-esteem. The study expounds that a sense of belonging and the consequent interpersonal attachment that arises from novel posting is a critical motivator for members to be engaged in a virtual group. Rules and norms that discourage members from posting social messages may reduce or inhibit that sense of belonging (Walther, Bunz, & Bazarova, 2005). Since members may be physically and/or geographically dispersed, social interaction may build their social ties and make them more cohesive as a team. Social control includes letting newcomers know the norms of the group and discouraging use of the platform to discuss topics that are outside the groups' interests such as social messages (Ersoz, 2019).

Ashforth, Harrison, and Corley (2008) posit that an individual's participation behaviour acts as a sign of membership and leads to further cohesion between the members and boosts motivation to participate. Participatory behaviour that increases affective commitment among members is seen, in their study, as an impetus for participation. This affective commitment may be cultivated through social messages posted on task-related groups. Easterbrook & Vignoles (2013) make similar observations that in virtual networks, interpersonal bonds are important factors in cultivating a sense of belonging that is pertinent to member participation in a group. Participation in a WhatsApp group thus becomes a reliable signal of commitment to the group (Ashuri & Bar-Ilan, 2016).

In a study of 77 virtual groups in Korea, Ogara, Koh, & Prybutok (2014) singled out offline activities and perceived usefulness of the posted messages of the group members as a key driver to participation. In that study, offline activities were said to be a necessary component for the creation of social presence which in turn motivated participation. In dispersed virtual groups, members do not have the opportunity to create this much sought after social presence. The only way of creating it is through posting social messages in the platforms. Such social messages are likely to contradict the second driver of participation according to that study, which is the usefulness of a message. Usefulness here is related to the degree to which the message relates to the goals of the group. In the face of that contradiction, it is important to conduct a study to shed light on how these social messages interplay with task-oriented in WhatsApp group conversations.

In conclusion, the previous studies mentioned in this section have highlighted several motivators for people to participate in IMs. Nevertheless, questions remain about what motivates individuals to follow, contribute and maintain such communities (S. Gilbert, 2017). The communication of social and task messages in IMs, as well as the perceptions of group members about the type of messages that should be posted needs to be examined. Understanding those issues is necessary for further identifying ways of making members participate more in the IM groups.

2.6.1 Task and Social-Oriented Communication in IMs

Group communication consists of both task-oriented and social interaction which are pertinent to the sustainability of communication (Beck et al., 2017). Although the relationship between the two has previously been a matter of interest to scholars of communication (Daft & Lengel, 1986; Marlow et al., 2017; Walther, 1992), studies

on the relationship and role of social messages in task-oriented groups have been inconsistent and inconclusive. Also, Lin, Standing and Liu (2008) observe that literature on virtual teams has emphasized the task dimensional factors.

There is agreement among the body of scholars in communication that interaction processes involving task and social messages differ between face to face and online communication (Branson, Clausen, & Sung, 2008; Martins, Gilson, & Maynard, 2004). These differences affect the ability of an online group to function effectively (Shwartz-Asher, Ahituv, & Etzion, 2009). In light of the differences that exist, it is imperative that empirical research in communication leads to clarity on the best practice in interaction within both face to face and online settings. The area of interest for this study is interaction in online settings, specifically in IM group platforms.

In online settings, task-oriented IMs such as farmers' WhatsApp groups are started with a key agenda of facilitating members to debate matters related to their trade. Based on that foundation, the expectation of members as well as administrators is that all messages posted within such platforms are task-oriented (Tsai & Bagozzi, 2014b). Nevertheless, the actual behaviour of the users of these platforms differs from the intentions of the users (Desanctis & Poole, 1994). Group members go beyond posting task messages and engage in social interaction besides the task. Instant messaging group communication therefore, in most cases, consists of both social and task-oriented messages. Different scholars who have studied such communication have produced conflicting results in regard to the ideal content of messages that enable the groups realise their objectives. The scholars have made a number of conclusions that are highlighted below.

Firstly and on one hand, scholars in support of online group communication that sticks to the posting of task messages exclusively observe that a communication environment with reduced social information leads to equal status effects and greater information sharing (Nicholson, 2016). Similarly, unlike in face to face groups where a member may be 'liked' by others based on non-task-oriented communication, in online groups, Walther, Bunz, and Bazarova (2005) found out from existing literature that in online environments, group members like those who contribute more on task-related endeavour and suggest that members should be encouraged to make more contributions that are related to the objectives of the group. An implication of such a finding is that members should be encouraged to adhere to task communication.

In such a communication environment where only task messages can be posted, group administrators enforce strict rules that make members shun from posting social messages. They act as gatekeepers who ensure that group rules and norms are maintained without activities that may lead to disturbance (Hercheui, 2011; West, 2017). The gatekeepers, who are mostly group administrators, curate the content posted by members, ostensibly to create an environment that reflects the expectations of the users (Klonick, 2018). In such cases where those restrictions are enforced, group administrators do not normally know the perceptions or expectations of the members.

Secondly and on the other hand, other studies provide results that conflict with the proponents of task only messages and indicate that online groups with more social, relational or affectionate communication performed better on their work (Walther et al., 2005; Weisband & Atwater, 1999). Other scholars who hold a similar view observing that although task communication is important for accomplishing the

objectives of a group and that social communication can foster other benefits for the group such as cohesion and trust (Gupta & Govindarajan, 2000). In a related study on interaction by students in a group, Kwon, Liu and Johnson (2014) observe that they need processes to develop social relationships, positive group climate and trust among group members all of which inspire social-emotional interactions. From those studies, it is clear that although task communication is central to the accomplishment of tasks, social interactions also help in meeting other needs that are crucial both for the survival of a group and accomplishment of a task. These needs include the development of cohesion and trust (Greenberg et al., 2007). Li and Cox, (2016) conclude from a study that the social messages posted in the discussions by the Chinese in an online forum can promote the participants' motivation and interaction, and also enhance ties among members.

Literature implicates both task and social messages to accumulated messaging which is an indication of motivation for members to post messages and sustain communication in a group (Abrams, Cross, Lesser, & Levin, 2003; Walther et al., 2005; Weisband & Atwater, 1999). This contradicts the position of other scholars such as Zhuang and Bresnahan (2012) who after studying messages from an online forum of HIV patients concluded that it would be advisable for such groups to establish rules of civility and encourage members to strictly comply with the rules on content to be posted on the platform.

From a contextual perspective, a vast majority of extant studies on social presence and online participation have been conducted on groups that deal with online groups within educational institutions. Also, most netnographic inquiries have been specific to certain platforms such as chatrooms, Facebook groups, LinkedIn, e.t.c. Scholars are

calling for studies that explore this subject outside educational settings and with various technological platforms (Joksimovic et al., 2015). Since social presence is increasingly associated with online participation, a better understanding of its role in farmers' WhatsApp groups is necessary, with a view to advancing knowledge in the field of enhancing mediated communication. Walther, Bunz, & Bazarova (2005) explain that certain posting behaviours if propagated, might contribute to a virtual group's optimization. This study, in response to that call, explores social and task communication in the context of agricultural extension setting within a WhatsApp group in Kenya.

From those two lines of argument, although numerous studies have been conducted to find out the role of task and social messages in the success of online groups, the results are inconsistent and unclear. The inconsistent results from previous studies point to a need for communication scholars to build on empirical evidence that will lead to an understanding of the issue of social messages on task-oriented online groups. There is need for understanding communication of task and social messages and whether members of these groups should focus on task messages or mix task and social messages since both positions have been implicated in literature. That gap forms the crux of this study.

Extant literature by Rooderkerk and Pauwels (2016) call for research that looks into the challenging task of operationalizing and measuring the quality of the discussion and further insist on the need for a study that can investigate a joint model of task and social messages, including their interdependence.

2.6.2 Content of Messages Posted on Online Groups

The content of messages in online groups has been a matter of interest to previous scholars (Chris & Ngai, 2017; Mayangsari & Aprianti, 2017; McLaughling & Vitak, 2012). In the context of Facebook, McLaughling and Vitak (2012) observe that the perceived desirability of content of messages is conceptualized as the extent to which people perceive others' post as appropriate or desirable. This observation lends credence to the argument made in this study that the perception of online group member's on the messages posted on their platform is a consideration to be made while coming up with regulations that guide messaging on WhatsApp groups.

Still on the context of use of Facebook by young teenagers in the Asian context, Chris and Ngai (2017) categorize three dimensions of content namely, information sharing, self-presentation, and opinion expression. Information sharing is related to task messaging while self-representation relates to social messages and opinion expression relates to members' personal opinion on matters of human interest such as politics. . In the context of that study, the scholars aimed to explore the perceived desirability of each of those categories of content. In the current study, a similar aim, namely to investigate the perceptions of group members on social and task messages is explored especially in the context of task-oriented WhatsApp groups in the Kenyan context. The perceptions of members on messages of different content may differ and affect sustainability and dynamics of communication in a group.

Chavez, Montano, and Barrera (2016) identified a pattern of the content of messages posted in online discussion forums and described them as either the dominant messages that a related to important information on the task or those associated with social order relations that provide participants with a feeling of support to carry out

communication exchanges. A third pattern of content relates to coordination and regulation of group activities while the last one relates to coordination of social activities within the platform. Although those four patterns of content are considered critical in the success of an online forum, the authors explain that although social messages are not directly important in accomplishing the task, they are important in activation of the participation of discourse, increased motivation, or the construction of a community. In the context of the current study, the researchers aims at investigating communication of both social and task messages and compare several WhatsApp groups for farmers with a view to recommending an effective practice of posting content that ensures effective participation of group members in online interactions.

The reviewed previous studies in the area of content of messages posted on online platforms have been conducted on the Facebook platform. None of them has examined messages posted on WhatsApp and in the Kenyan context. The necessitates the current study in order to create a more nuanced understanding of messages posted and the perceptions of group members on the content of such messages in order to make online communication on task related matters more effective. Those studies have also relied on content analysis as the research method. The current study employed the use of a netnography which has been proposed by Kozinets (2010, 2015) as a comprehensive way of investigating the unique contingencies of online communication.

2.6.3 Regulations of Online Groups

To control behaviour of members, Walther, Bunz, and Bazarova, (2005) observed that virtual groups devote a disproportionate amount of time and effort to establish rules

and procedures. Before there was a concern by scholars on how groups form norms that enable them meet their goals, Piccoli and Ives (2000) noted that previous studies seemed to implicitly assume that virtual teams would be self-directed. That implies that there was an assumption that no managerial effort was required to coordinate and regulate the content of procedures of posting messages.

Walther et al., (2005), in a study to examine the degree to which challenges faced by virtual teams could be ameliorated through setting of groups concluded that there are several viable communication routines and if more are adopted, there would be a better experience and better results of group efforts. Based on the conclusion of that study, it is imperative that more rules and routines be identified with a view to improving the outcomes of virtual groups. The study by Walther et al., (2005) examined various rules that are common among virtual groups. These included: getting started right away, communicating frequently; multitasking by getting organized and doing substantive work simultaneously, acknowledging that one has read others' messages, being explicit over what one is doing and setting deadlines and sticking to them. The study did not mention the platform where those rules were applied as well as any rule(s) regulating the type of messages that should be posted on the platform.

A distinctive feature of WhatsApp groups for farmers is their ability to partly resemble face to face communication through integration of social cues or messages during group interaction. Yet, group gate-keepers regulate the content of messages sent on those groups. This necessitates a need to understand the communication environment in terms of the type of messages that should be shared on such groups. In a systematic review of literature on regulations of such groups, Mars et al., (2019)

observed that no established guidelines specifically for WhatsApp as an IM have been found. The regulations restrain members to avoid social messages in favour of task messages. Much remains to be understood regarding the group members' responses to both social and task messages as well as how interaction in the group changes over time based on the content of messages posted.

2.6.4 Existing Netnographic Studies on WhatsApp Groups

Since their inception, WhatsApp group platforms have become a popular channel for interaction on task and social-oriented activities (Tang & Hew, 2017). Consequently, several studies have been conducted on how group members have adopted and appropriated communication within the platform.

While WhatsApp groups have been studied in different contexts and sectors of development, the findings of these studies have not been subjected to a comprehensive review in order to assess the common approaches and empirical gaps that require to be filled. This literature review explores previous netnographic studies on WhatsApp, providing an overview of the main research contexts, themes, and methods as well as the suggestions that have been made for future empirical investigations.

Since (Kozinets, 1998) initial reflections on netnography, several studies have been conducted on various online platforms and messaging apps. These include inter-alia: a study on blogs (Stainton, 2018); WeChat (Fuller, 2006; Peng, 2017a, 2017b); Facebook (Berge, 2017; Ebrahimi & Salaverría, 2015; García-Álvarez, López-Sintas, & Samper-Martínez, 2017; Logan, 2015; Nugraha, 2015; Pena & Amezcua, 2017; Plunkett, 2013) and Instagram (Serafinelli, 2017). Although netnographic studies have been conducted on communication within various online platforms, the application of

this study design in the study of WhatsApp messages is still at a nascent stage. This is in spite of its widespread use in task-related activities and its position as a popular instant messaging app.

Existing netnographic studies on WhatsApp groups have focused on a variety of subjects. One study focused on the ethics and challenges of researching co-viewing on social media (de Sá, 2018). A different study has investigated family communication patterns on an extended family's WhatsApp group (Apriliani & Irwansyah, 2017). In the education sector, a case study on understanding interaction among parents and teachers has been conducted (Mayangsari & Aprianti, 2017). Another netnographic study on the educational sector sought to determine the kind of messages shared by science teachers in a WhatsApp group that formed an online community of practice to support professional development (Cansoy, 2017). On the educational sector again, an investigation on improving educational outcomes and reducing absenteeism at remote villages using WhatsApp was also conducted (Nedungadi et al., 2018). WhatsApp has been used within professional settings for formal communication in bureaucratic circles as revealed by a netnographic study through one study of a government office in Indonesia (Saudiah & Salamah, 2017). In religious and charity circles, a study by Azmi, Noor, & Siti (2017) explored the social reality of interaction within a WhatsApp group of religious endowment community referred to as Waqf .

A study by Apriliani and Irwansyah (2017) combined netnography and quantitative network analysis of data to investigate the pattern of communication on kin-keeper in an extended family's WhatsApp group. A kin-keeper is a family member who acts as a communication hub that keeps everyone in the family updated about how others are doing (Kamal, Mdnoor, & Baharin, 2016). The study found out that the

communication pattern within an extended family's WhatsApp group tends to be centralised by certain members of the family. In terms of sample size, the study observed the communication behaviour or pattern of a single extended family. The mixed-methods study focused on the group for 4 months, between September and December 2016. Apriliani and Irwansyah (2017) suggest that future research should look at other types of families or groups. This study extends this recommendation by studying other types of groups, namely farmers' WhatsApp groups.

Majority of studies in this area have been centred on the field of education. A study by Mayangsari and Aprianti (2017) investigated two WhatsApp groups, each from a different school in Indonesia, to explain the main topics of chats between members and their communication styles. A total of 503 chats were observed. The study found out that discussion topics ranged from student permits, greetings, class activity, news, educational events and selling or marketing a product. The study results also indicated that communication styles among parents and teachers differed. Parents from one school used more emoticons during their chats and indicated the links to sources of the information shared while in the second school, members exchanged greetings, used fewer emoticons and provided no links to their sources of news. Both groups used informal language in their chats. While that study examined the content of the conversations on WhatsApp, it does not explore the interplay between the different types of messages (social and task), necessitating further studies to be conducted on that area.

In a different netnographic study on the educational sphere, Cansoy (2017) examined the kind of 'shares' made by teachers of Science in a WhatsApp group that aims to support professional development among teachers. A single group, chosen as a

purposive sample, with a membership of 12 was the sample of the study over one year. A total of 1363 messages comprising of photographs, text, and audio-visual materials were analysed through open coding. The study investigated the content of teachers' communication in the group and found out that teachers engaged in both task and social communication which included information on field knowledge on their subjects, application-oriented projects in the fields, sharing useful task-related webpages, pedagogical practices and emotional support for one another. The study was conducted with a limited number of group members (n=12) and did not explore the relationship between the type of messages posted and the realisation of the objectives of the group.

Another netnographic study on the use of WhatsApp in the educational sector sought to investigate the improvement of educational outcomes and the reduction of absenteeism at remote villages in India (Nedungadi et al., 2018). The 9-month mixed methods study coded and analysed 8968 messages that included photos and text, posted by 26 participants from a single WhatsApp group. The study results indicated that the number of posts on the group related to the task (classroom attendance) was consistent with the frequency of interactions between teachers and coordinators.

Away from education circles, Saudiah and Salamah (2017) examined WhatsApp group chat usage in the task-related environment, specifically within the internal and external office in government agencies in Indonesia. The netnographic study investigated a sample comprised of one group and followed the five steps of a netnographic study recommended by (Kozinets, 2010a). The results of the study categorize communication in that group into various topics, but all can be grouped into four organizational communication directions, namely: downward

communication; upward communication; horizontal communication and diagonal communication.

Lastly, a netnographic study of WhatsApp groups has also been conducted on a religious endowment community named Waqf. Azmi et al. (2017) investigated the social reality of the group to understand the communication behaviour and culture of the members. The study sample was a single group and the duration of the study was stated as the duration of membership of the researchers in the group which was not expressed in specific terms. The results of this study indicated the content of the discussion as characterised by expression of sensitivities, unity, spirit, willingness, commitment, the disclosure of information, influence, focus, gaps and frictions.

From this existing literature on extant studies in this area, several issues have emerged and will be addressed in this study. The multiple netnographic studies on Whatsapp have brought to the fore the need to reflect on methodological gaps in the extant studies. Most of these studies have relied on single groups to develop theory. In research, single cases provide only a snapshot view, without an accurate representation of the dynamic nature of online communities (Malinen, 2015). On the same note, the groups that these groups focused on had low membership. Apart from the sample size in previous studies, the number of chats or messages analysed in those studies was also low, with the highest being 8968 in a study by (Nedungadi et al., 2018).

This study builds on the limitations of previous netnographic studies by studying more WhatsApp groups (n=5) and analysing more messages for a longer period. The wider variety of groups chosen for the study will ensure that the research findings will

be empirically rich, reflecting the complexity and nuances of different ways of interacting to improve the outcomes of a WhatsApp group.

2.7 Rationale of the Study Based on the Reviewed Literature

This review of literature indicates that studies on the communication of task and social are few, based on Western contexts and rely on cross-sectional research designs. Also, no studies on communication in IMs have been done in Kenya. The subject has been explored from multidisciplinary perspectives, ranging from human communication studies, psychology, information technology and business studies. Nevertheless, regarding communication, there is still much to be understood, considering that online groups are a constantly evolving phenomena (Danescu, West, Jurafsky, Leskovec, & Potts, 2013). The literature reviewed has brought to the fore several important gaps and emerging issues in the scholarly understanding of the communication of task and social messages in IM groups. These range between inconclusive and inconsistent issues in communication as well as methodological constraints in previous studies.

2.7.1 Inconsistency in the Literature on Task and Social Messages

To start with, the reviewed literature on the issues of task and social communication points out to conflicting perspectives that required to be studied to provide more understanding of the phenomena. On one hand, scholars point out a need to regulate the content of messages posted in favour of task messages (Klonick, 2018; Nicholson, 2016; Walther et al., 2005; West, 2017; Zhuang & Bresnahan, 2012). This is supported by another study on online support groups that concludes that misalignment of task and relational messages may accidentally offend the individuals support groups are designed to help (Beck et al., 2017). Those studies have recognised both

task and social messages as crucial for group sustainability of interaction. The high amount of information being conveyed in a channel may cost the group time in completing the task (Sheer & Chen, 2004).

On the other hand, scholars recognise the value of social messages in task-oriented groups as members need processes to develop social relationships, positive group climate and trust among group members, all of which inspire social-emotional interactions (Kwon et al., 2014). Other needs derived from social messages include the development of trust and cohesion (Greenberg et al., 2007; Gupta & Govindarajan, 2000). An earlier study had also noted a generally better performance by groups that cultivate social relations through relational or social messages (Weisband & Atwater, 1999). Balancing of task and social messages may have additional benefits towards achieving group goals as important issues(task) must be balanced with socio-emotional talk (Beck et al., 2017).

Those studies have hence indicated an absence of consensus among the body of scholars on the communication of social and task messages in task-oriented online groups. It is unclear whether messages must be task-related, socially-related, or whether either will do (Walther et al., 2005). Both have been implicated in the literature. In response to the empirical gaps identified above, this study sets out to investigate the communication of social and task-related messages in IMs, specifically farmers' WhatsApp groups in Kenya. It also seeks to understand the perception of farmers on the type of messages that should be posted on their WhatsApp groups as well as how farmers' participation changes over time in response to the messages posted.

2.7.2 Methodological Constraints in Previous IM Studies

From a methodological point of view, there is a clarion call by scholars for future studies on IMs to be conducted through a qualitative longitudinal design (Hercheui, 2011; Malinen, 2015; Pimmer, Mhango, Mzumara, & Mbvundula, 2017; Shen & Khalifa, 2011). Although IM platforms are recent phenomena, numerous empirical studies have been conducted on this emerging field and scholars have pointed out cross-sectional studies as a limitation in the study of IMs (Hercheui, 2011; Malinen, 2015; Pimmer et al., 2017; Shen & Khalifa, 2011).

A vast majority of those studies have used qualitative methods to test hypotheses (Blabst & Diefenbach, 2017; Bouhnik, Deshen, & Gan, 2014; Grinter & Palen, 2002; Karapanos, Teixeira, & Gouveia, 2016; Khanna, Sambandam, ..., & 2015; Ngaleka, E-Learning, & 2013). Other studies have employed mixed methods (Adu-Kumi, 2016; Pimmer et al., 2017). Quantitative studies have also been done in a few studies such as (Hartati & Arisandi, 2017; Rashidi, Vaniea, & Camp, 2016). These reviewed studies have one common characteristic: they are all cross-sectional. Such studies, despite describing rich details on the nature of communication in IMs often lack in explanations of social contexts in online behaviour (Hercheui, 2011).

In the communication of social and task messages, perceptions change over time (Anandarajan et al., 2010). Since cross-sectional data measures attribute at one point in time, using a longitudinal approach will provide a clearer understanding of the perception of farmers to messages posted over time. Scholars argue that cross-sectional studies cannot examine the fluctuation of social presence and recommend a study that can show how the dimensions of task and social communication vary over time (Hercheui, 2011; Malinen, 2015; Pimmer et al., 2017; Shen & Khalifa, 2011). In

response to that need, this netnographic study will compare social and task communication in several WhatsApp groups over time. Netnography allows a longitudinal exploration of communication in IMs (Bammosy, Zhao, & Wang, 2014).

Group communication is dynamic. Tuckman, (1965) describes stages of group formation indicates that groups may experience different contents of messages at different stages. The relationship of variables of interest in studying IMs is not captured through a cross-sectional study design (Blabst & Diefenbach, 2017). Cross-sectional studies fail to capture the changes in such patterns of change.

More trustworthiness of research findings will be achieved through the exploration of long term effects of social presence to understand its effect on participation. Longitudinal studies also serve the purpose of describing the pattern of change (Menard, 2014). In the context of IMs, longitudinal studies help to explore how various dimensions and their impacts may change over time (Shen & Khalifa, 2008). Such studies show how the effect of social presence ‘fluctuates’ at different periods of group development as well as predict the future patterns of such influence. A longitudinal study design will also identify the phases (if any) through which the effect of social presence moves over time (Dolan & Hons, 2015). Based on that methodological limitation identified in previous studies, the researcher conducted this study within a longitudinal design to describe a broader view of communication of task and social messages.

2.8 Chapter Summary

The review of related literature brought to the fore some matters of interest to communication scholars that needed to be investigated further, clarified or validated. The literature on communication of task and social messages in IMs indicates that

empirical results on this area are relatively limited, done predominantly within a Western context and offer inconsistent findings. The reviewed literature described the concept of IM and also situated the study firmly within the field of communication studies. It also described the theoretical underpinnings informing the study and pointed out the research gaps that emerge from the study. In this regard, the researcher has revealed, through literature, that it remains to be known whether IM members in task-oriented groups should post task messages only, social messages or the two combined since both have been mentioned in literature. The study also seeks to use a netnographic research method to bridge the methodological constraints mentioned in previous studies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology used in the study. The section highlights the philosophical paradigm, approach, as well as the research method. The study sample, data collection, data analysis and reporting are also presented. The chapter ends with an explanation of the unique ethical challenges that such studies face and the considerations put in place to protect participants from harm.

3.2 Philosophical Paradigm

Philosophical worldviews, also referred to as paradigms, have been defined as a basic set of beliefs that guide action (Guba, 1990). Research practices are informed by those philosophical worldviews which determine the positioning and ethos to be used, based on the direction taken by scholars who have previously examined similar phenomena. Paradigms involve a set of assumptions and all research rests on assumptions (Given, 2008).

Research is mainly based on four philosophical worldviews namely; post positivists, constructivists, transformative and pragmatist (Creswell & Clark, 2017). Studies applying post positivist paradigm are quantitative in nature while transformative worldviews are applied in studies that question taken-for-granted assumptions to empower the marginalized to have a voice and for the oppressor to develop critical consciousness for change to happen (Mertens, 2007). Creswell (2007) explains that pragmatist worldviews are concerned with investigations that ask the question ‘what works’ and seek for solutions to address the research problem. The research questions in the current study are concerned with interpretation and understanding of

participants' perceptions and how they make sense through interactions. For such studies, Stake (2010) recommends that a constructivist/interpretivist worldview that adopts qualitative approaches is best suited to draw an in-depth understanding of participants' experiences.

Based on the conclusion above, in this investigation, the interpretivist paradigm informs the choice and design of research questions and overall methodology. Crotty (1988) identifies three assumptions of the interpretivist paradigm: 1) Human beings construct meaning as they interact with the world they are studying and that meaning is not discovered but constructed; 2) researchers seek to learn the context or setting of the participants through immersing themselves into the community and gathering data personally; 3) the generation of meaning is usually social, as a result of interaction with a human community, meaning that the researcher constructs meaning inductively from the data collected from the community. As Mack (2010) explains, the word interpretivists stress on the ability of the individual to construct meaning.

The interpretivist paradigm evolved from the theoretical and philosophical positions recommended by previous scholars in this kind of research (Crotty, 1988; Given, 2008 & Mack, 2010). In line with the purpose of this study which relates to understanding the communication of farmers in their real-life online context, interpretivists seek to understand people's lived experiences within their contexts. This paradigm is therefore the most suitable in guiding this study as it helps the researcher understand the complex world of lived experiences in online communication (Bush, Singh, & Kooienga, 2019).

Scholars have explained that it is important that researchers in social sciences show awareness of their philosophical paradigms, and acknowledge their orientations towards them so that their studies can be read against a particular position (Creswell, 2009; Mason, 2002; Lichtman, 2006; Richards, 2003). Questioning a research paradigm is important as it aids the understanding and framing of social phenomena (Saunders, Lewis, & Thornhill, 2016). Paradigms provide the lenses through which a study is conducted.

Interpretivists view reality or truth as an object that can be perceived differently by different researchers. They extend the interpretivist view that based on subjective experience, individuals construct their own realities and beliefs (Lietz, Langer, & Furman, 2006). The aim of the interpretivist is to understand the meaning humans give to their experience (Given, 2008).

This study emerged from the researcher's experiences in the field as an active participant in the groups under study. Such studies describing a researcher's experiences in their local contexts are known as naturalistic studies (Given, 2008). A naturalistic or interpretive inquiry is studying people in everyday circumstances by ordinary means (Beuving & Vries, 2014). Naturalistic philosophy views the world as socially constructed in contrast to being objectively determined (Connell & Lowe, 1997) and seeks to study social life as experienced by participants of a group under the ordinary, everyday circumstance. This form of inquiry sees humans as inquisitive beings who survey the world to understand why people do what they do (Beuving & Vries, 2014). Naturalistic philosophy relates to the interpretivist paradigm.

Besides the philosophical paradigm, as advised by Given (2008), Grix (2004) and Mack (2010), researchers must commit to an ontological and epistemological position as they engage in any scientific investigation. Crotty (1988) defines epistemology as the theory of knowledge embedded in the theoretical perspective and thereby in the methodology while ontology is defined by Mack (2010) as one's view of reality and being. Those scholars explain that ontology and epistemology determine how a researcher views the world and constructs reality. Ontologically, Given (2008) notes that qualitative researchers emphasize relativism and socially constructed reality. In this investigation, the goal was to understand the reality of communication of social and task-oriented communication by members of farmers' WhatsApp groups. Hence an ontological position that leads the researcher to constructing multiple realities from interacting with many group members sufficed. This position is provided by the relativists.

Therefore, this investigation relied on a relativist ontological assumption and an interpretivist paradigm. The researcher took the view that different WhatsApp group members view communication of social and task messages differently. The same applies to the collective view of different group members. By interviewing individual group members and participating in their interactions as the researcher observed how they interact, an in-depth understanding of the communication of social and task-oriented messages on their platforms was gained.

3.3 Research Approach

The researcher employed the use of a qualitative approach to seek answers to the research questions. To understand the interplay between social and task-oriented messages in farmer's WhatsApp groups, the study required to use an approach that

would help obtain an in-depth interpretation of the phenomena. Since studying conversations on a WhatsApp group requires one to participate and observe the interactions, an approach where the researcher is the main data collection instrument is the most suitable. The researcher needed an in-depth understanding of communication on farmers' WhatsApp groups and the qualitative approach would be the most suitable to do this since the main strength of qualitative research is its potential to explore a topic in-depth (Carlsen & Glenton, 2011).

A qualitative study is best suited in this study as it provides a basis for making comparisons between task and social messages in WhatsApp groups. Qualitative researchers are often interested in examining differences, similarities, and associations among a variety of objects such as statements, individual meanings, and political configurations (Given, 2008). (Kozinets, 2010) explains that qualitative approach is also particularly beneficial for exposing the rich symbolic world that underlies needs, desires, meanings and choice. The main strength of this approach in this study is that it aims at understanding and interpreting human experience and uncovers meaning as it makes comparisons. Qualitative research aims to describe, interpret and explain reality through the use of words, as opposed to quantitative methods that use numbers (Beuving & Vries, 2014).

The choice of a qualitative approach is informed by the philosophical paradigm guiding this study as well as the nature of research questions. Since a qualitative approach is naturalistic, it requires a commitment to 'think with data' as opposed to 'thinking about data' (Wuyts, 1993). The paradigm also requires a researcher to collect data in the natural settings where participants experience the issue or problem under study (Creswell, 2013). In this study, the researcher attempted to understand

phenomena regarding the meanings members of farmers' WhatsApp groups bring to social and task-oriented messages posted on their groups.

A qualitative approach provides the researcher with a holistic way of looking at interactions within a farmers' WhatsApp group through participant observation and direct interaction with the group members. A qualitative approach helped dig deep into data and make sense of them as the researcher sought to answer the research questions. Qualitative methods allow the researcher to examine data and at the same time consider ways he or she might reach out to individuals or groups to learn more about their lived experiences (Salmons, 2016).

3.4 Research Design

The researcher used a netnographic strategy of inquiry in this study. Based on the nature of the research questions in the current study, netnography was the most suitable method to rigorously collect and analyse interaction in instant messaging groups. Understanding the communication of task and social messages on WhatsApp groups over a period of time required a research method that would enable the researcher to conduct an online ethnography. This method brought to this study a clear set of steps and procedures that were followed in the study.

3.4.1 The concept of Netnography as a Method in Communication Studies

Netnography was originally used in marketing and consumer studies but has now gained prominence in scholarly investigations in the field of communication studies (Kozinets, 2010). Netnography has been used in investigating the practice of communication in a growing number of studies. These include studies on family communication pattern on kin-keeper (Apriliani & Irwansyah, 2017); observing and interacting with celebrity in the digital world (Logan, 2015); understanding

communication among parents and teachers (Mayangsari & Aprianti, 2017) and rhetorical sensitivity on IM communication (Saudiah & Salamah, 2017) among others. This is testament to the fact that netnography is mainly a method for the study of internet-mediated human communication and it has gained popularity as an approach for understanding such interaction. Netnography involves the application of ethnographic methods to advance insider knowledge about an online community, and the use of the information obtained to answer research questions (Alang & Fomotar, 2015).

The term netnography was coined by Kozinets (1998) from the words ‘internet’ and ‘ethnography’. Netnographic research design emanates from ethnography, which is an inquiry guided by the notion that a group of people interacting together for a while will evolve a culture (Patton, 2002). Kozinets (2015) defines netnography as a specific set of research practices related to data collection, analysis, ethics and data presentation. He explains that a significant amount of the qualitative data collected and participant-observational research conducted originates in, and manifests through the data shared freely on the internet, including mobile applications. Netnography is naturalistic in orientation, allowing researchers to provide a window to naturally occurring phenomena (Silverman & Sommer, 2019).

Qualitative studies on online-based platforms have been an area of interest to scholars since the advent of the internet and different terminology has been used to describe them. These terminology include; cyber ethnography (Ward, 1999); virtual ethnography (Hine, 2000); connective ethnography (Dirksen, Huizing, & Smit, 2010); computer-assisted webnography (Horster & Gottschalk, 2012); ethnography of the internet (Hine, 2015); digital ethnography (Pink et al., 2016); online ethnography

(Markham, 2005); digital anthropology (Horst & Miller, 2013) and netnography (Kozinets, 1998; 2002; 2010; 2015). There lacks agreement among the body of scholars in this area on whether these terms refer to the same concept but some researchers such as Grincheva (2014) have explained that these terms are synonymous while others such as Lugosi, Janta, & Watson (2012) draw a distinction and introduce the term Investigative Research on the Internet (IRI). In the face of absence of a finer distinction between the terms, it is worth noting that all these scholars reveal and are interested in how human relations, work relations and power structures are changing within the context of online communication (Kozinets, 2010). The researcher chose to use netnography as opposed to those other methods as it provides a set of unique processes that are suitable for this study.

One of the key attributes of netnography is that it is a fast and relevant method for obtaining unbiased information from online communities (Kozinets, 2010). Other benefits of this method include being unobtrusive (Pollok & Piller, 2014) as well as attributes of anonymity, co-creation, rich communication and emergent data (Costello, McDermott, & Wallace, 2017). In comparison with other qualitative methods, netnography is distinctive in its flexibility in telling the story, understanding complex social phenomena and assisting the researcher in developing themes from the group members' point of view (Kozinets, 2002; Rageh, Melewar, & Woodside, 2013; Thanh & Kirova, 2018). Due to these benefits, netnography has become a popular method for studying interaction within IM groups in recent times as evidenced through various recent studies (Apriliani & Irwansyah, 2017; Azmi et al., 2017; Nedungadi et al., 2018; Saudiah & Salamah, 2017; Thanh & Kirova, 2018).

Netnography sits within a broader methodological context of online/virtual ethnography (Bengry-Howell, Wiles, Nind, & Crow, 2011). On one hand, it is related and shares many characteristics with ‘traditional’ ethnography such as the inductive and iterative aspects (Kozinets, Dolbec, & Earley, 2014). It entails studying people in their natural online environments with the researcher immersed within the community and is concerned with communication and connection that people form online with one another. Kozinets (1998) emphasizes that both its field-work and textual account should be methodologically informed by the traditions and techniques of cultural anthropology which extends to traditional ethnography.

Nevertheless, netnography differs from traditional ethnography in several respects. Unlike ethnography, netnography is organised around a set of steps to be taken while undertaking research. It insists and provides a framework of ethical conduct that a scholar should stick to, and it is less intrusive (Kozinets, Dolbec, & Earley, 2014). It also differs in its focus on specific approaches and processes within online involvement with a clear distinction between active participant observation and non-observation (Kozinets, 2015; Kozinets et al., 2013). Netnography adopts conventional ethnographic practice such as participant observation and views the web as the field-site that is social-cultural, experiential, and mobile (Silverman & Sommer, 2019). Compared to ethnography, netnography is also less time consuming, potentially less obtrusive, and less costly (Bratucu, Gheorghe, Radu, & Purcarea, 2014). Traditional ethnography also requires scholars to immerse themselves into a group and carry out a lengthy observational process while netnographers recognize that online interactions leave a permanent trace, hence researchers can study archived information (Kozinets, 2015). The use of archived data enables a longitudinal study of events (Emma & Bryman, 2018).

Although various past studies have used netnography as a methodology in different ways, Kozinets (2015) insists on the need for human presence, participative and online personal connections in netnographic inquiry. Other scholars, (Cherif & Miled, 2013; Healy, 2012), have underscored the necessity of the netnographic researcher being immersed in an online community under study for a long period to understand the culture of the group. This implies that there is need for netnographers to be active participants within the online groups they study and act as co-creators of content over a period of time. The researcher conducted this study with those facts in mind.

From its original definition by Kozinets (2010), as a written account resulting from fieldwork studying the cultures and communities that emerge from online, computer-mediated, or internet-based communications, it is evident that the methodology was developed to study interactions. Similarly, its data collection involves direct copying of the computer-mediated communications of online community members and observations of the community and its members, interactions and meanings (Bowler, 2010). This implies that it relies on data generated through interaction and hence it is a method in communication studies. This is further supported by (Pollok & Piller, 2014) who assert that netnography involves monitoring of the communication and interaction of community members to gain practical insights into their usage behaviour. The focal point of netnography is investigation of human interaction and that places it as a methodology used in the field of communication studies.

Hoehle, Eusebio, and Sid (2012) observe that previous studies on online group members perceptions have used surveys, case studies and interviews and propose that researchers in this area can learn more about communication by making use of methodological approaches that have not been utilised. To respond to this and similar

calls, a netnography was conducted in this investigation. As recommended by Kozinets (2002), this study followed the following steps in netnography.



Figure 1: Methodological Steps Employed in Netnography (Bratucu et al, 2014)

The researcher started the netnography at the *entrée* stage. *Entrée* involved identification of groups or communities to study as well as familiarizing oneself with their interaction norms and patterns as a participant. Since data collection in this study entailed participation through close interaction with group members as the researcher observed their interaction, the entry into this research activity would either enhance or inhibit that goal. As advised by Kozinets (2010), *entrée* can either make or break interactions; a researcher can be rejected by the group if he or she does not understand the traditions or customs of the community under investigation. It was therefore imperative, as a first step to ease entry into the groups studied by forming a relationship with the members as well as learning the dos and don'ts of the group. Scholars suggest 'lurking' as a suitable entry point (Beaulieu, 2004; Given, 2008; Kozinets, 2010; Schaap, 2002; Shoham, 2004). At the *entrée* stage, the researcher

gathered relevant information about the culture and posting behaviour of the groups under focus through lurking.

As a member of the groups the researcher was studying, gaining access to the groups was not a challenge. As a practicing farmer, the researcher was already a member of the groups prior to the study. Gaining entry is easier for an existing member of a group (Croucher & Cronn-Mills, 2014). The access the researcher had gained provided what Kozinets (2002) refers to as ‘cultural entrée’. Cultural entrée’ enabled the researcher to understand the norms of communication of both social and task messages in the everyday online lives of members of farmers’ WhatsApp groups through their response to interactions. The researcher participated actively by interacting with other members of the group in the course of the study. Netnography requires participants to interact with a researcher (Beninger et al., 2014). Active participation involved posting messages, responding to comments made by others and asking questions. This made the researcher experience ‘how it feels’ to be a group member to enrich engagement with other members and learn as much as one could about the group as advised by Kozinets et al., 2014 and Walstrom, 2004.

The details of the next steps of this netnography namely data collection, data analysis, interpretation and research ethics are discussed in the next sections of this report.

3.5 Population of the Study

The population considered in this study comprised of all WhatsApp groups for farmers in Kenya. Practically, it was not possible to establish the total number of such groups in the country since such data is not available. The issue of what constitutes the population in this study was not pertinent since being a qualitative investigation;

the findings and conclusion only reflect the context within which the research was conducted and not the entire body of farmers' WhatsApp in Kenya.

3.6 Sampling

Purposive sampling was used to identify the groups to study in this investigation. The issue of sampling and selection of data to be studied requires strategic attention and forms one of the most important tasks in this qualitative study. The researcher identified the groups to be studied and analysed through observation as well as group members to be interviewed. In ethnography, the major sampling considerations are considered to be time, context and people (Hammersley 1995). In this section of the thesis, the study focuses on those three considerations.

Scholars explain that the most often used sampling procedure in qualitative studies is purposive sampling (Braun & Clarke, 2013; Given, 2008; Silverman, 2005). Purposive sampling, also called judgment sampling, involves selecting participants on the basis that they meet criteria that have been predetermined by the researcher as relevant to addressing the research questions (Given, 2008). Etikan, Musa and Alkassim (2016) explain that in purposive sampling, subjects are selected based on the purpose of the study. A sample in a qualitative study is selected based on the ability to provide information that can be used to provide answers to the research question (Mason, 2017). The choice of these groups was not ad hoc or accidental but strategic.

3.6.1 Sample Size

The researcher identified and selected five farmers' WhatsApp groups based on the relevant qualities they possessed. In that regard, farmers' groups that were suitable and relevant to the research questions that required groups with constant

communication through task and social messages were chosen. The sampling criteria, therefore, considered groups that were information-rich in the context of the study. To fit in those criteria, the groups had to have members who were involved in the frequent posting of messages and who engaged in an active flow of interaction. Kozinets (2010) describes the criteria for selecting online communities for study as being (1) focused on the research question; (2) groups should also have a substantial number of heterogeneous members and (3) groups should demonstrate interaction through detailed and descriptively rich data. To ensure that an information-rich sample that was relevant to the research questions was selected, the researcher looked for a variety of groups with vibrant activity of members posting both social and task messages every day and others with less or no social activity or messages for comparison.

The researcher also selected groups that he could gain access to. The collectives selected for the study were closed groups, meaning that only an existing member could read and send messages. Given (2008) observes that gaining access to groups of interest, establishing credibility and trust is challenging and recommends that a researcher should choose a setting of which he or she has an existing relationship through work or personal life. The researcher therefore chose groups where he was an existing member.

The question of sample size and generalizability of findings arises in qualitative studies. There are no rules on sample size in a qualitative study and researchers are guided by what they want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with the available time and resources (Patton, 2014). In qualitative research, although a small sample

may not be used to provide generalizable findings, it can provide important insight into a particular niche group. Gubrium and Holstein (2014) explain that qualitative researchers have shifted from a clearly defined, predetermined number of participants to a focus on the research process as informing the ultimate number of participants. Sample size should help a qualitative researcher understand the process but not represent a population (Mason, 2017).

Qualitative researchers are more interested in a small number of participants who represent the phenomena of interest. Although the researcher generated voluminous data from the five groups under investigation, in qualitative research, the key guiding principle through which sampling decisions are made is a focus on specific people, situations or sites because they offer a specific – ‘biased’ or ‘information-rich’ – perspective (Patton, 2002). A large and randomly selected sample is preferred in quantitative studies to arrive at a generalizable finding and conclusion. The key issue for qualitative sampling is therefore how to focus, strategically and meaningfully, rather than how to represent (Mason, 2017). In contrast, in qualitative studies, which include netnographies and ethnographies, there are no standard conventions regarding determining sample size.

Positivists are concerned about a statistically representative sample but qualitative researchers are more concerned and interested in theoretical generalizability than in sample sizes (Murray, 2014). In a naturalistic study such as this one, the researcher did not attempt to form generalisations that will hold in all contexts but to create a working hypothesis that may be transferred from one context to another hence there is no need of defined sample size (Guba, 1981). Similarly, as opposed to quantitative researchers, Kozinets (2010) mentions that ethnographers and netnographers, among

other qualitative researchers lack a clear and measurable standard of determining sample size.

Based on the nature of the research questions, the researcher planned to interview a total of twenty-five participants. Participants with the relevant study characteristic were recruited. These characteristics included selecting participants who comprised of meaningful categories of two people who post and advocate for posting of task messages only through their posts on WhatsApp. The researcher also selected other WhatsApp group members who posted and advocated for the posting of social messages within the groups and others who posted both task and social messages to develop different perspectives of the phenomenon under investigation. Those relevant categories of interviewees that the researcher chose constituted a range of participants to allow for generation of data to explore processes, similarities and differences. The rationale for selecting specific participants must reflect the purpose or goals of the study, allowing the investigator to find representative individuals who have the characteristics being considered by the investigated (Arcury & Quandt, 1999). The researcher selected the participants purposively to generate rich knowledge about the research questions.

3.7 Data Collection Instruments

Having gained access to the groups to be investigated, the researcher used observation of archived messages, participant observation and offline semi-structured interviews to gather data that was used to answer research questions of this study. The researcher undertook the data-collection stage of the research with careful adherence to the rigorous steps used in other qualitative studies. Three types of data were available to the researcher as a netnographer namely: archived data, elicited data and field note

data (Kozinets, Dolbec, & Earley, 2014). The use of the three data generation methods was consistent with advice from scholars who have called for a multimethod approach to the study of online communities (Emma & Bryman, 2018; Kozinets, 2015). As a method, netnography involves observation, participant observation and interviews to gain insider knowledge about an online community (Alang & Fomotar, 2015).

As a qualitative study, the researcher was the most central instrument of data collection. Marvasti (2014) advises that in a netnography, data collection is partly similar to other qualitative studies in the sense that the research process is a cyclical one and also part of the research design. Data collection in this study was a cyclic and reflexive task that informed analysis and further data collection.

3.7.1 Participant Observation

To gather archived data, the researcher observed the day to day communication of posted messages as they had unfolded on the WhatsApp group platform prior to engaging in participant observation. This helped in making a deep understanding of the task and social messages exchanged in the groups. Observation of posted and archived messages helped the researcher understand communication of task and social message in the natural setting in which it occurred. Observation helped in gaining a cultural entry that revealed what the group members were doing before the researcher started the formal process of gathering data through participant-observation. Archival data comprises anything the researcher can gather from the Web that is not a product of his or her involvement to create or prompt the creation of data (Kozinets et al., 2014). The archived data generated through observation included text, graphical, visual, audio, and audio-visual files as well as screen captures. The researcher used

that data to generate reflective field notes for the purpose of reflection and analysis. As Kozinets (2002) advises, unlike in traditional ethnography where a researcher observes people, in a netnography, a researcher observes their communicative acts.

The researcher uncovered and captured relevant data using a screenshot feature provided by Microsoft Windows and also through handwritten field notes. The researcher also constantly made field notes while participating and observing group members' responses as they unfolded. Those field notes were used when drafting the report on the findings of the study. As an observer, the researcher learnt about the groups by initially reading posted text and watching audio materials as a lurker. The researcher observed the online communicative acts such as hostile reactions to either task or social messages, insults in response to certain posts, profanities, appreciation or celebratory messages.

Through observation, the researcher paid keen attention to the routine details of messages posted and how group members responded to them. He observed what they said and recorded what was revealed through the feedback they received from other group members. From the trail of messages that group members had left on the platform, the researcher identified and recorded the relevant issues related to the research questions and the emerging trends and patterns of messages that were posted.

To gather more field note data, the researcher performed data collection as a co-producer through participant observation. In this study, the focus was on observing and capturing the communication activities, specifically on posting of social and task messages, the rules on the content of messages to be posted, how and whether those rules are enforced, as well as responses and reaction by group messages to those task

and social messages posted. The researcher also observed how the pattern of messages communication of those messages changed over time.

Participant observation is a method of generating data which entails the researcher immersing herself or himself in a research 'setting' so that they can experience and observe at first hand a range of dimensions in and of that setting (Mason, 2017). Participative action is at the core of a netnography and that is one distinguishing factor between it and gathering and coding of online qualitative data (Kozinets, 2010b). The researcher read messages posted on the farmers' WhatsApp groups extensively, capturing the interaction between group members. As a participant-observer and a member of those groups, he also posted messages to add value to the discussions in the group for other members to benefit. Participant observation was instrumental in this study since it is best suited in studies aiming to understand phenomena from the perspective of those experiencing it (Given, 2008).

Participant observation brought the benefit of allowing the researcher to get closer to a naturalistic environment, since the researcher was observing interactions that were going on in a real natural setting within the WhatsApp groups. Such a setting provides insight into naturally occurring behaviour (Croucher & Cronn-Mills, 2014; Emma & Bryman, 2018). In this investigation, participant observation involved reading and following message threads that had been posted in each of the groups for a period of one year. These messages included the researcher's contribution to debates as a participant in those groups. I observed the online conversations as they unfolded to gain a deeper understanding of the task and social messages posted on the WhatsApp groups. I read text messages, viewed images and watched video clips posted on the platforms for a period of one year to get an in-depth understanding of the

communication of social and task messages. As that was done, the researcher recorded field notes that provided essential details that were useful when analysing data. Some useful message threads were extracted as screen-shots and recorded on a Microsoft Word document.

Although the researcher was studying data posted over a period of one year, he took a shorter period to read data posted over that duration. Kozinets (2002, 2010) observes that unlike in traditional ethnography where a researcher must be immersed into a group for a long time for data collection, a netnography is faster as it relies on archived data. As the researcher determined the stage of group development when he would study those groups, he put into consideration previous studies by Tuckman (1965) and Tuckman and Jensen (2010) who demonstrated that groups go through five stages namely forming, storming, norming, performing and adjournment. The line that separates those stages in the context of the groups the researcher was studying was however vague. Groups develop at different rates, hence it was difficult to identify a common stage to study among the groups. To navigate that limitation, the researcher studied archived messages on the group forums since their inception and up to one year of their existence.

3.7.2 Semi-Structured Interviews

The researcher also used qualitative interviews to gather more data. As mentioned earlier, Kozinets (2010) states that in a netnography archival data, elicited data, and field note data are used. Having gained an insider perspective from participatory observation, I went further to gather elicited data from semi-structured interviews with members of the WhatsApp groups I had studied. I interviewed five members from each of the groups. Elicited data refer to content that is co-created by the

researcher and members of the online community through processes of interviewing (Kozinets et al., 2014). Clearly worded questions guided the interview process. The data I gathered through interviews revealed important information about the group members' situations and their perspectives enabled the researcher to go beyond observed behaviour to explore their feelings and thoughts. Kvale (1996) advises that qualitative interviewing attempts to understand the world from the subjects' point of view to unfold people's lived experiences and uncover their worlds.

Various reasons cited by scholars make interviewing suitable for this study. (Braun & Clarke, 2013) observe that interviews are the most familiar data collection tools for qualitative researchers. Given (2008) advises that semi-structured interviews are the most valuable means of data generation when the qualitative researcher comprehends the fundamentals of a community from the insider's perspective. Hine (2015) and Garcia et al. (2010) have emphasized on the need for online ethnographers to take into account offline worlds, explaining that even the most committed internet user has a life beyond the computer. These sentiments are echoed by Ritchie, Lewis, Nicholls, and Ormston (2013) who stress the importance of qualitative researchers talking to people to grasp their point of view. In addition to that, Kozinets (2010b) advises that in-depth interviews allow netnographic researchers to broaden their understanding of what they observe online. Studies that use only one method are more vulnerable to errors linked to that particular method (Patton, 2014).

I conducted interviews with individual group members in order to add insights into communication of task and social messages within the groups and seek the perceptions of the members on those messages. Interviews also helped in exploring the perceptions of the group members or their preference between social and task

messages. To conduct the interviews, I arranged and agreed on a meeting date, time and location with the interviewees for a face to face interview. I opted for face to face interviews instead of telephone interviews. As opposed to telephone interviews, a face to face session provides a physical encounter which is an essential context for an interview which is flexible, interactive and generative, and in which meaning and language are explored in-depth (Ritchie et al., 2013).

The interviews helped the researcher understand the experiences of group members and administrators in moderating the posting behaviour of the members as well as find out the reasons informing such actions which could not be deduced from merely observing their actions and conversations. Listening to their ideas helped the researcher understand their perceptions about the role of rules on posting in ensuring that they participated in groups that are both successful and sustainable. Kozinets et al., (2014) appraise the use of interviews in a netnography and observe that ethnographers who use online interviews gain access to a vast variety of virtual voices. They advocate for the use of video chat which provides a significant advantage over the well-established technique of telephone interviewing. In this study, the researcher opted for an offline face-to-face interview due to the value and far greater insight it provides as asserted by Bruckman (2006) and Markham (1998) who explain that online interviews are of little value and that they limit the information that can be gained through non-verbal cues.

Given (2008) explains that most ethnographers use semi-structured interviews to collect further data. Such interviews provide a conversational data generating style whose aim is to encourage respondents to speak personally and at length about their lived experiences and perceptions (Silverman, 2017). This argument is reiterated by

Kozinets (2010) who observes that in-depth interviews broaden the understanding of what a researcher has observed online. The semi-structured questions encourage the interviewee to give more elaborate, detailed or exemplified information where necessary (Hammersley, 2013). The key strength of semi-structured interviews is their ability to combine structure with flexibility (Ritchie et al., 2013). The interactional nature of the interviewing process also allows both the interviewer and interview to co-create and generate new knowledge.

I prepared and used an interview guide with a list of open-ended questions on specific topics related to the interviewees' perception of both social and task messages. Once I had made all the arrangements for the interview, I telephoned the target interviewees and requested them for an appointment for an interview. During the interviews, the researcher informed the interviewees about the intention to record the session on a tape-recorder and sought their consent. Each interviewee was observed as he or she responded to questions and the researcher took notes about their responses.

The in-depth interview questions with the participants helped the researcher understand how the group members view the posting of social and task messages. Specifically, the interview questions sought information such as the opinion of the respondent on posting of social messages on their group platform, their interests in either task or social messages, whether they associated social messages with success or failure of a group, and the kind of messages they wanted to read on their groups among others. After preparing the interview guide, the questions were piloted by interviewing three participants from other groups outside the ones to be studied so that any bottleneck on the interview questions could be detected before executing the

formal data generation process. Pre-testing enabled the researcher to identify shortcomings in the interview guide and improve the questions.

During the interview, I had the flexibility to adjust the wording of questions or even change the order in which I asked them, based on the responses I got from the interviewee as well as the context, as advised by Emma & Bryman (2018). During most of the interviews, the researcher recorded the sessions on a tape-recorder and transcribed them later. In other cases, I took notes as the interviewees responded to my questions. Data collection guided and informed analysis and both activities were conducted simultaneously. The researcher interviewed active group members until the point of theoretical saturation where participants' responses were not yielding new ideas. A total of twenty five group members were interviewed.

3.8 Data Collection Procedures

Based on the research questions, the qualities which were relevant to this study included choosing those groups that exhibited extremes of varying content of messages posted, in terms of being either social or task-oriented or both social and task-oriented to enable the researcher to make strategic comparisons and develop a well-grounded argument. I therefore ensured that the groups exhibited different levels of adherence to the rule on the content that members should post. As Collingridge and Gantt (2008) advise, participant selection should have a clear rationale and fulfil a specific purpose related to the research question, which is why qualitative methods are commonly described as 'purposive'. The goal of purposive sampling is to sample groups or participants in a strategic way that those sampled are relevant to the research questions being posed (Emma & Bryman, 2018).

Besides identifying the broader samples to use for data generation, I also made certain strategic considerations in the choice of samples of data to gather within those cases. That applied to selecting the duration and messages to be studied in participant observation as well as selecting participants to be interviewed. Regarding data from farmers' groups, to capture a descriptively rich picture of the interaction, I studied messages posted in the groups in the form of archived conversation threads since their formation. Kozinets (2010) explains that just as an ethnographer will extend from a basis of participant observation and include other elements such as interviews, archival data collection and a range of other techniques, so too will it extend to a netnography.

In a previous similar netnographic study, Kulavuz-Onal and Vásquez (2013) combined archived email messages, interviews and online participant observation as their sources of data. I therefore used archived messages from previous group interactions as well as synchronous communication that took place when I commenced data collection. Most of those groups I studied had been in existence for one year by the time I started collecting data. I also participated in communication in those groups for six months as a participant-observer, observing synchronous and asynchronous posting of messages.

Regarding the time I spent doing participant observation in this investigation, I applied the use of a compressed mode of ethnography which determined the duration. Borrowing from ethnography, the duration I spent conducting participant observation required critical attention from the onset of this study. Jeffrey and Troman (2004) describe three modes that constitute the time taken in ethnographic practice namely; compressed, selective intermittent and recurrent. The scholars describe compressed

mode as a practice that involves a short period of intense ethnographic research in which researchers inhabit a research site almost permanently for anything from a few days to a month. They describe the selective intermittent mode as a longer period, from three months to two years, but with a very flexible approach to the frequency of site visits while the recurrent mode is one where temporal sampling phases formalize the research methodology. Kozinets (2010) advises against ethnographic modes that take a long duration in the field, arguing that they are time and resource-intensive and since they involve in-person participant-observation on the part of the researcher, they are unavoidably intrusive.

As I used the compressed ethnography mode, I was fully immersed in the interactions of the group members for six months, recording every significant detail on the subject of communication of task and social messages. The distinctive nature of the research site with both archived and synchronous participant observation of messages allowed the researcher to have an in-depth understanding of the phenomena under study within that duration. The attention of an ethnography should not be limited by a focus on time but on the quality of time spent in a research setting (Carroll & Mesman, 2011). The compact nature of the observed research experience of a compressed time slot provided a representation of a larger picture constructed over a longer period (Jeffrey & Troman, 2004).

Concerning the selection of participants to be interviewed, I was guided by several factors. In interviews, people form the sample or sampling category (Mason, 2017). To decide which people to interview, the researcher targeted interviewees that had been communicated with on the WhatsApp forum previously and formed a rapport. The people selected had to be willing to participate in the study. Braun and Clarke

(2013) observe, that there is nothing wrong with interviewing acquaintances. It was easier to build rapport and acceptance with such people and they were easier to access than strangers.

In addition to that, in identifying group members to be interviewed, some desired combinations of experience with the phenomenon, gained from an extended period of membership to the group were a consideration in this investigation. Mason (2017) describes the experience in terms of knowledge of the group or topic as an important consideration depending on the nature of the study. Selected participants had been members of the WhatsApp groups since their inception as they were more experienced and well-versed with their groups' communication practices. The researcher also identified respondents who had insight and understanding about the two main issues of the research topic namely task and social messages. Interviewed group members met the criteria discussed earlier and were willing to participate in the study.

3.9 Data Analysis

The researcher used thematic analysis to make sense of the data collected. Thematic analysis was the best-suited method of analysis in deriving answers to the research questions. The analysis involved a description of patterns that emerged as a response to task and social messages by group members. Scholars have singled thematic analysis as an accessible and theoretically flexible approach to analysing qualitative data which is not tied to a particular epistemological or theoretical perspective (Braun & Clarke, 2006; Maguire & Delahunt, 2017).

Thematic analysis refers to the process of identifying themes in the data which capture meaning that is relevant to the research question and making links between such themes (Willig, 2014). The aim of thematic analysis is to make sense out of a large amount of qualitative data by looking at data as a whole and identifying the emerging descriptive pattern (Silverman, 2017). In this way, thematic analysis helps the researcher identify patterns in the data (see Braun and Clarke, 2006).

As the researcher read and participated in posting messages on the groups in the *entrée* or familiarisation stage, he gained an overview of the breadth and breadth of diversity of data. That stage also involves abstraction and conceptualisation (Ritchie & Spencer, 2002). While reviewing the messages, field notes were made by recording the recurrent themes and issues observed from the groups.

Data analysis started by classifying data into thematic codes which were developed through reading and reflection. The researcher coded all themes from field notes made from the archived participant observation data as well as interview transcripts. Each code represented a theme or idea with which each part of the data was associated. The themes were made up of conceptual labels (Roulston, 2014), with sections of interaction data that conveyed an idea about the features of the task and social messages and their antecedents. The qualitative comparison was based on purposefully selected groups. This means that generalizations in qualitative comparison were of a theoretical rather than a numerical kind (Palmberger & Gingrich, 2014). As an analytical procedure qualitative comparison of themes explicitly compares each incident in the data with other incidents appearing to belong to the same category, exploring their similarities and differences (Spiggle, 1994).

Since the groups were purposively selected, with differing levels of enforcement of rules on the content posted, I compared the communication patterns in each group with other groups. As Glaser and Strauss (1967) advise, I compared data with data and code with code between the groups to find similarities and differences. I identified major themes in each group and put them into categories. I thereafter compared the categories and used the emerging patterns to report the communication of task and social messages in the groups. I read and identified patterns or trends that emerged from the communication of both social and task messages. I relied on the data arising from the communication of task and social messages to lead to titles for emerging themes and used direct quotations to exemplify the type of data classified under each theme. Given (2008) elaborates that themes express meaningful patterns or important ideas involving reduction, segmentation and categorization of data.

I constantly compared each incident in the data with incidents belonging to a similar category, isolating their similarities and differences. I also compared communication of social and task messages in the five WhatsApp groups by isolating similarities and differences in interaction patterns to identify underlying patterns across the groups. I employed the grounded theory strategy where according to Marvasti (2014), specific observations of data on WhatsApp groups led to generalised plausible relationships between the concepts of social and task messages. This method of analysing qualitative data involves information gathered being coded into emergent themes involve coding data into themes, then categories, to form conclusions (Hewitt-Taylor, 2001).

The themes from both observation data and interview transcripts were data-driven rather than predetermined. I comprehensively examined the context of communication

of task and social messages in each group. I did this until the categories were theoretically saturated. Some categories became a central part of theory or theme. I related the emerging themes to respond to the requirements of each research question. Throughout the analysis, I will constantly move back and forth, redesigning and reintegrating the thematic categories until I reached a point of saturation. Braun and Clarke (2013) further emphasize the importance of building themes through thematic analysis since they capture something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set.

In distinguishing between social and task messages, I used Rourke and Garrison (2001) model and template for the assessment of social presence. There is a debate by qualitative scholars on the suitability of using priori categories to guide a coding process (Crabtree & Miller, 1999; Creswell, 2007; Marshall & Rossman, 2006). As I used the priori indicators from this model, I was open to emerging categories of social messages. Creswell (2007) encourages qualitative researchers to be open to new additional emergent codes during analysis. The messages classified as task-oriented were those related to the practice of farming. Advertisement messages on farm inputs and products were considered as task messages since they related to the objectives the group.

3.9.1 Reporting Findings

Reporting findings and analysis went hand in hand. Being naturalistic research, I presented the results in descriptive narrative form. I used ‘thick’ descriptions which play a central role in qualitative studies, (Creswell, 2013), in order to give a clear and holistic picture of the farmers’ response in comparison of communication of social

and task messages. Findings emanated and were grounded on the emerging themes from the collected data. Similar to the practice in ethnography, netnography aims at organising the results of a participant researcher into a rigorous, meaningful and useful form of research output. In the case of this study, I produced a detailed report describing the interpretations of the findings. The thick descriptions are accompanied by direct quotations from the data collected through observation and reading messages posted on the farmers' WhatsApp groups. The quotes helped the researcher to capture the contextual richness of data and make a convincing analysis that was used to make conclusions by demonstrating the logic of the findings.

3.10 Ethical Considerations

In this study, the critical issues on ethical consideration that I considered are well-established procedures in a netnography. They are informed consent, confidentiality and anonymity. The debate on these considerations is based on whether digital spaces should be considered as private or public spaces. In the following sections, I demonstrate how I addressed each of the three concerns.

3.10.1 Informed Consent

Obtaining informed consent is the main ethical dilemma in online studies (Mkono, 2012). In the current investigation, since I collected data through interviews and participant observation of messages posted on the WhatsApp groups, I needed to obtain consent from both the interviewees and WhatsApp group members whose messages I studied. In the case of interviews, I sought consent to conduct the study from the group administrators and members that I interviewed. I asked them to read and sign a consent form before each interview session began. The consent form spelt out their rights including the right to withdraw from the interview at any stage and

that the information they provided remained confidential and would not be used for any other purpose apart from this study. I also sought and obtained written permission from Moi University and the National Commission for Science, Technology and Innovation at the research proposal phase of the study.

While collecting data from observation of messages posted on the WhatsApp groups, obtaining informed consent was impossible and I waived that requirement. This is the position and advice provided by various scholars with an interest in studying online groups and communities (Bruckman, 2006; Eysenbach & Till, 2001; Sugiura, Wiles, & Pope, 2017). This applies to studies such as this one where as the researcher, I present no risk or harm to the group members.

Generally, studies on online communication pose new challenges that compel researchers to reconsider concerns of informed consent, privacy and anonymity (Sugiura et al., 2017). In that regard, Lester, (2020) explains that there is a growing acknowledgment that digital spaces pose new, ethical challenges for ethnographers. Kozinets (2002) views adherence to research ethics as an integral part of ethnography and recommends various practices to be put in place: (1) full disclosure by the researcher about his or her presence, affiliations and intention to study the interaction of members; (2) assuring members of confidentiality and anonymity; (3) seeking feedback from members of the group under study; (4) the researcher should seek informed consent whenever he or she wants to quote a certain post directly; (5) member check, which involves asking members who were studied to comment on some of the findings of the study.

Key among the controversial issues was the difficulty of obtaining informed consent from all the group members and also the overarching question on the ethics of lurking. Also, the issue of whether the members of the group are aware of the presence of the researcher in the group arose. Netnography involves ethical concerns, especially because of the sensitivity of mediated interactions and identity of members. The online environment is an arena where new phenomena and features are constantly being introduced and it is necessary to be aware of the potential risks to the participants (de Sá, 2018).

This netnographic study of WhatsApp groups raised some unique ethical concerns that I needed to address to ensure that data collection and reporting avoided any potential harm to individuals or groups. While studying WhatsApp groups, I expected to encounter some practical difficulties and controversial ethical positions. Traditional ethical guidelines could not be applied in this context. The application of traditional ethical standards in studying online communication is contentious (Grinyer, 2007). In order to abide by the principles of informed consent, I contacted the group administrators through a letter, asking for permission to conduct the study. I sent the letter to each administrator through their individual WhatsApp addresses. I also posted a letter to each of the groups explaining to them that I would be participating in group interaction as both a member and researcher.

I explained that I would observe their patterns of communication of social and task messages and sought their consent to do so. I explained through the letter that in case a member did not want his or her messages to be included in the study, I assured them that I would refrain from making any comments based on such messages. Nevertheless, the researcher's attempt to seek consent from group members was

largely unsuccessful. Most members in all the groups did not comment or respond to the request. Sugiura et al. (2017) faced a similar challenge and explained the issue of obtaining informed consent from all group members as a challenge for researchers and suggested that it is time for scholars to rethink ethical guidelines and procedures, especially with regard to informed consent in online spaces.

Scholars have pointed out this practical challenge in obtaining informed consent while studying online groups (Sugiura et al., 2017). Recent scholars who have faced the same challenge have proceeded with their data collection without consent. They have argued that none of the data provided is truly confidential, as it has been shared with the other participants (Chen & Pearlyn, 2019) and sharing images for discussing or educational purposes on social media is legal and ethically acceptable even without consent (Bennani & Sekal, 2019). In addition to that, the Scientific Affairs' Advisory Group (SAAG) made a ruling that informed consent can be waived if the research involves minimal risk and does not negatively affect the rights and well-being of subjects, if the research could not be practicably carried out without the waiver (Kraut et al., 2004). While collecting text, audio and visual data from the groups, the complexity of seeking access from groups and the question of who should give consent in a WhatsApp group remains a thorny issue.

Lester (2020) observes that a critical ethical consideration when doing research on digital platforms is whether a researcher does or perhaps more importantly should orient to digital spaces as public or private contexts. Whether consent needs to be obtained from individual contributors or from system administrators is fraught with uncertainty and in that case, information that is treated as public data may not require obtaining informed consent (Sugiura et al., 2017). Likewise, Markham and Buchanan

(2015) advise that on digital platforms, individuals' data and messages are constant and public while personal information is globally distributed, implying that what one may consider as private is actually public data. It requires protecting these exchanges as anonymous or pseudo-anonymous, and/or requiring informed consent for their use (AoIR 2019). A similar opinion is presented by Kozinets (2015) who stated that even if the identification of individuals occurs, because the online communications media is legally viewed as a public place, this should undermine claims of invasion of privacy.

In this investigation, I was aware that not all group members whose messages I was studying were able to read the request for permission. Also, some of the members had left the groups and I was studying their messages. In such a difficult and unique circumstance presented by studying online groups, informed consent could be waived if the research involved minimal risk and did not negatively affect the rights and well-being of subjects (Eysenbach & Till, 2001; R. Kraut et al., 2004).

3.10.2 Anonymity and Privacy

WhatsApp group conversations expose vast amounts of members' details such as personal and family photographs, names and telephone numbers. To guarantee the privacy of information, I followed the ethnographic practice of pseudonymization (Kozinets, 2010) to protect the names and identity of group members. I removed personal identifiers such as names and initials from printed chat logs that I quoted or mentioned in the findings. I ensured that the final report did not include any personally identifiable information. I did not attribute the findings to any specific or identifiable member of a group to protect their privacy.

As a researcher, I guaranteed the group members whose messages I was studying of privacy and anonymity as well as their rights to withdraw from the study and have their information expunged at any point during the study. Individuals' understanding and expectation of privacy in virtual spaces which are publicly viewable such as WhatsApp groups may differ from other contexts (Smith & Dinev, 2011). That implies that there was less obligation on the part of the researcher to guarantee each individual member of privacy. I, however, ensured at all times that their identities were not revealed. Privacy in online groups may be violated if group members cannot maintain control over their personal information (Amichai-hamburger et al., 2016).

I also refrained from misrepresentation. Misrepresentation means masquerading as a legitimate group member while one is not. Since I was a participant-observer, misrepresenting myself as a genuine farmer would have been an offence and a breach of ethical conduct (Kozinets, 2002). Membership to the WhatsApp farmers groups I will be studying was restricted to farmers. I had joined the groups primarily as one and I would also post messages with a genuine interest to add value to the discussions in the group in order for other members to benefit. This ensured that I won the trust of other members of the group. I will also create trust among the group members by explaining the purpose of the study and assuring them that their identity will be anonymized throughout.

Furthermore, I approached posted photographs as published content that is protected through intellectual property rights. Published content cannot be reproduced without permission (Kozinets, Dolbec, & Earley, 2014). I did not publish any photo without written and informed consent from the original source.

3.10.3 Confidentiality

To ensure there was confidentiality while interviewing group members, I explained to them that the information they provided would be used only for the purpose of this study. I ensured that the data I collected from them would not be released for unauthorized purposes or to unauthorized people. The line between the definition of the terms privacy and confidentiality is narrow and sometimes the two words have been used interchangeably. In the context of this study, confidentiality is the controlled release of personal information under an agreement that limits the conditions under which that information may be released further (Smith & Dinev, 2011).

Ethical considerations in netnography are more complex than in quantitative studies since researchers interact with the group members more (Mertens, 2014). In the course of this study, I abided by the set procedures of protecting the informants and groups from any risk of harm. I respected the persons involved in the study and refrained from any form of deception before, during and after data collection.

3.11 Trustworthiness of the Study

Firstly, as I have already stated, I am cognisant and I have reported on this dissertation that the conclusions made from the findings of the study were specific to the group(s) studied and I would not generalize them to the entire population of farmers' WhatsApp groups. Naturalistic studies, such as this one, do not attempt to form generalisations that will hold in all times and places but to form working hypotheses that may be replicated from one study to another (Guba, 1981). Kozinets (2002) mentions that such a generalization can only be done after multiple methods for triangulation are used to provide more valid conclusions. Since the groups were

not be selected randomly, the chosen sample was not be used to make a claim about standard theoretical generalisation about all farmers' WhatsApp groups or all WhatsApp groups in Kenya and beyond. I recognize Desanctis and Poole (1994) argument that the use of technological platforms may vary across contexts.

Also, to mitigate presentation of inaccurate results, I used a different data collection method to triangulate the results. Studies that use multiple methods, in which different types of data provide cross-data validity checks (Patton, 2014). Triangulation is a commonly used procedure to enhance trustworthiness (Costello et al., 2017; Lincoln & Guba, 1985). I used methodological triangulation which involves using multiple techniques to check and guarantee the accuracy of results and provide additional data to check or enlarge interpretation of findings (Gubrium & Holstein, 2014). The researcher conducted interviews to triangulate the results of participant observation to corroborate the findings. In the interviews, the researcher targeted a number of group members from different groups and asked questions regarding their views or responses to social messages posted on their groups as well as the desired messages that should be sent on the group. I recorded and analysed the commonalities and differences between the observed data and the interview data to test consistency, increase accuracy and hence strengthen the study.

In addition to those measures, I constantly debriefed other scholars on the data collection procedures I was using, data analysis procedures and findings of the study. Lincoln and Guba (1985) advise qualitative researchers to expose themselves to people who will provide searching questions and critique the work to get ideas that will help strengthen the study. The researcher presented the proposal and sought comments from other scholars and peers. Getting a second opinion helps a researcher

work things through and the discipline of having to explain a strategy to others will help to make explicit the multitude of sometimes half-formed ideas one is operating with (Mason, 2017). The feedback from peers, who include the researcher's thesis supervisors, dissertation committee and workmates with an interest in qualitative research, helped increase the trustworthiness of this inquiry. Moreover, to mitigate personal bias, the researcher maintained a reflexive journal to guard against a possibility that personal beliefs or agenda skewed the findings or interpretations. Those personal reflections are presented later on this dissertation.

As this investigation was conducted the researcher was cognisant that a number of actions may be a potential threat to trustworthiness in a netnographic study such as this one. These include personal bias (Miles, Huberman, & Saldana, 2014) misrepresentation (Kozinets, 2002), inaccurate findings (Silverman, 2014). These multiple threats can weaken and invalidate findings or interpretations. The legitimacy and novelty of the results of this qualitative study are presented through a demonstration of how trustworthiness has been guaranteed through mitigating against those threats. In academic research, issues of quality, which is related to the generalization of results, validity and reliability do arise. Unlike quantitative research where validity must be proved, in qualitative research, the alternative term 'trustworthiness' is used to describe the equivalent of 'validity' in quantitative studies (Lietz et al., 2006; Lincoln & Guba, 1985). Trustworthiness is the quality of a study, which is determined by whether the findings and interpretations are a result of a systematic process and whether they can be trusted (Lincoln & Guba, 1985). At the centre of trustworthiness is how the consumers of research findings in the current study can have faith in the researcher's procedures, findings and interpretations. In the

course of collecting and analysing netnographic data, I will adhere to the laid down procedures and conventions in ensuring that the study is trustworthy.

Lincoln and Guba (1985) advise qualitative researchers to use two criteria for ensuring the trustworthiness of a study. The first criteria is the equivalent of internal validity in quantitative studies and it is enhanced through prolonged engagement and persistent observation, triangulation and peer debriefing, negative case analysis and referential adequacy. The second criteria is transferability which is an equivalent of external validity and is enhanced through thick descriptions where the researcher presents enough details for a reader to determine whether they apply to his or her context. The next criteria that apply to this study is confirmability, which refers to whether the results are a product of a trustworthy process of data collection and analysis. Previous researchers have emphasized data collection procedures and the interpretation of findings to establish trustworthiness (Wallendorf & Belk, 1989). In the context of this study, I demonstrated trustworthiness in those several ways I have discussed.

3.12 Chapter Summary

In this chapter, the researcher described details of the methodology used in this investigation. In summary, the study is informed by an interpretivist philosophical paradigm. In line with that paradigm, a qualitative approach was used. Netnography as a research design was employed with a purposively selected sample of five farmers' WhatsApp groups in Kenya. Data was generated through observation of archived group messages, participant observation and semi-structured interviews. The archived messages observed had been posted over six months while participant observation took a similar duration. The researcher used thematic data analysis and

planned to report data through thick descriptions. In a netnography, unique issues of ethics arise. In that regard, the researcher paid attention to the use of informed consent, anonymity and confidentiality. Finally, the researcher gave a guarantee of trustworthiness through triangulation of observed data with interviews and peer debriefing.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

In this chapter, the study focuses on an in-depth analysis of findings of the study. It is divided into sub-sections namely: background information, response rate and three thematically arranged areas: communication of social and task messages, responses to communication of social and task messages and perceptions on communication of task and social messages. Each of the last 3 sub-sections is concluded with an analysis of the findings in light of the research question. The chapter starts with a description of the groups chosen for study and the rationale behind selecting them.

4.2 Background Information

Data was gathered through participant observation and in depth interviews. The researcher purposively chose five farmers' WhatsApp groups to investigate communication of task and social messages. The names of those groups were pseudonymised using codes to conceal their identity. The groups were KD, PLC, VPE, DFK and MKY. These groups had some common and varying attributes that led the researcher to the decision to study them. Table 4.1 below provides a description of each of the groups.

Table 4.1: Summary of the Description of the Groups Investigated

Group pseudonym	Type of farming	Description of the group
KD	Dairy	Messages posted strictly task-oriented. Enforcement is done through mutual agreement between members and gatekeepers.
VPE	Poultry	Messages posted are strictly task-oriented. The gatekeepers reprimand violators of that policy.
DFK	Dairy	No adherence to the policy of posting task messages. Both social and task allowed. Social messages are more prevalent.
PLC	Poultry	Both social and task messages posted.
MKY	Mixed	Both social and task messages posted.

The groups varied in terms of enforcement and compliance to rules on posting social and task-oriented messages. Two groups were chosen based on the attribute that adherence to the rule on posting task messages was strictly enforced and two groups where the rule was rarely enforced or not enforced at all were also chosen. KD and VPE had gatekeepers who moderated the messages posted and ensured that members who posted social messages were reprimanded. VPE leadership removed any member who posted a social message(s). KD used a less punitive approach by politely asking non-compliant members to respect the posting rules. On the other hand, DFK leadership cared less about the messages posted. The group started with both social and task messages but with time, it degenerated to a large social group with little conversation on task. PLC and MKY freely accommodated both social and task messages. The two groups balanced the content posted. There was adherence to the rule on posting task messages but once in a while, members were allowed to indulge in posting social messages.

The two extremes on content posted provide a basis for comparison of communication patterns in order to answer the research questions. The researcher compared the patterns of posting messages of both social and task messages over time in those groups. Time was spent ‘hanging around’ and participating in the debates that farmers held in their forums that composed of social and task-oriented messages that the study sought to understand.

Upon reading the posts on those groups for the first time, the researcher came up with 7 categories of themes where most social and task messages that were posted could be placed or located. The themes provided the researcher with guidelines for identifying more data from other groups under study. The researcher collected data from a

number of the five groups until a discernible pattern could be identified emerging from the interactions. Analysis was done on written messages that had a coherent meaning. Data in this chapter is presented in the form of a narrative, with direct quotations in some cases to illustrate the findings. In cases where the researcher demonstrates a thread of messages posted, snapshots of messages from the WhatsApp groups have been used.

4.3 Response Rate in Interviews

The researcher conducted in-depth interviews with some members of the five farmers' WhatsApp groups. To enhance content validity in the responses received from those interviews, a large number of respondents (n=25) were interviewed until qualitative saturation was reached. The interviews, which took between forty five minutes and one hour, ensured that the researcher obtained rich and thick data to create a nuanced understanding of communication of social and task-oriented messages. Table 4.2 below summarises the response rate by interviews from each of the WhatsApp groups.

Table 4.2: Response Rate

WhatsApp group	Sample size	Response rate	Percentage response rate
KD	6	6	100%
VPE	6	4	66%
DFK	6	6	100%
PLC	6	5	83%
MKY	6	4	66%
Total	30	25	83%

From the table above, 89% of the purposively selected sample participated in the interviews. Although the literature surveyed in this study does not provide a recommended response rate for qualitative interviews, scholars (Montgomery, Cooper, & Guan, 2008; Stefanie, 2014) are in favour of a high response rate. In spite of the researcher in the current study not managing to interview all the targeted respondents, reaching a point of saturation confirmed that interviewing more people would not have yielded any new data.

4.4 Communication of Social and Task Messages

To answer this question, data was gathered through observing the conversation on the groups within the period of study. The conversations involved information sharing, questions, providing answers, suggestions, as well as opinions that motivated the specific activities of each WhatsApp group. The content scope of the first question focused on observing how members of farmers' WhatsApp groups in Kenya communicate social and task messages. Specifically, the researcher observed the following: the regulations guiding the posting of task and social messages, how and whether those rules were adhered to in different groups, as well as responses by group members to the task and social messages that were posted. The scope also involved observation of how the pattern of communication of task and social messages evolved concerning the type of messages posted on the different groups.

4.4.1 Regulations Guiding the Posting of Social and Task Messages

Firstly, in all the five groups under focus, the content of messages to be posted was regulated, ostensibly to maintain a civil environment and help the group remain focused on its main agenda. A look at the rules in those groups provided the researcher with a clear picture of how the communication of social and task messages

works. The regulations guide the task-oriented communication ostensibly to make the members remain focused on the substantive issues of the group.

Common among the regulations was a requirement that members should post task related messages only and avoid social conversations. For instance, in the VPE group, the administrator reposted the group rules every time a new member joined. The administrator of the group dedicated time to enforcing the group regulations and procedures. These rules included:

Group rules for new members.

- 1.)No discussion of any other thing except poultry.
- 2.)English is the main language.
- 3.)No posting links from other groups or forwarding articles unrelated to poultry.
- 4.)Respect to one another. No insults or abusive language.
- 5.) If you have to send photos don't jam the group with too many photos. A few photos are enough.
- 6.)Let's strive to help one another. If a member seeks help please help him/her.
- 7.)Breaking of the group's rules will warrant ejection from the group. Be alert (VPE 1)

The first rule meant that the posting of messages was moderated and censored in favour of task-oriented messages. The third rule in that group emphasized on the first one. Another common rule among these groups stipulated the content of messages that members were supposed to share. One of the groups under study stated the main rule as follows:

This is a dairy farmer's group. Membership is restricted to people practising farming within Kenya. Members are required to post only messages that relate to dairy farming. Any member who violates this rule will be removed from the group. (KD 1)

Similarly, the other groups studied had a similar requirement but put it across through different wording. At the beginning of activity in every group, the administrator reminds members to constantly to stick to the rule.

Additional rules were set and communicated as the group members continued with their interaction. For instance, in one group, there was a heated debate on whether daily newspapers would be admissible as proper content for sharing in the post. In that group, the administrator was categorical that posting newspapers would not be allowed and threatened to take action against the member who had posted it. Sanctions were also put in place for members who failed to adhere to the rules.

The issue of sharing online dairy newspapers elicited a heated exchange on the group with members disagreeing with the position of the administrator on whether such posts were admissible or not. Some members argued that in consistence with the posting rules of the group, newspapers contain information on farming and hence they should be allowed. Similarly, others opined that newspapers were not necessarily based on political matters or social matters but were a necessary tool in the hands of a farmer.

After a debate that took time to resolve, the administrator bowed to pressure and allowed such posts to be made. On days when the group member who shared newspapers delayed in posting them, members would protest the delay. That indicates that members of that farmers' WhatsApp group would seek to meet other needs above the main objectives of the groups. The disagreement between members and the administrator on this matter also indicates that the effort to muzzle some social messages may lead to conflict in the group. Despite the potential of the WhatsApp group to advance the objectives of the farmers' group, it became a source of frequent friction and aggravation for members, resulting to wastage of time in conflict resolution and exit of members from the group.

It was a common practice among the groups for new group members to be inducted by being introduced to the rules of posting such as:

Josephine welcome to the group we discuss dairy along the value chain matters only (KD 2).*

Joyce and Emma* welcome to the national dairy platform. Please stick to matters dairy only (KD 3).*

That action by the group administrator to welcome new members by stating the rule on posting indicates the value that administrators and group members placed on making members stick to the rules of the groups. Both group administrators and members expressed their interest in enforcing the rules as evidenced through the following conversations, occurring after a member posted a religious message in a poultry farmer's group. There was uproar by members with remarks such as: "Really! Is this part meant for this group? Over to admin. Let's have rules enforced".

Similarly, in the KD group, there was conflict among members when one of them sent a religious message that irritated other members. The group took time to debate the conduct of that member. The group recommended that the member be reprimanded and removed the forum. The member apologised and was allowed to remain the group. The posts made by that member made a few group members leave the forum in protest. The offending member also withdrew his remarks and deleted the post from the forum.

I wish to apologise to my Christian brothers for forwarding a message that seems to demean the Holy Bible by referring to the Bible as the black Book. I want to categorically state that it was careless, casual and insensitive of me to pass on this as a Christian and a believer of the Bible. I apologise to those who were affected and left the group because of my action and I ask for their forgiveness. I request the admin to Readmit those that left the group Because of the above posting. Sorry, let's Forgive and discuss matters dairy. On that basis, I remove the posting. (KD 4)

Encouraging members to stick to the rules was an incentive that created a warm and friendly environment in the KD group. "Tom*, the post could be helpful to our health

but on the wrong platform. Thanks” (KD 4). At one moment, when a member sent a message outside farming in the KD group, the following exchange takes place:

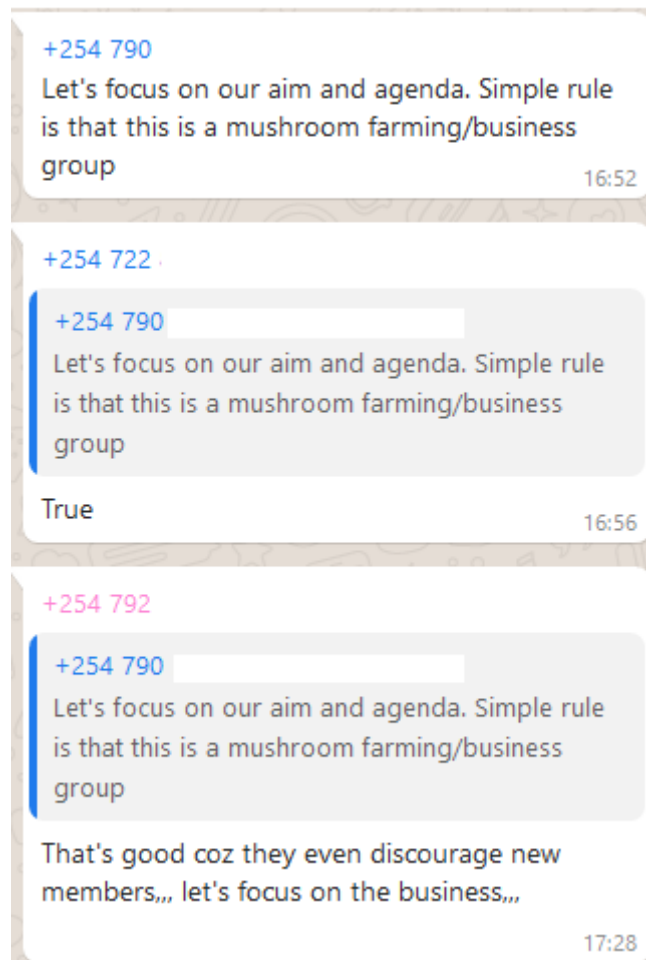
Administrator: Jack, I am sorry this is an uncalled for post on this platform*
Member: Forgive me, please. But is this the reality?
Administrator: You know well that this is a spelling mistake. You can also do the same...but how is this impacting on the dairy industry! (KD 5)

Still on the same group, a member posts images of a car he intends to sell and attracts the following response:

Administrator: Okole, what is the image of car's (sic) relevance to dairying?*
Member 1: It's meant to irritate the forum members.
Offending member: Apologies
Member 2.: At this rate admin, am just hoping no orgy images will be posted and uncalled for apologies coz the message will have passed. This habit is demeaning. (KD 5)

The same group spends a long time resolving an issue of someone who posted a photo that is remotely related to the task. To conclude a lengthy debate on that photo, a message was posted with a member wondering where the conversation in the group was headed since the posted photo was meant to create humour on the group.

In a different group (MKY), members complain after the administrator does not take action against violators of the rule on sticking to task messages. A few members left the group as a result. This led to an agitated member posting this message: “Is there an admin in this group?”(MKY 1). The administrator took action and removed several people from the group and as a result of that action, the following thread ensued:



Likewise, at the VPE group, members protested the posting of a photo whose contents are outside the scope of the objectives of the group.

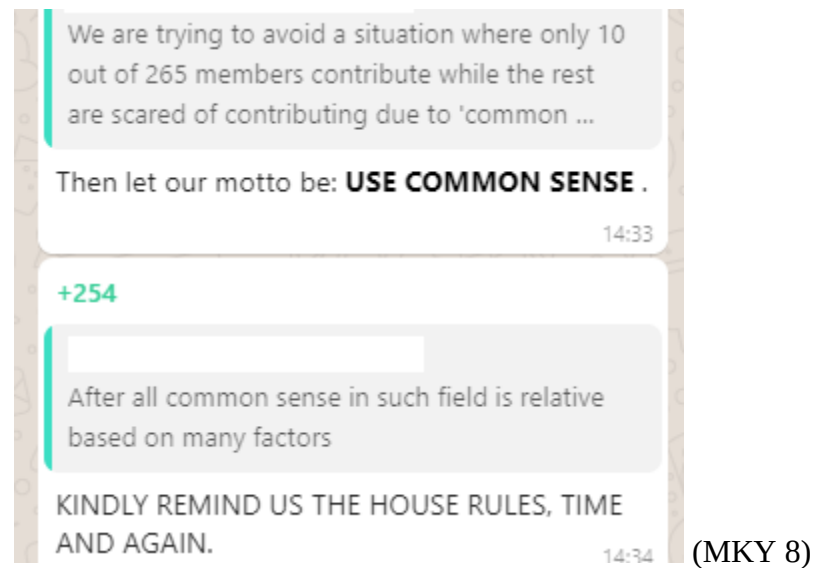
Group member: We have rules here. I am really pissed up by some posts. Why on earth can someone decide to share this photo on our group? How is that useful to a poultry farmer? Can't we have order and respect other people? I am almost fed up with this group. (VPE 5)

Similarly, in the PLC group, the administrator often reminded the members about the group rules and ensured that violators were removed. The first and main rule insists on the need for members to stick to matters related to poultry. Members were reminded that their group was only meant to deal with matters related to poultry.

At one point in the DFK group, members protest when a political message is posted. They complain about the laxity by the group administrators in reprimanding violators of the regulations, with one of them stating that he hated the group since rules were not followed and yet the administrator of the group remained lenient.

The rules were so specific to the kind of farming that the group members engaged in that an attempt to post about a different product would be met with resistance. After posting a question about mushroom farming in a poultry group, a member received the following response: "Please note that you are out of order(sic). This group deals with poultry and nothing else. Join another group."(MKY 1). The protests by group members when rules were not followed by other members suggested a collective desire by most group members to read only task-oriented messages on the forums.

In one case, a group member urges the group administrator to take action by removing defiant members from the group. This suggests that group members detest those who post social messages and are more endeared towards those who stick to the rules. In a case where there was a misunderstanding among group members, a simmering conflict was resolved when they revisited the rules on posting to ensure that they remained focused. In that scenario, a member had made a post and insisted that the group should use common sense to determine what was acceptable to others and what was not as indicated on the thread below.



From this thread, a disgruntled member explains that group discussions should be inclusive, creating an atmosphere where members can freely express their farming ideas. When the matter brews some conflict, one member, albeit sarcastically says that the motto (or rules) of the group should be changed ‘use common sense’. Another member leads to the resolution of the conflict by asking the group administrator to remind members of the posting rules quite often. Across the five groups, it is evident that during the early stages when they were formed, sticking to task messages elicited more interaction among members. In some of the groups, members were constantly reminded to follow the posting regulations. Those messages on posting rules affirm the group administrator’s commitment and desire to ensuring that members adhere to posting task related messages. Introduction and enforcement of those rules was done by both the group members and administrator, underscoring the groups’ perceived usefulness of an atmosphere that led to the realisation of their objectives.

The rules on the content of messages posted in these groups have helped in this study by providing an understanding of how social and task messages work and how

deviating from rules shapes interaction in the WhatsApp groups. The rules across the groups insisted in members posting task messages exclusively on the forums.

4.4.2 Social Messages are posted in Spite of the Regulations

Another major finding suggests that contrary to the desire and effort by group gatekeepers and members to stick to task-oriented messages, communication of social messages was unavoidable in the groups. The rules posted above have pointed out in the section above were meant to indicate the ideal expectations of the members of the groups. However, in practice, the groups demonstrated a strong tendency to defy the set rules deliberately or inadvertently. The five groups adhered to the set rules at different levels with some defying all the rules, others struck a balance between social and task communication while others managed to maintain communication of predominantly task messages. Even those that followed the rules on posting task messages only witnessed a few cases of deviation from the regulations. In one group, a member remarks:

Admin, you have become too much. Even when we are working in the shamba(farm), we don't talk about farming all the time. Let me share a little about my weekend. We cannot have work all the time. Some little play makes Jack a happy farmer. (MKY 1)

In the VPE group, the administrator was silent for a week and there was no one to curate the content. Within that period, there was an upsurge of social messages. When the administrator resumed and took action against violators of the rules on posting, participation in both social and task communication plummeted, leaving only two members discussing matters related to farming. The absence of conversation gave rise to the posting of photos and advertisement on farming implements without any debate. Any slight silence by the gatekeepers gave rise to social messages.

*Member 1: What is happening? Admin ako?(Where is the administrator)
Member 2: This group is losing(sic) direction. (VPE 5)*

Member 3: Is this a group or a market?

Member 4: We need another administrator here. Make me one and I will discipline these fellows (VPE 6)

The group continued to experience less and less interaction on task, with members opting to send social messages. Even when rules were made explicit, members would keep deviating and the administrators of the group had to keep reprimanding them and bringing the groups back on track. After posting a social message on the benefits of garlic on a dairy farmers' group, a member was reprimanded and informed that the post could be helpful on people's health but it had been posted on the wrong platform.

In a different group, regardless of the effort by the administrator to keep off non-farming related messages, a poster promoting a betting company was posted, prompting the group gatekeeper to remark:

Kindly Musa, here we are not interested with such "quick" investment and "miracle" profits. We are farmers. Farming requires patience and hard work. Kindly take your idea and explanations to another group. I believe am speaking for the majority in this forum may be except you. (MKY 3)*

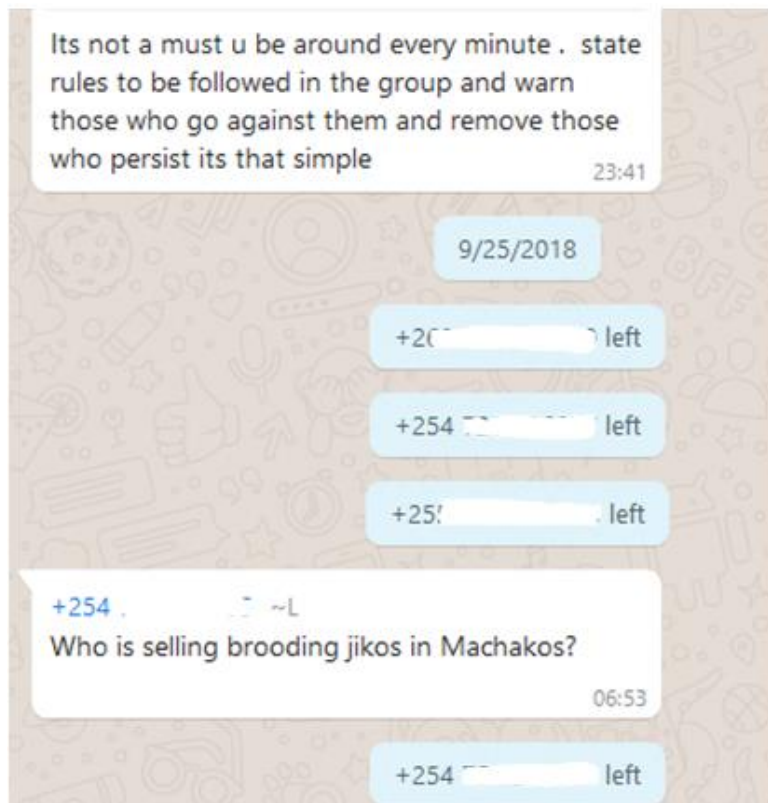
The member who posted the message above left the group in protest. In reaction to the same message, other member protested by stating that no advert that was unrelated to the task (poultry farming) should be posted.

We better remain just a few farmers in this group than have a 1000 jokers. You post your own things, I remove you. How hard is it to follow simple instructions for some people? I will chuck you out of the group until we have people with good manners. (VPE 8)

The episode above made the group administrator tighten the rules and ensure that anyone posting any form of social message was removed from the group. Members of this group were agitated whenever another member sent a social message. After a long lull in debating, one member sent a social message, ostensibly to reignite the

conversations but was met with the following warning by the unrelenting administrator: “Out of order. Strictly poultry.”(VPE 19).

The screenshot below captures the results of this disagreement on posting of social messages:



(VPE 11)

The task-related question on the subject of brooding ‘jikos’ above remained unanswered, probably out of the other group member’s pre-occupation with resolving the issue of social messages. Similarly, in the PLC group, the strong urge to post social messages continues to put the group administrator and members on a collision path. In such cases, members post social messages but rationalize by showing how such messages are still relevant to farming.

Member: I am so so excited by the response of the opposition to China loans. They are saying that the problem isn’t borrowing but that such money has ended up in the pockets of a few greedy Kenyans

Administrator: Shani, I am warning you to stop this. Keep your political views to yourself.*

Member: Admin, with all respect, allow people to breathe. What is wrong with someone saying that. This is directly related to farming since we are broke coz of this senseless borrowing. This is related to farming. (PLC 8)

That statement underscores the struggle that group members go through in a bid to share their non-task-oriented ideas in such a controlled communication environment. It is evident that it was difficult and almost impossible to ‘switch off’ social messages.

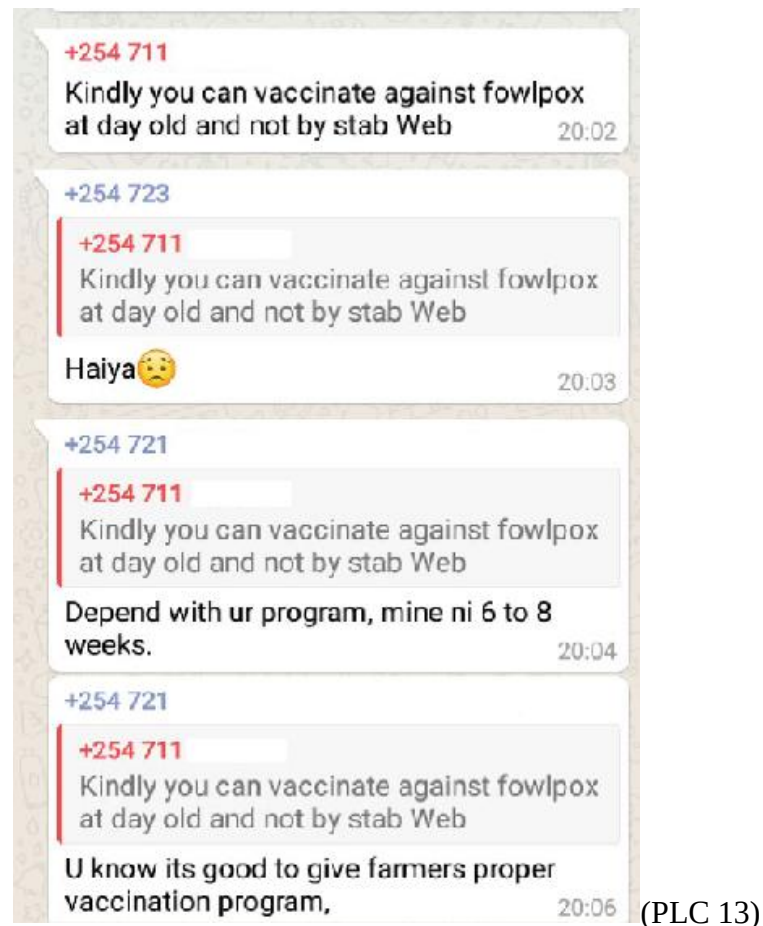
4.4.3 Responses of Group Members to Posted Task and Social Messages

Thirdly, the group messages that the researcher observed and participated in indicated varying responses by members in relation to task and social messages. Regarding task messages, responses by group members were mostly related to decision making and providing feedback on either a question that had been raised or giving a counter opinion on a message that had been posted. Task messages also involved expressions of success stories and frustrations arising from their farming-related experiences. Task messages were seen as central to realising the objectives of the group. the exchange below exemplifies task-oriented communication.

Member 1:Where can I buy lime? My soil was tested and I was told it is acidic.

Member 2: Depending on where you live, you can buy it from Athi River mining. They sell a 50kg bag at 350 bob. (MKY 6)

The above exchange indicates the direct and relevant responses that members gave and received when discussing task messages. Task messages were pertinent to all group members since they formed the core reason for most members to join and remain in the groups. The thread below shows how members responded to task messages in a different group.



The responses above suggest that task messages received relevant task-related responses from the members. This indicates that the members responding to such messages were interested in solving problems related to their trade. Groups where task messages were dominant experienced no problems in determining what was admissible to be posted since task messages were acceptable to all members across the groups.

Responses to social messages varied depending on the type or content of the message posted. Social messages evoked different reactions depending on their content and the group the researcher was observing. In some cases such as in the excerpt below, the group administrator responded critically against this social post.

Pliz be informed this is a wrong forum to post such information. Keep your political stands to yourself. This is a POULTRY LEARNING FORUM! (PLC 9)

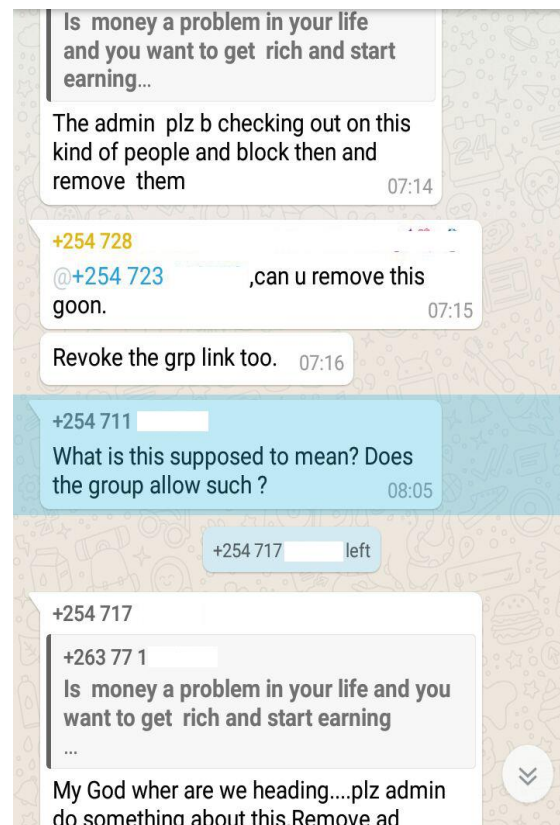
In the KD group, a member posted a religious message and received a backlash from group members that later degenerated to a verbal altercation.



KD 13

In MKY group, a member who intends to send a social message pleads with the administrator before-hand to be allowed to do so, since she is afraid of the resentful response of the administrator towards such messages. In the same group, a member posts a social message with animations wishing members a happy new year and receives the following response expressing disapproval from the group administrator. At a different moment in the same group, a member posts a message to alert fellow members of an on-going con trick that has made unsuspecting people lose money. The message also receives a resentful response from the administrator. This is a demonstration of the willingness of members to stick to the task and shun social messages.

Still in MKY group, members are irritated by social posts that introduced them to alternative ways of making money besides mushroom farming as shown on the thread below.



(MKY 9)

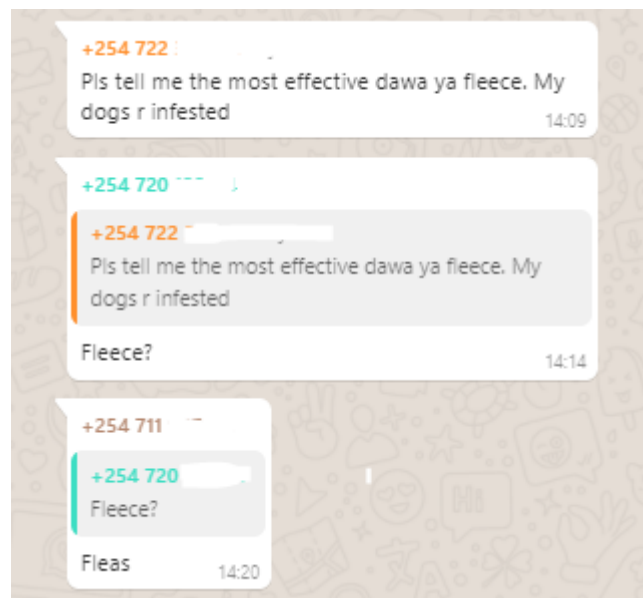
In conclusion, from the reaction of members to both task and social messages, it is clear that task messages elicit overt feedback. Group members provide the expected and relevant feedback to such messages. Task messages go unchallenged by members. In the case of social messages, the response from group members was unpredictable and often time associated with conflict between individuals and group members. Social messages are largely disapproved of and detested by the administrators and members of the groups.

4.4.4 Certain Types of Social Messages are Acceptable across the Groups

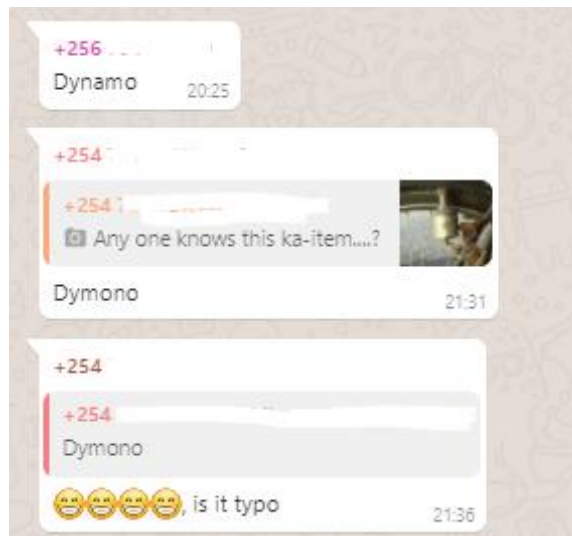
In addition to those findings, the response of group members in the above section of this report, social messages are detested and posting them is challenged. Data suggests that some types of social messages are perceived by some members as useful to the group. Although posting social messages attracted the wrath of administrators and some members of the groups, some social messages elicited favourable feedback and

generated a warm and friendly environment for communication. The patterns of communication observed suggests that not all social messages elicited an unfavourable response from group members.

Firstly, the researcher found humour to be a staple in the group communication. Humour related to task was applauded and elicited interest and interaction from members. For instance, in the PLC group, the following message elicited interest from group members.



The group members were excited by the misspelling of the word ‘fleas’. Although humour from that expression was not deliberate, it elicited positive comments and stirred the group into action as they jokingly interrogated whether the member who posted was interested in ‘fleece’ or ‘fleas’. A similar joke was celebrated in two other groups.



In addition to humour, inspirational messages related to the task or successes in farming were also accommodated. For instance, in the case mentioned earlier about posting of daily newspapers for members to read, the following remark, which was supported by a number of members who indicated that a newspaper was an added advantage to the group. This implies that group members are interested in social information that is beneficial to them. To justify their desire to share newspapers, they argue that they contain information that could also be beneficial to farming. The following statements demonstrate their response.

It's just ridiculous that a newspaper can elicit a reaction as this. That's weird and unfortunate. Sending a newspaper has no harm whatsoever. (PLC 14)

Information is power! Irrespective of the headlines on newspapers, deep inside lies so much information one can learn from. (PLC 15)

Information is power! Irrespective of the headlines on newspapers, deep inside lies so much information one can learn from. (PLC 16)

This message is followed by a thread of posts celebrating and acknowledging the pleasure of reading it. It is worth noting that the message, although humorous, relates to farming and hence group members did not object to posting it in their forum.

Furthermore, social messages are acceptable to group members and administrators if the member posting issues a disclaimer. In PLC group, a member posted a poster, sensitizing members about a medical camp but accompanied it with a disclaimer, followed by a response from the gatekeeper that gave the member a green light to post whatever information he wanted to post. Moreover, social messages on security warnings, accidents and avoiding risks are acceptable within the groups. For instance, when Kenya was attacked by terrorists at Dusit II hotel, the groups under study took time to warn members about their safety and this was acceptable across the groups. More warnings about risks of flooding and other natural calamities were accepted by members and tolerated.

In addition to that, social messages that support the welfare of individual group members were acceptable across the groups. Members appreciated social-emotional messages of goodwill directed at those who had been appointed to certain positions of leadership in their careers. In the KD group, for instance, a member who was appointed to a position in government received a barrage of congratulatory messages. These messages lit up interaction in the group. Members of that group also teamed up to mourn the death of one of them. They go to an extent of spending days paying tribute to the deceased and even organised a fundraiser to support his family. Such messages do not face or raise any criticism from the members and group gatekeepers. This is an indicator of the need for the welfare of members to be addressed through social messages in such groups. Also, motivational and inspiring messages were accepted across the groups. A motivational message such as the one below is tolerated in the strict KD group as well as others.

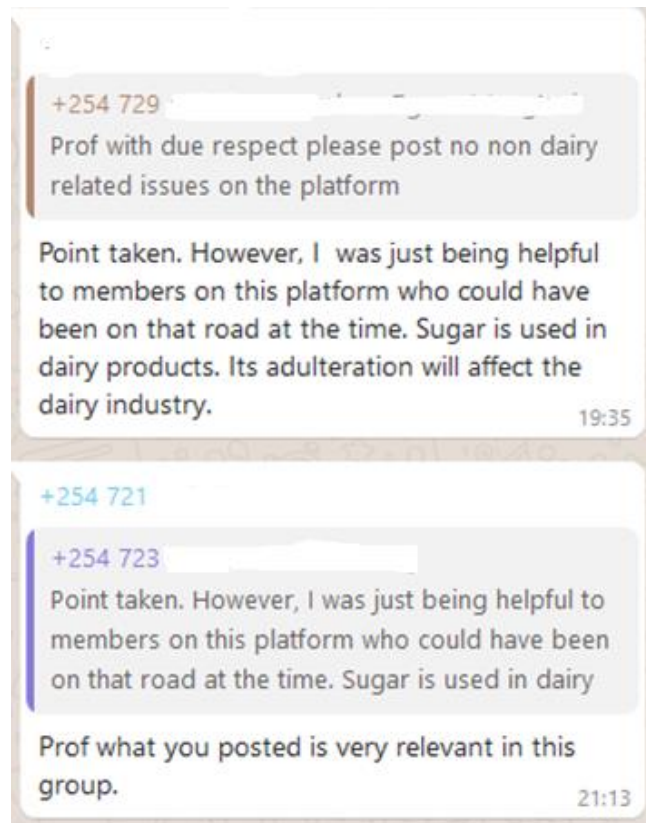
In numerous instances, group members expressed sympathy with certain members who had been bereaved. They offered social support through messages of hope and encouragement and even went ahead to organise fundraising activities in support of such a cause. Seasonal good-will messages that were posted during holidays and national days were also accommodated by group members. Group members across the five groups could not resist from posting social messages completely. When put to task to withdraw the messages and apologise, they would craft ways of relating the messages to farming in order to make them relevant to the group. The following cases demonstrate that trend:

KD 17: (after posting a photo on corruption) Bwana Lazsen, plz note that this post is not for this platform.*

KD 18: (response) Corruption or ethical practice in the dairy industry can be enforced by the administration or leadership. Just the way the admin does here. You warn and punish repeated malpractice. So the buck stops with the executive. If our admin is weak or lax, we shall post every manner of material here.

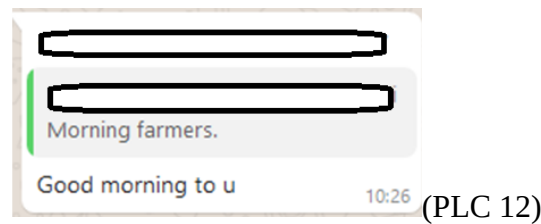
KD 19: Sorry for this post but it could probably be relevant to dairy in one way or the other.

KD 19 is posted after a political message that is remotely related to farming. Another religious message receives the remark that that is a wrong forum to post such a message. To further make the gatekeepers allow social messages, a member posted a message on a lorry ferrying sugar that had overturned on a certain road and the following exchange ensued:



Although KD group as pointed out earlier has strictly restricted posting of social messages, group members tactfully justify almost any other message to make it relevant to the task. After a duration of time, social messages started creeping in slowly, with the group sometimes spending more time on social activity than on task. This points at the inevitability of social messages in the groups. As members engage more and more on social messages, communication on task is put on the back burner.

Greetings, appreciation and other goodwill messages were allowed across the groups. In the morning, numerous members would send greetings and they would receive favourable responses. Such messages improved relations and enthused members to post more messages on the group platforms while ultimately increased the levels of participation.



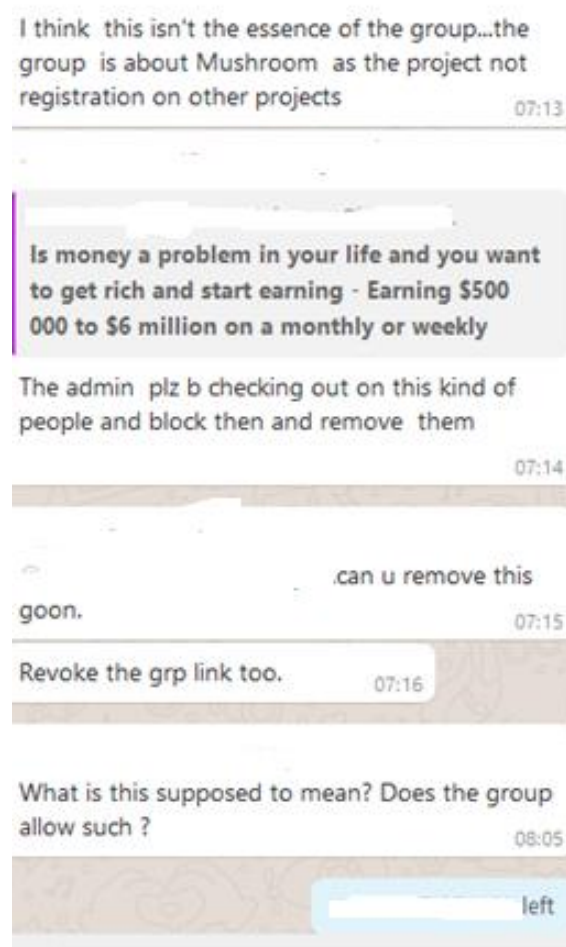
(PLC 12)

Brief biblical or religious quotes were relatively condoned in the groups. However, quite often than not, members did not comment on such posts, indicating that although they were not infuriated by those messages, they were not interested in advancing debates on them either.

Although the researcher has argued that some social messages were permissible even in the strictest of the groups, it was observed that some of such messages were not acceptable. The prominence of scolding of people who posted such messages was an indication that group members did not perceive them as acceptable. There were instances where as a result of posting unacceptable messages the group administrator would eject the concerned members from the group. Across the five groups, among the unacceptable social messages were those comprising of sensitive or taboo topics and some religious messages too. After a member posted religious messages a number of times, the following exchange ensued:



Promotional messages that aim at marketing products such as betting companies, bitcoin trading and merchandise that is not related to farming are not tolerated by the members of the PLC group. Members react to such messages by urging the administrators to remove the people posting such messages from the group. Some members leave the group to express their dissatisfaction with the messages sent. Below is an example of such incidence where a member quits the group while others ask the administrator to take action.



In conclusion, the patterns of messages from the groups above suggest that posting social messages is inevitable even in the groups that enforce the rule on sticking to task messages. Data also suggests that some social messages are acceptable across the

groups and in many instance, they fuel member participation in those groups. Nevertheless, the type or content of such messages matters.

4.4.5 Task-Oriented Communication Gravitate towards Social over Time

Another major finding was that across the groups, it was evident that at their inception, members were driven by a motive to gratify their needs through getting and exchanging information on farming. This was indicated by their constant participation in posting task-related matters. As explained in 4.2.1 above, all the groups under study had rules stipulating that only task-oriented messages should be posted on the platforms. Over time, emerging pattern across the groups indicates that communication gradually evolved with members accommodating social messages. The response of members to such messages is not static. It evolves with time as the group progresses and the demands by members evolve.

Although some of the groups were dominated by more social than task-oriented communication, the ones that retained focus on task communication still accommodated some social messages. A case in point is PLC. The gatekeeper of the group started by enforcing the rule on posting task messages. However, over time, she was overcome by the wish of the members to share newspapers which she had earlier considered as an unacceptable social post. This is illustrated in the conversation below between that group administrator and various members.

Gosh. Which political stand? That one is a newspaper madam...what is wrong with a newspaper?

While it might be true, others were categorical that newspapers are not wanted here. Ati (and) strictly poultry! I find it myopic.

Tell them...some people are so cheap

For your apology to be accepted, can you send me that newspaper in my WhatsApp no. on daily basis!? Thanks!

Where is today's paper? (translated)

Farmers... it's true what they say, your eating of meat shouldn't compromise my vegetarian. What's not welcome is not no matter who posts it. We have enough groups where you can share what you feel should be shared but on this forum, we do poultry and only poultry. Admin, busybodies are not welcome (PLC 15)

The administrator of that group gave in to demands by members and allowed newspapers to be posted on the platform but not without reminding them to abide by the rules. Following that exchange and after settling the matter, the group allowed members to post social messages such as morning greetings, congratulatory messages and appreciations to other members through emoticons. Such posts were not allowed in that group previously.

The group also accommodates other social messages such as public notices. After posting the message below, a member is thanked for doing so. Such messages would not have been acceptable to the group at its beginning.

Be Alert and Warned, Conmen Are all over! They will approach you pretending to be selling sim cards on offer. When you buy, they will ask for your ID card so that they can register you. If you give them your ID card, they either copy or memorise your Date of birth as they capture your ID No. They will then ask you for an alternative contact number, most preferably Safaricom. What follows next is, they will Block your Safaricom Sim and renew it using the details they have acquired from your ID. They can then withdraw all money from your Mpesa and even Get a loan from M-Shwari. Stay Safe! Only buy sim cards from certified shops with licence and not in the streets. (PLC 17)

PLC group later accommodated an advertisement by someone selling a car, alerts on traffic jams, as well as religious and humorous messages that were not related to farming. The levels of adherence to the rule on sticking to task messages were diminishing over time.

Likewise, the KD group, which was the most focused on task-oriented messages, also gradually lapsed into allowing social messages. In response to that, at one time, a

member stated that it was time to reflect on where the forum was headed in relation to the original objectives. Other members gave a rejoinder after which the group returned to its course by concentrating on the communication of task-oriented messages for some time.

*Good morning members, in total agreement Bett**

The main objective of the platform was to harness the huge and wide knowledge of members of this forum in a systematic, sustainable and structured manner to enable the use of such information to influence all the value chain activities for the sustainability of the dairy industry. (KD 18)

The gradual inclination towards social messages indicates that members have some social needs they need to satisfy above task-oriented information. Over time, the administrators were not keen on censoring posted messages and members resorted to sharing social messages again. The conclusion made at the end of the data collection period was that social messages were inevitable in the groups. Efforts to muzzle the contributors of such messages led to either conflict or waning member participation in communication within the groups.

At various moments, KD members would agree to set time aside for discussion of a certain topic. They went ahead and set up a structure to be followed during such debates. During such debates, members who were knowledgeable about the topic under discussion would first give expert advice on the issue and then open up a plenary discussion on the same. The levels of member participation in posting task-oriented messages during such debates were heightened and no social messages emerged. After a fruitful two day debate that was not interrupted by social messages, a member observed that the group was on the right track and what they needed to remain on that trend was to maintain discipline and consistency of discussion of task-oriented issues.

In the PLC group, after the administrator and members noted that participation in conversations was waning as a result of cracking down on violators of the rule on sticking to task-oriented messages only, they adjusted their rules by providing a structure where social messages would be accommodated.

**Monday-Market days+ Questions and answer sessions.*

**Tuesdays-Lecture day +Question &answers sessions.*

**Wednesday-Testimony session*

**Thursday-Question and answer sessions.*

**Friday-Market days + Questions &answers session.*

**Saturdays-Questions and answers sessions(PLC 17)*

In the structure above, social messages were accepted each Wednesday, although the group administrator expected such messages to be related to farming. Members used such days to give their personal experiences in farming as well as sharing life lessons that could have not been allowed in the groups earlier, such as this:

As an entrepreneur, you should be aware that real business takes time to build. Don't listen to stories on how you can make millions in a very short period. (Less than 1 year). Be patient to build your client base, be consistent in your product quality and availability. Finally, ensure you maintain high levels of trust. (PLC 18)

PLC and KD groups were predominantly task-oriented. However, at some points, they would set aside time to discuss pertinent task-related issues. At other times, they would set aside time for social engagement. The other 3 groups also demonstrated active member participation when they combined acceptable social interaction with task-oriented messages. Doing so provided an atmosphere where both task and social needs were met and interaction sustained.

To conclude this section of the study, data suggests that communication of task messages is done in a formal and respectful manner. On the other hand, social messages are communicated in a critical and indifferent disposition. There is camaraderie in the communication of social messages. They are expressed in a

relaxed and friendly manner that elicits laughter and provides a break from the monotony of discussing task issues.

In addition to that, communication of task and social messages takes place under a set of communication rules. These rules are introduced and enforced by group administrators and members. The main rule of engagement stipulates that group conversation should be centred on task-oriented messages and members should not post social messages. In spite of the explicit rules against posting social messages, members of farmers' WhatsApp groups in Kenya disregard the regulations until the group administrators and some members take action against that practice.

Posting a social message elicits threats from the administrator and group members while posting a task-oriented message prompts desirable feedback. Nevertheless, certain types of social messages are acceptable across the farmers' WhatsApp groups. Communication patterns show sustainable participation in communication takes place in groups that allow members to exchange task-oriented messages together with acceptable social messages.

4.5 Responses to Communication of Social and Task Messages

4.5.1 Introduction

This study focuses on the communication of social and task messages on farmers' WhatsApp groups in Kenya. In this sub-section, the researcher presents findings of the second research question that reads: What are the farmers' responses to communication of social and task messages on their WhatsApp groups? To find answers to this question, the researcher observed the messages posted on the forums and how group members reacted to such messages. Farmers were also interviewed to seek their response to social and task messages. The scope of this question included

investigation of how a member responds when a different member of their WhatsApp group posts task-oriented messages as well as the benefits of such messages to the member, both as an individual and collectively as a group. It also investigates the response of members when a member of a WhatsApp group posts social messages and the perceived benefits of such messages to an individual and the group.

4.5.2 The Response of Group Members to Social Messages

Across the groups, the members interviewed expressed disdain and disapproval of social messages posted on their platforms. They were categorical on the notion that such messages are not only distractive but also a source of conflict between members. The rules were meant to meet the members' need for a communication environment devoid of social messages. In the PLC group, a member responds to rules against social posts, praising the administrator for keeping people posting social messages at bay. They viewed social messages as an avenue to a communication environment where gatekeeping is no longer effective and the desire to remain focused on the task is hindered by their disruptive and unpredictable nature.

This is very good at least notify members and it seems unstructured well enough. I was kicked out of a group that had no objectives or even rules and regulations that I had been placed. I wasn't given a warning or notification. Just removed. Keep it up. (PLC 16)

In the same group, a member posts a social message that angers members and the administrator. The administrator remarks: “*Jean, this is a poultry group. This should be the last warning. Read the rules.”(PLC 17)

The response by the group administrators to that social message is evidence of their disdain for such messages. A similar reaction is seen in other groups, such as VPE when a member sends a social message on the subject of student indiscipline in schools, he gets the response that it was a good read but in the wrong forum. Still in

VPE, a social message receives the wrath of members. Some leave the group immediately after that post while another remark with a reminder that the offending member should adhere to the rules and that they only discuss matters to do with chicken on that group. The exclamation marks used on the comment above meant to emphasize the irritation of the aggrieved member by that message. After that message, two more responses and several members leaving the group indicated members disapproval of such messages.

Shame on you. (VPE 17)

Geoffrey, I think is the high time you becomes mature, you shud b(sic) ashamed of yourself. (VPE 18)

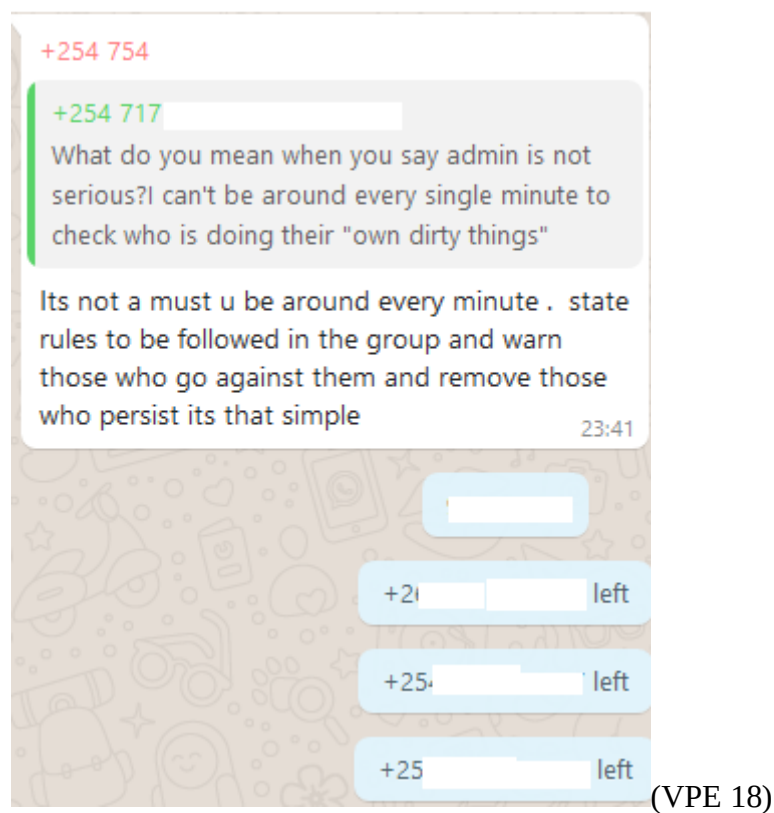
Besides obtaining the responses to social messages through observing the posts made by group members, the researcher derived more answers to the question at hand through the interviews conducted. Respondents expressed their disapproval of social messages. Asked how he responds to social messages, a member expressed:

What for? As I told you, we have other groups where we discuss social things and make fun. But for our farming groups, we are there for one business: farming. People who post such messages (social) have are not serious and should not be entertained. Let a farmer's group remain that but not a social club. I normally respond to such messages by telling the person who has posted to choose another group to do so. (MVPE 4)

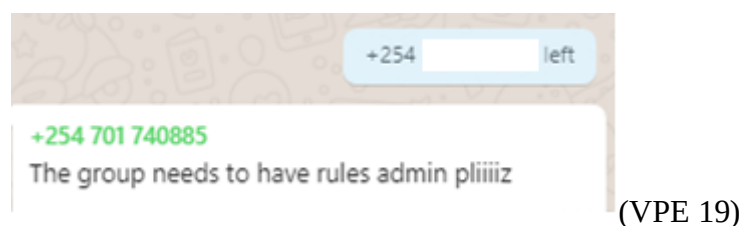
Similar sentiments are made by a different interviewee who says that although in their group the rules are clear and often followed to the letter, she would respond by either leaving the group or asking the administrator to remove the offending member from the group. She explained that she liked her group since the administrator has no chance for people who post social messages since they had joined that group to make money and not fun. Such findings suggest that group members were generally interested in a focused forum where members stick to the communication of task-oriented messages. They had a negative opinion about social messages and view them

as an obstacle to the achievement of their goal of engaging in seamless conversations about farming.

Besides those responses, patterns emerging in the other groups indicated that members responded to most social messages by leaving the groups or withdrawing from active participation. A case in point is the VPE group. There is a verbal altercation between members after one of them sends a social message. Eventually, a number of people leave the group as shown on the thread below:

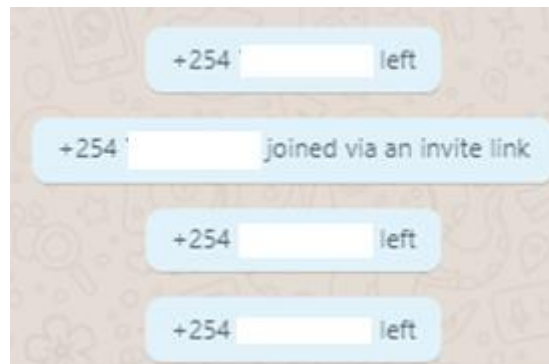


Still in the VPE group, members respond by leaving the group in several other occurrences of social messages.



The response by a member of the group on the above screenshot comes after a member leaves the group in protest over a social message that had been posted.

Besides those members who left after the thread above, scores of others left in protests against the posting of social messages in the group in the KD group.



KD 13

In the PLC group, after members spent some days posting social messages, a number of them responded by leaving from the group. In other instances, the administrator complained of diminishing activity after noticing a lull in posting activity and acted by calling members to act as indicated below:

Administrator: And by the way...wakulima mmekimya sana..(farmers, you are so quiet) Just wondering is everything sailing OK..how is the poultry business taking our farmers? Any challenges so far? (PLC 10)

Administrator: Remember December is the month to reap big in terms of poultry meat and eggs..leteni (bring) ideas. (PLC 11)

The administrator of PLC keeps reminding members about the rules of the group. The more he enforced the rule, the more this researcher's observation of communication trends suggested that members were shying off from posting messages as indicated by the thread below:



(PLC 16)

The last statement on this thread shows the concern of the administrator over declining member participation. This finding suggests that task communication in an environment where no social messages are allowed can potentially discourage group members from participating through posting messages on the group.

In VPE as well as other groups, as more and more members were removed from the group after flouting the rules against posting social messages, conversation fizzled out. There was minimal interaction with only two people engaging in dialogue. The messages posted changed from debates and conversations about poultry farming to the posting of farming-related photos, posters and advertisements of products, which did not elicit comments from members.

Similarly, in DFK, after social messages become the norm of communication in the group, some members leave the group while others make comments such as;



DFK 12

Other messages with a similar indication of member apathy after long durations of task messages include:

Hi. Good morning. Just wondering, are the farmers in this forum fulltime farmers or what are they.??? Am asking because the participation here is too low, there is no flow of chatting & the sharing of experiences is very minimal. Ama watu wanaogopana(are people afraid of one another)...??? Being quiet is what will make you more scared. One should share, ask questions, get answered by experts & in the process, we all learn. That's the beauty of a forum coz those who know educate others & those who don't know to learn. 🙄(PLC 14)

At one moment in the same group, the administrator calls people by their names to ask them to participate in group debates on farming. Even after making such an effort, one person leaves the group and no-one responds. This finding indicates the withdrawal of members from the active posting of messages due to dissatisfaction with the previous messages shared. This pattern emerges in all the groups that allow members to post social messages unabated. In another group, KD, members are concerned about the inactivity in the group. One of them makes the following comment:

Its called NATO No Action Talk Only. We would rather talk less, act more. Sometimes even shooting in the dark is shooting, you may hit the bully's eye without knowing. Someone was training farmers in Kinangop and after the

training was done one of the farmers stood and asked, "after all the Githungu (read English) what's my business? How will the Githungu benefit my business? We would rather do baby steps. Let's think big, start small and start now. Some proposed way forward will ensure our life span beyond our daily interactions within the group. Who will bell the cat?

Besides the pattern on member apathy, social messages are also followed by mass exits from the groups. This finding, therefore, suggests that task communication in an environment where no social messages are allowed can potentially discourage group members from participating through posting messages on the group. The trends in the communication of social and task messages show that enforcing rules on refraining from posting social messages points to a trend of reduced interactions on both social and task messages.

In conclusion, as pointed out earlier on this section, members and administrators of the two groups expressed dissatisfaction and reprimanded violators of the regulation on strict adherence to the posting of task messages. This response differed between the groups, depending on whether they enforced the regulations on content to be posted or not.

4.5.3 The Response of Group Members to Task Messages

The group members interviewed consistently reported that being a member of a group where members post task messages has invaluable benefits for them. They explained that they were members of such groups predominantly to learn and exchange information about farming which could only be derived from engaging in task-oriented conversations.

I am in the group for the task messages only. There are immense benefits that I accrue from such information. Task communication in my group is everything. Why else would I have joined such a group? Unajua (you know), I have been able to get market for my mushrooms and also obtain ideas on best practice in growing them from the task messages posted on this group. (JMFk 1)

All the interviewed members were full of praise for task messages and responded to them favourably. Other comments on the same include:

Why can someone remain in the group if it weren't for such messages? I like what I read from the group since my apples were once infected with a strange disease and I was able to treat it using some solution of soda ash and grounded pepper which I made at home. Those are the benefits you get from such messages. (SMAFK 1)

The responses received regarding task messages were similar in terms of member's viewing them as not only beneficial but also the reason why they joined and remained in those groups.

From the participant observation made, at the initial stages of the existence of the groups, accumulated task messages led to greater motivation for members to participate. This observation is corroborated by messages posted in various groups with members hailing the groups for sticking to the posting of task messages. In groups where members have constantly posted such messages, the researcher observed remarks such as:

I am loving this group. It is the best I have ever joined''(VPE 8). In a different group, a member posts this in praise of task messages: "I wish all other agricultural groups that I admin could be like this one. Thank you all for sticking to the core theme (MKY13).

That was an indication that rules on sticking to task messages motivate people to remain the group and participate more. Soon after that comment, a member violates the rule by posting a message promoting betting. This attracts the wrath of members who retort by asking the offending members to take the news about betting to idlers.

After that scenario, several members respond by leaving the group. That is an indication of their indignation with social messages and desire to stick to the task. Although sticking to the rule on posting task messages only has motivated members

in some groups to participate, the vice-versa appears to be true in some circumstances. In most groups, offending members were served with a warning. The group, VPE, had the most grounded enforcement of those rules. The gatekeeper would remove members who violated the rules from the group without any warning. The remaining members shied away from posting since perhaps they were afraid that their messages would also not be tolerated. The pattern of communication in that group indicates that the expected positive outcomes of restricting members to task messages may not be achieved since it is not translating to more participation.

From participant observation of exchange of task-oriented messages by the members, it emerged that members of groups where the posted messages were predominantly task-related rarely left the groups. This was unlike instances of groups where social messages would be sent and members would protest and leave the group, sometimes in large numbers.

4.5.4 Perspectives on Benefits of Task-Oriented Messages

The respondents cited a number of benefits that were related to task-oriented communication but not from social messages. The main and only use of WhatsApp group for farmers, according to the interviewees was to find messages related to the exchange of knowledge on farming and marketing of their produce. They cited purposes such as connecting with farming experts, clarifying information on certain farming practices, sharing farming information and searching for a market for their produce as the motivation for joining and remaining in the groups. None of the respondents cited getting social messages or recreation as a purpose for joining the group.

I have gained more from my farming through the task-related messages I receive from these groups. By engaging with fellow farmers, I have been able to avoid unnecessary costs and also know the best time to go to the market. Kwangu (to me), task messages are full of advantages. (SM 1)

To other members, engaging in task messages provides relief from the difficulties they encounter in their day to day practice. A member explains that farming had become very difficult and frustrating since the government had abandoned farmers completely. She further explained that when she engaged with her peers on their WhatsApp groups, she was consoled to find that everyone was going through what she was going through. She explained that those debates on farmers' real-life experiences provided her with the impetus to carry on with farming. A similar observation was made by one of the respondents.

I am a member of several pig farmers' groups. In some of the groups, members who are dissatisfied by social messages keep 'lefting' the groups. Especially when some offensive social messages are made. In my best group, you will rarely find someone leaving. There is satisfaction in reading messages that are from mature people who know why they joined the groups. I have benefited a lot from the task messages posted. (SM 2)

Such messages were consistent with the researcher's observation of group exchange of messages, where members did not exit from the groups that were consistent in sharing task messages. Also, there was a perspective shared by several groups members that task messages were beneficial to the group since they ensured that there was coordination and logical flow of communication in the group.

When my group members are discussing some serious mushroom farming issues, sometimes someone posts a message unrelated to the task. That makes you lose focus. Task messages only make communication smooth and well-coordinated. (SP 1)

Messages that are not task-related disrupt the flow of information in the group. Task messages help one to stick the lesson or issue under discussion without interruption. (DK 2)

That's why I prefer sticking to messages on farming with the other interruptions. Sometimes you are discussing an issue or a veterinary officer in the group is teaching you something important and someone from nowhere posts useless messages. Task messages make you stick to important matters. (JM 2)

The above comments are a testament to the importance members place in task messages in relation to their role in helping members remain engaged in a consistent exchange of relevant messages.

Across the five groups under study, it emerged that interaction was changing over time. The communication of social and task messages in these groups evolved with members adjusting by accommodating more social messages in the groups over time. Their views or responses regarding posting some social messages also evolved as the groups progressed over time. The researcher observed that task messages attracted sustained interaction at the early stages of a group. However, the intensive exchange of ideas waned over time in the groups that managed to maintain adherence to the rule on posting of social messages only.

Two groups among the five studied, namely, KD and PLC maintained an environment devoid of or with minimal social messages. Over time, the pattern of interaction on the task gradually changed with few and fewer interactions in a day. The few interactions were done by a handful of people. Some days would pass without any post on the platform, a trend that was decried by the group administrators.

PLC 1: And by the way...wakulima mmekimya sana (farmers, you so quiet)..just wondering is everything sailing OK..how is the poultry business taking our farmers? Any challenges so far? Remember December is the month to reap big in terms of poultry meat and eggs..leteni ideas (raise your ideas)

PLC 2: Watu Wa Nanyuki mpo..? Silence nayo..? (People from Nanyuki, are you there? You are so quiet). Mwangi, Sean*, how is the construction of your mushroom growing house going..???*

Such posts were sent by the administrator of the PLC group at a moment when farmers were not participating in the platform. The same administrator had enforced the rule on posting of predominantly task messages. The trend of member apathy through becoming inactive in participation over time seems to be a result of the serious task-oriented communication they have participated in.

There is nothing more healthy than making friends here, then engaging privately coz I also get a one on one with some farmers from this forum too and we actually discuss quite a lot on matters mushrooms but what am saying is that forum discussions should not die off. If we have conquered mushroom topics, let us bring in secondary topics. MKY 15

This message implies that the group administrator is interested in going beyond the task messages and encourages members to introduce messages that may lead to cohesion of the group. Social messages are one way of cultivating that cohesion. This administrator implies that such a climate where members are cohesive will result in positive task-related outcomes.

Secondly, debates on task-related matters in groups that entertained social messages were relatively incoherent, as observed through the extent that members seeking for solutions in these groups received feedback on their queries. The questions below did not receive any feedback from group members since they were either engrossed in social messages or their motivation to participate had diminished. In the MKY group, after a period of social exchanges, several questions on task went unanswered:

Member 1: Hi hope you are well. Was enquiring does anyone know the market day for mbuzi in Makueni and Isinya..?

Member 2: Would know the difference between the boma rhode and rhodes grass?

Member 3: Good Afternoon Members, Where are milk ATMs gotten?

Member 4: Which is the best place for agribusiness management scholar to get attached to during her degree program?

Member 5: Any traditional vegetable farmer's in the group?

Member 6: Hello in here, how is everybody, I would like to know what nutrition values are in napier grass and boma rhodes grass? (MKY 21)

Such emergent practice is an indication of disruption of communication of task messages, which form the crux of the objectives of the group, by social messages.

Based on those comments by the interviewed group members as well as observation of their posted messages, the researcher concludes that members rarely left the groups on account of posted task messages unlike in the case of social messages. Nevertheless, giving so much attention to task communication exclusively points at some member apathy in communication. There were complaints that members were engaging in much unproductive talk. Such complaints were accompanied by calls for face to face plenary meetings. This indicated a potential loss of sustainable interaction in the groups. Data suggests that groups that restrained members from posting any form of social messages gradually died off as they experienced minimal interaction. In groups that permitted members to share a lot of social messages, other members responded by either leaving the groups or remaining passive. Posting of social messages in an unregulated manner interrupted task-oriented communication and pointed at the loss of coordination of group activities.

In this subsection, the scope included a focus on how a member(s) responded when another member of their WhatsApp group posted task-oriented messages as well as the benefits of such messages to the member, both as an individual and collectively as a group. It also investigated the response of members when a member of a WhatsApp group posted social messages and the benefits of such messages to an individual and the group.

In summary, the findings suggest that the responses by members of farmers' WhatsApp groups in Kenya to communication of social and task-oriented messages suggest an underlying desire to focus on task-oriented messages only. They consider

such messages beneficial to the group and to them as individuals, suggesting that the members who participate in these groups are more interested in discussing solutions to their farming issues than seeking social pleasure.

Members of farmers' WhatsApp groups in Kenya disapprove of social messages. They view them as a distraction from the core task. They consider social messages distractive and hindrances to the accomplishment of the objectives of the group. They cite that social messages make groups ineffective. They nevertheless consider specific types of social messages associated with benefits to the group. They advocate for some light moments to keep the group members actively engaged in conversation. The response of members of farmers' WhatsApp groups in Kenya therefore indicates an inextricable connection between task and social messages in their WhatsApp group communication.

4.6 Perceptions on Communication of Task and Social Messages

4.6.1 Introduction

In this sub-section, the study focused on the findings that provided answers to the third research question. The scope of the question focused on the issues relating to the perceptions of group members on the messages posted on their forums. It also focused on particular group member's opinion about posting of strictly task-oriented messages and those that allow members to combine social and task-oriented messages. The scope also relates to the opinion of members on the content of messages that should be posted on the groups and how their preferred type of messages would be beneficial to the group.

4.6.2 Perceptions of Members on Posting Task Messages

Findings on perceptions of members on messages posted to the groups differ among the interviewed members in relation to both task and social messages. While some members were dynamic, perceiving both social and task-oriented messages as beneficial to a group, others were rigid and advocated for members to adhere to task messages. Regarding posting task messages exclusively, members expressed satisfaction and perceived such messages as the main reason why the groups were formed from the first place. They also perceived communication of such messages as a necessary ingredient in assisting the group to achieve its roles. One interviewee viewed task messages as the reason behind the formation of the group.

Since we are here for business, this is very good. I like everyone who is sending task messages since there is no joke. It is just serious business. They are just talking about poultry. Nothing else. And I think that is why I am in the groups. That is the reason why I keep reading. (L1)

Similarly, other respondents perceived task messages as beneficial and viewed them as the major motivator to join, remain and participate in the groups. They wanted a situation where there was a clear demarcation between the purposes of task-oriented and social WhatsApp groups, insisting that they sought their social needs from groups dedicated to such purposes.

I am in the group because of my interest in improving my poultry farm. I am in other groups where we discuss social matters when I need them. When I want to take a break, I read messages from my former high school classmates groups for relieve. In my farmers' WhatsApp group, I perceive task messages as the most important in any group. (D1)

Groups members who expressed such opinions saw no interrelationship between social and task-oriented messages. That opinion indicates that such group members had separate groups where they met their social needs and perceived social messages in a task group as inappropriate. They, therefore, vouched for task messages only to

be posted on their farming-related group. A similar view was expressed by another member through the following remark:

Ya(yes). Task messages are the most important to me. This is because when I need social messages, I have friends and I am in other groups with them. I even don't know people apart from 2 in this farmers group. The rest, I don't know them. I am in this group solely for obtaining farming information and hence I find task messages very important when compared with social forwards. (L3)

Another respondent emphasizes on the benefits derived from task messages in the following remark:

There are messages which are beneficial for example, you get a message on what is happening with current product prices, someone would have really updated you because maybe you're at work and someone posts that prices are going to increase tomorrow and maybe you wanted to sell so you will hold all your goods. Sometimes also before selling, you can tell somebody or take a photo of your goods and send to someone say in Mombasa or Kisumu so that they give you prices.(SR 2)

Asked how often he reads messages posted on his group, a different interviewee explained that that depended on whether a group was “serious” or not. If a group was ‘serious’, the interviewee explained that he would read all the messages posted on the platform every day. For some groups that were not serious, the member would rarely read posted messages and explained that he had even quit from such groups since they wasted a lot of time. Probed further to express what he meant by a ‘serious’ group he stressed on this:

It is that group where people know what brought them together. It is a group where people are focused and send many messages. There are some groups where people go for a week without posting any message. In such groups, a member can ask a question but nobody responds. Those are not a serious group. In my dairy farming group, we have farmers and experts who keep exchanging ideas. I read such messages dairy so that I do not miss out on anything. (JM 2)

This further indicates that group members are keener to follow and participate in groups that adhere to the posting of task-oriented messages exclusively. The

perceived benefits of task messages were innumerable. Group members insisted on the need to stick to posting such messages. Nevertheless, some group members pointed at some downside of some task messages.

For this group, I think my feeling is that of positivity but I think at some point as a farmer, there are some, when people are talking about how they are faring, it is very positive for me, I feel like I want to be here for that. But when people start talking about the shortcomings, I start questioning whether it's an adventure I want to get into. A good example is the marketing of mushrooms. I found the group they tried to brainstorm and see, where can I sell my mushrooms in a good price, I compare to the workload that has come, people doing the workload look so convinced with positive messages but when they start selling, it's like a negative message, it's a discussion I don't want to hear about because I feel marketing becomes too much work, this thing already is too much work. So, I think I have a mixed perception, some messages give you positivity, some I feel are discouraging for me. I don't know if I've answered that question.(JN 1)

The respondents disapproving of posting task messages exclusively were also concerned that so much of task without relief from social messages were a source of boredom as expressed in the two responses below.

I think such a group is boring (without social messages). I may put it like a workplace. When you are in a workplace and the boss is so rigid on you, you find that you cannot work to perfection because now you are afraid. It's good to be flexible. People should send inspirational messages in the morning. Such messages need to be related to farming and to the real lives of farmers. That is not bad. Or a bible verses. (D2)

Another respondent felt that the enforcement of the rule on task messages was too strict and unrealistic. The member also added, "These are the bonuses of being in a farmers' group. You get new friends and an opportunity to make personal interaction". He protested the unfair treatment by a group administrator when he made the special request quoted below:

The groups I have been in funnily enough there has been zero-conflict that I remember of. I think the rules were set out and people have just adhered to them. I remember one time I posted when I was trying to do some research with farmers. Just like what you are doing. I was doing research and I had wanted to ask some people some questions and the moderator said 'no'. The

purpose of this group is not for your personal research. So, people have really kept off. (CO 2)

The need to remain focused on the task and benefits of doing so was further emphasized by a different respondent:

I perceive task messages to be the only way to keep members active in the group. I left other groups cause (sic) members there spent all the time making fun and sending senseless messages. Task messages are the best and I would encourage fellow group members to stay on the task. (A1)

According to that interviewee, a successful group is one where members remain focused on task communication. Other members expressed related sentiments, viewing task messages as tacitly linked to the goals of interacting in the group.

My perception is that all messages posted here should be focused on the task. That's what has brought us here. Sina shughuli na mambo ingine (I have no other business) in this group. I am a busy apple farmer. Where do I find time to engage with other things? I usually quit groups that entertain idlers. Let me show you what I post.(We scroll through her phone together). Task, task, task! Why else would I be in a group? So my opinion is that task messages can make us as farmers to do better. (MM 3)

Group members responded most favourably to task messages involving content that was consistent with the particular type of farming practised by members of that specific group. There was concern that some group members post messages on the farming part not related to the specific crop or product that that group is focused on. A member from MKY group emphasized that she perceived the posting of task messages as a way of keeping group members focused. She gave an example of someone who posted a message on mushroom farming on her group which is focused on dairy farming. She firmly expressed the need to remain focused on the initial purpose of the group. The perception of task messages as the ones desired by group members is further reiterated through the comment below.

Yes, very much, because, in fact these are the rules that we set as a group. I perceived formal or task messages as very useful to me in my career. I cannot leave the group that sticks to these rules. If I left by mistake, they (rules) are going to haunt me. I insist that if anyone wants fun, let them join other groups. As I have told you, I am in other social groups but for this one, hebu ikae hivyo (let it remain that way). (T4)

One common response from interviewed members was that group interaction must meet the ideal expectation of all members which is the communication of task-oriented messages. This response by members points out at the perceived importance of task messages, the perceived distraction from social messages and the perceived link between task messages and success of a group. The predominant attention of the respondents was to focus on the task of peer to peer support through sharing farming-related messages.

4.6.3 Perception of Group Members on Posting Social Messages

The respondents had varying perceptions regarding the posting of social messages on their farming group forums. While some held that there was no place for any social messages in the groups, a few others perceived some type of social messages as beneficial to them and the group. Most of the interviewed group members were categorical that group interaction should be devoid of any social message. In one of the interviews, when asked whether social messages should be posted on farmers' WhatsApp group, a respondent explained that no social messages should be posted on their platform. She explained that the purpose of the group will be diluted by social messages and that people are free to join other groups to meet their social needs.

The overriding desire to meet the group objectives was seen as the motivation towards insisting on sticking to the task. Any message(s) that were not related to farming were associated with the disruption that could have derailed the group from meeting its mandate. The same respondent expands this argument by relating his experience from

another group that failed to live to its mandate as a result of entertaining social messages.

Let farming groups be used for farming-related matters only. Period. I think it depends with the setter of the group for instance if the group was mainly for family, it should be family and family can tolerate other things but say you are in an office set up, some of the funny things won't make sense. But church groups, family groups, community groups or a unit you're doing like here in school, last semester I was doing a unit Business Information Systems (BIS) members were arguing for almost 6hrs because someone sent funny things. Allowing such social message on farming groups makes them like the useless BIS one.(SR 2)

Social messages were also perceived as time-wasters. Asked about his perceived benefits from social messages, a member emphatically stated that he accrues no benefits at all from such, terming them as unnecessary time wasters. He also stressed on a point that the messages that appeal to one person may not appeal to others, hence social messages are likely to offend some group members. The member explained that he has witnessed the collapse of several WhatsApp groups as a result of members failing to adhere to the posting of task-oriented messages exclusively.

On the other hand, social interaction alongside task accomplishment is an idea held by some of the interviewees. Such groups members perceived social messages as an inseparable part of the process of accomplishing tasks. One respondent stated that she cannot remain in a group that does not provide other benefits besides farming. She stated that after a long day working, people needed encouragement through social messages. What that respondent indicated was the need to have some type of social messages that could be allowed at certain moments. A related view is expressed by a different member.

You can't (post a social message) in my group and survive. I like it that way. Just have a look at the messages on the group.(She shows me). Someone has just posted a motivational message. I don't know what will happen but just wait. However, two weeks ago, I saw some difference in a post that a member

made that asked farmers to pray and fast so that the Kenyan government can support farmers. The members were asked to raise their hands if they would participate in the prayers. That message, although social was supported because we were praying and fasting for this poultry venture. Any other message outside poultry has not been accepted. The lady who tried to joke earlier received a bad response from members. (L3)

Although the respondent above is against any form of social messages, she admits that when a member previously posted a religious message, fellow members embraced it and supported the idea on praying and fasting for the practice of farming in Kenya. That indicates that her group, although very strict in observing the rule on posting of farming-related messages only, is open to some social posts that are deemed relevant. Another response indicates the usefulness of social messages to the groups.

It should be both. Reason being, if you make it task-oriented only, a time will come when you don't have information or people are not participative. You may even go for one day without someone posting a message in such a case. If you mix with social, you diversify. Messages such as traffic alerts such as "don't use this road" there is traffic jam. You see that helps a person in that group. Or maybe an alert when there are attacks such as the Dusit terror attack. Maybe there are groups that do not allow such. Such messages are still on the task but also touch on the social.(D4)

The comment by the respondent above suggests that although members are mostly interested in task messages, they may opt for social messages on matters that touch on their lives directly such as alerts on impending danger and traffic warnings. On a similar note, a number of group members interviewed consistently reported that posting task messages exclusively has some adverse consequences on the communication of messages in the group. Although they maintained that task messages are their preferred option, they still admitted that some social messages break boredom and provide a necessary relieve that motivates members to communicate. One of the members, who was a firm advocate of task-oriented messages only, remarks:

For example, I personally post cowtoons, where a farmer and a cow are talking and have a comic picture. A cow is asking the farmer, “do you take my weight? Why don’t you take my weight?” So that’s a social message but within the strict dairy farmers’ group. The social, you know as people mature it is very difficult to limit.(T2)

In the final remark by the group member above, he opines that as the group progresses and ‘matures’, members are more prone to posting social messages. The same respondent asserts on the inevitability of communication of social messages in the group and goes ahead to elaborate the importance of such messages asserting that one should bring about social messages but related to the business of the group. If a social message serves the purpose of giving group members a break from the monotony of discussion on farming, the respondent observes that no-one can be against such a post. The respondent observed that as much as they liked their work, group members also enjoyed taking a break. From the perception of that member, both task-oriented and social messages were necessary insisting on the need to ensure that social messages posted in such groups must be related to farming.

Asked about the messages he prefers reading on the groups between social and messages to farmers groups, a respondent said:

(Emphatically). If we confine ourselves to farmers group, I don’t expect and social posting there. In fact, if you post something that is social and doesn’t go in line with the messages of the dairy farmers, I will not be the one to say this is out of topic, but I will also not respond to that. I will let it pass, I am a bit polite not to bust the guy who has posted, but there are other groups where I expect the jokes to come. Those discussions that are more relational that are more of gender issues, because that group has no definitions, but this one, we came together because as the dairy farmers, we must stick to the rules. So, I prefer messages that are strict on the subject matter. Updates on developments being done by the departments is also a common problem that farmers are facing. That for me is very good for discussion. (T4)

On a question of what farmers post on the groups, a respondent suggested that at times, social messages will appear but all of them must be related to the task. Such

messages as the expression of happiness after attaining a task related feat are accommodated by group members.

When I look at the groups, what I see are pictures of the cows, celebrating moments either a cow has given birth to twins or they are making things with a new, machine or even sometimes they are posting who can get me this and that product. It is really an empowerment group to the farmers and that's what I see. For example, let me show you something....(shows me task messages) This is a farmer whose cow has twins and she is requesting for help on how to take care of them. You see it is very comprehensive platform where farmers can reply to one another. T5

Similar sentiments are made by a different member who expands this argument by giving an example of the messages that should not be posted in farming-oriented groups.

You may not make a joke on religion or on women as it may be very offensive. There are those jokes about farmers and about government, that are within the context, but it is a satire. You should bring about social but related to the farming group. In my group, the top are the campus group members. Most of the news on dairy are found in the group. So, I don't like social messages in the subject matter groups. K1

The perception of the interviewed members was that farmers' WhatsApp group should stick to posting task messages exclusively. While some members observe that social messages related to task should be allowed in the groups, others are categorical that group communication should not deviate from the task at all and there is no place for social messages at all. Members view the group as a forum for sharing and circulating farming-related messages only.

4.6.4 Perceptions of Group Members on Mixing Social and Task Messages

Findings further indicated a strong desire by some of the interviewees to view social messages as part of the larger context of communication that would lead to the accomplishment of the task. Although most of the respondents in interviews saw task

messages as their preferred messages, they also raised sentiments on the need to make the group interaction interesting to the members. Such opinions were shared especially by youthful farmers. One of them perceived a group that concentrates on posting task messages only as boring, explaining that there are some young people like himself who ‘need to have a life’. He insisted on the need to mix task and social messages that he referred to as ‘interesting stuff’ that can make the group lively, adding that he hated boring groups.

Another respondent emphasized on the need for the emotional needs of members to be met through the groups by blending task messages with social-emotional messages.

Let's mix farming with fun. This business inakuwa (is) considered to be for old, boring and uneducated people. That's the image that most Kenyans have of a farmer. For us young generation chaps, we want to have fun as we work. (DZ 2)

It is worth noting that the above message came as an after-thought to the respondent. Earlier, he had strongly supported the idea of steering away from non-task-oriented messages. Such opinions arguing that task messages ought to be blended with social messages came from youthful farmers who saw these groups as an avenue for not only communicating about farming-related matters but also a platform to seek and express pleasure.

My opinion is that task messages are very important but we also need a break. In our group, we have put the admin to the task to ensure that we have the freedom to enjoy ourselves sometimes. We have dedicated Fridays to our things. It is the day to celebrate those who have had birthdays that week, e.t.c. Task messages without a break are not good stuff. I like it this way. It is better than when we would be removed from the group after just sending a smiley (AN 1)

While those two respondents expressed such feelings, others had a strong opinion in favour of groups remaining devoid of any other message outside the task. They viewed task messages as the *raison d'être* for the existence of the groups and

expressed dissatisfaction with social messages. A group member that the researcher interviewed insisted on remaining opposed to the posting of social messages, observing that such messages destroy communication in groups. Noting that the groups are comprised of people from different religions, age and preferences, the member insisted that social messages can be disgusting to some people. He opined that group members with an agenda outside farming should leave the farmers' WhatsApp groups. The opinion expressed by others echoed a similar idea.

Why post other messages? We are united by this group as farmers. If I wanted to pass time, I would since we have many groups. In this one, I am here for ideas on mushroom farming. We hate it when we see some people posting rubbish. It doesn't help. It is in bad taste. Let us stick to what brought us together. That's my take. (JC 2)

An interview with different group member underscored the perceived importance of task messages but expresses reservations for moments when they become redundant. More interviewees expressed their perception in favour of remaining focused on posting task messages exclusively. One of them also suggested that there is need to be considerate to the opinion of other members who may prefer to post both social and task messages.

My personal perception is positive for task messages but negative for social messages, I find it barely dependent on an individual. There are individuals who have no problem doing even 50-50, we joke, we learn, we joke, we learn but for me personally if I'm getting into something and I'm using my time, then let's deal with that thing so, if messaging is task-oriented, I'm satisfied with that. I, sometimes I don't feel there is any value in doing social messages in a task-oriented group because I just feel sometimes it's a waste of time reading through things that are not helping me personally. (JN 3)

In general, the opinion of almost all the respondents was that groups should communicate task messages only and should not entertain any message outside that. It is worth noting that a few respondents saw the need to build an environment that not

only meets the task needs but also social needs. They have insisted that task messages should be given more prominence.

I perceive such messages to be extremely useful. I would say it is informative and it's interactive and it brings transformation. Because if the first time I grew my pigs while putting those troughs on the ground and they make it dirty and maybe some were dying because of the contamination of the water when somebody posted their pigs taking from the taps, it transformed me and informed me that I need to adjust my learning methods and adapt the new technology. Even the drinkers, it gives you the perception that you just don't buy the drinker that will pull the ground, because the chicken will make the water dirty but if I have the drinker from the top, it saves. Through such messages, I have learnt so much.(LM 1)

In an interview with a different group administrator, the researcher sought to know her perception about the social messages posted on her group. She had earlier in the interview insisted on sticking strictly to task-oriented messages on her group but expressed her perception of social messages as being beneficial to the group. She gave an example of moments when someone could be undergoing some difficult moment and may benefit from uplifting messages from the group. Insisting on the need to inject some fun in the group, the same respondent asserted that there should be room for some recreational and relational messages in the group but maintains that such messages should be related to farming. Farming and communicating on that trade on a WhatsApp group does not have to be dull, according to that interviewee.

It is worth noting that that statement was made months after this interviewee had a verbal altercation with a member who had previously posted a social message in the group. The interviewee admits that earlier when she started her poultry farmers' group, she could not entertain any social message but her opinion had changed with time to accommodate the wishes of the members. She responds with the following statement to indicate that her change of perception about social messages was informed by members' preferences:

To some extent, you might let people speak their minds sometimes. If you are too strict, you might open your phone and note that such and such a person left the group. I added the person to the group to benefit from farming and the person has left. Sometimes I call the person and say, “hi, hello, I have seen you have left the group.” So he or she might open up and say “oh niliona hiyo group inabore” (I noticed that that group is boring). You don’t even want to chat, I sent something and nobody replied, so I have to say something like “what did you say, I did not see it.” So after talking the person says nirudishe (reinstate me on the group). From that you can conclude that there are people that do not want such strictness. They want even in the group, even if they have friends out there whom they chat with want to chat their own things. So you can accommodate such person even if it means chini ya maji (in hiding). You talk politely like, “please don’t leave the group”. To some extent, for that one person, you give a leeway. If you want to joke, look for a way to do it but make it farming oriented. Don’t make other people feel bad but don’t leave the group. (AN 3)

A different member shared similar sentiments to indicate that as members become more familiar with each other, they are likely to form a social bond that makes them change perceptions and warm-up to social messages. The interviewee noted that there is a group where one feels as if they are at home due to the bond created among the members. He stated that it was difficult for one to leave such a group because the connection between the members had made their farming lives more interesting. Noting that group interaction matured with time, the interviewee noted the need to be cautious when posting social messages since, for instance, there could be single mothers in the group who can be offended by a post about gender stereotypes.

This line of thought is testament to the fact that even group members and administrators who emphasized on posting task-oriented messages exclusively still identify some social messages that are relevant to the group. This points at an apparent contradiction in how group members have a low opinion of social messages but find it difficult to keep away from posting them. It also points at a change in members’ perceptions about social messages over time. After the initial reluctance

and fear that social messages would antagonize group members, the messages are accommodated gradually over time.

In this sub-section, the researcher presented findings that provided answers to the third research question that read: what are the farmers' perceptions of communication of task and social messages posted on their WhatsApp group forums? The scope of the question focused on the issues relating to the perceptions of group members on the messages posted on their forums. It also focused on particular group member's opinion about posting of strictly task-oriented messages and those that allow members to combine social and task-oriented messages. The scope also relates to the opinion of members on the content of messages that should be posted on the groups and how their preferred type of messages would be beneficial to the group.

4.7 Chapter Summary

In summary, from this chapter, data suggests that members of farmers' WhatsApp groups perceive task messages as tacitly linked to the goals of interacting in the group. They express an underlying desire to focus on task-oriented messages only. They consider such messages beneficial to the group and to individuals, suggesting that those who participate in these groups are more interested in discussing solutions to their farming issues than seeking social pleasure. Group members perceive social messages as an unnecessary impediment to their core business of discussing farming-related matters. They find them unpleasant and problematic to control. Group members explain that they joined the groups with the sole purpose of exchanging farming ideas and not for pleasure. Some of them perceive some social messages such as warnings, farming-related humour and goodwill messages as important to them

CHAPTER FIVE

INTERPRETATION AND DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents an interpretation and discussion of the key findings of the study. In general, the researcher discusses the key findings concerning the purpose of the study, which was to investigate and expand understanding of communication of social and task-oriented messages on farmer's WhatsApp groups in Kenya. Interpretation and discussion is done in light of the theoretical underpinnings of the study and literature reviewed in Chapter 3. The discussion is grouped into various emerging themes that are drawn from the findings.

5.2 Emerging Themes

5.2.1 Regulations of Group Communication

In response to the first research question, the findings of the study reveal that communication of social and task-oriented messages in the groups under study was regulated by group administrators and members. This supports the idea of Hasibuan (2018) that online groups must control the behaviour of group members. Central to understanding the communication of social and task-oriented messages in farmers' WhatsApp groups is the need to understand the rules that regulate the posting of such messages. It is of interest to compare this finding with Walther et al., (2005) who explain that investigating the rules of group communication provides a basis for understanding how deviation and sticking to rules on posting messages affects group communication. Also, (Ersoz, 2019) explains that different online groups develop a selection of norms or rules that are specific to the objectives of each group.

Similar to a study by Kimberley and Flak (2018), the difference between the groups investigated in this study lay on the deviation and compliance with those rules. While any group member may post freely on their farmers' WhatsApp platform, all the groups studied in the present investigation had set rules that were meant to curate the content posted by members. This practice agrees with the observation by previous scholars (Hercheui, 2011; Klonick, 2018; West, 2017) who observe that online groups are rule regulated. Identification of regulations or norms governing the posting of messages in the WhatsApp groups provided an avenue for understanding how social and task-oriented messages work in group communication. These rules direct group members on the messages to post and messages not to post in order to have a sense of direction and focus in the group.

In a similar study on messages posted on online groups by students, Yücel and Usluel (2016) observed that students contributing off-topic content (social messages) were warned by their friends and urged to post task-related content. Likewise, to function efficiently and satisfy the needs of members, the groups studied made consensus on the regulations to be followed when posting messages. These rules were set-up by the group administrators and in some groups, members played a role in both their formulation and enforcement. This gate keeping role by both group administrators and members is consistent with Hercheui (2011) and West (2017) who elaborate that rules in such groups ensure that norms are maintained without any disturbance. The members negotiated their expectations regarding the content of messages to be posted on the platform. New rules were negotiated, making group members participate in creating the atmosphere of communication that they aspired for. The rules were central to the group operations and members had to be constantly reminded to stick to them or face expulsion from the group. In some of the groups studied, new members

were issued with the rules immediately after joining the groups to ensure that they conformed to the expectations.

Although there were numerous rules on posting, one rule stating that members are only allowed to post content that is related to the type of farming that the group engages in was common among all the groups. Presence of such rules is a phenomena reported in other studies such as Guo and Goh (2014) and Damanik (2020). The latter study observes that in the context of a learners' WhatsApp group, the teacher should make rules on what should and what should not be posted on the group. All the groups investigated in the current study had rules that were either discussed by members at the beginning of the group or imposed on members by the group administrators. Common among the rules in all the groups studied, in particular, is one that stipulates that posting of non-task related information (social messages) was prohibited. Those groups were chosen for investigation partly on the basis that they offered different styles of posting behaviour and enforcement of the rules and protocols on posting.

In spite of the existing knowledge about the rules of virtual groups, the rule against posting of social messages in the WhatsApp groups studied has not been observed in previous investigations. Walther et al. (2005) confirmed that virtual groups are rule regulated and went further to identify the dominant rules but the main rule identified in the current investigation does not feature among the ones they stipulated. There was unanimity and uniformity among the different groups that only task messages should be shared on their platforms. A significant implication of the rules is that in the context of these groups, the messages posted by members should focus on the task, that is farming, rather than on social messages. This observation is consistent with

other studies such as Yücel and Usluel (2016) and Hou and Wu (2011). Nevertheless, it is worth noting that those two studies were conducted in education related groups comprising of a homogenous membership.

The assumption that group administrators and some members had was that the members could not be self-directed in choosing whether to post social or task messages and hence they had to be controlled through rules. This observation is consistent with Hercheui (2011) who explains that for online groups that are interested in long term sustainability, rules of governance and guiding member behaviour are necessary. The finding is also consistent with a similar one by Garcia and Badia (2020) who observed a relationship between task-oriented postings in students online interactions and positive task outcomes.

Agreement of members and administrators on those rules is crucial in ensuring that the posts conformed to the expectations of all. Although in some cases, the rules are provided by the group administrators, the members protested some rules and forced the administrators to tone down on some demands. A case in point was one group where the administrator saw posting of daily newspapers as social messages that violated the rules. The members were opposed to the idea of banning the newspapers from the group. After spending days discussing the issue, the administrator gave in to the demands of the members and allowed them to share newspapers on the forum.

5.2.2 Task-Oriented Communication Gravitate ttowards Social over-time

Groups where administrators do not accept the wishes of members, spend long durations of time trying to reach agreement on rules thereby wasting the time that could have been spent on substantive issues. This indicates that member agreement on the rules is crucial in creating the right atmosphere for communication within the

groups. Klonick (2018) made a similar observation that the gatekeepers use rules to create an environment that meets the expectations of the users of a mediated platform. Based on the rules that regulate their communication, farmers' WhatsApp groups tend to dedicate more focus on task and less on social messages. This is consistent with Walther and Burgoon (1992) who reiterate that over time, virtual teams may appear to reduce their task focus in favour of social messages. A more recent study by Fuller and Summers (2017) made similar conclusions observing that over time, the manner of interaction changes with prior rules being re-engaged and formalizing group norms.

The rules stipulating the content of messages to be posted are enforced in varying degrees among the farmers' WhatsApp groups. In some groups such as KD and PLC, members who posted any form of a social message at the initial stages of the groups were reprimanded. Other groups allowed members to combine social and task messages while others, such as DFK allowed members to post any type of message regardless of the rules. As Walther, Bunz and Bazarova (2005) note, understanding the rules and norms of virtual groups helps in deepening understanding of how communication in such group works. The rules that govern the posting of social and task messages have set the stage for understanding their communication within farmers' WhatsApp groups.

WhatsApp group members and administrators who hold that the rules against posting social messages should be followed maintain high hopes that a group that dedicates itself fully to sending task messages realises better outcomes. They view avoiding social messages as a way of maintaining decency, values, focus, control and coordination which are appropriate in society. Regulating against social messages is seen as an avenue for accomplishing task-oriented communication. For this reason, in

most of the groups observed, defying the rule by posting social messages is met with resistance. Compliance and deviation from those rules come with consequences for communication within the group. Walther et al. (2005) agree with this finding and state that compliance to or deviation from rules has a stronger impact online than offline.

On a positive note, the findings of this investigation reveal that WhatsApp groups that comply with the rule have few or no exits by members. In groups that have barred members from posting any form of content unrelated to the task, such as KD and PLC, the frequency of posting messages or collaborating dwindles. This however does not mean that members participate actively in posting messages on the group. In such circumstances, group members do not respond to task or social messages posted. This is an indicator that WhatsApp group members are encouraged to post and comment on both task and social messages in a ‘user-friendly’ environment that is created by social messages. In the Social Presence Theory which informs this study, Short et al. (1976) explains that the inability of a medium to convey social cues (which he calls non-verbal cues) affects interactions. Reduced member participation appears evident in some groups as an effect of keeping off from posting social messages.

The inactivity of members in groups that do not entertain posting of social messages mirrors findings of a study by Berlanga, Rusman, Bitter-rijpkema and Sloep (2009) that social interaction in task-oriented groups should not be taken for granted. Their study, which was based on communication in online groups used in education circles indicated that learning and social interaction take place together. In the case of farmers’ WhatsApp groups, exchanging information on farming can take place

alongside social interaction. Although the WhatsApp group members interviewed indicated their preference for task messages, this does not guarantee an environment that supports participation in task-oriented communication. To overcome the absence of social cues that are present in face to face group communication settings, group members, either unconsciously or deliberately engaged in posting social messages. Those social messages compensate for the missing non-verbal cues that impoverish online interaction.

The findings of this investigation also suggest that farmers both embraced some social messages but still expected group members to remain glued to the task. Group members were expected to abide by the rules of posting task messages exclusively and yet they could realise that they needed some social messages to meet their relational needs. An earlier researcher, Schutz (1966) argued that individuals join groups to gratify relational needs, such as inclusion, control, and affection—needs that cannot be completely satisfied by task messages. Those benefits are derived from social messages. Communication of social messages plays a distinct role in maintaining member participation in these groups. Some social messages stimulate participation and motivate group members to remain engaged in the groups.

Groups that allowed members to engage in acceptable social messages provided relational benefits such as social cohesion, feelings of belonging which appear to be critical in sustaining communication. Social messages may therefore not be related to the task but they are an embedded component that supports task-oriented communication. A similar observation is made by Kang, Han, and Lee (2017) who explain that social support through social messages creates an interpersonal glue that

influences task-oriented behaviours. Both task and social messages are an important ingredient in successful task-oriented WhatsApp group communication.

The discontent of group members with posting and accommodating social messages is consistent with Kang et al. (2017) who noted that social messages are underemphasized both in practice and in literature. Unlike in group communication in face to face settings which cannot be devoid of social messages, communication in a farmers' WhatsApp group is constrained of social cues hence group members look for alternate ways to compensate for that deficit. Evidently then, the absence of social messages does not necessarily mean that communication is going to be task-oriented.

5.2.3 Social Messages as Impetus for Group Communication

Data suggests an inextricable connection between task and social messages in farmers' WhatsApp group communication. This is in contrast to (Hou & Wu, 2011; Yücel & Usluel, 2016) who considered posting predominantly task-oriented messages as an ingredient for better group outcomes. The findings of this study further reveal that communication of either social and task or task-oriented messages exclusively matters in the sustainability of communication within WhatsApp groups. There were substantial differences between the groups that adhered to the regulation on communicating task messages exclusively and those that had no restriction on the content of messages to be posted. The WhatsApp groups investigated in this study were unique since membership was drawn from diverse social-economic backgrounds. The group membership comprised of people with varying levels of education, exposure and other demographics. Membership criteria and composition of WhatsApp groups characterize the qualities and dynamics of communication between participants (Lambton et al., 2019). In groups with a homogeneous membership,

social messages would most likely be accommodated since members may share the same preferences for such messages.

In groups that allow certain social messages to be posted over time, members create an environment full of warmth and a friendly environment that builds trust and motivates members to participate more in task-oriented communication. From the inevitability of social messages, the researcher deduced that in communicating task-messages, WhatsApp group members adapt their overall communication to mimic face to face communication where the social cues cannot be 'switched off' or regulated against. This observation is mirrored by (Fay, 2004) who observes that social messages meet the interpersonal communication needs of members.

Furthermore, for the farmers' WhatsApp group members to participate in communication optimally, the group should strike a balance between posting acceptable social and task-oriented messages. The inevitability of social messages in farmers' WhatsApp groups that regulate against such messages is an indicator that both task and social messages are pertinent to all forms of group interaction. This is a position mirrored by Beck, Paskewitz, Anderson, Bourdeaux, & Mueller (2017). Viewed with this lens, social messages are chosen by group members to accomplish both task and relational goals

Since the researcher has explained that not all social messages relate to motivation of members to participate, identification of the relevant social messages is crucial and a delicate issue in farmers' WhatsApp groups. These groups, owing to the wide-ranging preferences of messages by members are sensitive and as Beck, Paskewitz, Anderson, Bourdeaux, & Mueller (2017) observe, misalignment of task and social messages in delicate groups is likely to accidentally offend some members. Striking a balance

between task and social messages is therefore a crucial and sensitive matter that group administrators and members need to agree on.

Findings reveal that social messages in task-oriented WhatsApp groups undoubtedly play a critical role in motivating group members to remain engaged in communication. Coppola et al., (2004) identify a positive social atmosphere, coupled with predictable communication patterns as essential ingredients for group success. This suggests that social messages provide an important context for the communication of task messages. They appear to be critical in enhancing sustained communication in the groups through member participation. This finding is also consistent with the Social Presence Theory which Sheer and Chen (2004) argue that it can be linked to many positive facets of communication such as quality, appropriateness, richness and accuracy. Social messages are critical to member participation as they foster an atmosphere for WhatsApp group members to make close ties that motivate them to engage in conversations.

Despite a widespread view by group administrators and members that social messages are harmful to the accomplishment of task, social messages help to maintain a working relationship through sustaining task-oriented communication. This agrees with a study by Molinari (2010) who observes that social messages create a bond between group members that gradually makes members focus on the task communication over time leading to diminishing attention on social messages. The patterns of collaboration in the groups reveal that one condition for successful communication is through giving members leeway to post acceptable social messages alongside task-oriented ones.

On the other hand, some social messages appear to provide an impetus for group members to participate. Humour related to the task, goodwill messages such as congratulations, appreciation, and encouragement, positive feedback and greeting were acceptable and well embraced across the groups. They also lit up the group whenever there seemed to be laxity in sending messages. This finding further supports a call by Gordon (2017) for more research on specific relational and task-related interactions and how and when they are exercised in a virtual team and how they are blended and communicated.

5.2.4 Certain Types of Social Messages Are Acceptable Across the Groups

Certain types of social messages alongside task messages solidify group conversations by increasing member participation. For instance, humour in groups has been observed to be linked to performance in teams (Lehmann & Allen, 2014). Humour related to the task triggers a positive and supportive environment for member participation in the groups. Whenever a member made humour in the groups studied, that would act as an invitation to members, including the most passive ones to participate. As Beck and Keyton (2014) observe, humour enhances the group interaction process. As a social message, humour related to task motivates members to engage in further task communication.

Task messages in some instances contribute to the creation of a social effect during group interactions. Humorous task-oriented messages appear to be friendly to both the groups that are strictly focused on task and those that allow certain social messages. The example of ‘cowtoons’ posted in one of the dairy farmers’ group illustrates a task message that has properties of a social message. Paskewitz and Beck, (2018) make a similar observation and explain that certain task messages may both fulfil task and

social needs. Such task messages that can serve two purposes are acceptable to the group members without eliciting negative reactions since they remain within the ambit of permitted content.

On one of the posts, the researcher observed on the groups, a member states, “if we have conquered mushroom topics, let us bring in secondary topics” (MKY 15). This message implies that the group administrator is interested in going beyond the task messages and encourages members to introduce messages that may lead to cohesion within the group. Social messages are one way of cultivating that cohesion. This administrator implies that such a climate where members are cohesive will result in positive task-related outcomes.

During the interviews with group members, participants who were members of different farmers’ groups pointed out that they read and participated more in groups that were ‘lively’. Asked to describe what a ‘lively’ group was, a member responded, “I like a group that is not boring. Once in a while, it is good to take a break to discuss other matters that affect our lives”. That suggests that group that once in a while allow members to take a breather by discussing social messages potentially create an environment that is conducive for interaction on task-oriented matters.

This key finding indicates that contrary to the regulations that stifle the posting of social messages on farmers’ WhatsApp groups, social messages are a basic and essential element of maintenance of communication within such groups. Social messages act as a trigger to task messages and help sustain communication in the group. The influence to shape the posting of messages on the groups seems to be determined largely by social messages. The elimination of social messages, for instance in the PLC group had an observable effect on the participation of members.

This shows that if group members perceive that membership participation through posting messages is declining, they can engage in social interaction which may motivate members to reignite their participation on task-oriented issues. This suggests that if farmers perceived that they received support from social messages, the act of including some defined social messages in task-oriented groups may lead them to develop a sustainable environment for task communication. Especially necessary is to ensure that rules on posting elaborate the specific type of social messages acceptable to the group. These include goodwill messages such as greetings congratulatory posts and humour related to the task.

Posting task-oriented messages exclusively is the ideal expectation of members of farmers' WhatsApp group. The groups that enforce the rule against social messages succeed in ensuring that members remain in the group. There is little or no exit by members of groups that adhere to the core objective of the group which is to share ideas, experiences and lessons on how to advance farming.

Nevertheless, over time, members of those groups that do not allow posting of social messages suffer from burn out. It is common to see messages similar to one from the administrator of PLC group stating, "and by the way, where are you farmers? I am wondering whether poultry farming is sailing OK". PLC group administrator could not allow any social posts. Such remarks by leaders of groups that strictly enforce the rule on posting task messages exclusively are common and suggest that the degree to which members feel the urge and desire to post messages diminishes over time. They are concerned by the silence of members. Posting activity is minimal as evidenced by situations and groups where members run for days without posting any message. Inactivity in terms of posting messages is destructive to a group. As various scholars

observe, participation in those groups is seen as a measure of success and sustainability of virtual collectives (De Melo Bezerra & Hirata, 2011; Malinen, 2015; Walther & Burgoon, 1992; Walther et al., 2005)

The burnout in those groups suggests that group communication devoid of social messages is lean and devoid of social gratification that is necessary for sustainability to participation. Media Richness Theory by Daft and Lengel (1986), which is part of the theoretical lenses that inform this study, is concerned with richness and leanness of a medium providing a basic assumption that computer-mediated communications transmit less naturalness in terms of the social cues available in interpersonal encounters. This implies that in online communication, people exhibit less or fewer of their usual group communication habits such as exchanging social messages. Richness is not so much about the medium per se but how group members use it. Users of a medium have the ability to make it richer or leaner (Ferry et al., 2001). The groups that stick to posting tasking messages only make their communication lean and hence the group suffer from the effects of reduced member satisfaction.

5.2.5 Responses of Group Members to Posted Task and Social Messages

The response to social messages varied depending on the content of the message. For the social messages that were acceptable to the members such as greetings and goodwill messages, the responses include providing feedback and sharing in the emotions evoked by the message through text or emoticons. If the social message takes a direction that some or all members like, they applaud it and may begin a conversation centred towards such a message. In other cases, if some members were offended by the social post, they would leave the group. In one of the groups, a member posts, “Social messages are the reason I have quit some groups. They affect

the effectiveness of a group in delivering its mandate.” This finding matches with a previous study by Bouhnik, Deshen, and Gan (2014) who report that group members decided to quit a WhatsApp group because the general direction of the conversations was not to their liking and one of them only came back only when the other group members promised to act according to her expectation. It is clear from the findings that whenever group posting activity wanes, an acceptable social message reawakens members and spurs participation in both task and social messages. This is evidence that some members are motivated to participate in communicating in a group to meet social needs. Although the farmers interviewed pointed task messages as the only goal they would wish to pursue in these groups, it is clear that in practice, social messages help them realise much needed social gratification. This finding also mirrors Rau, Gao and Ding (2008) argument that people join online groups to fulfil their social-emotional needs.

The response of members and willingness to accept social messages changes, albeit gradually in favour of social messages. This points out to an inference that communication of social messages that are considered appropriate in those WhatsApp groups is based on user experience and the level of familiarity of group members with each other. As such, in the early stages of these WhatsApp groups, members should focus on task messages as they gain familiarity with each other. As the group communication progresses, they can debate on the nature and extent of social messages acceptable in the group as they build acquaintance with each other. WhatsApp group members in a task-oriented group become more acquainted with each other and open to social messages based on the common interests they share.

It is important for an instant messaging communication environment with both social and task messages to be structured so that members can understand their expectations. Loss of control of social messages was one of the fears expressed by some of the respondents in the interviews. The structures can be made in various ways, as the researcher observed from the findings. One way is by setting aside time or days where members are free to send social messages and other days where serious task debates are carried out. Another way is through defining the social messages that are acceptable to the group. PLC group members negotiated and made the administrator relax the rule against the posting of daily newspapers on the groups. Perhaps if such a concession was not made, it could have affected relations and communication within that group. The rules stipulating the type of messages to be posted should be revised to accommodate both social and task messages to foster an environment that sustains participation. This is a position held by the social presence theorists.

In the face of enforcement of regulations on the messages to be posted, WhatsApp groups members, when left to decide on whether to stick to the regulations or not appear to disregard them and slip back to social messages until fellow members or a group administrator intervenes. This finding is supported by Walther, Bunz, and Bazarova (2005) who observe that the manipulation or intervention by group managers may provide a practical approach to understanding and improving online groups. Earlier on, when the WhatsApp groups observed had been newly formed, there was an undivided commitment by members towards posting task messages exclusively. Prioritization of task-oriented communication is evident at this stage across the groups.

Observing how communication of social and task messages evolve is central to an understanding of how they are communicated. The farmers' WhatsApp groups modify their communication of social and task messages over time. A pattern indicating a gradual shift towards posting of social messages across the groups observed was discernible over time. Recurrent situations of group members, administrators and groups where no social message would be posted over time embracing and accepting some social messages were evidence that over time, such messages usually found their way into the communication of a group. This trend indicated the possibility of co-existence of social and task messages as the group matures, without eliciting conflict that would be witnessed in the earlier stages of the group.

In addition to that, in groups that stick to the rules against posting social messages, the practice of posting messages wanes over time. There are few and fewer interactions on the task and most posts are characterised by posting posters and advertisement of products. Such posts do not elicit active participation of members. In groups such as KD and PLC whose messages were predominantly task-oriented, after around one year of existence, the groups would run for days without any single post, prompting the administrators to make wake up calls to members to participate by posting messages. It is until the posting rules are relaxed that members swing into action and make the group alive with discussions once more.

When group members manage to create an environment where they can discuss task matters without interruption, they are ready and willing to discuss social issues without losing focus of the core objectives of the group. Once the group is stable and in its communication on task-oriented matters, there is less insistence by members and

administrators on following the rules and members gradually, either deliberately or unconsciously engage in posting social messages.

In practice, the regulations are modified and appropriated. Without necessarily creating a new version of the rules, group administrators and members employ and accept social messages. Change occurs as group members seem to have exhausted task-related information and look to further build and maintain relationships with each other. In several occasions, members of the KD group who suffered fatigue planned to have a plenary face to face meeting as they realised that the virtual group interaction was not sufficient to meet their personal and collective needs. Desanctis and Poole (1994) had a similar observation on group members appropriating messages over time and forming new social structures that were consistent with group communication practices. A case in point is the PLC group which modified and appropriated their regulations by moving from a rigid pro-task messages structure to accommodating social messages on certain days of the week. Even under the new regulations, members still flouted the rules by posting social messages on days dedicated to task messages. This implies that users of an instant messaging forum actively select and choose the content of messages to send in those groups.

A single-minded, task-oriented objective that members of these groups root for is seldom the case since there are other competing relational needs to be met through group interaction. This suggests that in consistence with the argument of Sheer and Chen (2004), human communication, whether face to face or on IM platforms is goal-oriented and involves task, social and self-presentational goals. Communicators strive to meet those goals simultaneously.

5.2.6 Integration of Social and Task-Oriented Messages

In all the groups studied, even when instructions or rules are made explicit, members tend to ignore them until a direct intervention is made by the administrator or other members. A similar observation is made by Walther, Bunz, and Bazarova (2005) who studied different types of rules in virtual groups and observed that virtual members will still break rules until explicit attention is drawn to their rule-following failures. The group administrators in these groups had to constantly remind group members to observe the rules.

Concerns about the kind of messages to be sent on task-oriented WhatsApp groups inform the group administrators' decision to set regulations. Nevertheless, at any given group at one point in time, members respond to that group requirement in ways that are inconsistent with the regulations. Since those regulations urge members to refrain from sharing social messages in favour of task messages, they create an environment that demotivates members from participating in the groups. Social messages are therefore a necessary ingredient for motivating members to participate in group conversations. Based on the evidence from the researcher's findings, WhatsApp groups that rigidly enforced the rule against posting social messages encountered a challenge of member apathy in participation in communication. Two of such groups suffered from absence of member participation until at one point, the administrators started mentioning members by their names on the forum, requesting them to contribute to debates. In consistence with this observation, a study that identified mechanisms that can enhance the success of virtual teams by Coppola, et al (2004) came up with a conclusion that social messages indeed lead to positive outcomes for such groups. This expectation of the group members and administrators

is merely idealistic since groups thrive through the interpersonal relationships that are created by members through combining task and social communication.

Contrary to the rules that advocate for messages posted to be devoid of any social communication, the findings further indicate that some social messages create a conducive environment for communication of task-oriented messages. This finding is analogous to Garcia & Badia, (2020) and Yücel & Usluel, (2016) observation that online group members post both task and social messages to complete tasks. Similar to face-to-face communication, in online group interaction, effective engagement cannot thrive without social messages. Thus, the findings contradict the notion by group members and administrators that a task-oriented WhatsApp group requires task messages only to realize the core objectives of the group.

The regulations that have been established abolishing posting of social messages are in conflict with group communication realities that Keyton and Beck (2009) postulated when they explained that groups are contextually and socially situated by the interpersonal and intragroup relationships. These relationships are built by group members through the social or relational messages they share. In spite of the groups being task-oriented, data showed that any attempt to put a gag on people posting social messages was not sustainable as members kept lapsing and engaging in social conversations. WhatsApp group members will deliberately or unconsciously engage in social conversations regardless of the regulations barring that. In some cases, members who posted such messages, when reprimanded, laboured to sanitise the posts by showing how the messages were directly or remotely related to farming.

Despite the prevalence of regulations, social messages still occur in all contexts. There is an inconsistency between the rules and actual performance in terms of posting social messages. In the groups where regulations were strictly enforced, members still managed to pass goodwill messages such as congratulations on appointments to a new position in government, post greetings and condoling with members who had been bereaved. These social support messages provided an atmosphere that was vital in creating a sense of cohesion between group members. Similarly, Ogara, Koh and Prybutok (2014) observe the importance of user experience, richness and social influence in user satisfaction and social presence in IMs. Participation by a large number of members improved around this time as they sent messages of consolation to the bereaved. This is an indication that social and task messages are inseparable in a WhatsApp group forum and that they can co-exist. It is clear that the communication patterns that emerge and maintain as well as stabilize these WhatsApp groups are a product of both social and task messages and not task messages alone.

The motivation behind regulating against social messages is the contention among group leaders that they hinder discussions on task, makes the group lose focus on the task and make decision making difficult. However, some social messages are necessary to accomplish task goals. This is in line with the argument of Keyton and Beck (2009) who explain that both task and relational messages are used interdependently to accomplish both task and social goals. Such messages include consolations to members who have been bereaved, congratulatory messages to members who have achieved certain feats, humour related to the task, goodwill messages during certain holidays and special events.

This view is supported by Kang, Han and Lee (2017) who opine that informal communications (social messages) may not be directly related to work tasks, but their role can go beyond relationship-building towards supporting accomplishment of task. Given the connection between posting social and task-oriented messages, if encouraged and allowed, the right kind of social messages may contribute to the optimization of the desired task-oriented participation in a WhatsApp group. The practice and perception by group administrators and members that it is undesirable to accommodate social messages alongside task-oriented messages in these groups have been disapproved through the findings of this study. It is common practice within the groups studied to disregard social messages, yet one cannot ignore the underlying connection between a WhatsApp group environment with social messages and sustainability of communication of task-oriented messages. A social context, built partly through social messages emerges from these groups as a necessary ingredient in a task-oriented group. Informal relationships appear to make group members more interested in participating in the group as opposed to an environment that is mechanical and fully task-oriented.

5.2.7 Inconsistency between Perceptions and Practice

The perception of WhatsApp group members about task and social messages denotes two sides of the same coin. On one side, they perceive task messages as critical and central to the group which reflects the findings of other studies (Hou & Wu, 2011; Yücel & Usluel, 2016) where posting predominantly task-oriented messages is seen as an ingredient for better group outcomes. Interviewed group members in this study explained that task messages form the core reason for forming, joining and remaining in a group. On the other side, they perceive social messages as distractive and

therefore a threat to effective communication and survival of the group. This is a position observed by Hercheui (2011), Nicholson (2016), West (2017) and Wang, Poole, Harris, and Wangemann (2001) who observed that group members preferred less rather than more social presence. It is for that reason that group administrators play the role of gatekeepers to protect members from social messages by censoring the posted content. In practice however, group members continue to post social messages indicating that such messages are unavoidable in WhatsApp group communication.

This finding reinforces the idea that social messages can co-exist with task messages and mirrors Garcia & Badia (2020) and Yücel & Usluel (2016) observation that virtual group participants post both task and social messages to complete tasks. From the current study, in one of the groups where social messages were weeded out strictly, a member commented, “while it is fun to talk about the fun you had in the meeting with the Cabinet Secretary, we need to now focus on the issue of milk prices”. From that comment in the group conversation, it is clear that previously, members had been discussing the fun they made (social messages) and the current comment is drawing their focus back to task issues. The discussions on social issues therefore trigger discussion on the substantive issues.

5.3 Chapter Summary

The chapter has provided an in depth interpretation of findings in light of the theoretical framework and reviewed literature. Major thematic issues arising from the findings are discussed. The researcher argues in the chapter that reduced member participation appears evident in some groups as an effect of keeping off from posting social messages. This is explained through the lenses of Social Presence Theory

which informs this study. In consistence with the Media Richness Theory, there is evidence from the study that people exhibit less or fewer of their usual group communication habits in online communication. Group members in such contexts overcome that shortcoming through exchange of social messages.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter provides a summary of the findings as well as the conclusion and recommendations of the study. The summary of findings is arranged thematically according to the research question as stated in section 4.1. In addition to that, the chapter presents the implications of the findings and recommendations for policy and practice. It also provides suggestions for future studies and finally, the reflections of the researcher as a doctorate scholar.

6.2 Summary of Findings

This study investigated the communication of social and task-oriented messages on WhatsApp farmers' groups in Kenya. It addressed three research questions: how do members of farmers' WhatsApp groups in Kenya communicate social and task-oriented messages in their forums? What are the farmers' responses to communication of social and task messages on their WhatsApp groups? What are the farmers' perceptions of communication of task and social messages posted on their WhatsApp group forums?

To answer those questions, the researcher used participant observation of messages posted on the forums as well as in-depth interviews with members of farmers' WhatsApp groups. A summary of the key findings is presented on the sub-sections below.

6.2.1 Communication of Social and Task Messages

Regarding the question on how members of farmers' WhatsApp groups in Kenya communicate social and task-oriented messages in their forums, data suggests that communication of task messages is done in a formal and respectful manner. On the other hand, social messages are communicated in a critical and indifferent disposition. There is camaraderie in the communication of social messages. They are expressed in a relaxed and friendly manner that elicits laughter and provides a break from the monotony of discussing task issues.

In addition to that, communication of task and social messages takes place under a set of communication rules. These rules are introduced and enforced by group administrators and members. The main rule of engagement stipulates that group conversation should be centred on task-oriented messages and members should not post social messages. In spite of the explicit rules against posting social messages, members of farmers' WhatsApp groups in Kenya disregard the regulations until the group administrators and some members take action against that practice.

Posting a social message elicits threats from the administrator and group members while posting task-oriented messages, elicit desirable feedback. Nevertheless, certain types of social messages are acceptable across the farmers' WhatsApp groups. Communication patterns show sustainable participation in communication takes place in groups that allow members to exchange task-oriented messages together with acceptable social messages.

6.2.2 Responses to Communication of Social and Task Messages

In relation to the question on farmers' responses to communication of social and task messages on their WhatsApp groups, findings indicate that the responses suggest an underlying desire to focus on task-oriented messages only. They consider such messages beneficial to the group and to them as individuals, suggesting that the members who participate in these groups are more interested in discussing solutions to their farming issues than seeking social pleasure.

Members of farmers' WhatsApp groups in Kenya disapprove of social messages. They view them as a distraction from the core task. They consider social messages distractive and hindrances to the accomplishment of the objectives of the group. They cite that social messages make groups ineffective. They nevertheless consider specific types of social messages associated with benefits to the group. They advocate for some light moments to keep the group members actively engaged in conversation. The response of members of farmers' WhatsApp groups in Kenya therefore indicates an inextricable connection between task and social messages in their WhatsApp group communication.

6.2.3 Perceptions on Communication of Task and Social Messages

Finally, in relation to the perceptions of communication of task and social messages posted on their WhatsApp group forums, findings indicate that members of farmers' WhatsApp groups perceive task messages as tacitly linked to the goals of interacting in the group. They express an underlying desire to focus on task-oriented messages only. They consider such messages beneficial to the group and individuals, suggesting that those who participate in these groups are more interested in discussing solutions to their farming issues than seeking social pleasure. Group members perceive social

messages as an unnecessary impediment to their core business of discussing farming-related matters. They find them unpleasant and problematic to control.

The opinion of members of farmers' WhatsApp groups is that only task messages should be posted on their groups. They explain that they joined the groups with the sole purpose of exchanging farming ideas and not for pleasure. Some of them perceive some social messages such as warnings, farming-related humour and goodwill messages as important to group members.

6.3 Conclusions

This study set out to investigate how members of farmers' WhatsApp groups in Kenya communicate social and task messages in their forums, their responses to communication of social and task messages and their perceptions of communication of task and social messages posted on their WhatsApp group forums. Farmers' WhatsApp groups in Kenya are unique due to their membership composition that is characterised by diverse demographics.

The main thesis in this study is that although messages on the WhatsApp groups I investigated are communicated under a set of rules that discourage members from posting social messages in task-oriented groups, social messages are a necessary ingredient in sustaining communication in those groups. While it is important for communicators on task-related WhatsApp groups to focus on task-oriented communication, there is an inextricable connection between task and social messages. Participants and group administrators of task-oriented IM groups with heterogeneous membership should view social messages positively and appreciate the contribution they make in communication within the groups. They should abandon the single rule discouraging posting of social messages and instead concentrate on establishing an

interactive environment where members will feel motivated to participate. That notwithstanding, it is pertinent that groups with heterogeneous membership identify and advocate for the type of social messages that are acceptable across their membership.

6.4 Recommendations for Policy and Practice

This investigation sought to promote more understanding of communication of social and task-oriented messages in WhatsApp groups for farmers. From the analysis and discussion of findings, some possible implications arise. These implications relate to policy and practice in communication on WhatsApp group forums. Those issues are considered in the following subsections.

6.4.1 Setting Regulations that Accommodate both Social and Task Messages

In terms of practice, this investigation raises important issues on the communication path that managers of task-oriented WhatsApp groups should take to promote the sustainability and productivity of their groups. The manner in which group administrators and members manage communication of task and social messages is critical to the sustainability of participation in the groups. The broader implication to practice is that contrary to the rules of posting messages in farmers' WhatsApp group, social and task messages can co-exist. As the findings suggest, group administrators and members censor the messages posted and demand that they should be exclusively task-oriented. As the group activities progress, those groups that enforce this rule rigidly record diminishing member participation. The importance of active member participation through posting and commenting on messages cannot be gainsaid. Such apathy in communication is destructive to accomplishment of the core objectives of the groups. The response of farmers to social and task messages raises implications

for the design of regulations on messages that should be shared on their WhatsApp group forums.

Data from this investigation has provided a wealth of information in support of the fact that groups need both social and task-oriented messages to thrive. There is, therefore, need for group administrators and other gate-keepers who moderate the content of messages to do so without necessarily killing social presence. This applies to Communication for Development practitioners who should train members of WhatsApp groups dealing with development that rules on posting messages should essentially point out the kind of social messages that are permitted and what is not permitted in the groups. Such messages may be agreed on by members but data suggests that they should include humour that is related to the task, seasonal greetings and goodwill messages, sharing stories on personal achievements and frustrations related to the task as well as consoling members who are facing hard times in life. Such relational messages create a collaborative team environment and provide the necessary glue that keeps members engaged.

Thus, while there were fears among group gate-keepers that social messages would threaten the existence of the group, there is evidence that such messages, in conjunction with task-oriented ones will be constructive to group communication. Improved member satisfaction that is brought about by responding to their social needs through social messages will translate to a more desirable environment for communication which translates to favourable group outcomes. The rules and protocol stipulating the content to be posted on these groups need to create a balance between creating the right social atmosphere for sustained communication and members remaining focused on task-oriented conversations.

6.4.2 Multi-Task by eengaging in Both Social and Task Communication

The issue of what particular content of messages can be identified and encouraged in farmers' WhatsApp group is important since it has a bearing on the (in) ability of the group to meet its outcomes. From the findings, the disdain towards social messages that were expressed by the group members interviewed was driven by the anticipated distraction that they expected to arise from such messages. Indeed, as data suggests, social messages were related to the dysfunction in some of the groups. Group members should accept that they may take longer to achieve on task-oriented outcomes when the platform is filled with social messages that they need to wade through. If left unchecked, they can ruin and break-up the collaborative environment in the groups. This finding does not necessarily limit the option of encouraging members to post social messages in their forums. There is a need to create a trade-off between members who are interested in relating socially and those who are interested in remaining focused on task messages. This can be realised through a clear demarcation of social and task-oriented discussion sessions.

To mitigate conflict between those two parties, some groups enacted regulations that developed a structure on periods when people could engage in any social discussions. One such group identified two days of the week when members were free to engage in debates outside the task. Given that there are members who are not interested in such social messages and debates, such members can keep off the groups on those days. It is an offence in such WhatsApp groups to post social messages on days dedicated to task-oriented messages.

Another way of structuring the WhatsApp group conversations to accommodate social messages is by scheduling certain days of the week for discussions on a given topic.

During such times, an expert(s) on the area of discussion can be invited to join the group online at the specified time. The expert can be allocated time to guide the members in the given area and then invite members to ask questions. Throughout such moments, it should be clarified that no social message should be posted by members. This kind of structure seemed to work in groups such as KD and at such occasions, there was evidence of engagement among many of the group members. A group with such arrangement will relax the rule on posting social messages after that scheduled debate. That structure will ensure that the relational needs derived from social messages are met in tandem with the overarching task-oriented needs. Group administrators and members are therefore encouraged to use those strategies in their management of day to day communication in their farmers' WhatsApp groups.

6.4.3 Capacity Building

There are policy-makers such as governments, non-governmental organisations and practitioners in the area of communication for developments working with farmers' groups. Owing to their massive uptake and use among Kenyans, WhatsApp groups have become a critical medium for use in task-related activities. Policy-makers should utilise the findings of this study, especially in capacity building among virtual agricultural extension services. To address difficulties in managing the complexity of online group communication, they should build capacity among their staff who work with WhatsApp groups on the need to link group discussions on farming to meeting members' social needs. An essential path to improvement of communication in task WhatsApp groups is to train the group administrators and members that they need to mimic conversations in their face to face gatherings while interacting on online platforms. They should do this by incorporating social messages in their online group communication.

6.5 Contributions and Originality of the Study

The contribution of this study is in terms of theoretical, methodological and practical implications. Firstly, in terms of theoretical contribution, the study extends the application of Media Richness Theory to the study of communication on instant messaging platforms. Postulated by Daft and Lengel (1986), MRT focused on face-to-face and written communication. None of the previous studies reviewed has used MRT as the theoretical lens to study communication on WhatsApp groups. Previous studies that have used MRT revolve around face-to-face and written communication. Those studies have focused on comparing richness of communication between face to face and email exchange (Thomas, 2013); comparing a traditional website to an interactive site created in a virtual platform (Badger, Kaminsky, & Behrend, 2014) and an investigation of corporate communication on websites compared with animation and videos (Saat & Selamat, 2014). Others include investigation of team collaboration using multiple channels that included email, Google Docs, Facebook, texting, and phone calls (Aritz, Walker, & Cardon, 2018). In this study, MRT provided the theoretical lens incorporating media richness and leanness to articulate the dynamics of the interplay between social and task messages on WhatsApp groups. The use of MRT in this study validates its use beyond face-to-face and written communication to explain constructs in instant messaging platforms. It demonstrates the robustness of MRT in model communication on WhatsApp groups in a task-related context.

Secondly, for scholars of group communication, the study responds to calls by researchers (Church & de Oliveira, 2013; Karapanos et al., 2016) for more understanding of communication of task and social messages in task-oriented IM groups. This is necessitated by the fact that extant studies in communication within

IMs have previously provided inconsistent conclusions on the interplay between social and task messages in task-oriented groups. From the findings of the current investigation indicating that sustainable member participation takes place in groups that allow members to exchange task-oriented messages together with acceptable social messages, this study emphasizes social messages as an underlying component necessary for success in communication within task-oriented IMs. This expands scholarship in the area of digital communication by further validating studies that view social messages as an important source of impetus for group members to participate in posting task messages (Ertiö, Ruoppila, & Thiel, 2016; Joksimovic, Gašević, Kovanovic, Riecke, & Hatala, 2015; Nov, Arazy, & Anderson, 2014; Poth, 2018; Richardson, Richardson, Swan, Lowenthal, & Ice, 2016; Zhou, Su, Zhou, & Zhang, 2016). This research contributes to the literature in this area through the conclusion that both social and task messages can co-exist and create a conducive environment for member participation in task-related communication in WhatsApp groups with a heterogeneous membership.

The study further makes a theoretical contribution by adding new knowledge in the area of digital communication through articulating the type of acceptable social messages in the WhatsApp groups investigated. These are messages on humour related to the task, goodwill messages such as congratulations, appreciation, encouragement, positive feedback and greetings which are acceptable and perceived to be useful to communication in the groups. In doing so, it expands studies that have explored motivations behind participation in online groups. Studies in communication in WhatsApp groups in the context that the researcher has referred to are few and none has focused on communication of social and task-oriented messages on

WhatsApp groups. These related studies which the researcher has made reference to include Omanga (2019), Henry et al. (2016) and Farmer, Liu, and Dotson (2016).

Thirdly, this investigation also presents a methodological contribution to the literature on the study of communication in WhatsApp groups. This is particularly important since contemporary scholars (Malinen, 2015; Park et al., 2014) have pointed out that group processes demand a longitudinal approach to observe changes in communication patterns over time. Prior to this study, there is no other that the researcher knows of, that had utilized a netnographic approach in the Kenyan context. This investigation, therefore, introduces this methodology in this context and presents it as novel methodology that should be applied in studies exploring communication within online environments. The study also combines participant observation and in-depth interviews as data generation methods which is an uncommon practice within the studies the researcher has come across in this context. Since group communication is increasingly done online, researchers in the field of communication studies can advance scholarship by applying this novel but under-utilised approach.

The findings of this study should be linked to effective communication in task-related WhatsApp groups. To practitioners and scholars in the communication for development arena with a focus on agriculture, this study advances a novel perspective by informing them on the need to create bonhomie through the acceptable social messages in their task-oriented WhatsApp groups. The implication for communication for development practitioners who use WhatsApp groups in farming and other task-related contexts is that they should promote the use of acceptable social exchanges which will yield dividends in member participation and group productivity. They should focus on striking a balance between social and task communication

instead of regulating against social messages in order to work efficiently and satisfactorily. The more practitioners understand the communication of social and task messages in WhatsApp groups, the more they design communication patterns and content that leads the groups towards meeting their set objectives. Specifically, the results suggest that members of WhatsApp groups for farmers should adapt group communication rules that allow them to blend task-oriented communication with social messages.

In conclusion, the main thesis in this study is that although messages on the WhatsApp groups I investigated are communicated under a set of rules that discourage members from posting social messages in task-oriented groups, social messages are a necessary ingredient in sustaining communication in those groups. While it is important for communicators on task-related WhatsApp groups to focus on task-oriented communication, there is an inextricable connection between task and social messages. Participants and group administrators of task-oriented IM groups with heterogeneous membership should view social messages positively and appreciate the contribution they make in communication within the groups. They should abandon the single rule discouraging posting of social messages and instead concentrate on establishing an interactive environment where members will feel motivated to participate. That notwithstanding, it is pertinent that groups with heterogeneous membership identify and advocate for the type of social messages that are acceptable across their membership.

6.6 Suggestions for Further Studies

The results of this investigation provide a conceptual foundation from which the communication of task and social messages in online groups can be explored further.

Numerous concerns have emerged in this investigation which would require further empirical study. One of these involves replicating the study by investigating communication of social and task-oriented messages in other groups outside farming. Such studies can check the consistency of the findings across WhatsApp groups formed for accomplishment of different activities.

In addition to that, the researcher suggests that future studies focus on farmers' WhatsApp groups whose membership is relatively homogenous. The current investigation focused on groups with heterogeneous membership. The findings can be tested against a group with membership composed of people with a similar background of education, exposure and other demographics. This suggestion is made since the findings may have been affected by the varying demographics among the members of the groups studied.

Finally, as McLuhan (1977), suggests, the medium is the message. In that regard, different or varying findings may be realised when a similar study is done on farmers' groups in other online platforms such as farmers' groups on Facebook and Telegram Messenger among others. Since the Media Richness Theory indicates that different media have different levels of richness and leanness, such forums may present different findings.

6.7 Researcher's Reflection as a PhD Scholar

In this brief section, I reflect on my journey as a PhD scholar. As advised by Kozinets (2010), a netnographer ought to deal openly with issues of reflexivity and in recent times, researchers have become increasingly concerned about their own awareness and self-reflection. The journey of my PhD studies has been a long one, filled with a mixture of excitement and frustration, joys and sorrows, learning and unlearning.

Along the journey, I met new people, learnt new skills and reached new academic heights.

My inspiration to pursue the topic of study on communication of social and task-oriented messages was inspired by personal observations on online groups that I belong to. I was concerned about why some groups carry out their communication activities seamlessly while others barely survive beyond a few months since their formation. Of interest to the researcher were the rules that most farmers' groups had put in place, stipulating that WhatsApp group members should not post messages that are not related to farming. From interaction with literature in this area, I noticed a call by researchers for a need to conduct further studies on this subject and I took up the challenge.

I cannot claim that I started this research *tabula rasa*, unhindered by preconceived ideas of the phenomena I was investigating. Before the study, my standpoint on communication of social and task-oriented groups in farmers' group with a homogenous membership was that social messages should not be posted on task-oriented WhatsApp groups. Although I held such beliefs, I was open to alternative interpretations and I approached the investigation with an open mind. The results of the study indicate that I, together with like-minded WhatsApp group members, need to adjust the perception of social messages as a hindrance to the accomplishment of tasks through communication of task-oriented messages. I should rather view them as a necessary ingredient in creating a sense of community that is necessary for online group participation.

Through this study, I have learnt the mechanics and rigour involved in qualitative enquiry. I was introduced to netnography by one of my thesis supervisors at a time

when I was struggling to find a suitable approach to investigate this phenomenon. I had previously conceived a quantitative approach but it could not effectively capture the complexity of online group communication.

Finally, having immersed myself into communication within digital spaces through this study, I have discovered new horizons through a deep interest in understanding communication on online platforms. This study has left me with more questions than answers on the complex process of group communication. This is just but the beginning of a long journey of research on the previously uncharted areas of communication of social and task-oriented messages on WhatsApp groups. The PhD journey has been a rewarding and inspiring experience.

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APPENDICES

APPENDIX ONE: COPY OF RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. STEPHEN MWANGI MACHARIA
of MOI UNIVERSITY, 0-100 Nairobi, has
been permitted to conduct research in
Nairobi County
on the topic: SOCIAL AND
TASK-ORIENTED COMMUNICATION ON
INSTANT MESSAGING PLATFORMS: A
NETNOGRAPHIC STUDY OF FARMERS
WHATSAPP GROUPS IN KENYA
for the period ending:
31st January, 2020

Permit No : NACOSTI/P/19/43830/28040
 Date Of Issue : 1st February, 2019
 Fee Recieved :Ksh 2000



[Signature]
 Applicant's
 Signature

[Signature]
 Director General
 National Commission for Science,
 Technology & Innovation

APPENDIX TWO: LETTER TO GROUP ADMINISTRATORS AND MEMBERS SEEKING ACCESS

Date: March, 2019

To the group administrators and members of xxxxxx farmers' WhatsApp group

Dear members,

Re: Request to study WhatsApp group messages for an academic research

I am a member of this group and a doctoral student at the Department of Communication Studies, Moi University. I request you to allow me observe the messages posted in this group for the purpose of an academic research study. The aim of the study is to understand **your communication of social and task-oriented messages.**

To carry out the study, I will observe the interactions that group members have engaged in over a period of time and analyse them to make a conclusion(s). I will not cite the name, phone number or any other information that will reveal the identity of the group or any member of the group. You have a right as an individual or a group to withdraw from this study at any time by notifying me through writing. The data I collect will be used only for the purposes of this study and will be treated as confidential. I will share with you the results of the study, which will benefit the group through understanding best practice in posting messages on the platform.

I look forward to your favourable feedback.

Yours faithfully,

Stephen Macharia

APPENDIX THREE: SAMPLE INFORMED CONSENT FORM

Title of the study: Social and task-oriented communication on instant messaging platforms: a netnographic study of farmers' WhatsApp groups in Kenya

Investigator: Stephen Macharia

Institution: Department of Communication Studies, Moi University

Introduction:

I am a Doctor of Philosophy student from the Department of Communication Studies of Moi University and doing a research on how farmers in Kenya communicate social and task-oriented messages on their WhatsApp groups.

Purpose of this research study

The purpose of this study is to investigate social and task-oriented communication on farmers' WhatsApp platforms. The study also seeks to understand how farmers respond to both social and task messages as well as their perceptions of task and social messages posted on their group platforms.

Procedures

I am requesting you to take part in this research project. If you accept, I will ask you to respond to the interview questions I will ask. This will take between forty-five minutes to one hour of your time. During the interview, I will sit down with you at your place of work or any other place of your choice. I will ask you to allow me tape-record our conversation. If you do not wish to answer any of the questions during the interview, you may say so and I will move on to the next question. No one else but myself will be present unless you would like someone else to be present.

Possible risks or benefits

There is no risk involved in this study except your valuable time. There is no direct benefit to you also. Nevertheless, the results of the study may help improve on member interactions in your farming WhatsApp group.

Right of refusal to participate and withdrawal

You are free to choose to participate in the study or not. You may also withdraw at any time from the study.

Confidentiality

The information provided by you will remain confidential. Nobody else except myself will have access to it. Your name and identity will also not be disclosed at any time. However the data may be seen by an Ethical Review Committee and may be published in a journal and elsewhere without giving your name or disclosing your identity.

Available Sources of Information

If you have any further questions, you may contact me on 0722 483268 or machariamwangi0@gmail.com.

AUTHORIZATION:

I have read and understand this consent form, and I volunteer to participate in this research study. I understand that I will receive a copy of this form. I voluntarily choose to participate, but I understand that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study. I further understand that nothing in this consent form is intended to replace any applicable state or local laws.

Participant's Name: _____

Signature : _____

Date : _____

Investigator's Name: _____

Signature : _____

Date : _____

APPENDIX FOUR: INTERVIEW GUIDE FOR GROUP MEMBERS

Disclaimer: This interview will take between 1 and 1.5 hours

General Questions

- i. Please tell me about your WhatsApp group.
- ii. For how long have you been a member of this group?

RQ1: How do members of farmers' WhatsApp groups in Kenya communicate social and task messages in their forums?

- a. What kind of messages do you like posting on the group?
 - Could you give a reason for this?
- b. What kind of messages do you prefer reading on the group?
 - Could you give a reason for this?
- c. What kind of messages are posted by other members on your farming Whatsapp group?
- d. What regulations guide the kind of messages that should be posted on your group?
- e. How often do you read and post messages on the group?

RQ2: What are the farmers' responses to communication of social and task messages on their WhatsApp groups?

- a. How do you respond when a member of your WhatsApp group posts task-oriented messages?
 - What are the benefits of such messages to you as an individual?
 - What are the benefits of such messages to your group?
- b. How do you respond when a member of your WhatsApp group posts social messages?
 - What are the benefits of such messages to you as an individual?

- What are the benefits of such messages to your group?

RQ3. What are the farmers' perceptions of communication of task and social messages posted on their WhatsApp group forums?

- a. What is your perception of messages posted on your WhatsApp group?
 - b. What is your opinion about posting of messages that are strictly farming related, without any social messages?
 - c. What's your opinion about posting social/relational messages on your farming WhatsApp group?
 - d. In your opinion, what kind/content of messages should be posted on your farmers' WhatsApp group?
- How are such messages beneficial to your group?

Conclusion

Do you have any other information or opinion you would like to share regarding communication of social and task messages in your farming WhatsApp group?

End

APPENDIX FIVE: A SAMPLE INTERVIEW TRANSCRIPT

Tell me about your farmers' Whatsapp group

My groups is made up of poultry farmers. Only poultry farmers, no dairy, no pigs. Poultry only including layers, broilers and kienyeji (local breeds). I have more than 1,040 birds on the farm.

What else can you say about the group?

I can say it is very informative. I am really getting a lot of help because right now I have just ordered some feeds because one farmer was saying that the production has really improved since she changed because they have started doing their own feeds and one farmer says the production has really improved. I benefit a lot from the group. I have been a member for one month

My interest in these groups is related to the kind of messages that people send.

What kind of messages do you post on the group?

I am not very active in sending messages. I have sent only 2 messages: one on feed and another one where I was asking for help because I wanted to make cages. I needed help to be directed to the right person. Those are the only messages because they are also very strict. They keep saying you should not post forwards on funny messages. If you do that, you will be kicked out. Here is just poultry. Matters related to farming tosha(enough).

Only task messages? No matters related jokes?

No no no. Imagine, they are very keen. Very keen. Its just matters related to poultry farming.

What could be the reason behind this? Why is it that they do not allow social messages?

I think it's just business. They don't allow social messages because of course you know when you allow, they just keep forwarding, forwarding, and sometimes if you have a problem, you will post it here and then another one comes with a forwarded social message. Of course your task messages may not be given attention. I think that is the reason why they just say: business!

Do you like it that way?

Ya. I like it that way. I don't mind because that is the reason why I joined the group. Of course I have friends and we can talk social things when I want to. I attended one of the face to face meetings of members of that group and I realized we have old people in the group. Every Thursday, the group holds a meeting. This group is very strict and serious.

So you prefer posting task messages yourself?

Yes, yes, because I know what I want. I am okay with that.

Are there members who flout the rules and what happens in such a case?

Yes, of course. Some few days ago, there is a lady who sent a forwarded message with chicken talking, trying to joke around. Immediately people started complaining: 'please, this forum is for poultry, blah, blah, blah. Another member asked, "Is there anything wrong with that? Just a joke." And she was told, "please, you are also going to be kicked out". That's how strict they are.

So, there are regulations that guide the kind of messages posted? Which regulations are those?

The rules are not posted but I remember the chairman and secretary of the group just saying that it is a group for poultry, no forwards, no jokes and if anyone is caught doing this, they will just be kicked out. That is the regulation I have seen.

How often do you read messages on the group?

I read them every now and then. I can't skip any message. Every now and then, I make sure that I am reading because I want to see whether there is something new, the price of eggs, e.tc. actually we have set the price of eggs here to avoid exploitation. As a group, we have set the minimum prices of eggs.

How do you respond to the messages on task? Do you respond to them?

I don't think I respond. I don't do so.

In what way(s) do task messages benefit you?

In many ways, such as setting prices for the eggs, earlier, I used to sell them at a lower cost. I have also got customers through the group. The rest of the group benefits just like me. I have seen them saying things such as, "thank, thank you for sending me customers"

What is your perception about the kind of messages sent to your group?

Since we are here for business, this is very good. I like everyone who is sending task messages since there is no joke. It is just serious business. They are just talking about poultry. Nothing else. And I think that is why I am in the groups. That is the reason why I keep reading. Those other groups where there are just social forwards and everything, I just find myself off.

Are people active in sending messages on this group?

They are very active. Because we are so many. We are over 200 members in the group. Every day, people are just writing, every now and then, asking questions,

So you are happy with sending only task messages?

Ya. I am, because when I need social messages, I have friends and I am in other groups with them. I even don't know people apart from 2 in this group. The rest, I don't know them.

You cant even make a joke related to farming?

You cant. Just have a look at the messages on the group.(She shows me). Someone has just posted a motivational message. I don't know what will happen but just wait. However, two weeks ago, I saw some difference in post that a member made that asked farmers to pray and fast so that the Kenyan government can support farmers. The members were asked to raise their hands if they would participate in the prayers. That message, although social was supported because we were praying and fasting for this poultry venture. Any other message outside poultry has not been accepted. They lady who tried to joke earlier received a bad response from members.

According to me, social messages should not be posted here because we will lose focus. I am okay with the current situation and I am finding interest in reading the messages without skipping any. Imagine a group of people helping you to make money. We have to be serious.

If I was to be removed from this group, I would not be happy. I would struggle to get back there. I am getting crucial information about the feeds. Someone has made feed and everyone is saying this feed is superb, superb. Its good.

Thank you so much xxxx for your time

APPENDIX SIX: OBSERVATION SCHEDULE

The observation schedule was adopted from (Rourke & Garrison, 2001), having done a study titled: *Assessment of social messages*, which is similar to the current study. This schedule identifies and delineates social messages. Task messages are related to farming

<i>Category</i>	<i>Indicators</i>	<i>Definition</i>	<i>Example</i>
<i>Affective</i>	Expression of emotions	Conventional expressions of emotion, or unconventional expressions of emotion, includes repetitious punctuation, conspicuous capitalization, emoticons.	"I just can't stand it when ...!!!!" "ANYBODY OUT THERE!"
	Use of humor	Teasing, cajoling, irony, understatements, sarcasm.	The banana crop in Edmonton is looking good this year)
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability.	"Where I work, this is what we do ..." "I just don't understand this question"
<i>Interactive</i>	Continuing a thread	Using reply feature of software, rather than starting a new thread.	Software dependent, e.g., "Subject: Re" or "Branch from"
	Quoting from others' messages	Using software features to quote others entire message or cutting and pasting selections of others' messages.	Software dependent, e.g., "Martha writes:" or text prefaced by less-than symbol <.
	Referring explicitly to others' messages	Direct references to contents of others' posts.	"In your message, you talked about Moore's distinction between ..."
	Asking questions	Students ask questions of other students or the moderator.	"Anyone else had experience with WEBCT?"
	Complimenting, expressing appreciation	Complimenting others or contents of others' messages.	"I really like your interpretation of the reading"
	Expressing agreement	Expressing agreement with others or content of others' messages.	"I was thinking the same thing. You really hit the nail on the head."
<i>Cohesive</i>	Vocatives	Addressing or referring to participants by name.	"I think John made a good point." "John, what do you think?"
	Addresses or refers to the group using inclusive pronouns	Addresses the group as <i>we</i> , <i>us</i> , <i>our</i> , <i>group</i> .	"Our textbook refers to ..." "I think we veered off track ..."
	Phatics, salutations	Communication that serves a purely social function; greetings, closures.	"Hi all!" "That's it for now" "We're having the most beautiful

APPENDIX SEVEN: WORKPLAN

	Phase/Activity	Dates	Expected outcome
1	Development of proposal	January to July 2018	Research proposal
2	Proposal defense and correction	October 2018 – Dec 2018	Approval of research proposal
3	Piloting research instruments	Dec 2019	Data collection instruments
4	Data collection and analysis	Jan-June 2019	Completed research instruments/data collection
5	Data interpretation and refining the final draft thesis	June 2019 – Jan 2020	Results/findings
6	Making corrections from supervisors comments	Jan - March 2020	Draft thesis
7	Seminar presentation	Nov. 2020	Seminar presentation
8	Corrections after seminar	Nov.-March. 2021	Final thesis
7	Submission for examination	April 2021	Final thesis

APPENDIX EIGHT: RESEARCH BUDGET

No.	Item	Description	Unit Cost (Kes)	Estimated Amount (Kes)
1.	Equipment	Laptop	53,000	53,000
2.	Stationery	i) 10 Writing materials	300.00	3,000
3.	Travel	Transport to the venue for interviews	12 days	1,000
4	Refreshments	i) Refreshments for interviews	1,000.00	8000
5	Bureau Services	i) Printing	3, 000.00	15,000.00
		ii) Photocopying	600.00	3,000.00
		iii) Binding	800.00	4,000.00
6	Miscellaneous		5000	5000
	TOTAL			92,000