

Northumbria Research Link

Citation: Ogwu, Suzannah (2019) An exploratory study of the application of mindsight in virtual communication: the case of email. Doctoral thesis, Northumbria University.

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/42076/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>



**Northumbria
University**
NEWCASTLE



UniversityLibrary

**AN EXPLORATORY STUDY OF
THE APPLICATION OF
MINDSIGHT IN VIRTUAL
COMMUNICATION: THE CASE OF
EMAIL**

S.A. OGWU

PHD

2018

**AN EXPLORATORY STUDY OF
THE APPLICATION OF
MINDSIGHT IN VIRTUAL
COMMUNICATION: THE CASE OF
EMAIL**

A thesis submitted in partial fulfilment of
the requirements of the University of
Northumbria at Newcastle
for the degree of
Doctor of Philosophy

Research undertaken in the Faculty of
Engineering and Environment

July 2019

Abstract

Virtual communication is powerful because it gives the ability to communicate with one another instantly: overcoming time and distance barriers. As well as providing such opportunities as immediacy and reachability, it poses challenges such as articulation and discernment of content, issues relating to frequency of use, as well as the emotional and social intelligence of users. Many scholars have documented the problems encountered when people engage with virtual communication. These problems may include misunderstanding and information overload. Such problems can disrupt workflow and cause stress among workers. These problems are common in both the corporate and academic world, especially among people who have to use email communication continuously due to the nature of their jobs and activities. It is believed that every work environment utilizes one form of email communication or another on several levels and for different purposes.

Researchers have suggested technical and policy-related solutions to virtual communication problems. They have not, however, taken into cognisance the holistic views of issues such as sensory, bodily, mental and social states of individuals. Therefore, recent research has attempted to gain an in depth understanding of human issues which are connected with virtual communication and have explored what it means to address the challenges mention above (such as emotional, environmental issues and self-awareness of users). In order to address this gap, Mindsight Theory (Siegel 1999 to 2016) has been suggested. The Mindsight Theory centres around mental health issues but has not yet been applied to virtual communication. This approach has used the combination of mindfultech email observation developed by David Levy and Mindsight Theory formulated by Daniel Siegel. The combined practise and theory were adopted to form the Mindsight utility for virtual communication. The crux of the exercise was to encourage people to cultivate empathy, compassion, emotional intelligence and self-reflection on virtual communication in particular on email communication. This was developed to engage users in experiencing self-awareness and awareness of others. It allowed them to develop their guidelines for virtual communication. The email observation practice is a set of exercises that has been developed to enable people to identify their email habits over a duration of time to establish a change of attitude towards electronic communication.

In this research, an exploratory study has been conducted using an interpretive paradigm to understand the implications of the theory of Mindsight on self-awareness and awareness of others on virtual communication. A pilot study was conducted to streamline the exercise. Three case studies were completed: two with university students and one with a social entrepreneurship organisation. The findings suggest that heightened awareness of sensory, bodily, mental activities and social awareness were experienced among the participants. The findings correlate with the personal guidelines formulated by the participants. The outcomes of the research addressed the gaps identified.

Table of Contents

Abstract.....	3
List of Figures	8
List of Tables	8
Acknowledgements.....	10
Declaration.....	12
Chapter One: Introduction.....	14
1.0 Background	14
1.1 Mindsight Theory and Awareness	15
1.2 Rationale for Research.....	17
1.3 Research Question, Aim and Objectives	18
1.4 Contribution to Knowledge.....	18
1.5 The Beneficiaries of the Research.....	19
1.6 Thesis Structure	19
Chapter Two: Literature Review	20
2.0 Introduction	20
2.1 Virtual Communication	20
2.1.1 The use of Virtual Communication in Business, Education and Research	20
2.1.2 Communities Enabled by Virtual Communication	22
2.2 Email Communication	24
2.3 The Problems Associated with Virtual Communication via Email	24
2.4 Methods of Minimizing Virtual Communication Problems via Email	27
2.4 Mindsight Theory	29
2.4.1 The Mind	29
2.4.2 Mindsight	30
2.5 Integration	32
2.5.1 Integration of Awareness.....	32
2.6 Chapter Summary	36
Chapter Three: Methodology	37
3.0 Introducing the Research.....	37
3.1 Research Approach	37
3.1.1 Justification for a Qualitative Methods Approach	38
3.2 Research Process: Action research within Case Studies	39

3.2.1 The Case Studies	40
3.2.2 Action Research	41
3.3 Designing of the Field Study	44
3.4 Gaining Access	45
3.5 Sample of Study	46
3.6 Data Collection	46
3.6.1 Development of Exercise	46
3.6.2 Diaries	47
3.7 Qualitative Data Analysis Strategy	48
3.7.0 Data Analysis Technique of Diary Entries	48
3.7.1 First Stage	48
3.7.2 Second Stage	48
3.7.3 Third Stage	49
3.8 Validity and Reliability	49
3.9 Resources	50
3.10 Research Ethics	50
3.11 Chapter Summary	51
Chapter Four: Analysis	52
4.0 Introduction	52
4.1 Steps Taken for the Thematic Analysis	52
4.1.1. Pre-Analysis Stage	52
4.1.2 Categorizations and Themes	53
4.1.3 Analysis Stages	55
4.2 Analysis of the Pilot Study	58
4.2.1 Sensory Awareness	58
4.2.2 Bodily Awareness	58
4.2.3 Mental Activity Awareness	59
4.2.4 Interconnection Awareness	60
4.3 First Case Study	63
4.3.1 How Participants were Recruited and the Method of Analysis	63
4.3.2 Sensory Awareness	63
4.3.3 Bodily Awareness	64
4.3.4 Mental Activity Awareness	65
4.3.5 Interconnectedness Awareness	70
4.3.6 Collective Findings from First Case (Postgraduate Students)	71
4.3.6.1 Sensory and Bodily Awareness	71

4.3.6.2 Awareness of Mental Activities	72
4.3.6.3 Interconnection Awareness	79
4.4 Chapter Summary	81
Chapter Five: Second Case Study Analysis of Diaries from Nongovernmental Organisation in United States of America	82
5.0 Introduction	82
5.1 Analysis of Participant ED's Diary	83
5.1.1 Sensory Awareness	84
5.1.2 Bodily Awareness	86
5.1.3 Mental Activity Awareness	87
5.1.4 Interconnectedness Awareness	89
5.2 Collective Participant Analysis	91
5.2.1 Sensory Awareness	91
5.2.2 Bodily Awareness	93
5.2.3 Mental activity awareness	95
5.2.4 Interconnectedness Awareness	101
5.3 Third case study	104
5.3.1 Sensory awareness	104
5.3.2 Bodily awareness	105
5.3.3 Mental activity awareness	107
5.3.4 Interconnectedness Awareness	111
5.4 Comparing Outcomes between the Educational and Organisational Contexts	115
5.5 Summary	117
Chapter Six: Discussion	120
6.0 Introduction	120
6.1 Themes in the Participants' Experience of Applying Mindsight to Virtual Communication via Email	120
6.2 Perceived Implication for improved Communication in Virtual Communication	128
6.2.1 A Recap the Gap in Knowledge	128
6.2.2 Perceived Implication for improved Communication in Virtual Communication	130
6.2.3 Practical outcomes for virtual communication	132
6.2.4 The Implication for personal development	135
6.2.5 The Implication for Organisations and Stakeholders	137
6.2.3 Practical outcomes for virtual communication	139
6.3 Virtual Communication Process for Individuals and Organizations	142
6.4 Summary	143

Chapter Seven: Conclusion	144
7.1 Purpose of the Research	144
7.2 Summary of Research Question.....	144
7.3 Contribution to Knowledge.....	146
7.4 Limitations and Recommendations of the Study.....	146
References	148
Appendices.....	159
Appendix A: Version one of MUVIC: Used for the pilot study	159
Appendix B: Second Version of MUVIC used for the first case study	164
Appendix C: Third and Final Version of Exercise used in the Research	167
Appendix D: Mindsight Process Refined at the End of PhD Research	170
Appendix E: Example of a Participant's Diary	173
Appendix F: The Domains of Integration	181
Appendix G: E-learning Conference 2016.....	184
Appendix H: ELearning Conference 2017	195

List of Figures

Figure 2.1: Triangle of wellbeing (Siegel, 2010b).....	31
Figure 2.2: The Wheel of Awareness (Siegel 2007)	34
Figure 3.1: Action research for participants adopted from Kemmis et al. (2014)	43
Figure 3.2: Research Design.....	44
Figure 4.1: Wheel of awareness for the thematic analysis.....	57
Figure 4.2: Participant 5 diary analysis through the wheel of awareness	62
Figure 4.3: Charts of sensory and bodily awareness sensations of the first case study	71
Figure 4.4: Chart of mental activities awareness of the first case study	72
Figure 4.5: The chart of thoughts from the mental awareness of the first case study	75
Figure 4.6: Chart of Interconnected awareness experienced by the participants of the first case study.....	80
Figure 5.1: Participants' nodes comparison (An example)	84

List of Tables

Table 2.1: Virtual communication problems presented in literature	27
Table 4.1: Categories and main themes from literature review	53
Table 4.2: Categories, main themes and sub theme (sub themes emerged out of data analysis).....	54
Table 5.1: Facilitators/inhibitors to virtual communication	118
Table 6.1: Perceived implications for improved virtual communication by participants....	131
Figure 6.1: Sensory awareness and sensory themes among participants. 52% of participants reported they experienced awareness of their senses. From this, 37% were aware of their hearing, 21% were sight aware, 24% were taste aware, 17% were touch aware, and 1% were smell aware.....	122
Figure 6.2: Bodily awareness and awareness themes among Participants. 72% of participants reported they experienced awareness of their bodies. From this, 42% of the 72% were aware of the discomfort and 58% were aware of their comfort.	123

Figure 6.3: Mental activities awareness and mental activities awareness themes among participants. 91% of participants reported they experienced awareness of mental activities. From this 39% were aware of their emotions, 34% were aware of their attitude and 27% were aware of their thoughts.	124
Figure 6.4: Interconnectedness awareness themes among participants. 72% of participants reported that they experienced interconnectedness awareness. From this 43% were aware of compassion, 36% were communication aware and, 21% were empathy aware.	127
Figure 6.5: Practical Solutions to Virtual Communication Problems.....	135
Figure 6.5: Practical Solutions to Virtual Communication Problems.....	142

Acknowledgements

I want to give thanks to God, the maker of heaven and earth who gave me the grace and strength to do this work these past four years. I give Him all the glory. Secondly, I would like to thank my principal supervisor Petia Sice, whom, in my perception is a genius. I have watched in awe of her innovative capacity so much so that I feel privileged to be guided by her. Her professional and motherly support has seen me through my studies. I mean to say that I stood on the shoulder of a giant. I would not have come to this stage of completion without her, both intellectually and morally. She has been a pillar for me and her compassionate leadership style has been a source of inspiration for me. I hope to implement that as I go through life's journey.

I also like to thank my secondary supervisor Shelagh Keogh who has also provided guidance throughout my studies. She is very approachable and dedicated. Her intellectual approach to matters has been a compass through which my research was guided. Her eye for details and professionalism has been inspiring to me. Both of my supervisors deserve a national award for going above and beyond to support myself and other students of Northumbria University. Their services are priceless.

Thirdly, to my parents Mr. and Mrs. Alexander Yargawa for providing my tuition fees and all of the application fees that I had to pay. I am also grateful for all of their spiritual and parental support throughout my life. If not for them my life would have been miserable. They stood with me through thick and thin. They have never turned their backs on me in many situations and they faced challenges in the process of standing by me in spite of what the world thinks of me. I am eternally grateful to the both of you.

I am very grateful for my baby Lisa who is the reason I wake up in the morning, the reason I have a dream, the goal I strive to be a better person. Your love for me is endless. There were times in which you came home every single day with a handmade card that said: "I love you, Mum." You have been patient and understanding throughout my studies and have always prayed for my success. Thank you very much.

My gratitude goes to Dr. Friday Ogwu for his support for Lisa and myself during my studies; we are very grateful. I would also like to thank Mr. and Mrs. Yetti Mathias for all their lovely support and concern throughout my studies and they have never looked back since helping me.

My siblings: Deborah, Judith, Peace, Emmanuel, Josiah, Nita, Tati. Thank you so much for all your love and care. Life would have been empty if not for all your enduring love for myself and Lisa. You are part of my major support network.

To Judith who has been a confidant and a friend. You have never been tired of hearing my endless dramas and phone calls at odd hours of the day. In tears and joy, you have been a reliable source of encouragement to me. I am very grateful, and words cannot express my gratitude to you. You have shared your money with Lisa and myself and you have endlessly provided for our needs. You have been the family member that has been with us in a foreign land and has not failed to visit us consistently during the years. To Talatu who has given me a taste of family in Newcastle. Thank you for your love and support.

A million thanks to Chief and Lolo Chukwuetu for their care for Lisa and myself during my studies. You have been our parents in Newcastle who have been a source

of protection and financial support during my studies. Your home has been open to us and we feel part of the family.

I am grateful to Pastor and Mrs. J.T. Apofure who have sent daily spiritual and moral encouragement throughout my years of study. I have never seen such dedication and commitment to the soul. I also extend my gratitude to Pastor and Mrs. Samuel Ohiomakhare for their pastoral care and guidance to Lisa and myself. You have not failed to ask for our welfare and to pray for us.

I will like to thank my best friend, mentor and counsellor Dr. Dorine Lugendo who has always checked in on me from far away in Kenya. I adopted your lone parent researcher framework and I scaled through. You never left my side and I appreciate your friendship.

To my boss, Colin Goodlet, in my first and current job at Northumbria University. Thank you for mentoring, believing and accommodating me and my mistakes. You are the kind of boss every new employee should have.

My gratitude goes to my pastors Stephen, Salvation and Absalom. You always pray for me and have not failed to expound on the words of the Bible. I have grown in faith as a result of my association with you. Your theology of great dimensions has left me seeking more knowledge. Thank you very much. I would also like to thank my Uncle Major Sakamanha Glenn for his continued financial and moral support throughout my studies. I would also like to thank my Uncle Mr. Edwin Kibikiwa for always hosting me whenever I have visited Nigeria and for all the odd trips to the airport.

My appreciation goes to the special people that have looked after Lisa when I went to University or conferences. The summer holidays would have seen the end of my research but your support has enabled me to weather through while you took care of my baby as I went to study. Some of you even picked up and dropped Lisa off at school. These special people are Mr. and Mrs. Ezekiel Rodrigues, Mr. and Dr. Oriuwa, Mr and Mrs, Michael Eje, Mrs. and Mrs. Idika, Mariam Jatto, Kermilis Darling and Chief and Lolo Chukwuetu and family.

To my friends in church: Margeret Idika and Richard Okorie - for your moral and spiritual support, Dr. Tolu Kolawole - for your concern and constant inspiration, Dr. Emmanuel Ogundimu, Henry, Tobi and John for your friendliness and love and to all the members of Deeper Life Bible Church, Newcastle upon Tyne. Thank you for your continued prayers and devotion. I will like to appreciate the Barnabas Life group and the Life Vineyard Church Newcastle members. You have been lovely and supporting and I have been exposed to another dimension of Christian living.

To my Colleagues within the University: Aham, Dele, Kush, Paul, Wafa, Paras, Pratik, Ismahan, Steven, Shirin and David. Thank you all for making the journey worthwhile.

To my Federal Government Girls College Yola, secondary school classmates and class of the year 2000 for all the love and solidarity. Since we formed the group in November 2016 it has been all joy and laughter. They say one bee cannot make honey, thanks a million!

Declaration

Declaration I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by Northumbria University Ethics Committee

I declare that the Word Count of this Thesis is 46,332 words.

Name: Suzannah Adejoh Ogbu

Signature:

Date: 18th of July, 2019.

I dedicate this work to my Parents Elizabeth and Alexander Yargawa and to my daughter Lisa.

Chapter One: Introduction

“We function more effectively and more healthfully online when we are more attentive, relaxed, and emotionally balanced. This can also be stated in the negative: We operate less effectively and less healthfully when we are distracted, physically uncomfortable, and emotionally upset. Moreover, many of us now are often distracted and stressed out when we’re online” (Levy, 2016 p.3).

1.0 Background

Scholars have focused on organisational or cross organisational structure or distributed project teams that are supported by advanced technology infrastructure. The nature of the remote communication that is needed to support such work is referred to as virtual communication. Virtual communication is computer mediated communication (Myers 2007). Therefore, virtual communication is essential to organisations; because they depend on effective communication to achieve their goals (Malmelin, 2007) The success of any organisational virtual communication depends on every individual employee in that organisation. Therefore, the nucleus of the communication process is the people. It is not about the technology but how the communication is being done. Communication is a process where one mind affects another and it is mostly through this process that individuals produce their perceptions and act collaboratively with others (Hedman and Valo, 2015). This implies creating social worlds instead of just disseminating information between people. The fact that communication is not just a method used to disseminate information but also a means of developing social entities that enable us to co-creation understanding with others. This perception should lead individuals to approach communication with a sense of awareness of ourselves and others. Regrettably, this is an experience that eludes many, as De Paoli et al (2014) report that some people find it difficult to communicate effectively with others virtually. This might be because people come from different backgrounds and they do not know one another before communicating online. If communication is not only a mere exchange of information then how can effective communication, especially virtual communication, be achieved? Some of the problems encountered with virtual communication can be: not knowing the other party, difficulties in connecting with people, lack of trust, lack of interpersonal clues, reduction in communication quality, lack of connection and not having shared knowledge (Soucek and Moser, 2010;

Januska, 2011; Galambos et al., 2012; Morgan et al., 2014; De Paoli 2015; Hedman and Valo 2015; Gupta et al., 2016). There is a need for a holistic approach taking into consideration the physical, mental and social state of being and the qualia (quality as perceived by an individual) of the person's experience. The theory of Mindsight offers such an approach. Mindsight is said to enable individuals to envision what is going on within themselves and helps them to understand their minds and to resonate with their experiences. This enables them to be mindful of mental operations and stops them from being carried away by them (Siegel, 2010). The next section introduces Mindsight.

1.1 Mindsight Theory and Awareness

Mindsight is a theory that was first developed in the field of psychotherapy by Dr Daniel Siegel (2010). He discovered that when he talked with his patients, they explained that they felt 'felt' by him (Siegel, 2010, p. 27). They had a sense that he understood what they meant and felt. There was no term to describe this process of feeling 'felt' in the field of mental health at the time and he coined the term Mindsight. Mindsight is the ability to discern sensations, thoughts and emotions while identifying them as activities of the mind. It is also able to appreciate or notice the thoughts of others so we can understand their point of view which enables our responses to be compassionate. Mindsight enables people to monitor and manage their feelings and thoughts and not be driven by them (Siegel, 2010). Mindsight can be considered to be a powerful lens through which we can understand our inner lives with more clarity, integrate the brain and enhance our relationships with others. It is a kind of focused attention that allows us to see the internal workings of our minds.

The Theory of Mindsight defines the mind as an embodied (personified) and relational process emerging from the mutual interconnectedness of the physical, mental and relational (both human and environmental) domains of human reality. The mind, as an emergent property of the body and relationships, is created within the internal neurophysiological processes and relational experiences. In other words, the mind is a process that emerges from the distributed nervous system extending throughout the entire body and also from the communication patterns that occur within relationships (Siegel, 2009). Relationships refer to how energy and information are managed and shared among persons (Siegel, 2010). These relationships can be at a personal or

broader level, for example within communities, countries, etc. (Clinton and Sibcy, 2012).

To put it simply, human connections shape neural connections. Relationships and neural linkages together shape the mind (Siegel 2009; Siegel 2016) The brain (the embodied nervous system), mind and relationships are aspects of one reality and need to be considered together. The body provides the biological structure for hosting human experience and the mind is an embodied and relational process that regulates the information and energy flow, in the brain and in relationships with others and the environment (Siegel, 2016). The term ‘embodied brain’ refers to the whole nervous system, not only the brain. The triangle of well-being shows the nature of the reality of energy and information flow. The mind is a regulatory mechanism of the brain and relationships.

Therefore, the regulation of energy and information flow is achieved through the management of intention and attention (Siegel, 2010b). Intention determines the direction of attention. Attention acts like ‘a scalpel’, as the direction and scope of attention can trigger changes in the brain (neural plasticity) and the communication further influences our mental activity, brain and relationship patterns in mutual interaction (Sice, et al., 2013). The intention of ‘seeing reality’ more clearly and continuously enhances our awareness and reflection capability in making sense of reality. This requires the integration and stabilizing of attention in the monitoring of body sensations, mental activity and relationships.

In Western culture, a heightened state of awareness is often referred to as mindfulness. This terminology is widely accepted in the West, where the state of mindfulness is defined as the opposite of mindlessness, that is, where we are functioning on autopilot, or merely downloading our mental models, assumptions and prejudices rather than witnessing present experience as it unfolds (Kabat-Zinn, 2009). The author, therefore, provides an operational working definition of mindfulness as the awareness that emerges through deliberately paying attention in the present moment and without judgment to the unfolding of experience moment by moment. It is important to clarify that our understanding of mindfulness as paying attention to experience as it unfolds is not only connected to present moment sensations but connected to accepting and witnessing our present moment experience, which may involve some or all aspects of

experience, that is, sensations, mental activity (thoughts, feelings, memory, intentions, beliefs, attitudes, etc.) and relational experience (connectedness to others, to our planet, to nature, etc.) (Sice et al., 2013). Therefore, individuals taking part in virtual communication need some reminder that the connections that exist are beyond mere virtual communication but are a process of interconnection with others.

1.2 Rationale for Research

Virtual communication is utilized in organisations, businesses and organisation run projects in the form of business or research collaboration. The ability of the people involved in a project to communicate effectively is essential to the success of the projects. Some of the problems that lie in virtual communication are a lack of mutual trust and extensive communication between possible partners (Januska, 2011). Scholars have reported some of the issues people face when using virtual communication. These have included difficulty in relating to people (De Paoli, 2015). Others have claimed some of the difficulties in connecting to people arise because of different backgrounds (Januska 2011 and Galambos; Weidig et al., 2012), lack of trust and disagreements (Hedman and Valo, 2015), lack of interpersonal clues, lack of connection (Morgan et al., 2014) and reduction in the quality of communication (Gupta et al., 2016). It was thought that if an organisation is to achieve the purpose of collaborating, then a solution for meaningful communication should be suggested. Mindsight is a theory that has been used extensively in relationships between parents and their children and doctors and their patients by first encouraging an understanding of oneself and then an ability to understand the other person (Siegel, 2010a). To date, there has not yet been an application of this theory in virtual communication. It has been considered that a better understanding of ourselves leads to better and more effective communication with others. Better communication leads to better relationships and better relationships enhance good business relationships i.e. the types that are built on empathy. Hernez-Broome (2011) rightly argued that Mindsight facilitates the connection with ourselves and others through a combination of insight and empathy. It was with great interest that the present investigation into the exploratory application of Mindsight and the virtual communication process was conducted.

1.3 Research Question, Aim and Objectives

This research question narrows down the research and helps propel it toward its primary goal and signposts the project to its audience. That is why a research question must be written carefully (Creswell, 2013).

Aim:

To explore the application of mindsight to virtual communication with the intention of providing a utility which will aid personal awareness, reflection, and action.

Research Question

Can the qualia (quality as perceived by an individual) of experience reported by participants applying mindsight in virtual communication indicate improved communication as perceived by participants?

Objectives

The objectives of this study are:

1. To critically evaluate the literature on mindsight and virtual communication in organisational and business contexts and identify the gaps that Mindsight addresses.
2. To develop a utility of engaging Mindsight when using virtual communication which includes self-awareness enhancement, monitoring and managing self in the communication process.
3. To conduct a pilot study to test the application of the Mindsight virtual communication utility.
4. To conduct primary research by applying the Mindsight communication process in academic and business contexts.
5. To compare findings from different contexts.

1.4 Contribution to Knowledge

1. Insights into the exploration of Mindsight and virtual communication.
2. The development of a utility for engagement and the application of mindsight in virtual communication via email for individuals and organisations.

1.5 The Beneficiaries of the Research

This research will be beneficial to businesses, governmental organisations, educational institutions and private individuals in understanding their virtual communication process.

1.6 Thesis Structure

This thesis is structured into five chapters:

Chapter one presents an overview of the research, giving the background of the study. An introduction to virtual communication and Mindsight is provided and there is a brief reference to mindlessness. Following this, the aim, objectives and the research question of the study are presented. Finally, a summary of the contribution and benefits of the research are presented.

Chapter Two presents the literature review and establishes the gaps in knowledge in virtual communication literature. Moreover, it presents the problems identified and the solutions that were suggested by scholars.

Chapter Three presents the methodology and the philosophical stance of the research. It explains why a qualitative study was undertaken. It gives details of the action research within the case studies. The chapter also explains the data collection instrument and facilities that were used. Furthermore, it introduces the method of analysis and validation.

Chapter Four presents the analysis of the qualitative data obtained from participants' diaries. It explains how the analysis utilized the wheel of awareness (mindsight practice) to provide the initial categories for the thematic analysis.

Chapter Five presents a discussion of the research findings and describes the factors perceived by the participants that improved their virtual communication. It also shows the implication of the findings for individuals and organizations. It discusses the contribution to knowledge made by this research before, finally, presenting the whole process of improved virtual communication.

Chapter Two: Literature Review

2.0 Introduction

2.1 Virtual Communication

Virtual communication is any communication that is computer-mediated (Myers 2007), it is different from face to face communication because the communication is done in a virtual space. This therefore means that ‘virtual’ is a functionality that is aided by computer networks and ‘space’ is an interactive setting. It is the conceptualization of the interactions that happen over a computer network (Chandler and Munday 2011, Welinder, et al. 2014). These interactions are said to be enhanced through digital connections for information exchange among people while they are in different locations (Yu and Shaw, 2008). Therefore, the virtual space is likened to a room that is created employing a computer application installed solely for content sharing among people for communication and interaction (Welinder, et al. 2014).

Therefore, virtual communication has made life flexible and people are no longer constrained by time and place to perform certain activities: they can function virtually (Shaw and Yu, 2009). This has paved the way for individuals who live in distant places to be cognitively close to one another (Rodríguez, et al. 2010) and has positively altered the way people interact with themselves (Yu and Shaw, 2008). A shift has taken place transposing the traditional or natural communication of face-to-face communication to virtual communication thus altering human existence from real beings to virtual ones and impacting interpersonal relationships (Baeva, 2016).

Going beyond the realm of the individuals, enterprises can now partner with other organisations beyond their geographic and organisational horizon (Godwin and Rennecker, 2000). Activities and tasks required in jobs have been made drastically changed by way of virtual distribution (Ale, et al. 2009). This collaboration is made possible via emails, websites and video conferencing facilities (Bosch-Sijtsema and Sivunen 2013, De Paoli, et al. 2014).

2.1.1 The use of Virtual Communication in Business, Education and Research

Until recent times, many people were not interested in communication that was electronically enabled due to the fact that it was too expensive and distant from the reach of most people. It was not easy then to reach out to people without having first

to penetrate their personal associations, affiliations and connections. Modernised communication has altered this phenomenon and has changed people's interests (Carey, 2008).

The utilization of virtual communication is now in almost every facet of society including entertainment, business, education and cultural heritage (Sköld, 2011). For instance, manufacturing companies employ a synchronised collaboration among stakeholders operating in different sites. This enhances flexible production and joint decision-making processes. Companies within this sector are multinational. They employ virtual collaboration among stakeholders that enable easy adaptation to grow changes in market demand and a network of suppliers with the goal of making an adequate profit (Galambos, et al. 2012). Such stakeholders are sometimes organised into virtual teams and they provide avenues for local expertise to be utilized globally as well as satisfying global demand for products (Montoya, et al. 2009).

Communication between leaders and employees is now done differently in business. Men (2015) reported that in the early 1980s and 1990s, CEOs were more comfortable to use conventional means of communication (face to face communication and telephone conversations) to communicate with their employees but the exploit of web2.0 innovations over the past ten years has changed the face of internal communication in organisations. Company leaders and organisations engage employees through virtual platforms such as blogs, instant messaging, intranets and social media networks. Technology with rich media components enable more presencing (blend of presence and sensing) through audio and video conferencing and comment and sharing functions have enabled closer communication. Through these technologies, bottlenecks in organisations are reduced, employees are now more able to gain access to leaders and they communicate in a more relaxed and friendly manner. This kind of atmosphere enables employees to express their views and opinions about organisational issues freely (Men, 2015).

Similarly, in an educational setting, virtual learning has been highlighted among scholars for example, Skold (2011) claims that the effect of virtual communication on learning features in diverse academic fields like psychology, the study of education, sociology, game studies, architectural and information studies. Biasutti (2015) explains that online learning helps time management because it provides learners with

the flexibility to choose comfortable locations. They can also access their learning materials via the internet where they are located in the world. This process gives learners the opportunity to reduce travel expenses. The utilization of virtual communication is not limited to a single setting or setup because virtual communication has given rise to virtual work in organisations so that companies and businesses rely on teams that operate virtually to achieve set goals. This kind of team makes up different types of virtual communities such as virtual collaborative research groups or virtual enterprises to mention but a few.

2.1.2 Communities Enabled by Virtual Communication

Organisations deploy team work to achieve their goals. Sometimes they utilize virtual teams to cope with the demand of the fast-changing world due to the impact of globalisation (Schaubroeck and Yu, 2017). Sometimes companies rely on virtual teams to reduce running cost and provide swift solutions to complicated problems (Powell, Piccoli, et al. 2004, Ale, et al. 2009). The teams are not usually located in the same place and so use virtual communication to enhance their activities (Schaubroeck and Yu, 2017).

Therefore, a virtual team is a temporal workgroup that communicates electronically and is dispersed geographically, culturally (Pauleen and Yoong, 2001, Powell, et al. 2004) and sometimes organisationally (Montoya, et al. 2009). The collaboration is through an interconnected task that is governed by a common goal (Montoya, et al. 2009). Although this definition can also be true of traditional teams, it is essential to state that teams could emerge at any time and in any organisation to achieve a task or goal. Schaubroeck and Yu (2017) argued that the virtual team varies to the degree that it utilizes virtual communication. Marlow et al. (2017) recalled that virtual teams primarily depend on virtual communication and they vary according to the degree they utilize technology in their communication. Based on these scholarly assertions, it could be assumed that there might not be a clear-cut distinction between a traditional team and a virtual team, except to the degree that the teams involve virtual communication in their activities. It can be conceptualized that a virtual team is a team (traditional or virtual) that utilizes virtual communication to achieve its goal or task as the need arises. A virtual team could therefore consist of marketers located in the United States of America and developers of software in India or design engineers located in Germany and manufacturers in China (Montoya, et al. 2009).

Other scholars perceive the virtual team as a global virtual team. They state that the global virtual teams work and live in different parts of the world. Usually, the group is accountable for the making and implementation of decisions that are vital to the programme of the organisation. The team communicates using the support of technology and they use this means more than face to face communication (Pinjani and Palvia, 2013). The team might be set up by one organisation and be utilized by a multinational company. Additionally, other virtual teams could be made up of individuals from different organisations. These virtual empower organisations to harness skills and competence of employees to achieve a common goal (Ale, et al. 2009).

In academia, virtual teams work in virtual collaborative research which consists of virtual communities that are formed by people who may be geographically dispersed but cognitively close. A research team can consist of people that are not necessarily from the same institution or nation but the only prerequisite they need is to have a joint research group. The concept of virtualization has the impression that groups are not a collection of people but an outcome of a network of the representative of systems, reflections, and practices. (Rodríguez, et al. 2010).

Businesses utilize virtual enterprise (VE), which is a temporal collaboration of enterprises or businesses that combine resources and expertise in order to respond to business opportunities (Davidsson and Jacobsson 2009, Cezar, et al. 2011, Januska 2011). These businesses provide services, production processes and training development (Minjie and Wei, 2010). At other times, organisations need individuals that can deliver project, such people possess specific skill sets needed to accomplish the project. Most often these individuals are geographically dispersed and due to that they must rely on virtual communication to enhance their operations (Schaubroeck and Yu, 2017). These companies retain their independent entities such as their information systems, people, physical assets and their modes of operation. Member companies in a VE are located around the globe. This nature enhances their ability to cope in volatile market environments (Davidsson and Jacobsson, 2009). They utilize virtual collaborative tools of synchronous (video conferencing, audio conferencing, chatrooms) and asynchronous (emails, corporate websites and discussion boards) applications to communicate tasks and their experiences with one another (Cezar, et al. 2011). Communication is the key to virtual enterprises (Januska, 2011) and team

working competences which include the ability to resolve conflicts, comprehension of group norms and the capacity to be tolerant to differences (Suter, et al. 2009) are essential to for the smooth running of such setups. The most popular technology used among these teams is email communication.

2.2 Email Communication

Email communication provides a means through which information can be rapidly exchanged. This makes communication accessible in large organizations that are geographically dispersed (Soucek and Moser 2010; Morgan et al. 2014). Email communication is the most popular type of communication that is used in organizations and is an integral aspect of work life (Soucek and Moser 2010; Jerejian et al.2013; Kushlev and Dunn 2015; Levy 2016; Whittaker and Sidner 1996; Hanrahan and Pérez-Quñones 2015). It has been reported that 183 billion emails circulate the world on a daily basis (Kushlev and Dunn, 2015) and it has been estimated that by 2018 there will be approximately 5 billion email addresses in the world (Levy, 2016). This shows how much the world relies on this form of communication (Levy, 2016) and how it has drastically changed the way we exchange our ideas and thoughts within organizations and among workers (Jerejian et al. 2013). These figures contribute to the prediction that was made over 30 years ago by Rice and Bair (1984) who stated that the use of virtual communication might enhance both individual and corporate efficiency. The mailboxes of people have become an integral aspect of their lives and it will be challenging to end the use of email communication. Therefore, a significant amount of employee time is spent on email communication (Jerejian et al. 2013). Some workers spend up to half of their working time replying to and sending emails (Levy, 2016). When email communication is used prudently, it yields excellent benefits to the people within a network by enhancing their participation level (Gupta et al. 2016).

2.3 The Problems Associated with Virtual Communication via Email

For the past 30 years researchers have highlighted the problem with virtual communication (Baeva, 2016) as virtual communication has been said to trigger some issues more than other forms of communication. People who do not know one another have to communicate sensitive issues (De Paoli, 2015) and communication done over the internet is usually different from face-to-face communication (Prieto-Arranz, et al. 2013). Consequently, there have been complaints about difficulties in communicating and connecting with people from different countries, religions, and identities.

Sometimes people do not know one another outside of their virtual communication and have not physically met before (Januska 2011; De Paoli 2015). This also happens in a virtual enterprises, as the companies that form the enterprise are often multinational and communication can often get complicated due to entities that are geographically scattered and culturally diverse (Galambos, et al. 2012). Similarly, Hedman and Valo (2015) observed that communication among management teams faces challenges such as distance barriers, time and cultural differences among teams that are geographically dispersed which can typically lead to lack of trust and disagreements.

It is perhaps important to focus on the problems to email communication, since it is the most popular kind of virtual communication. It has been reported that it comes with some challenges to people in organizations. One of these problems is the lack of interpersonal clues. Communication that is done face-to-face has the possibility of gaining more context through interpersonal interactions and body language. Face-to-face communication gains meaning and depth through these pointers as the receiver can gain understanding by decoding the feelings of the sender. These clues are missing in virtual communication, however, because replies may be delayed and with a lack of face-to-face interaction receivers are often not able to see physical clues which may lead to misunderstandings and misinterpretations (Morgan et al. 2014). On the contrary, people in face-to-face communication have the opportunity to interact and develop a shared understanding of the processes they need to take in order to achieve their common goal. This is not the case with virtual communication as the chances of interacting frequently is limited and the capacity to develop a shared knowledge of processes is distorted due to distance and time differences. As a result, having a shared knowledge and feeling connected to one another becomes a problem (Morgan et al. 2014).

Other problems with email communication are information overload. The constant dependence of organizations on electronic communication has led to a rapid increase in the volume of emails received by employees nowadays which is an issue of concern. It has been reported that information overload is affecting workers (Soucek and Moser, 2010). This increases levels of stress among workers as they receive a significant number of emails (Jerejian et al. 2013; Pignata, et al. 2015). Information overload occurs when individuals receive information that is beyond their processing ability

(Soucek and Moser, 2010). The problem occurs when there is too much distribution of messages that an individual can cope, which causes, disruption in workflow (Soucek and Moser, 2010). The result is that the quality of communication is reduced (Gupta et al. 2016). For example, employees could lose track of their workflow due to a variety of emails that need action. This means that employees can also lose attention on their work because of the constant influx of emails interrupting them and making them lose track of the direction of their communication (Soucek and Moser, 2010). Similarly, receiving many random and varied messages reduces people's effectiveness in communication as they have to separate relevant from less essential messages (Gupta et al. 2016).

Communication deficiency happens when workers have a lot of emails they are not able to respond to. As a result, communication becomes impromptu and then they approach it with informal attitude. This kind of casual disposition towards email affects the quality of messages written so that the emails are inconclusive without sufficient information for the reader to act upon which may cause misunderstanding. The effect of ambiguity in emails happens when rules of communication, contexts and societal clues are misplaced as a result of obscure messages. This gives gaps in communication so that receivers are unable to take the desired actions that the senders expect within a particular time period (Soucek and Moser, 2010). Therefore, it can be seen from the problems highlighted at the beginning of this section above, that people or organizations might not be able to harness the benefits of using virtual communication if the problems are not addressed. Table 2.1 presents the issues of virtual communication presented in literature.

Table 2.1: Virtual communication problems presented in literature

Virtual communication issues	References to main literature sources
Not knowing one another	De Paoli, 2015
Difficulties in connecting with people from different backgrounds	Januska. 2011 and Galambos, et al. 2012
Lack of trust and disagreements	Hedman and Valo, 2015
Lack of interpersonal clues (facial clues)	Morgan et al. 2014, Kruger et al., 2005
Reduction of the quality of communication	Gupta et al. 2016
Not having shared knowledge and lack of connection	Morgan et al. 2014
Workload stress as a result of email overload	Stich et al., 2018
General communication problems including i.e the problems of conveyance of meaning problems.	Burgess et al., 2005
Information overload and disruption of workflow due to receiving a large number of emails, losing focus and attention on work, constant influx of emails and less productivity	Soucek and Moser, 2010; Whittaker and Sidner 1996; Liu and Moh, 2016 ; Hanrahan and Pérez-Quñones, 2015; Lushington et al. 2015, Renaud et al., 2006
Loss of attention during email communication	Hanrahan and Pérez-Quñones, 2015 ; Jackson et al. 2001

2.4 Methods of Minimizing Virtual Communication Problems via Email

Researchers have put forward recommendations of how people can interact with virtual communication (especially email communication) and solutions to overcome stress and overload issues in addition to other problems they may face (see Table 2.1 for a summary of the problems). It has been suggested that people should be taught how to apply techniques that will enable them to manage their emails (Burgess et al, 2005; McMurtry, 2014 and Soucek and Moser, 2010). These include processes that decrease the number of messages an individual receives which makes a significant difference. For example, some organizations have been advised to provide intervention in the form of messaging filters that helps to separate essential emails from unrequested emails, (Jerejian et al. 2013; Freed et al., 2008). Others have suggested that companies should produce drafted guidelines on how companies'

emails should be utilized (Soucek and Moser, 2010). Similarly, Pignata et al. (2015) and Jackson et al. (2001) recommended that employees should be given training on how to manage their emails. Moreover, Soucek and Moser (2010) made some recommendation about email overload, they suggested some processes that would increase people's capability of processing information. These include training that will enable people to manage enormous volumes of email communication.

Others like Jerejian et al. (2013) and Liu and Moh (2016) suggested that people utilize techniques such as manual filtering of emails and continuous monitoring of emails. There are different types of filtering strategies which include spam detection (Iyengar et al, 2017) and spam classification (Kumaresan and Palanisamy 2017). A more focused approach on important communication recommends that inboxes should be automatically deleted after they are read (Levy 2016). This suggestion, however, might not have considered the effect deleting emails might have on work flow. One other suggestion made by researchers is to attend to emails at set times to avoid constantly checking them (Levy 2016; Kushlev and Dunn, 2015).

Gupta et al. (2016) supports the above measures because they have reported that reducing the number of emails employees receive in an organization improves their work quality and reduces their levels of stress. They claim that other publications focus on the recipient of the emails approach to issues. Therefore, their focus on addressing the senders of emails by a way of suggesting email optimization will mean that the sender will have to determine if the email they are about to send is more or less important to the receiver.

Table 2.1 shows the solutions recommended by other researchers to address the problems of email communication. They came up with several suggestions which were either mechanical or behavioural. Levy (2016) developed an observational approach that addresses the relationship between the communicator and the facility while others focused on the receivers of email communication (although Levy did suggest ways through which emails should be read from a receiver's perspective). It has been observed that people tend to check their emails unnecessarily and proposed that emails should be checked at set times of the day in order to harness better attention from the individual. Levy (2016) also addressed the attention issues of individuals and attempted to reduce information overload tendencies by developing a reflective

exercise that prompts people to observe themselves and to learn from their behaviour. The exercise brings awareness research into virtual communication, the approach focuses on reflection, which encourages individuals to develop guidelines for themselves personally. The exercise does not prescribe what people needed to do differently. In conclusion, the above solutions focused mainly on environment and people's behaviour but failed to address:

- The awareness of virtual communication tendencies and behaviours.
- The investigation of enhanced awareness on individuals and the effect of the environment on them while they communicate virtually.
- Providing support to what people can become aware of through the development of guidelines.

Recent advancement in the theory of Mindsight provides insight and tools for awareness development. In summary, the skills of awareness and reflection need to be developed within the communication processes of organizations (Sice et al. 2018a).

2.4 Mindsight Theory

2.4.1 The Mind

"The mind is an embodied and relational process that regulates the flow of energy and information". (Siegel 2016, pp 37). It is also a self-organising process that regulates the flow of energy and information" (Siegel 2016, pp.38).

Mindsight tries to explore what is going on in the mind of the self and that of others. The mind is both a neural and social product. It implies that the mind happens within and between people. It occurs within the body including the brain and within people as the flow of energy and information in the form of communication which flows through speech or written words (Siegel 2016).

Siegel (2010a) suggests that the brain and mind are interconnected. The mind is beyond the brain and the skin and it lives between people. This is because the mind has interpersonal qualities that indicate that it is not just the activity of the brain. Energy and information flow lie not just in the brain, but also throughout the entire body. This means that the brain is a part of something bigger called the nervous system which runs from the head into the gut and other parts of the body. Research reveals that the intestines are lined with neurotransmitters that directly influence our mental

state and health. These mental states can include feelings, thoughts, emotions, behaviours, and intentions (Siegel, 2015). It can be concluded at this point that this is the same system that is also responsible for the generation of the mind (Siegel, 2016). Therefore, the mind is an emanating property of relationships and the body from the distribution of the nervous system which spreads throughout the entire body (Siegel, 2015). The mind is not just the activity of the brain but the mind occurs both within and outside of ourselves when we communicate and relate to others. This demonstrates that the mind is multifaceted (Siegel, 2016). Therefore, the feelings, thoughts, and memories we experience are linked to the activities of the mind. They are a part of the subjective activities of the mind and the mind is the subjective experience of the energy flow patterns that contains information (Siegel, 2016). Since the mind is not limited to an individual but also encompasses relationships with others through communication of energy and information, the energy and information it produces should be channeled to the benefit of the owner of the mind and those it is transmitting to. The theory of mindsight tries to reveal what is going on in the mind of the self and others.

2.4.2 Mindsight

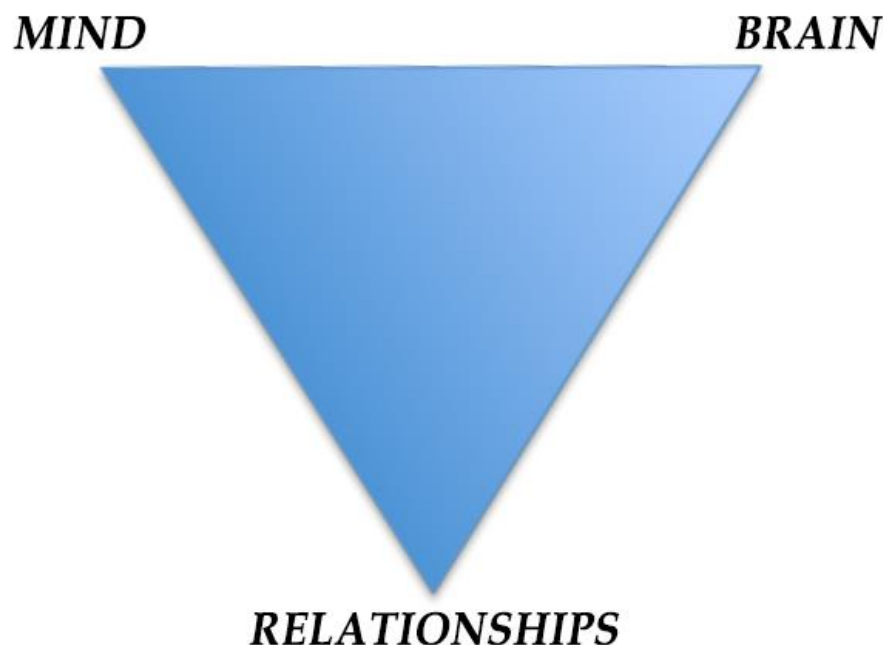
Mindsight is a theory developed by psychologist Daniel Siegel. He discovered that when he talked with his patients, they said they felt, that he understood how they felt. They had a sense that he understood what they meant and felt his understanding in response. There was no term to describe the process of feeling felt in the field of mental health and at that time he coined the term Mindsight (Siegel, 2010a). Mindsight is the ability to discern thoughts and identify them as activities of the mind. It is also able to appreciate or notice the thoughts of others in order to understand their point of view, which enables our responses to be compassionate and effective (Siegel, 2010a).

Mindsight enables people to direct their feelings and thoughts and not to be driven by them. They are then able to balance their emotions and to achieve a state of equilibrium (Siegel, 2010b). This is based on the premise that the mind is related to internal experience and processes of consciousness and awareness. Therefore, the mind can be described as a process that coordinates the flow of energy and information inside the body and in relationships, producing our mental activities which are our emotions, thoughts, and memories. Thus, mental activities have an impact on our internal lives

and occupy our awareness. Our aspirations, motives, and reasoning are also included in our mental activities (Siegel, 2012). The mind does not live in isolation, it exists in the triangle of wellbeing with two other elements: the brain and relationships (see figure 2.1).

The triangle of well-being shows the nature of the reality of energy and information flow. The mind is a regulatory mechanism of the brain and relationships (Siegel, 2010). Relationships do not only apply to personal levels but can be applied to larger entities like communities (Clinton and Sibcy, 2012). Therefore, it has been concluded that Mindsight forms the bases for social and emotional intelligence (Hernez-Broome, 2011). For instance, Heydenfeldt (2010) confirmed that companies that nurture socially intelligent behaviour (awareness, empathy, flexibility, and resilience) have a better chance of surviving crisis and can prosper in the midst of it. This shows that there is a linkage between mindsight, relationships and the brain demonstrated by Figure 2.1.

Figure 2.1: Triangle of wellbeing (Siegel, 2010b)



At birth, the brain is made up of differentiated neurons which later become circuits assigned for specific functions to regulate emotions, control impulse and monitor skills

(Siegel, 2010b). A highly integrated brain is one in which the neurocircuits required for thinking, feeling, communicating, relating and problem-solving work together in a collaborative fashion (Clinton and Sibcy, 2012). The product of mindsight is an integrated individual that can harness all possibilities towards a wholesome life.

2.5 Integration

2.5.1 Integration of Awareness

Integration is the basis of health and wellbeing. It promotes the linkages of different parts in a system. These parts are different in the sense that the components that make up are different from one another. Some examples are, individuals in a family, they are unified but are distinctive). This is demonstrated when members of the family interact with each other. Although the members are different, but are connected to one another (Siegel, 2012). Therefore, promoting differentiation does not only promote integration but it is the combination of differentiation and linkages that leads to integration.

The circuitry that allows people to connect with themselves is the same circuitry that allows them to connect with other people. When they experience some forms of self-awareness (such as awareness of their bodies) and connect to their bodily experience, it means that they are not self-indulgent but are in the process of understanding themselves which leads to self-compassion. When they know themselves profoundly it means that they are able to understand their inner world (understanding their emotions, attitudes and thoughts). This enables them to understand other people. They use the same techniques to understand themselves as to study other people (Siegel, 2007).

Therefore, a well-integrated mind is characterised by coherence, flexibility and adaptability. A mind that is not integrated is characterized by chaos and rigidity. That is why it is essential to observe the way an individual can integrate their mind, brain and relationships because integration enhances attuned communication, insight, empathy, body regulation, emotional balance, flexibility, intuition, fear extinction and morality (Siegel, 2007). Attuned communication leads to proper interpersonal relationships. This happens when people are open to the concept that their bodies are radars that help them to understand their internal state. This understanding leads to compassion and empathy where they can imagine being another person. Thus, they

develop an attuned communication, where communication comes from the bottom up where the communicator is receptive in listening and talking. This is different, and it is not communicating from the point of intrinsic memory that could be come from childhood or some negative experiences that stand in the way (Siegel, 2007). The different domains that an individual could achieve in integration can be found in Appendix F.

This research, however, focuses on the integration of consciousness and interpersonal integration. This is because the integration of consciousness and interpersonal integration is what the research aims to achieve by applying the wheel of awareness through mindsight in order to address the problems identified by virtual communication. Mindsight provides a practice called the wheel of awareness which seeks to develop the integration of consciousness and interpersonal relationships.

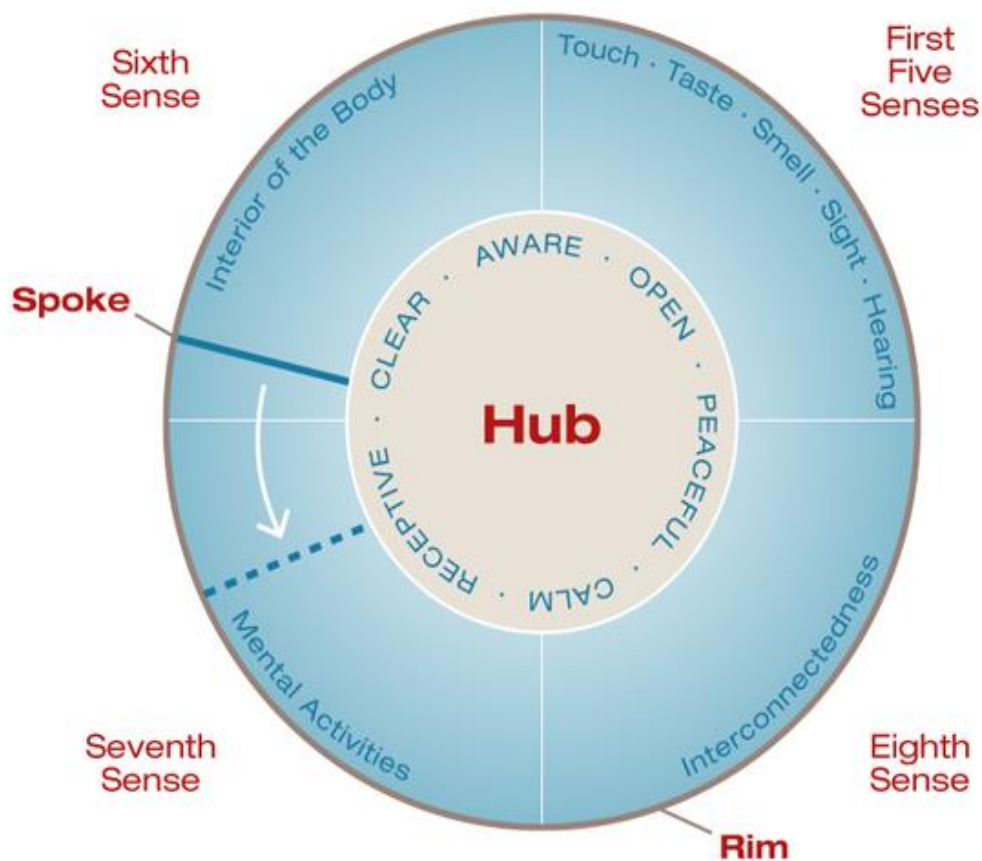
Thus, “consciousness is our ability to be aware and have a sense of knowing” (Siegel 2016, pp38). The wheel of awareness (WOA) is a symbol of the mind (see Fig 2.2), the hub representing an open awareness. The wheel spokes symbolize an individual’s attention and focus. Connecting the hub to the rim with the exterior part symbolizes anything the individual can be aware of. This can be anything that is well-known and contained in the consciousness of the person. The imaginary wheel enables the person to categorize their awareness. This is expressed by the wheel hub and the rim of the wheel represents the person’s awareness and consciousness (Baldini, et al. 2014). The WOA involves a commitment to an intended object or impression. Therefore, the interior of the body is what is known as the sixth sense, that is, the awareness of the inner sensations of the body: how the body feels internally. Therefore, when people are aware of their bodies they tend to be more compassionate and have empathy. Research shows that the more people are attuned to themselves, the more they are attuned to others and the more they are compassionate to themselves the more they are compassionate towards others (Siegel, 2010a).

The seventh sense is the awareness of mental activities of thoughts, feelings, attitudes and intentions. All these are the sensations of the 7th sense which is mental activity. People can also observe themselves having the thought, they can also think about the concept of the thought they are having, conceiving the concept of the thought. A person can also have the knowing. Knowing can help them make a decision. The

individual, however, must possess the ability to differentiate between sensing and observing and the concept of the thought. These give filters through which rim elements can come into the hub of the WOA (Siegel, 2010a).

The eighth sense is known as interconnectedness awareness. This awareness enable people to see each other as ‘we’. This is what is known as a ‘we map’ which allows people to accept and be aware that they are connected to others. It is a shared interconnectedness. Being aware aids response flexibility. People can move from probabilities to the openness of responses, and then to possibilities (Siegel, 2012).

Figure 2.2: The Wheel of Awareness (Siegel 2007)



A compassionate communication between people appreciates their differences and promote their linkages. This fosters an integrated relationship with one other and thus promotes the growth of integrative fibres within the brain. That is why children in an abusive and neglected relationship have impaired growth of their integrated fibres (Siegel, 2010b). The triangle of mind, brain and relationships (see Figure 2.1) can help

people to allow themselves to go deeply into the awareness of human realities. Where relationships the brain relate to each other and when the mind is included. Therefore, the mind has a regulatory function in the embodied brain and relationships. When all these are brought together, they produce a coherent mind (Siegel, 2010b).

The next section defines mindfulness, and demonstrates the relationship of mindfulness to communication and its relevance to virtual communication.

“The capacity of the mind to intentionally focus attention, monitor thoughts, feelings and physical sensations and to ultimately direct the flow of energy and information within the triangle of wellbeing-mind, brain, and relationships”(Clinton and Sibcy 2012, p.142).

Mindfulness is defined as a state of consciousness that enhances attention to what is happening within and around an individual (Bryant and Wildi 2008, Boyatzis and Yeganeh, 2012, Baas, et al. 2014, Dane and Brummel 2014) rather than being caught up in past guilt and future worries (Babu 2014). Pavlovich and Corner (2014) describe this as consciousness and consciousness is also similar to awareness (Pavlovich and Corner, 2014). Mindfulness is about being aware of the here and the now, about being linked to experience and enjoying the sense of unity between your mind and body (Collard and Walsh, 2008; Baldini, et al. 2014). It focuses on the mind and tends to reduce distractions that hinder clear observation of what is taking place in the moment. The mind focuses on feelings, intentions and the thinking process (Kull, 2005). The act of in the moment awareness is the backbone of mindfulness (Baldini, Parker, et al. 2014).

The mindfulness approach helps individuals and organisations to attempt to solve problems differently. It also reflects on how they utilize information in the dynamic world around them (Bryant and Wildi, 2008; Ndubisi 2014). From an individual’s perspective Langer (1992) defines mindfulness as an attitude of being consciously aware through active sensitivity. This helps the individual to be open to innovation and conscious to both situation and ideas.

The majority of research on mindfulness is in psychology and education (Gazella, 2005; Valorinta, 2009; Ndubisi, 2014). There is insufficient research and

implementation of mindfulness in organisations (Valorinta, 2009; Ray et al. 2011; Ndubisi, 2012; Dane and Brummel, 2014) and there is limited understanding of its tendencies and how it affects different aspects of organisations (Ndubisi, 2012). This is the reason why the Wheel of Awareness was introduced in order to enhance awareness in virtual communication. It is important to introduce mindfulness which Siegel (2009) calls “awareness of awareness” and “attention to one’s intention.” Although Mindsight goes beyond self-awareness to recognise the importance of interpersonal relationships, it is still vital to discuss mindfulness.

Therefore, mindfulness is an awareness that emerges by deliberately being attendant to one’s minute to minute observation in a welcoming way (Gazella, 2005; Shapiro, Oman et al. 2008, Boyatzis and Yeganeh, 2012). This observation enhances a person’s capacity to fully observe inward and outward situations which leads to awareness which boosts one’s ability to carefully engage in the present task or affair with undivided consciousness (Bryant and Wildi, 2008; Baas, et al. 2014). Barry and Meisiek, (2010) confirm that mindfulness is a procedure where a secured level of attentiveness abounds where considerations and feelings are noticed in the mind without over-analysing them and without also having an automatic response to them.

Thus, the observation of self introduces a space between an individual’s thought and reaction, which helps a person’s responses to circumstances in a reflective manner (Bishop, et al. 2004). Therefore, awareness overcomes any possible distracting reasoning (Ostafin and Kassman, 2012; Baas, et al. 2014).

2.6 Chapter Summary

This chapter has identified the gaps and the issues that need to be addressed in virtual communication via email. The solutions recommended in the literature have been reviewed and it was discovered that the virtual communication literature did not address the development of awareness. Consequently, Mindsight as a theory has been reviewed. Mindsight addresses these gaps but it has not been applied on virtual communication. This theory was introduced as well as the practice that this theory offers in developing this kind of awareness. As a result of this, four categories emerged within this practice: the awareness of the environment, body sense, mind sense and interpersonal integration.

Chapter Three: Methodology

3.0 Introducing the Research

This chapter introduces the research methodology, demonstrating the various approaches and processes that were undertaken to achieve the aim and objectives of the research. The chapter explains the methodology used to conduct the research. Therefore, the research approach, process, data collection techniques and analysis have been discussed in detail. Thus the chapter presents a justification for every decision made about the methods employed in the methodology.

3.1 Research Approach

Research approach is the plan and the procedure of a study that covers all the different levels of research from broad assumptions to the narrow details of the method of data collection, analysis and interpretation. The choice of a research approach should be in line with the nature of the problem, the experience of the researcher and the audience the research is going to address. Therefore, the research approach, research design and the research methods are the main components that demonstrate information in a sequential manner. This spans from generalised construct unto precise procedures of methods (Creswell, 2013).

There exist three major research approaches that were available to the researcher, these were quantitative, qualitative and mixed methods approach. It has been admonished that, the quantitative and qualitative approaches should not be considered as rigid opposites, but should be perceived as distant points on a continuum and mixed method can be found in the middle of the continuum (Newman and Benz, 1998). That is why although the research was qualitative there were some elements of quantifications in the data analysis. What differentiates the quantitative and qualitative research approaches can be in the type of strategies they employ, experiment or case study. It can also be reflected in the type of methods used within those strategies. Such as data collection through experiments for quantitative research and collecting data through observation in qualitative research (Creswell, 2013).

Therefore qualitative research is a study that uses series of activities to discover the observer in the world. This has a collection of operations that interpret and reveal the world. It is a method is natural, which implies that a situation is studied within its

immediate environment. The researcher makes sense of the situation through the eyes of the people that are directly impacted by the situation. (Denzin and Lincoln, 2011). This depicts the various realistic approaches to qualitative research but leaves out the design process and has not distinguish the various methods. Contrastingly Creswell (2013) highlights research design with a distinction of approaches. Stating that, qualitative research, *“begins with assumptions and the use of interpretive/theoretical framework that informs the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the literature or a call for change”* (Creswell, 2013).

This statement resonates with the present research, because the inquiry was structured according to interpretive worldview and upholds mindsight as a theory and a tool which is a double edged approach to the means of inquiry into problems individuals face on virtual communication and the same time addressing the problems they face. This means that they attempted to find problems and suggested a naturalistic approach to addressing the problem.

3.1.1 Justification for a Qualitative Methods Approach

The qualitative method was the most suitable approach for the context within capturing participants' experiences. Therefore the rationale for the selection of qualitative method in the present research is to study a phenomenon in its environment. In addition, it drove contextual meaning to problems and approaches that were noticed and adopted respectively. It has been stated that, qualitative research investigates social experiences by giving answers and meaning to the experiences. This was different from the quantitative approach which emphasises measurements and analysis of relationships that are uncertain between variables but not procedures (Denzin and Lincoln 2011). It was not necessary to imbibe a quantitative method because there was no need for measurements in the research but the investigation of people's experiences. It has been further affirmed that, qualitative research is more concerned about an individual's standpoint, and qualitative researchers think that they can get

closer to the participants' viewpoint by way of observing and interviewing them (Denzin and Lincoln 2011). Hence it was considered important for the researcher to gain access to the personal observations of respondents, so as to be able to understand their experience of the exercise on their communication, which was captured by employing the qualitative methodology.

In addition, qualitative approach was selected in retrospect to the research question and objectives of the research. The approach was selected so that the research questions can be investigated within the selected organisations in a detailed manner. Having the questions:

- What are the qualia of experience reported by participants when applying mindsight in virtual communication?
- What are the implications of mindsight in improving virtual communication as perceived by participants/individuals?

3.2 Research Process: Action research within Case Studies

Over the years, qualitative research has been diversified according to many categories based on discipline and traditions. Miller and Crabtree (1992) categorised approaches based on domains of human needs and emphasized that researchers make decisions based on their preference which might either focus on individuals, social settings or cultural perspective, while Wolcott (1994) maintained that researchers should select approaches based on their data collection strategies. Others classified approaches based on traditions (Jacob 1987) and discipline (Lancy 1993). One common thing among these scholars is the fact that the decision of the choice of approach still depends on the researcher. Even though they had their own focus they still left the key to the researcher. Now, the work of Creswell and Poth (2017) has rescued this situation by narrowing down the approaches to four classes. These are: case studies, grounded theory, ethnography and phenomenology; all of which have endured the test of time. This shows that the qualitative researcher can make some informed decisions after this simple classification. After careful consideration of the four moderated approaches it was decided that there was need to explore the problem closely and the case study approach gave the opportunity to study the problem in context.

3.2.1 The Case Studies

The case study enables the iterative process of the action research that would allow for multiple rounds of testing of the exercise to study the impact among groups of people. It is also appropriate in cases where a theory is at its rudimentary stage (Darke, et al. 1998). Although Mindsight has been extensively used in relations between parents and their children and between doctors and their patients (Siegel 2010b) there was a gap in the existing relevant literature about the application of Mindsight in virtual communication, hence the justification to use the case study approach to investigate this phenomenon. Moreover, the case study approach helps in the development and implementation of systems (Darke, et al. 1998) and is designed to study happening within its context (Pickard 2007). The respondents that participated in the research had no knowledge of Mindsight and they observed the exercise around their learning or work environment that utilizes virtual communication. It was therefore a study of a phenomenon within its context and also of having to develop and implement a process of virtual communication.

Consequently, case studies have provided details and completeness of the phenomenon studied (Denzin and Lincoln 2011). The role of the researcher at this point is to use the knowledge gained from this research holistically. The researcher here is therefore perceived as the mechanism through which the story of the research is presented in a comprehensive manner (Watson 2012).

The participants in the case studies needed to observe themselves using an exercise, therefore it was decided that it was necessary to have a utility whereby individuals could continuously observe themselves. It was also decided that action research should be imbedded within the case studies. This process was put in place to validate findings. In addition, the nature of the problem implied that it was beneficial to select a process that would have multiple attempts at exploring the problem and exercise at hand. Therefore, it became clear that action research was the better option among several other options. The reason for this being that action research allows for an iterative process where participants can continually repeat a process until some outcomes are evident over a period of time (Avison et al. 1999). These set ups have fulfilled research objective number four which is *to conduct primary research by applying the Mindsight communication process in academic and organisational contexts.*

3.2.2 Action Research

Action research is an iterative process that involves researchers and practitioners working together on a particular activity circle. This circle normally includes the diagnostics of problems, action intervention and reflection while learning. This method has been recommended because it links, blends and combines practice with research (practitioners and researchers). It is done so that theory will educate practice and vice versa. It blends theory with practice through changes and reflections occurring in the actual problematic situation that is within a mutually acceptable setup that is ethically approved (Avison, et al. 1999). The steps required for action research were fulfilled in the present research, as participants in the case studies did the exercise for six days and later captured them in a summary and finally developed guidelines as lessons learnt. The circle of the action research is displayed on Figure 4.1 and the exercises are in Appendixes A to C.

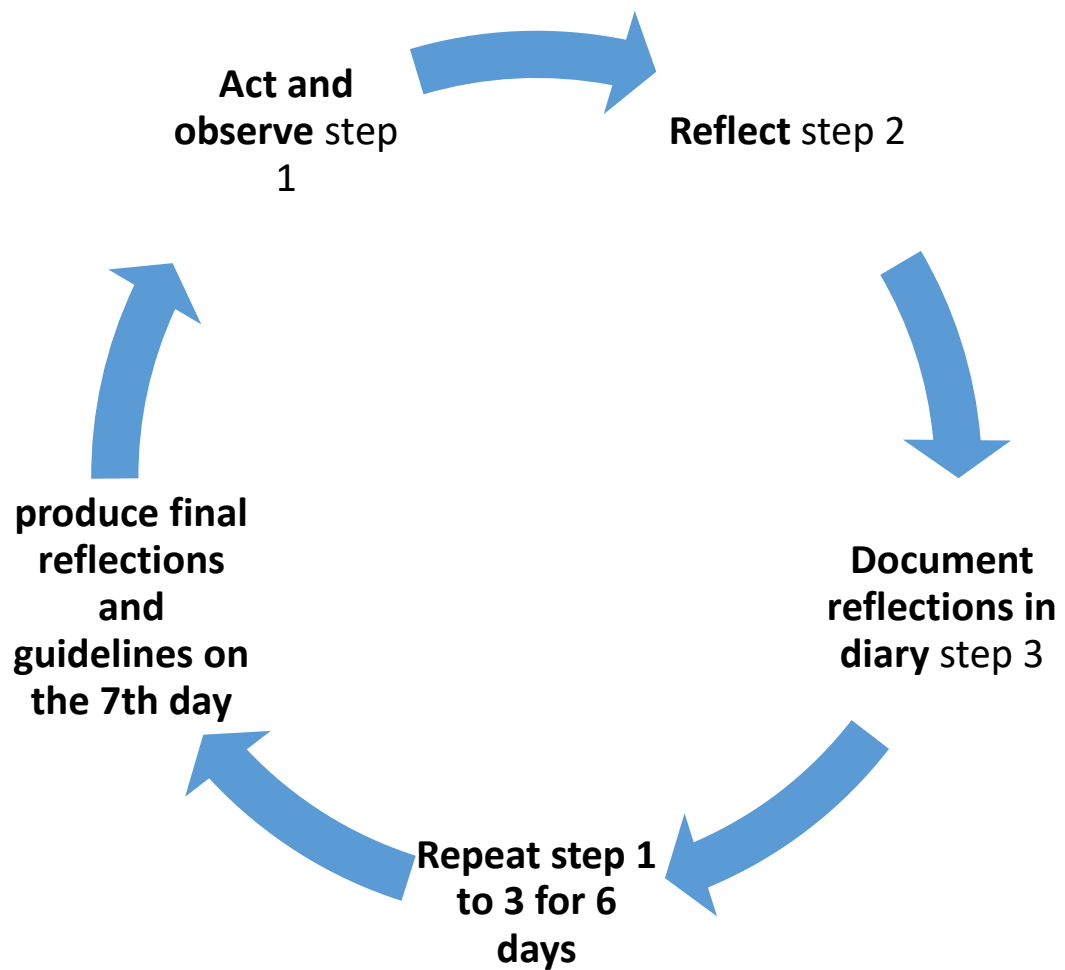
This adopted action research incorporated the principles of Reason's (1988) paradigm of cooperate inquiry (a holistic human learning process) which asserts that research is to be done with and for people and not on the people. The author emphasises that this principle must be applied to any research done with people as a rule of thumb. Therefore, the paradigm ensures that participants of this research contribute to the thinking process and also in making sense of meanings that emerge from the research. This kind of research is a kind of personal development and education for the participants. Reason believes that there is a relationship between inquiry and personal development. He defines this process as experiential inquiry, which recognises the importance of acknowledging personal experiences.

The framework for the action research within these case studies was conducted with students and practitioners in the United Kingdom and United States respectively. The respondents had little or no knowledge of Mindsight and the exercise was introduced to them to apply to their email communication. They were then asked to write their reflections in electronic diaries. This encouraged the participants to observe and reflect on the experience they had of the intervention to note what had occurred and to also capture their personal proposed behaviour towards virtual communication. This process resonates with the fact that action research gives participants the opportunity to research themselves in social settings (Kemmis, et al. 2014). This is a common research method in information sciences and is consistent with organisations. It is

usually applied to problems that have not yet been defined (Avison, et al. 1999). Mindsight is a theory that has not been used on virtual communication and it was deemed fit to employ a research process that would give room for an in-depth investigation in a step by step process.

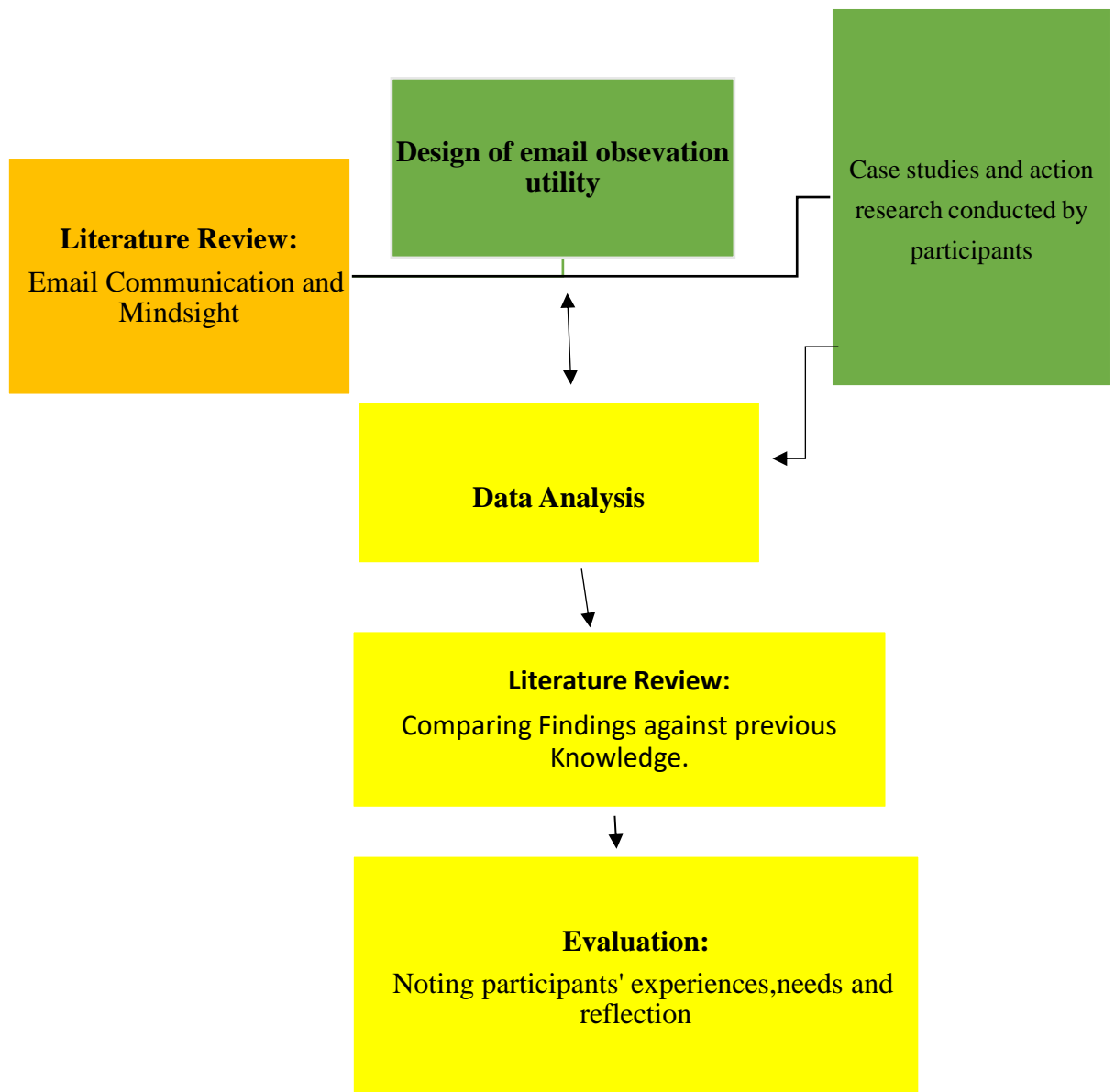
After all the above reflections, the planning of the research took around 18 months to complete. This included: the development of exercises that were used as instructions for the research and the decisions made to select the cohort of students that would undertake the research as first-person researchers. The research utilized two types of research participants: students who were readily available and one further group that made up the organisational context. This was thought about carefully to ensure that the research continued over a period of time. The exercise development was completed after several edits and drafts of instructions were created. The participants went through the steps in Figure 3.1. They conducted action research themselves, made discoveries by themselves and developed personal guidelines based on their discoveries in each case study.

Figure 3.1: Action research for participants adopted from Kemmis et al. (2014)



These steps lead to the final production of the Mindsight utility for virtual communication (MUVC) found in section Appendix D. The main research, therefore, took an iterative approach where it had the action research within three case studies. This helped to revise the instrument (MUVC). The participants were not involved in revising the MUVC but they produced the guidelines. Figure 3.2 displays the research design.

Figure 3.2: Research Design



3.3 Designing of the Field Study

The field study was designed in such a way that known contacts were utilized. In the first instance the opportunity of having access to university students was the driving force towards the data collection. This was because the researcher and the research supervisor had access to several cohorts of students and it was easier to solicit willingness to participate in the research. Therefore, university students were approached as the first point of contact. Secondly, there was the need to also triangulate data from another environment, therefore, a business organisation in the United States of America participated in the research.

3.4 Gaining Access

Gaining access to organisations and individuals is an important aspect of any research venture. Most researchers face the problem of not being able to gain access to organisations that fit the criteria of their studies. Feldman et al. (2004) claims that this problem comes to as a severe shock to researchers because some of their research activities are centred around the people or organisations they have in mind. This might happen because researchers do not have specific theories that show them how to gain access to people and organisations. The guides that are normally available to them are tips on an ad hoc bases. Therefore, researchers are left with a paradox where they ask organisations and individuals for a great deal of favours but have little to offer to participant organisations or individuals. Yet, they still go ahead to ask for assistances from their potential participants with the hope that they will gain access. In general, the reason for participants' willingness to participate in research is not often clear since they mostly do not gain anything directly from the research. It is supposed that willing participants give access because they want to help the researcher or because they want to part in a possible societal solution. (Feldman, et al. 2004).

The present research was far from this phenomenon as participants were made aware of the potential benefits they could gain from participating in the research. Due to this, the difficulty faced was less compared to other research. The success of gaining access, however, cannot be ascribed to the fact that the research had benefits to hand to participants. It was also possible to gain access because of proximity of the students to the researcher and research supervisor. Additionally, it was less challenging to gain access because the individual participants were mostly students in the same university as the researcher. It would have been more difficult if respondents were to be composed from a different university. Secondly, the organisation that was utilized in the USA had one of its executives attend a conference in the UK and it was there that contact was established. The commitment shown by the organisation was very helpful as the researcher was able to gain access to the participants through the executive.

Therefore, access goes beyond the privilege of observing and interviewing people for qualitative research. It involves the process of being able to learn from participants while observing and interviewing them. From this perspective, gaining access is not just a one off activity but it is a process that is developed and nurtured over a period of time. (Feldman, et al. 2004).

3.5 Sample of Study

There were three case studies in the research. The respondents consisted of groups of students at Northumbria University, United Kingdom. These groups consisted of postgraduate engineering and business students. A pilot study was also conducted among undergraduate students in March 2017. The postgraduate students made up the main study, however, which commenced in May 2017 and March 2018 respectively. An action research approach was undertaken with each data collection by analysing each data set and then adjusting their exercise with the view to improving participants' experiences.

The business case context was conducted at an international organization located in the United States of America which promotes social entrepreneurship by affiliating individual social entrepreneurs into their organization. They shape the global, entrepreneurial and competitive citizen sector which allows social entrepreneurs to thrive and enables citizens of the world to think and act as makers of change. The organisational setup matched the criteria for the research because it wanted to explore organisations that utilize virtual communication. The next sections discuss the rationale for the research instruments.

3.6 Data Collection

3.6.1 Development of Exercise

David Levy (2016) introduced in his book a variety of exercises that foster mindful observation of the use of information and communication devices and technologies and thus give users the opportunity to discover for themselves their tendencies and habits and develop their own guidelines with regard to technology use. These exercises are grounded in observation of the self while using technology, i.e. observing bodily and emotional states. The use of these exercises by students at The University of Washington reveals that intended mindful observation provides the users with the capability to discover unintended habits and usage of technology, reflect on what works and does not work for them and develop helpful personal guidelines.

From the perspective of the theory of Mindsight, the awareness of relatedness and communication with others and the environment (as well as the awareness of awareness) are part of what we can be conscious of while conducting a task or in any situation of being and doing. This present research developed further the 'email

observation' exercise proposed by Levy (2016) to include all aspects of Mindsight thus developing the 'Mindsight Virtual Communication Utility' (MVCU).

At the beginning of the MVCU (Appendix A), there is an aspect that focuses on integrating consciousness. This helps to strengthen awareness with a short practice of body and mind awareness. This focuses mainly on the senses of self, others and the written email. It invites people to be aware of their senses i.e. What they are feeling (which include what they can see, feel, and are experiencing mentally). This also includes the sense of connection with other people which gives the ability to think about what the other person in the email is trying to communicate. The participants were encouraged to observe their emails (focus email) for a period of six days and to keep diaries of their daily observations and reflections. Therefore, the process of developing and refining the exercise are outlined below and also demonstrated by Figure 3.1 and 3.2

1. First pilot study (attached in appendix A)
2. Amendment of exercise developed (attached in appendix B).
3. Main data collect.
4. Exercise amended from feedback.(attached in appendix C)
5. Second case study.
6. Third case study.

This exercise designed for the application of Mindsight on virtual communication satisfies objective two which is to *develop a utility of engaging Mindsight when using virtual communication, which includes developing self-awareness, monitoring and managing the self in the communication process.*

3.6.2 Diaries

Diaries are favourable in situations where participants' activities within their environment are needed to be investigated. It has been argued that diaries give researchers the opportunity to study information in its complete state (Beckers, et al. 2016). The present research encouraged participants to keep daily inputs to write about what they observed about themselves while they communicated via email. This was explored because of the format of the Mindsight exercise, which encourages participants to keep diaries of their email communication experience. It aligned with the research's purpose to explore Mindsight application in email communication.

Participants were therefore encouraged to keep diaries of their email communication for six days and on the seventh day they were to make a summary of their observations and write some personal guidelines for their own email communication. Data collection through diaries is built on people's willingness to keep accounts of their daily lives (Iida, et al. 2012). As a result, the diaries collected substantial information that was used to answer the research question and the data provided insight into the investigation in a way interviews or focus groups would not have been able to capture.

3.7 Qualitative Data Analysis Strategy

3.7.0 Data Analysis Technique of Diary Entries

The data analysis strategy employed thematic analysis, this stems from the fact that data obtained was analysed according to the predetermined categories extracted from Wheel of Awareness literature which formed the bases for the exercise and then analysis. This provided a clearer method of analysing the data and also the ability to answer the research questions. Therefore, the analysis proceeded using the steps below.

3.7.1 First Stage

A simple spreadsheet and thematic analysis were employed to analyse the data obtained from the diaries. Many rounds of reading the completed diaries were performed to capture emerging themes. First, the whole documents were read several times to understand and capture clues and meanings, then the emerging themes and statements were underlined. The underlined sentences and themes were categorised according to what, how and why things happened. These were later represented on tables and maps, to relationships.

3.7.2 Second Stage

Thematic analysis is a method used to identify, analyse and interpret the pattern of meanings in qualitative data. This provides an instrument that is not tied by paradigms but gives room for its adaptation in a range of qualitative frameworks. Given its flexibility this is why it is the most favoured approach in qualitative research. It emphasizes the lead role of the researcher in formulating codes and themes from the data that was obtained (Clarke and Braun 2017).

Codes are the smallest elements of analysis that capture features that are interesting from qualitative data that are important to the research question. Therefore, codes for the blocks through which themes (the pattern of meaning) are generated, underpin the

main idea that is shared in the research. Themes provide a framework for the organisation and reporting of the analysis observation. The goal of thematic analysis (TA) is not only to summarise the data contents but is to identify and interpret and is guided by the research question (in TA the research question is not static but it can revolve throughout the process of code and theme development). The main point of TA is to establish rigour and good quality analysis. This is because of the dual process of review that emphasises checking themes and reviewing them against data that is coded and the whole data set (Braun and Clark, 2006).

3.7.3 Third Stage

Computer assisted qualitative data analysis using Nvivo thematic analysis software. This was carried out because the software saved time in analysing the data. Nvivo also gave the researcher the opportunity to look at the entire data in one glance.

3.8 Validity and Reliability

The researcher took important steps to ensure that the research findings were accurate and trustworthy. Transparency was upheld during the process of research design, data collection and data analysis. This was because it is important for qualitative research to be transparent as it is the basic requirement of qualitative research and it also gives the reader the freedom to scrutinize the research process and to evaluate it (Bryman 2016). The research design, for example, was presented as part of a research paper in a conference (See Appendix G and H). The researcher presented the paper to a group of researchers at the conference. Questions were asked about the design and process. As a result, feedback from the conference helped to improve the process and design of the research.

Secondly, a layer of validity has been added to the research findings and built-in falsification strategy. This was demonstrated by displaying evidence that could not attain the research exercise's objective of enabling awareness. The discussion chapter displayed the percentages of participants who were unable to experience awareness in certain areas of the awareness quadrants. This demonstrated the holistic approach used to report the research findings without masking out the possibilities that were not attained (Life 1994).

In addition, simple counting helped in validating qualitative research findings which could be achieved by utilizing computer-assisted qualitative data analysis (Life,

1994). Simple counting was made possible with a computer assisted qualitative data analysis software Nvivo. Nvivo made counting evidence and themes possible so that occurrences and percentages of awareness achieved and the ones which were not achieved could be tracked and displayed.

Lastly, replication was achieved by using the exercises in two different case studies. These cases studies have different backgrounds but the same exercise was given to the two cohorts. This gave room for rigorous application of the Mindsight exercise in different backgrounds and that added to the validity of the research findings. It is believed that we can understand cases better when a single method is applied to different cases (Bryman 2016). Similarly, having action research within the case studies also validated the findings of the research which added to its reliability as the reports from the guidelines came directly from the participants and not the researcher.

3.9 Resources

All research is restricted by time and resources (Bryman 2016). Available resources for this project included the University Library which has sufficient materials in the form of journals, books, reports, databases and power searches to mention a few. Two project supervisors were allocated to me to provide guidance, both of which had a wealth of experience. Other resources included respondents from Northumbria University, United Kingdom and the business organisation in the United States of America.

3.10 Research Ethics

Data was collected from engineering and business postgraduate students from Northumbria University, United Kingdom. Data was obtained from social entrepreneurs from the United States of America. Before data was collected from the aforementioned sources some ethical issues were put into scrutiny. Firstly, ethical approval for this research was obtained from Northumbria University within the first year of commencement (a unique ethical number was given to the researcher by the University). Therefore, all required Northumbria research ethics forms have been signed accordingly. Secondly, each participant was fully informed about the research project. They were also told that they could withdraw from participation at any time and confidentiality was maintained. Unique identity numbers were given to the data of each participant. Original data entries were stored on the University drive for heightened security measures.

Data was collected via diaries within three case studies. These case studies involved participation in an exercise. Participants were told to observe and record their experiences of the exercise in electronic diaries. Each participant was fully informed about the research project. They were also told that they could withdraw at any time. Confidentiality was maintained unless they wished to publicly share their stories. All required Northumbria research ethics forms were signed accordingly and approval was granted in February 2015 in order to carry on with the research.

3.11 Chapter Summary

This chapter presented the methods employed to answer the research question and achieve the objectives that were developed in the first chapter. The chapter justified the reasons behind the utilization of action research embedded within case studies. It has also demonstrated the rationale behind the adaption of qualitative methods throughout all the stages of the research.

Chapter Four: Analysis

4.0 Introduction

This chapter presents the analysis of the qualitative study which had data from three case studies. A total of 55 diaries were analyzed meaning 330 daily entries for each participant over six days. There is a definition of the themes used for the thematic analysis at the beginning of the chapter; this was decided so that it will be easier for the reader to be carried along. This section is followed by the demonstration of the processes taken for the thematic analysis for both the manual and automated processes. The analysis took a systematic approach in the sense that, each of the case studies had one data set explained extensively. After that, collective analysis of all the participants of each case study was presented.

4.1 Steps Taken for the Thematic Analysis

4.1.1. Pre-Analysis Stage

It was determined at the beginning to utilize thematic analysis to interpret the data because the researcher thought it was appropriate to utilize it because of the rich text obtained from the participants' diary entries since that was the only tool used for the data collection. Thematic analysis is a method for identifying, analysing and reporting patterns called themes within data. It minimally organizes and describes the data set in substantial detail. (Braun and Clarke 2006). Secondly, it was thought that it was important to also utilize the circle from the wheel of awareness by using the senses at each quadrat as themes. This idea materialized from Mindsight literature, because, analysing participants' awareness through the tool might provide insight into their consciousness while communicating on email. Hence, the wheel of awareness was used (Figure 3.2). The initial categories were based on the literature review of mindsight, these categories were selected from literature because they conveyed and exposed the extent of the participants' consciousness of themselves and others while communicating on email.

1. Awareness of senses,
2. Awareness of bodily sensations,
3. Awareness of mental activities and
4. Awareness of interconnectedness.

As a result, the various domains within the wheel of awareness formed the initial predetermined categories for the research as displayed in table 4.1. Thus, both a deductive and inductive thematic analysis was adopted. This meant that the investigation was a top-down approach by utilizing categories that emerged from the review of the literature and some of the sub-themes that emerged from the analysis generated by the data (bottom-up approach).

4.1.2 Categorizations and Themes

It is essential to distinguish the above categories and themes that were utilized to explain the analysis. In the beginning, it felt right to define the mind according to Mindsight, because it is the crucial pillar on which every other category and theme in this research hinges.

“The mind is a self-organizing process that regulates the flow of energy and information... Consciousness is our ability to be aware and has a sense of knowing.” (Siegel, 2016, p.38). Awareness is the fundamental aspect of mental experience with which we have the subjective sense of knowing or being conscious of something (Siegel, 2012, p.5)

The mind occurs both within and outside of ourselves when people communicate and relate to others; this shows that the mind is multifaceted in its location. Hence the feelings, thoughts, and memories we experience are linked to the activities of the mind, and these are the subjective activities of the mind which contain the energy flow patterns that contain information (Siegel 2016). This shows that every other category and theme in this research is related to the mind directly or indirectly because every perception and action from the participants emerged from the mind. Table 4.1 and 4.2 contains the categories and significant themes.

Table 4.1: Categories and main themes from literature review

Categories	Main themes
Sensory Awareness	Sight, hearing, taste, touch and smelling.
Bodily Awareness	Comfort and discomfort.
Mental activity Awareness	Emotions, intentions, thoughts and attitude.
Interconnectedness Awareness	Empathy, compassion and communication.

Table 4.2: Categories, main themes and sub theme (sub themes emerged out of data analysis)

Categories	Main themes	Subthemes
Sensory awareness	Sight	Light and seeing objects
	Hearing	Conversations, cry, laughter, murmur, music, noise, quiet, white noise.
	Taste	Solid food and tea
	Touch	Feel.
	Smell	Air and coffee.
Bodily awareness	Comfort	Breathing, feeling comfortable, feeling relaxed, good posture, improvement in health, mindful effort, seeking comfort, stress relief and taking a break.
	Discomfort	Back discomfort, hangover, heat, and hunger, and illness, lack of sleep, negative energy, pain and physical discomfort.
Mental activities awareness	Emotions	Annoyance, anxiety, balancing emotions, calmness, confidence, disconnection, embarrassment, feeling peaceful, frustration, feeling positive, good mood, happiness, mixed feelings, motivation, nervous, sadness, sense of connection and stress.
	Thoughts	Distraction, calm, decision, less aware, less distracted, misinterpretation, relief, stress and wondering mind
	Attitude	Focus, attention, contentment, determination, focus, intention, not assertive, open mindedness, procrastination, reflective and thankful.
Interconnectedness Awareness	Empathy	Conditional empathy, focusing on others feelings, getting understood, giving assurance, giving empathy, inability to empathize, kindness toward others, not receiving empathy from others, positive response, receiving empathy, right tone, sensing others expectations, thinking about how others will feel.
	Compassion	Being helpful, compassion toward others, compassionate response, self-compassion, sympathy and understanding.
	Communication	Clear language, communicating impatience, connectedness, considering context, listening, listening skills and mutual agreement.

4.1.3 Analysis Stages

The steps taken for the thematic analysis of the data using the wheel of awareness as a tool together with the categories are explained below:

Stage one: The researcher drew a wheel of awareness circle on a broad sheet of paper (A2), the circle had three layers. Then the circle was divided into four equal parts (quadrants) to represent the four senses of awareness, which are awareness of senses, the awareness of the body, the awareness of mental activities and the awareness of interconnectedness. Figure 4.1 shows the circle of the wheel of awareness for the thematic analysis. The first (upper) layer of the cycle had predefined categories of sensory awareness, bodily awareness, mental activity awareness, and interconnected awareness. These categories made up the wheel of awareness in mindsight theory. This was selected in order to investigate peoples' ability to pay attention to such senses.

Stage two: The second layer had the main themes which were mostly drawn from literature. These themes were used to classify any sensation or awareness that individual can identifies or feel. These main themes break down the categories into precise senses. Example of such main themes is sight and touch that emerged from awareness of senses. Others include thoughts and emotions that emerged from awareness of mental activities. The full list of the main themes is displayed in the second column of Table 4.2.

Stage Three: A third layer drawn on the circle, this layer contained the main themes were broken down into sub-themes. This was achieved by cutting out phrases or sentences from the dairies that related to the sub-themes and then attached to the sub-themes as displayed by figure 4.1 and 4.2. The sub-themes differentiated the forms of senses. Therefore the sub-themes emerged from the data. Hence, the sentence or group of the sentence that falls under a particular theme is underlined and cut out; then it is attached to the third layer of the circle (see figure 4.2), which now forms the sub-theme. The whole diary of the participant is read out and underlined; then whole sentences were extracted to be pasted under the last layer of the circle of the wheel of awareness. This process was carried out on the diaries of 10 participants from the pilot study. The participants that were recruited were university students. The researcher asked a lecturer if it was possible to administer the exercise during one of the lecture

sessions. So the researcher took the exercise to the class where the students were and distributed the exercise. The next stage is dedicated to the analysis of the primary (main research after the pilot study) research 55 diaries that were analysed using Nvivo software.

Stage four: The diaries of the 10 participants from the pilot study were analysed manually, while the diaries 55 diaries from the main case studies which formed data for the study were analysed using the NVivo software. Therefore, the pilot study was analysed manually while the main study was analysed electronically using Nvivo. Nvivo is software used for thematic analysis. Nvivo was used to continue with the analysis because it gave the researcher a full picture of the analysis at a glance. It also saved time and energy and enabled focus on the data, than the manual process of the analysis. Therefore, the circles drawn from the pilot study gave the researcher a more in-depth understanding of how to navigate the analysis and to also develop the process for the analysis. Thus, the first step taken for the Nvivo analysis was to upload the file diaries unto the software. After that, the individual diaries were read to identify the various senses identified by the individual participant.

Figure 4.1: Wheel of awareness for the thematic analysis



When a sentence demonstrates an awareness by the individual, the sentence is then attached to one of four senses nodes that were defined from the wheel of awareness. The sentence is then highlighted and coded as a node. Before this time the four senses were categorized into main nodes which were, sensory, bodily, mental activity and interconnectedness nodes. When an individual's diary is read, the sentences that fall under a particular theme is highlighted, then allocated to a theme node. When a node is selected, it is further selected to form two other nodes which were categorized into the main theme and sub-themes that corresponds to the second and third layer of the circle of the manual wheel of awareness circle.

The next section is dedicated to the analysis of the pilot study. The pilot study utilized the exercise in Appendix A. The analysis started with a focus on one participant's diary in a detail format. The participant selected had awareness in all the four quadrants of awareness, this was to ensure that the awareness quadrants were all represented. After analysing the participant's diary, a collective analysis of all the

participants in the pilot study was performed. One participant was analysed extensively to demonstrate how they were aware of their sense and to also provide detailed demonstration of the analysis.

4.2 Analysis of the Pilot Study

This presents the analysis of the pilot study of 10 undergraduate third year students at Northumbria University, United Kingdom. The students rely on email communication for their university work. Their communication was examined by giving them the version of the exercise on Appendix A. The fifth participant was selected for detailed analysis because the individual had an awareness of some senses in all the four quadrants in the wheel of awareness which is demonstrated in Figure 5.2.

4.2.1 Sensory Awareness

From the literature, sensory awareness is the kind of awareness that emerges from the five senses of sight, hearing, smelling, tasting and touching. This participant recognized the sense of touch and hearing during the exercise observation. He was able to distinguish the various textures of the seats he used during the exercise. On one occasion, he recognized how he felt differently when he sat on a chair and a stool and how that made him feel. This feeling was categorized under the sense of touch.

“The available seat is a stool this is less calming and comfortable than a regular chair.” Participant 5.

Participant also notices the various sounds from the environment and their impact on him. On one occasion he had music on headphones, and at another time he notices noise in the surrounding area. These sounds were categorized under sound and subdivided into music and noise

Music: *“Calm atmosphere with headphones in listening to relaxing music both feet planted on the ground.” Participant 5.*

Noise: *“Busier atmosphere with greater movement and noise.” Participant 5.*

4.2.2 Bodily Awareness

Bodily awareness is in the second quadrant of the wheel of awareness. For this participant, it was further broken down into two main themes of discomfort and seeking comfort. Depending on the sentence and its content, the themes were further broken down to sub-themes.

Participant felt restless at a point during the exercise; this was experienced as a result of some irregular breathing. That was identified as restlessness in the analysis.

“Breathing is less regulated and calm, somewhat more sporadic.” Participant 5.

Seeking Comfort

Participant talked about things that made for comfort, which was analyzed as body regulation and body relaxation. Regarding body regulation, participant thought that posture had a lot to do with how they felt comfortable. The participant also took note of the kind of environment that enhanced the feeling of being comfortable. This paved the way for active engagement with the email communication.

“Within this task, I believe that I operate best when in a calm environment and an area where I have allotted time to complete a specific task and series of the task, this regards myself being relaxed not only in y posture but also within my breathing allowing for me to understand all content fully.” Participant 5.

4.2.3 Mental Activity Awareness

The mental activity awareness is in the third quadrant of the wheel of awareness. Therefore every time the participant mention or identify some emotions, attitudes or thoughts it was attached to the awareness of mental activities category. These were the following mental activities identified or felt by the 5th participant.

The participant felt anxious at some points in the diary entry. Anxiety was categorised as a sub-theme under the emotions main theme.

“Somewhat quit frantically I am in a rush to get to work, and I need to send an email confirming a meeting with my dissertation tutor. Being in a rush and more frantic state I am not taking a memory of my breathing and mindset.” Participant 5.

The participant spoke about some attitude that portrayed some aspects of not caring much, this was categorized under attitude main theme and named as a sub-theme called careless.

“I quickly write and send the email before leaving my house giving less concern to the recipient of the email and how I have conducted the email and the emotion behind it.” Participant 5.

Then sorting through the data an aspect of mental activity awareness still under the attitude main theme identified as intention. Where an individual proactively decides to do an action or makes up the mind to achieve a specific goal. Participant talked about the intention to read and to reply emails and complete some task (having a focus leads to achieving goals that were set beforehand. This process enables individuals to be able to communicate effectively, which might mean solving problems on time).

“Focused on scanning email inbox for any new emails which are regarding my studies. Reply to an email regarding a scheduled meeting to confirm my attendance to suggested time and place.” Participant 5.

“Furthermore, I found that in more frantic situations where time is less present I am more focused to complete the task at hand even though I was less aware of my psychology the task was still completed to a rate of accuracy.” Participant 5.

“Fast-paced environment I checked my emails on my break, so I only had a limited amount of time to complete a number of activities. This regarded less emphasis being placed on how I was feeling, my posture and my breathing and more focus being placed upon checking and replying to specific emails within in the allotted period of time.” Participant 5.

4.2.4 Interconnection Awareness

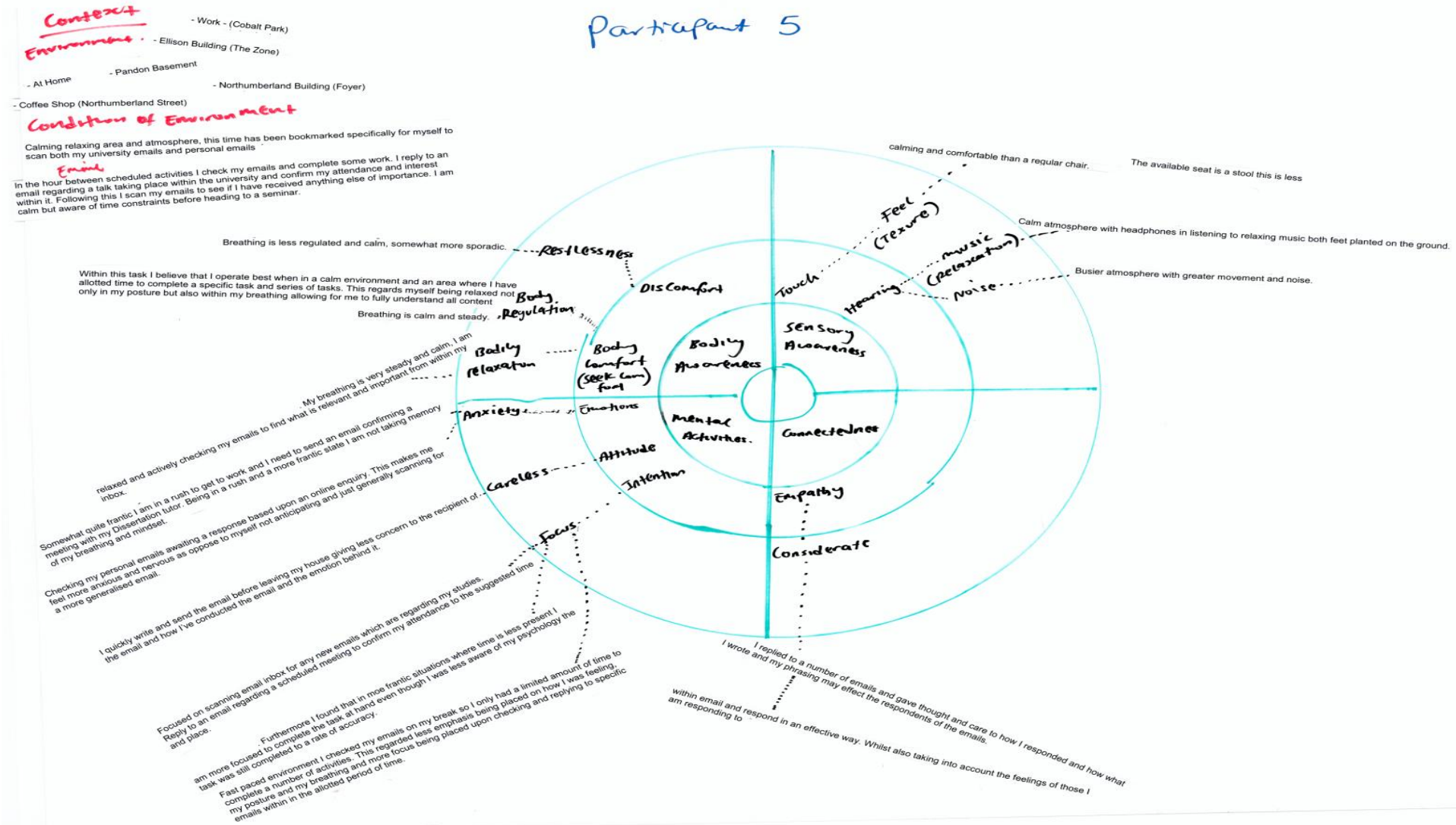
There were actions of empathy among participants (empathy is a central theme within the interconnectedness category) while communicating with others via email. Empathy in some instances was revealed when individuals demonstrated consideration to others, and this was categorized as consideration in the analysis of the whole diary. This is because to be considerate of someone means you are empathizing with them.

“I replied to a number of emails and gave thought and care to how I responded and how what I wrote and my phrasing my effect on the respondents of the emails... Within email and respond in an effective way. Whilst also taking into account the feelings of those I am responding to.” Participant 5.

The participants have experienced awareness in the quadrants of awareness, and this pilot study has helped to scrutinize the Mindsight exercise. As such the exercises were edited after this pilot study because the students found it long and some of the

instructions confusing. Therefore the first case study which is one of the primary studies used an edited version of the exercise in Appendix B. Therefore, this pilot study has satisfied research objective three which is to conduct a pilot study to test the application of the Mindsight virtual communication utility on virtual communication.

Figure 4.2: Participant 5 diary analysis through the wheel of awareness



4.3 First Case Study

4.3.1 How Participants were Recruited and the Method of Analysis

The first case study was made up of postgraduate engineering students of Northumbria University at Newcastle upon Tyne, United Kingdom. These students were selected because of easy access. The researcher asked student's lead tutor if it was okay to administer the exercises to the students. When the lecturer agreed, the researcher went into class and administered the research brief and the consent forms, after the students provided consent, then the exercise was given to them at another date. The students were encouraged to write their observations in an electronic diary which will be collected. The demographics of the participants were not collected, at the time it was thought information about their genders were not important. There were no incentives provided for the participants.

Therefore, 36 diaries were collected in this case study, and the diary of participants were analyzed extensively. The first case study utilized the exercise in Appendix B. The analysis started with a focus on participant twelve's diary in a detail format. The participant was selected because they had awareness in all the four quadrants of awareness. After analysing the participant's diary, a collective analysis of all the participants in the study was performed.

The primary study started with computer-assisted qualitative analysis using Nvivo and it utilized graphs and charts for rigour and presentation of the findings in numbers. Reason and Bradbury (2001) argued that rigour could be achieved by including quantitative measurements of qualitative research (Reason and Bradbury 2001).

4.3.2 Sensory Awareness

Being able to notice or feel some sensations while acknowledging them is crucial in coming to awareness. The transcript of this participant was read and categorized according to the different awareness that came into attention while doing email. Starting from the first quadrant of awareness of senses, the participant could still notice the taste of tea in his mouth long after he finished drinking it. This brings to mind that the participant was beginning to be accustomed to bodily senses. That would not have been noticed without reading the exercise instruction since participant was not accustomed to noticing and acknowledging awareness within and outside her body.

The diary captured some development toward the ability to notice mundane happenings around.

“I am stuck with the aftertaste of tea which is not the most appealing however after my third cup today I am not surprised. I have not had much in the way of food today which surprisingly hasn’t impacted on my overall work ethic considering, however, due to my late start to the day (lecture 3pm-5pm) I cannot say it has been the typical working day that most people are exposed to.” Participant 12.

This account also drew some attention that a person could forfeit eating food in order to achieve what they set out to do. This shows that the participant was focused on the task at hand. The respondent also talked about the condition of the room where exercise was taking place. It was noticed that the temperature of the environment affected her attention. This also brings to light the relationship between the senses and mental activities. It might be that things people feel within and around them affect their attention so that it drifts away toward what they are feeling than focusing on the task ahead which is the email communication in the context.

“Overall I would rate my comfort a 6 in the way that I am not itching to get home, but on the other hand, I do not feel completely content. This is largely due to the lack of sunlight and excessive temperature. Now the point at hand.” Participant 12.

4.3.3 Bodily Awareness

The main discomfort theme falls under the bodily awareness category; there is also the main theme of seeking comfort. These themes were used to describe the level of comfort an individual felt or try to achieve within and around their bodies. This could consist of feelings like hunger, tiredness, bad posture and others. The feeling of comfort could consist of when an individual feels comfortable or are trying to become comfortable by making some adjustments.

This participant felt hungry which was expressed as a form of bodily awareness of discomfort. This also means that the hunger can be a type of distraction since it is taking away the participant’s attention from work at hand. There seems to also be a relationship between bodily awareness and mental activity awareness as the case of hunger and distraction.

“Yet again I am completing the exercise within my student residence, with a quiet environment that is perfect for the exercise. I feel quite relaxed with significant confidence for. Completing this exercise, I have noticed a significant change in the duration of time it takes to return to focus on my breathing which is good to see improvement.” Participant 12.

Participant also reported feeling relaxed at the students’ hall of residence; this could also be attributed to doing the exercise in a familiar environment which calms the body and eliminates stress.

“This week I have reviewed only my university email as I Received more directed emails from members of staff, fellow students compared to the sheer amount of advertisement within my personal account. Today I was meant to be attending the Optical Commminutions Laboratory. However, the Ph.D. responsible for the lab was unavailable. Currently, I feel comfortable; however, I feel as though I am still waking up with my eyes feeling tired. With regards to the rest of my body, I would rate how comfortable I am as a 7, higher than last week but still room for improvement.” Participant 12.

The kind of facility used in sitting to do emails might also affect the way an individual feels comfortable in their body.

“For this exercise, I have changed where I am sitting slightly by sitting with my laptop in the sofa area of the space. I feel more comfortable generally when sitting in this area. However, I do not think it is the best decision for doing significant work over a prolonged period. The relaxed area has led to a number course mates coming to talk to me. This defiantly has impacted on my attention as I value a quick conversation over stopping a conversation as I do not have any time pressures currently.” Participant 12.

In summary, when individuals can be aware of their bodily sensations, they are also able to understand and notice the kind of environment and textures that make them comfortable or uncomfortable.

4.3.4 Mental Activity Awareness

Mental awareness was recorded as any form of awareness that was noticed through the mental faculty. This depicted the kind of consciousness that emanates from

thoughts, attitudes, and emotions. Therefore these four attributes of the mental faculty were recorded as main themes.

Every kind of awareness that came through the thought process was recorded under the theme 'thought'. Other sub-themes emerged from the participant's thoughts that were categorized as distraction, relief, and awareness. These were based on the kind of thoughts that came into awareness.

Distraction was noticed when a person's attention wanders away to other things or thoughts instead of maintaining focus on the task at hand. Therefore, any comment made about wondering thoughts by the participant was coded under the distraction sub-theme. For instance, the thought of thinking to maintain attention on breathing was a source of distraction to the participant instead of concentrating on being attentive; they found they were thinking about how to be attentive and that was a form of distraction since attention was drawn away from their aim of maintaining attention. Having deadlines was also distracting because the participant kept on thinking of the deadline ahead, which removed the mind from the task.

"I have decided to complete the first breathe awareness exercise at the computer desk within my room. The environment is ideal for conducting the exercise as my flatmate haven't woken up yet. I had late night as our group report was submitted around 8pm a lot later than I originally intended. I woke up with a feeling of anxiety, and still feel the same now. This is no surprise as after an intense week of long days to finish the group report. I find that focusing on breathe at the nostril level is most natural when compared to my chest and abdomen. I keep finding that I tend to turn my attention to thinking about the upcoming presentation submission, but by following the exercise guidance of saying 'thinking' in my head to help deviate my attention back to my breathe. I find that this took more time than I expected with my attention going straight back to thinking about my deadline as soon as I regain my original intention."
Participant 12.

When another person is eating within the same room as the participant doing email, it causes distraction. The participant reported getting distracted severely because of someone eating. It was an exciting discovery because something as simple as someone else eating could divert another person's attention from what they are supposed to be doing.

“Noticed that my attention was distracted several times due to a student eating a packet of crisp. This sounds trivial in hindsight, but at the time I could feel my self-becoming frustrated. I think it was more the magnitude of noise rather than the food as I didn’t feel hungry at the time.” Participant 12.

There seemed to be a distraction because of using a computer that was not familiar, meaning that the computer was a public one. This raised a form of distraction to the individual. It might be necessary to say that individuals might develop some emotional attachment to personal equipment so that working with external or publically owned equipment might be unsettling. Secondly, a developing noise from the background also distracted the participant, and it was significant enough for her to notice the change in the atmosphere because of people chatting. It was also essential to bring to light the fact that an individual can be distracted when they do not longer have the mind to keep working on a particular task or because they are tired.

“For this exercise, I was reviewing both my personal and university email account. I was working on the university computer as I was charging my laptop, which felt less familiar when compared. I have been here for the three hours after my optical communication lecture as I felt as though I had work to catch up. Currently there only 4 students in the area with 3 of them being course mates which isn’t surprising given the time. Before starting the exercise, the room was very quiet however part way through the group started to make more noise as they had been distracted by a friend phoning. The best way to describe myself at this moment in time will be phrase ‘wired.’ Especially meaning I was approaching the end of my capacity to work.” Participant 12.

Ill health and hangover from drinking could also make an individual to be distracted. These impacts were reported in the participant’s dairy as they found it difficult to concentrate on the task and those served as hindrances.

“This week’s breathe exercise is being completed with a slight hangover over the celebrations of completing the presentation for the group project, providing a respite from work. I am conducting the exercise in my study within my student house.” Participant 12.

“This is the last time I will be conducting the Email Observation Exercise and the first time I have performed it within my flat and during the weekend. I am currently feeling

unwell with cold and congestion which is having a major impact on my concentration levels and therefore my attention. I am finding it difficult to focus on the exercise.” Participant 12.

The participants were aware of their own tendencies to be distracted easily; respondent was hoping that the exercise would address the issue. There was consciousness of the fact that a noisy environment could be distractive. The understanding of one's tendencies and own environment were recorded as awareness under the thought theme. It is worthy of note that, an individual cannot change what they are not aware of, therefore being conscious of such things were termed awareness.

“Straight away I see that my attention had a lot of room for improvement and I am interested to see how this will change in the coming weeks. I think the environment aids with the exercise as there isn't anything obvious to attract my attention. I would like to try this in another area next week to see how distracted I get in a more dynamic environment.” Participant 12.

There was a sign of relief when the participant got a positive email that showed that receiving emails that are positive affects the recipient in a good way. There seemed to be a relationship with a positive message with a good mood, or a positive message produces a good mood.

“Reviewing my university email, I can see that I have two emails worth mentioning. Firstly, I have received an email confirming that the product essential to group project has been delivered and is ready for collection. This is a relief as I can now finish that section of the project earlier than I originally intended.” Participant 12.

The attitude of people was measured in terms of the way they focus on a task. Therefore, ability to keep attention on a goal or task was described and coded as focus. The participant reported noticing the improvement in the ability to focus on the task, and that was attributed to the exercise.

“Overall I feel that my ability to focus on the task at hand has significantly increased. This may be due to being familiar with the exercise or even the time given I am usually preparing for lectures around this time.” Participant 12.

The energy in a room has negative or positive impact on a person. The participant reported working in a room with people that were focused on their work. That also

influenced the decision to work. Therefore, the attitude of the people somebody work within a room helps them to focus or be distracted from their work.

“The room seems to have a communal motivation to focus on work which helps with concentrating on completing work.” Participant 12.

Having an inflow of positive emails seems to touch an individual in useful ways. That showed in the attitude of being thankful. For instance, the participant talked about receiving an email that reported getting a request granted. That led to a thankful attitude from the participant. It might imply that a good email might lead an individual into becoming thankful. Therefore, emails have an indirect way of affecting people’s mental faculties positively or negatively. The attitude of being thankful can also be related to the emotion of happiness because when one is happy, there is a tendency to develop a thankful attitude.

“Moving onto my emails it had been a rather slow week. I have received an email confirming a purchase from the University for my Group Project had been approved by my module leader. I wrote a response saying how much I appreciated him sorting this out as it had been playing on my mind for a couple of weeks. I am also thankful I went back through my emails as a book I had loaned from the university was up for renewal, and I had completely forgotten.” Participant 12.

Emotions were also expressed in the cause of carrying out email communication. It was discovered that some people tend to get embarrassed by so many unread emails. This might be due to the way they perceive things. The participant expressed some embarrassment because of so many accumulated unread emails in her inbox. This is still to mention that email communication has an indirect way of affecting people’s emotions.

“When opening my inboxes, it feels like I have opened a cluttered cupboard that you would find under stairway, with my personal account exceeding 2000 emails. I can recall the feeling of embarrassment when opening my email as I ensured my body was blocking the number of unread. Scanning through my university emails for the last week I can see that I have four emails that are directly from staff members with the rest being generic emails from blackboard, the university and the students’ union.” Participant 12.

Sometimes frustration and annoyance were experienced. For example, what is happening within an environment that is used for email communication could elicit negative emotions in the individuals that receive them. For instance, an individual making noise in the room made the individual and other colleagues be uncomfortable and frustrated with the situation. Therefore, the attitude other people put up within a shared space of work can frustrate other sharers. An email about a shifted meeting brought up some anger in the participant, this shows that emails that contain some disappointing content could bring up negative emotions in individuals.

“The stand out moment for me was the feeling of frustration I felt when the other student was distracting not only me but others within the room, I believe it will be useful to think of had caused me to have such a short tolerance in this occasion.” Participant 12.

“Receiving an email from my supervisor to rearrange the time of the meeting made me feel annoyed but not with him because his reasoning was just but more with the fact that it would be down to me to sort a new time and plan around other people’s timetable as I have had to do this multiple times in the previous semester.” Participant 12.

4.3.5 Interconnectedness Awareness

Interconnected awareness is the awareness people have about other people and how a connection with other people is achieved through communication, empathy, and compassion. Participant received empathy from a tutor; this shows that it is possible for individuals to empathise with one another through email communication because the words were written could convey sympathy to the reader. For instance, the participant claimed:

“The Second email is regarding the seminars and lecturers for this module. I think this email is significant as it shows empathy for the students given the approaching deadlines and is directly prevalent to myself as the concerns about the increasingly congested period, raised by myself and a few of the course members had clearly been appreciated and acted upon by the lecturer.” Participant 12.

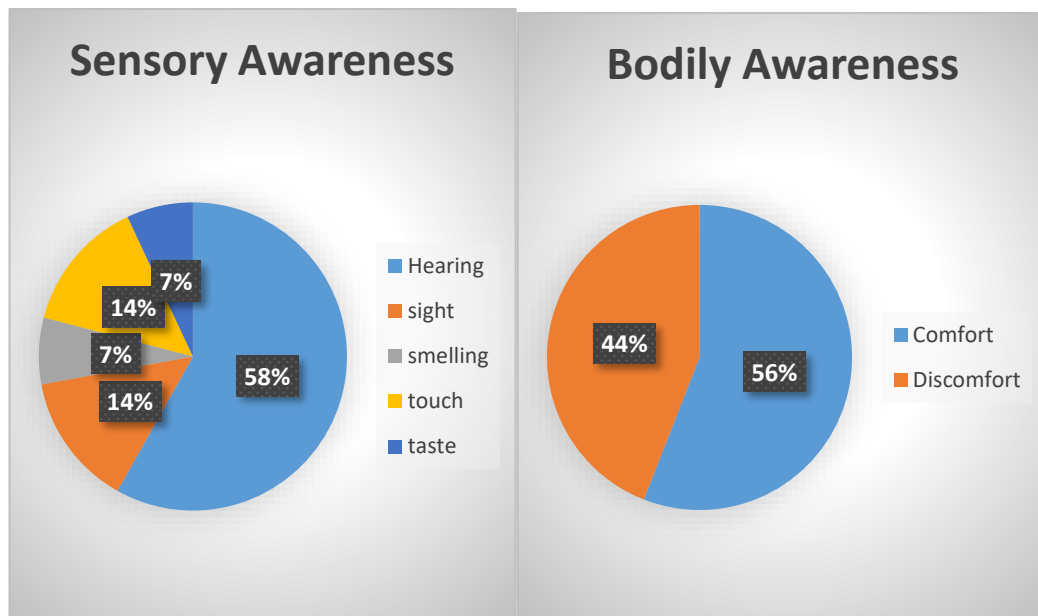
4.3.6 Collective Findings from First Case (Postgraduate Students).

This section shows the collective analysis of all the participants of case study one.

4.3.6.1 Sensory and Bodily Awareness

The collective analysis for the first case brought together the cumulative views of the participants. It captured how they reported gaining some level of awareness while engaging with the exercise. Therefore Figure 4.3 demonstrates a collective outlook into participants' sensory and bodily awareness levels. The first part of the figure shows the collective percentages of the sensory awareness distribution among the participants. The second half of the figure shows bodily awareness themes achieved.

Figure 4.3: Charts of sensory and bodily awareness sensations of the first case study.



People regulate their bodies as a way of seeking comfort, using activities such as breathing exercise is used for bodily regulation. Some others seek comfort by way of adjusting their postures to a comfortable state. During the analysis of respondents' diaries, others noticed the prevalence of having lousy posture when attending to emails mostly when doing it as the first activity in the morning. This happens when individuals might be dazed because they just woke up from sleep. Some individuals tried to address posture problems taking some measures. Others tried to be as comfortable as possible by seeking other means; these include looking for quiet atmospheres to work in.

“New plan to help with this is to book the quiet room in the corner of the office to be able to sit in silence, but not be too far away in case of any issues I need to attend to.”

Participant 18

Writing email from a coffee shop seems to have a relaxing effect on the communicator.

" The coffee shop environment made me feel more comfortable and I'm hoping that came across in the emails without it being too laid back or blasé"... participant 9.

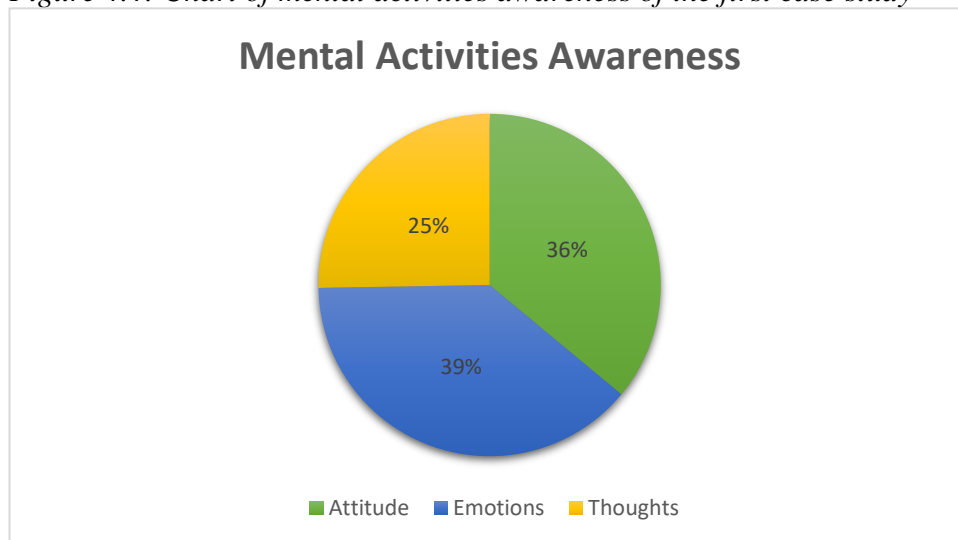
"I noticed that my body would feel a lot more relaxed after I had done the task, my shoulders would be a lot less tense and my mind did not feel as tight or as heavy."

Participant 34.

4.3.6.2 Awareness of Mental Activities

The mental activities that came into participants' awareness were attitude, emotions, and thoughts which were the main themes in the analysis. Therefore Figure 4.4 shows the collective levels of the participants' levels of mental awareness. Overall the participants were more aware of their emotions with 39% compared to their attitudes 36% and to their thoughts 25%.

Figure 4.4: Chart of mental activities awareness of the first case study



Thoughts

Distracting thought, was the prominent sub-theme from among the other sub-themes from the theme thoughts which comes out of the category of mental activities awareness. This is displayed in Figure 5.4. People got distracted when they work from home because they gain access to other electronic devices, which will not be convenient in public places.

"Though notably by making the effort to head into the university campus itself I was finding initially starting the work much easier than I would at home – where I would often have to work myself up to it, usually distracting myself easily by watching videos online. And soon finding that an hour has passed since I first decided to begin working. So this was a minor improvement nonetheless." Participant 9.

This might imply that the mind gets conditioned to focus in a work environment and also because the elements that cause distraction are not always found in a work environment.

It was also dictated that the act and effort put into trying not to be distracted, causes a distraction in itself. This revealed that distraction occurred as a result of the task of trying not to be distracted and effort placed into trying to focus on email communication.

"During this session, my attention drifted to how much work has been to put into improving attention, which is ironically counterproductive to what I am trying to achieve. However, it is quite pleasing to think it is having a positive effect overall." Participant 18.

Distraction can also come from other people's attitude within a team. It creates needless distraction to other people when the other team members fail to do the task that they were meant to do. This results in asking questions they can solve by themselves.

"A lot of unnecessary distractions today with people asking pointless questions which could easily have waited. I have seen a drastic increase in the quantity of emails the past few days with people requiring access to the new system – something which has been arranged prior but people don't like to read their emails up front." Participant 9

It was also revealed that the room or environment used for email communication could be a form or source of distraction.

"as soon as anything negative comes up the feeling of calm instantly goes and I fall into reaction mode. This was more apparent during this session as I was back at my desk rather than the quiet room which meant external disruptions." Participant 18.

It is possible to be distracted by a wondering mind even if a person is in a quiet environment that is void of noise and activities from people and objects.

"I was finding myself just staring at the screen." Participant 7

"As I cannot get access to the quiet room for the current sessions, I am making a more concerted effort not to get involved in conversations and debates, this takes a lot of willpower and just trying not to get involved takes my attention away as I am focusing on not getting involved rather than my emails." Participant 18.

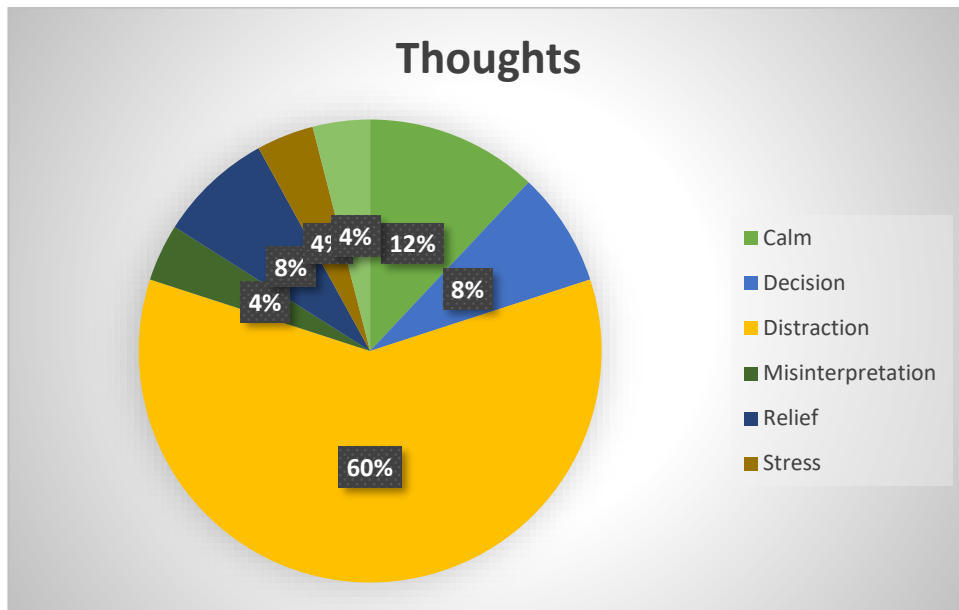
It was also revealed that people could sometimes find it difficult to maintain attention when they have deadlines on their minds because they keep wandering away from what they are supposed to focus their attention on.

"I keep finding that I tend to turn my attention to thinking about the upcoming presentation submission." Participant 12.

There seems to be a relationship between noise and distraction.

"Again the environment and the noise of the environment, makes it harder to concentrate and often causes the mind to wander more easily. I wanted to test this theory out, and it is conclusive that I can perform better in the quiet office environment. Therefore from this week forward I will utilise the quiet office to complete this activity, unless I feel I have made enough progress to become immune to the loud environment." Participant 23.

Figure 4.5: The chart of thoughts from the mental awareness of the first case study.



There seemed to be an unusual twist to evidence gathered when it was revealed that distraction could emanate from unlikely sources such as pets and hangovers.

“A slight hangover after the celebrations of completing my presentation... I kept finding myself getting distracted by almost everything...The biggest distraction that I am having right now is my dog who has somehow snuck into the kitchen without me noticing, with him constantly trying to get my attention.” Participant 12.

The above pieces of evidence revealed that it is possible to be distracted by junk emails, hangovers, pets, noisy environments and even within a quiet environment when the mind wonders off.

Emotions

Emotion is a theme under the mental activities awareness category, this captured all the various emotions people got while doing their email communication. The participants experienced some emotions like annoyance, calmness, confidence, disconnection, embarrassment, feeling peaceful, frustration, , feeling positive, good mood, happiness, mixed feelings, motivation, nervous, sadness, sense of connection and stress.

For instance, it was discovered that receiving positive emails gives feelings of ease and happiness, which in turn increases focus because of the positive energy that it

brings. Others reported having different effects when they did email communication in unhappiness or moodiness.

"After yesterday's high levels of frustration and repetitiveness, today was a complete turnaround in fortunes. Positive emails were received about what is being produced from my project implementation which in turn brings positive emotions and helps with focus. Emails for access were answered quickly with a new template saving time and frustration." Participant 18.

There seems to be a connection between the ability to concentrate and happiness.

"Mind was slightly more erratic due to getting some exciting news from the emails I was reading, however, I was still able to concentrate effectively." Participant 23.

Seeing the name of a particular person on the list of received emails can cause anxiety especially if the person is usually rude.

"When in the office, I often receive emails from a woman who for the past few years has been very rude to me, and I have noticed that when I see her name pop up in my inbox I feel anxious and agitated. Since I check my work emails at the beginning of the day, this feeling would often set the mood for the day which is not particularly healthy." Participant 25.

Coping with the pressure from email overload can cause stress and anxiety.

"Here is an example of the homepage, the email icon is on the bottom left-hand corner, and has that annoying red notification advising of the number of unread emails. I always try to stay on top of the emails I receive in an attempt to remove the notification from the screen. One day, after reading and dealing with all messages, I would receive perhaps three or four messages. I would see the notification, and decide to deal with later, there aren't many to go through after all. The following day the number will often increase to 40. Internally I feel myself churning up, quite uncomfortable, desperate to remove the notification. Yet from exhaustion I just don't have the energy to deal with them at that point, and they then pile up as it seems too difficult a task to complete." Participant 25.

It was reported that meditation every-time before reading emails lead to calmness which meant that, issues had a less negative impact on people.

"I began using a form of meditation prior to opening the emails to put me in a calm state of mind with the anticipation of having unwelcome feelings when seeing my inbox. As the weeks progressed, I found that I felt calmer as each week went by upon checking my mail, to a point where I am not feeling the effect of the issue throughout the remainder of the day anymore." Participant 25.

Attitudes

Attitude is a main theme under the mental activities category. The attitudes that were noticed by the participants were attention, contentment, determination, focus, intension, open mindedness, procrastination, and reflection and being thankful (these made up the sub themes)

The attitude of individuals was displayed in the way they paid attention to their email communication. It could be seen that the focus was the most popular kind of attitude experienced by the participants.

"Focusing on all overnight emails in one session helping to improve attention on other areas throughout the day... I think focusing on all overnight emails at once helps get emails out of my mind post activity and focus on other areas better." Participant 18.

There is also a relationship between the silent environment and ability to be attentive. That leads to an improvement in attention because the person works in a conducive environment.

"Mind was slightly more erratic due to getting some exciting news from the emails I was reading, however I was still able to concentrate effectively...This is something I perhaps need to consider for the future, that my attention could be better maintained simply by providing myself with the right environment to work in." Participant 23.

Others qualified the collective attitude in the environment that reinforced focus, reporting that people using the space had a communal spirit about doing their work which had a positive influence.

"The room seems to have a communal motivation to focus on work which helps with concentration on completing work." Participant 18.

Sometimes enhancing environment complimented with the appropriate equipment enhances a positive change in attitude.

"I realised that in order to complete the task of checking my mail I would be better off sitting at a computer properly, and giving my messages my full attention. When sat at a computer my entire attitude changes. I see the emails properly. I understand the content. I feel more capable of responding in a more professional manner."
Participant 25.

Another insight into peoples' attitudes is shown by the level of an individual's focus. It sometimes mitigated the distraction by way of focus, putting attention on the task they are meant to achieve. Suffice to say here that, maintaining focus is an antidote to distraction.

"As such the responses are very repetitive and frustrating to keep writing out. A lot of using ctrl+c, ctrl+v but despite the distractions and frustrations I focused on the task at hand as best I could and got the job done, albeit in a longer timescale than normal."
Participant 18

Focus is also achieved by deleting spam emails from email inboxes and also using site blocker, which is an application that blocks or hinders people the access to specific predefined sites. This helps individuals from looking at websites that served as a distraction from their work. The first remedy confirms Levy (2016)'s claims on why individuals delete spam emails from their inboxes to reduce distraction.

"Deleting any spam emails prior to reduce the total number of emails helps reduce the amount of dread felt and made it easier to focus on the task at hand as it didn't seem as daunting. New plan to help with this is to book the quiet room in the corner of the office to be able to sit in silence, but not be too far away in case of any issues I need to attend to." Participant 18.

"To combat my lack of attention, I used my site blocker each day of the week to allow me to concentrate on my work, and I also decided to extend the site blocker's hours to 7:00 pm as I was working much later in the evening than I usually did, and this allowed me to get as much done as possible during the day." Participant 23.

People have an awareness of situations that could be potentially unproductive when they want to commence email communication. Some participants noticed that checking and replying to emails while commuting on a bus will not yield the needed result.

"Logically I know that it just gets worse, and will have to deal with it eventually, but I feel the need to be prepared to work on my emails, and attempting to do so on the bus while on the way to university perhaps is not really the right time to concentrate on my messages." Participant 25.

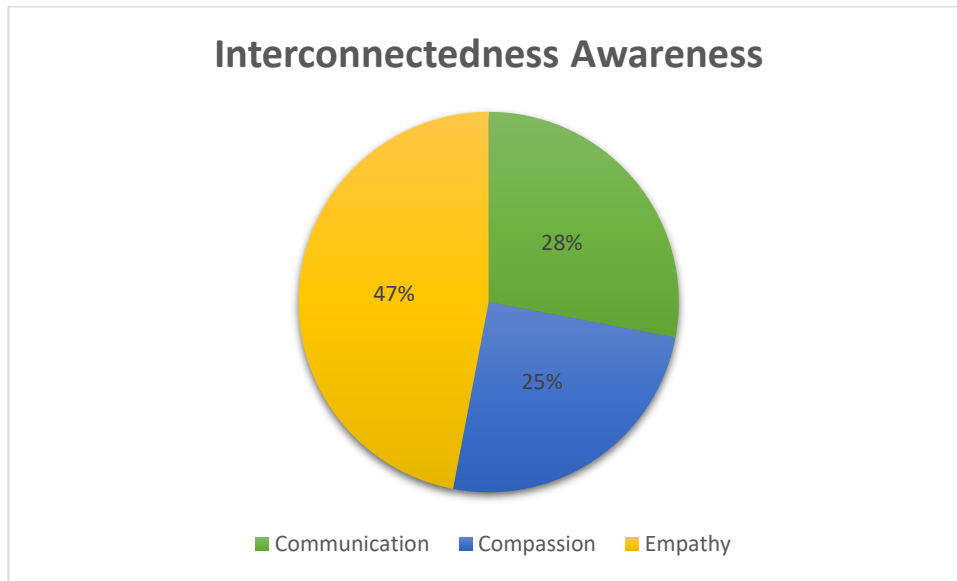
4.3.6.3 Interconnection Awareness

Interconnected awareness comes in the form of the way people communicate with others. Figure 4.6 shows the percentage of individuals that experienced the various types of interconnectedness awareness. More people experienced empathy with 47%. Communication awareness came second with 28%. Therefore, the communication awareness that participants manifested were professional tone, agreement, listening, considering context, connectedness, communicating impatience and unambiguous language. For instance, people recognised the importance of listening to others during communication.

"This has made me realise that effective communication can be acquired if you are willing to listen to others, rather than thinking what others are thinking." Participant 11.

Empathy was expressed by thinking about how others will feel. Sensing others expectations, the right tone, receiving empathy, positive response, not receiving empathy from others, kindness towards others, inability to empathize, giving assurance, getting understood and focusing on others feelings.

Figure 4.6: Chart of Interconnected awareness experienced by the participants of the first case study.



Receiving empathy from others has a way of boosting people's focus and happiness which in turn leads to better productivity on work and email communication.

"I noticed the improvements in my focus and attention much more today, mainly because I felt more positive going into the session and the emails received were praising the work done rather than complaining about minor issues which always seems to be the normal things received." Participant 18.

Sometimes these qualities are absent in an interaction, for instances, email communication that comes from commercial companies lacked empathy; but felt empathy is felt when emails came from tutors. Participants felt that a communicator gives them empathy when they appreciate a situation they are facing.

"Further to that, it is believed that it is important to listen to others during communication. "This has made me release that effective communication can be acquired if you are willing to listen to others, rather than thinking what others are thinking." –participant 18

The participants in the first case study experienced awareness. They complained about the exercise that they were confused on what they were supposed to do; as a result, the exercise was amended and shortened. Therefore the next case study utilized an updated version of the exercise which was more concise and shorter. The next section presents the second case study which was based on an organisation.

4.4 Chapter Summary

In this case study, the participants utilized the second version of the exercise which was an improvement from the exercise used in the pilot study. However, the participants in this case study found the instructions long and were confused about what was expected of them. As a result, the exercise was shortened from four pages to two pages to accommodate the busy lifestyle of professionals in the organisation which was utilized in the next case study. From the analysis, it was discovered that the students tend to be distracted by people, animals, noise and mobile devices. Distraction was a prevalent occurrence in this case study. This shows that the students were able to achieve some self-awareness of their tendencies. It will be interesting to uncover what the exercise will reveal in the organisational context in the next section.

Chapter Five: Second Case Study Analysis of Diaries from Nongovernmental Organisation in United States of America

5.0 Introduction

This chapter presents the analysis of the second case study of the research. This was conducted at an organisation in the United States of America. It organisation that supports social entrepreneurs. This data provided the organizational case that is different from the student population in order to triangulate and test the exercise on different scenarios. The exercise that was utilized came from the edited version of the exercise (on Appendix C) that was shortened to cater for the busy lives of the professionals. Therefore, 6 diaries were obtained from the organisation from the United States of America. Participants were recruited through the organisation's learning officer. Contact was established between the researcher and the leaning officer at a conference. Therefore research consent forms and the exercise were sent via email.

The participants were distinguished through predetermined initials for confidentiality reasons. Their entries were entered into Nvivo software using their initials as identification for the analysis. The analysis started with a focus on one participant (ED)'s diary in a detail format. The participant had awareness in all the four quadrants of awareness. After analysing the participant ED's diary, a collective analysis of all the participants in the study was performed.

This chapter is divided into three major segments. The analysis took a systematic approach in the sense that, one person's diary analysed extensively. After that, collective analysis of all the participants was done. Therefore, the first segment presents the extensive analysis of one participant for clarity purposes and the second segment has the joint analysis of the data obtained from the remaining five participants.

It was thought necessary to also utilize the wheel of awareness by using the senses at each quadrat as categories. This idea materialized from mindsight literature; it was thought that analysing participants' awareness through the tool would enhance more insight into their consciousness while communicating on email.

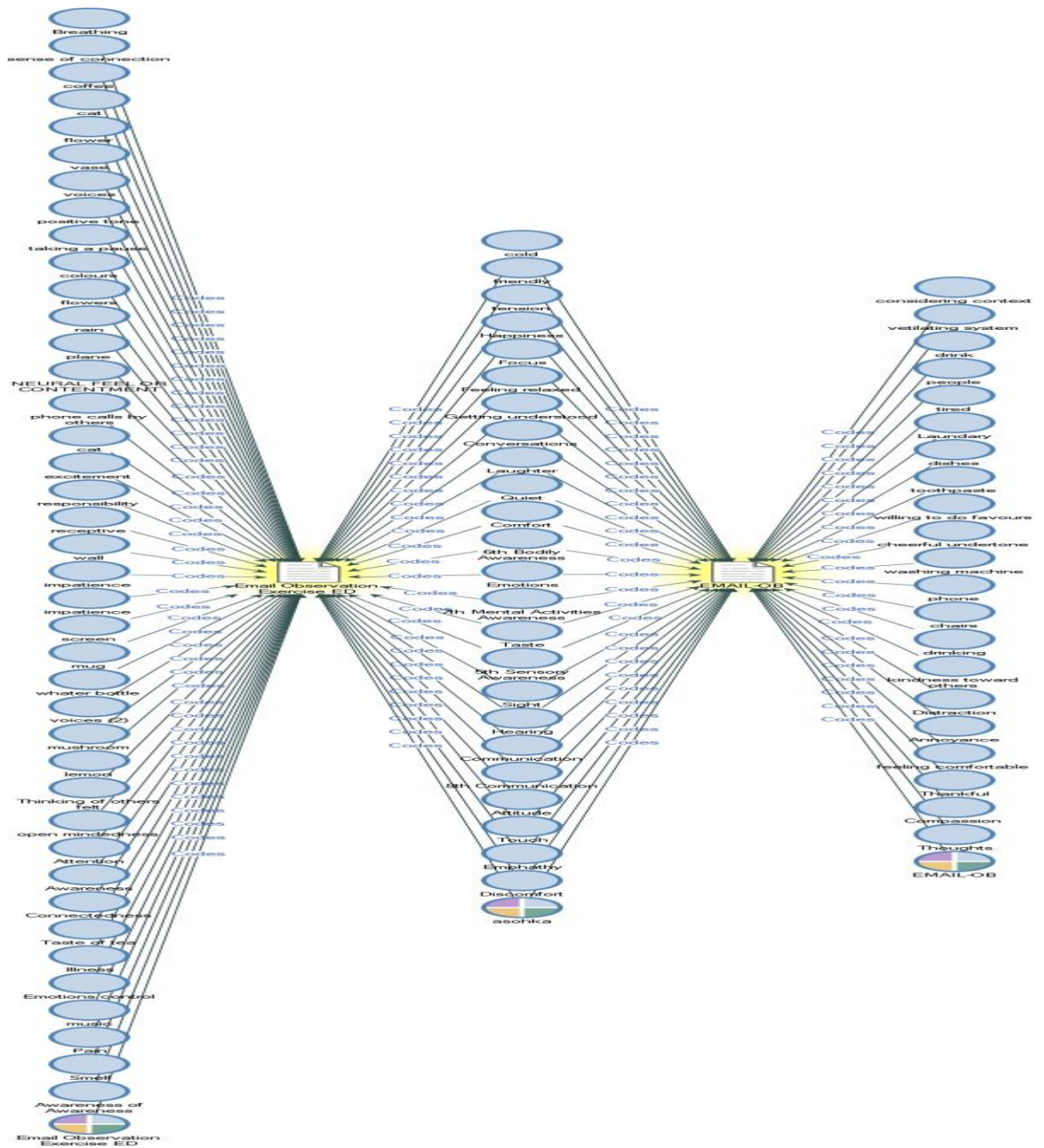
Consequently, the wheel of awareness invites that individual to first turn their attention to activities within the realm of their senses which include, sight, hearing, smell, touch, and taste. Next, they are summoned to notice the workings of the inner sensations of their bodies, what is felt within the body. Moreover, then told to notice mental activities; such as feelings, emotions, thoughts, and imagination. So lastly, individuals are called to turn their attention to the awareness of interconnection to things and people. Out of these senses emerged the categories for the analysis which were:

- Awareness of senses,
- Awareness of bodily sensations,
- Awareness of mental activities and
- Awareness of interconnectedness.

5.1 Analysis of Participant ED's Diary

The participant with the initial ED was selected for an extensive analysis because the individual came to the awareness of all the senses on the wheel of awareness. It could be seen from Figure 5.1 that participant ED had more awareness nodes recorded in the Nvivo software compared to other participants. The different types of awareness that come into participant ED's consciousness could be seen on the left side while the awareness reported by another participant is displayed on the right. The figure supports the reason why participant ED was selected instead of other participants.

Figure 5.1: Participants' nodes comparison (An example)



5.1.1 Sensory Awareness

From literature sensory awareness is the kind of awareness that emerges from the five senses of sight, hearing, smelling, tasting and touching (Siegel 2007). This participant recognized the sense of touch and hearing during the exercise observation. The participant was aware of the senses of hearing, sight and taste, therefore, it appeared that the individual was alert and could notice the flower and could also sense the dust in the room. After the participant sighted the flowers, it prompted the decision to get new ones. Then in the process of placing the new flowers, the participant noticed the

colours of the flowers. This revealed that the respondent had a deep sense of awareness of the environment through the senses. In another instant, the participant noticed the sound of the rain in the pipes and also noticed the cat jumping around. The cat's movement did not distract the participant. This revealed that the participant might have mastered the act of being mindful and as a result that gave some level of alertness and also that of being in control of self through the senses.

"My cat is sitting on the table in front of my laptop. The room is a bit dusty and there are dead flowers in the vase after not being at home for about 2 weeks. Feeling the taste of the coffee I am drinking for the first time in 2 weeks, I like it. It is quite silent, occasional voices of closing doors etc. from the neighbor flats." Participant ED.

"Replaced the dead flowers with fresh ones, they smell nice and look good with vibrant colors. My cat is running around. It is very dark out today. I am hearing the rainwater moving in the pipes occasionally. Also hearing a plane passing by. Have the taste of coffee in my mouth." Participant ED.

In another setting, the participant could notice the calmness in the environment while also noticing the gentle movements. The sensing of calmness might have been enhanced because the respondent was sitting in a skype booth. That might have a moderating impact on noise. Having a blocked nose affected the participant's ability to smell, therefore illnesses could hinder peoples' ability to be aware of certain senses. The participant also noticed the taste of the type of the tea that was consumed. There appeared to be a distinct taste based on the experience of drinking that type of tea and so the body was familiar with the taste.

"Sitting at a Skype booth, it is calm apart from people passing by and I am hearing some conversations on the background, 2 women talking on the phone and some others talking to each other, some laughter etc. It is very cold today, so I am a bit shivery with a slightly blocked nose. Have the bitter taste of an English breakfast tea in my mouth." Participant ED.

"It is very silent apart from the sound of my cat occasionally jumping up on the table and down. I still have a blocked nose today, it affects my smelling sense, cannot even smell the coffee I am drinking but it tastes good." Participant ED.

It can be concluded that the participant had developed some deep levels of awareness, and it was demonstrated by the quality of little objects, sounds, and feelings he/she was able to notice over the course of doing the exercise. Therefore, because the participant was able to notice these things; it gives the impression that the individual had some deep connection with self and is also aware of self, environment and other objects that were around.

5.1.2 Bodily Awareness

Bodily awareness is in the second quadrant of the wheel of awareness. For this participant, it was further broken down into two themes of discomfort and body comfort. Depending on the sentence and its content, the themes were further given subthemes. The participant noticed how email communication affected the body in a variety of ways. First, the process leads to withholding of breathing which also signified some tension just as the participant reported further. This shows that the communication had the power to alter one's breathing and also what is felt within one's body and mental faculties. Therefore, a calm or a day with less email traffic ushers in some calmness into the body. As could be seen from the second comment.

"My inbox is pretty calm today, so I was not experiencing any tense feelings in particular. Not sure if I can say I am relaxed either, rather feeling neutral." Participant ED.

"I am relaxed; it might be still to do with my relatively calm inbox, thinking of enjoying it while it lasts." Participant ED.

Also, the general mood at work could also have an impact on an individual, because colleagues returned from holiday, there was a general feeling of happiness. This could also mean that the environment could have an impact on an individual's email conversation, such that a happy or unhappy environment could influence an individual's email communication experience negatively or positively

"I am relaxed, happy to see that people returned from holidays with a positive mindset. I definitely feel content about this. Only received 1-2 unclear emails which made me slightly tense." Participant ED.

Having an optimal temperature around the email communication environments makes people happy.

"The heater is making quite a bit of noise, but working like a charm. It's a comfortable temperature here, I am happy about it." Participant OB.

Having a long activity could affect an individual's email communication negatively. Participant attended a long meeting and was tired from it. As a result, there was a desire to complete the email task quickly. It implied that it affected the participant's level of patience. This means that the body could affect the mind because, from the participant's report, tiredness might have caused impatience.

"I am bit more tense and impatient today, came from a very long meeting and want to go through emails quickly to get started with other tasks I need to do today. My shoulders are tense and slightly in pain." Participant ED.

5.1.3 Mental Activity Awareness

The mental activity awareness is in the third quadrant of the wheel of awareness. Therefore every time the participant mention or identify some emotions, attitudes or thoughts it was categorized under the awareness of mental activities. These were the following mental activities identified or felt by the participant ED.

Focus and commitment

Participant committed to ensuring that the task ahead was completed. The task was attached to the email communication. With that in mind, the participant's level of focus got heightened to finish the task by the deadline. This revealed that a commitment to a task breeds focus if there is something to accomplish then the ability to focus increases and all these stem from an individual's mindset to work. This kind of mindset also enhances effectiveness in organizations and could be seen in the second comment.

"On the topics that are important and directly under my responsibility, I observed higher level of engagement (immediately reading the email, perhaps checking my calendar to see when I can I deliver it, or reading the email more carefully or twice to make sure everything is understood). My thoughts are rather constructive, and my focus is on finding the time to do the task, perhaps analyzing its priority and urgency." Participant ED.

"I have quite an effective mindset, maybe even more than the normal times. With tight deadlines approaching, I want to quickly resolve all the waiting emails and focus on to do my actual work." Participant ED.

Some emails are exciting to work upon as they are clear and straightforward, they made the participant to commit to working on them. It could be said that excitement might yield the attitude of commitment to do work or email communication. Secondly, the participant also had an open mind toward the email communication, which shows that when an individual has an open mind, they tend to commit to the task.

"Those emails that are constructive and that excite me, I am very keen to get started with and feeling ownership already. I added them on top of my to-do list and will start getting them done. I can say I am very involved, open and eager. The unclear emails do not create an equal sense of involvement on me. I tend to flag them and get back later when I am free." Participant ED.

The participant was impatient to finish the task that might mean that the desire to finish task breeds impatience in the individual. It might be the participant's survival skill for finishing the task so not be left with much work to be done. It was also noticed that the participant takes precaution by pausing so as not to send replies that are inappropriate. This is applied when there is no clue about how to reply to some email messages.

"As mentioned, I am impatient and not very relaxed. My thoughts are about just going through the inbox to see if anything is urgent and then move on to my daily work. I do not consider this as a negative attitude, rather find it natural and therefore I am perfectly in peace with postponing some responses until I have a better input and an open attitude." Participant ED.

It was ironical to see how an illness could be a form of relaxation for the mind; the participant reported feeling impatient to finish a task some days earlier. Then when the participant became ill, the impatience gave way to a slowing down mood whereby email activities were taken at a slower pace. Could this mean that illnesses have a way of reminding individuals to slow down?

"I feel slightly under the weather today, which limits my attention a bit. Because of this, I am reading emails slower than usual, which surprisingly worked for creating a sense of calmness and removed urgency even if some of the emails I need to respond are time sensitive. So, I have open thoughts, but my attitude is not exactly that way, bit more reserved." Participant ED.

On the other hand, illness can cause some level of disconnection, because the body is weak; there is no willingness to engage in email communication.

"Feeling a bit introvert and not very keen on communicating due to slight sickness. Not with a particular email, but in general today I am a bit disconnected from people. I am happy to read and respond when needed but rather postpone my response to a moment that I am more engaged." Participant ED.

There was a feeling of contentment by the participant, which might have a link to the email traffic. It appeared that the participant might sometimes be contented when there were fewer emails to sort out. It sounded like having many email messages to attend to leads to some levels of discontentment because of the anxiety it causes for individuals.

"I am just relaxed, not necessarily happy or content. Do not feel stressed, maybe a bit tense occasionally depending on the email." Participant ED.

5.1.4 Interconnectedness Awareness

Participant had mastered the act of thinking before replying to emails is as not communicate impatience, as the participant observed that when a pause is taken, somethings issues resolve by themselves. This shows that is not good to rush email communication but to take time to relax or think through things before replying which will enhance email effectiveness.

"I am open and communicative. I do not have any negative feelings or thoughts. I do not respond immediately to not-so-urgent emails as I am in a time pressure with other things. Noticing that some of those emails resolve themselves in time and they actually do not require my immediate attention. Observing this helps me to feel calmer in the long term, still, ongoing work to practice that calmness though." Participant ED.

Participant felt open to getting engaged in email communication this gave a sense of connectedness. Could this kind of willingness be triggered by few emails to attend to?

"I am open and engaged. Feels particularly nice since I expected today to meet a much more stressful inbox after people being back from holidays." Participant ED.

"When communicating with others, I am connected, involved and open. I avoid responding to people right away if I sense that I am disconnected or not open to answering that particular email at that moment. This helps me to remain open and

keep a positive tone on my communications. Sometimes some emails might add to stress level since they are written in rush and sound anxious themselves. So, I almost always take a second/minute/day before responding them to not to react with negative mood." Participant ED.

Emails that are straight to the point seemed to solicit immediate action because they trigger a willingness to reply by the receiver. In the same vein, this might also enhance some level of receptivity. The participant reported replying such emails and felt a sense of connection to the senders. The sense of connection might have been induced some friendly responses as well.

"Naturally, I am much more receptive, open and friendly when I am reading or responding to those short, concise and constructive emails. I appreciate the sender and feel more connected to them for writing the email in this way as opposed to long and unclear emails." Participant ED.

Self-Awareness and Emotion Control

The participant was aware of his/her impatient tendencies and so decided to take a measure to keep it under control by replying at the time when situations had cooled off. That could not have been achieved if the participant had no self-awareness. Therefore emotion control cannot be achieved without first developing some self-awareness.

"Reflecting on my impatient and tense state allows me to better control my communications with others. I avoid responding to those emails if I know I will not be helpful or constructive with my current state of mind. This helps me to disconnect for the time in a good way. I rather not force communication for the sake of it." Participant ED.

It was observed that email brought on the feelings of stress and anxiety, but those feelings prompted the need to prioritise task. This shows that stress does not necessarily mean to be a bad feeling but could be termed challenging. Stress in email context means a feeling that prompts an individual to seek to fulfil what is truly urgent and important and also to seek out time to rest in order to achieve the next less urgent task via email communication.

In summary, when all the feelings mentioned above and others are acknowledged and reflected upon, then email communication becomes more meaningful. This is because the communication is carefully thought about from the word selection to the processes and sequences involved.

5.2 Collective Participant Analysis

5.2.1 Sensory Awareness

Some participants seemed to be aware of their senses and were able to notice little things like the feeling of the computer keyboard beneath their fingers, which they mostly used to type out email communication. Some of the participants were touch aware which was felt from their skins (warm, cold and computer) Also, the intensity of the participants' alertness was displayed by the extent of their noticing the taste of their mouths. This was so profound because the participants were in-tune with their senses which made them notice obscure things like the taste of their mouths. This would not have been possible if the participants were not attentive and observant at the same time. In addition to that level of attention was the ability to notice the sky and the colour of the sky, and the background noise of the air conditioning system all at the same time.

"I see the big grey sky through my window. I see a small lamp with yellow light. I smell food from my breakfast. I'm touching the keyboard of my laptop. I taste my usual mouth taste. I hear the ventilation system in the building, the cars in the street." Participant LJ.

"I see the aftermath of a party, the smell of delicious tacos, got to hit the piñata at the holiday party, can still taste the tacos I ate before." Participant FM.

The same level of alertness draws attention to the feeling of pain.

"So strange and uncomfortable. It makes me constrained and stressed. I burned my tongue with hot tea this morning. So my tongue is hurting a bit." Participant LJ.

Sometimes music could be displeasing to the hearing, one participant complained about hearing some rock music that was not comforting, but was later happy with another kind of music. This shows that people have their preferences in music and when they hear a type of music they do not as it negatively distracts them. Figure 5.4 shows the various sounds people heard.

"There's music in the background. Kind of heavy rock, which was bothering me a bit. Now, I can hear a nicer song. I remember to breathe again. At times, I forget to exhale more than exhale. I just hold my breathing, as my life depends on it." Participant LJ.

Participants were also aware of sounds participants were aware of other sounds like birds, cat, clock, conversation, drinking, laughter, music, noise, phone, plane, quiet, rain, traffic, ventilating systems, and voices. Then a combination of good visual scenes and smells induces a feeling of relaxation which could alter the impact of uncomfortable noise.

"I am sitting next to a window seeing a lot of green leaves on a mango tree, bright sunlight, hearing the sound of air condition, and a light traffic from the road in front of the office." Participant SC.

"Friday, working from home, my plants around me are happy even when it's cold outside." Participant FM.

Some others sighted flower and smell and tasted Tacos. More often than not, the things we perceive with our senses have a way of affecting our bodies negatively or positively. It seemed like there was a connection between what was affecting the participant's body.

"There's a lot of noise, outside, I can taste my latest snack, it doesn't smell good and I'm tired, maybe I have a headache". Participant FM.

Other items that came into sight awareness were, birds, boxes, buildings, cats, chairs, colours, computers, dishes, dogs, drinks, flowers, fruits, laundry, light, mobile phone, mug, notebooks, people, screen, sun, table and vase water. At another instant participant felt cold and also heard the traffic outside. Moreover, then saw and heard birds, trees and the sun. This combines the workings of the senses through the integration of consciousness. This demonstrates that an individual can be awakened to all these possibilities at once. This kind of awareness sometimes translates to other areas of life. Figures 6.5 and 6.6 displays most of the senses participants felt during the exercise.

"It's colder than the days before, had a big Mexican breakfast that was tasty, I can hear the traffic outside." Participant FM.

"Getting hungry and used to the Mexican eating schedule, it's sunny outside, and I can hear the birds and see them flying in the trees outside." Participant FM.

5.2.2 Bodily Awareness

Discomfort/Bad Posture

People could form bad postures when they are overwhelmed by numerous task that demands their attention.

"I'm email thinking about new projects I have in mind and trying to make time to start executing them, too many emails and skype calls and messages, need some time without solving other's problems to start working on my projects, thought this week was going to be easier but there's a lot of work, I slouch." Participant FM.

Bad postures induced by email stress were demonstrated throughout the diaries of individuals. There is a possibility of an email received to have such an effect on a person's physiology. It automatically pushes them to the point that they unconsciously slide their bodies into an uncomfortable position.

"I got an email from a senior leader who triggers me very easily. Got a bit worked up before opening it. I took a breath and open. It was a neutral email. Just action done. I was nice in my reply. But feel how my body gets tense and my breathing gets shorten." Participant LJ.

It also revealed that tensions could occur by the mere sighting of an email (just receiving a notification without reading the content) from an individual with whom a recipient has a problematic relationship with.

Tensed hands, shoulders, and forehead.

Being nervous comes with some physical symptoms even though it starts from the mind. The symptoms include tensed shoulder, hands and forehead. Not only does being nervous and anxious causes problems, emotionally but physiologically also. This could happen as a result of the amount of work that needs to be done. Therefore, the statement below confirms the claim in the literature that the feeling of overload could cause problems.

"I feel a bit nervous and with anticipation (almost anxious) about dealing with all the things that are emerging for work. At times I do hold my breath, or it feels that my

breath is short. I can feel my hands tense as well as my shoulders and forehead."
Participant LJ.

Lack of sleep and stress

Feeling stressed sometimes causes lack of sleep in individuals, this comes as a result of feeling anxious because there was a deadline ahead. This still shows that there is a connection to one's mental activity with physiology. Therefore, it could be concluded that feeling anxious caused the participant's sleep for the night.

"I'm anxious and stressed, it's deadline for something at work that I'm responsible of but depend on others, not only coworkers but people outside of the organization too, couldn't sleep well because of it, I tend to overthink and try to tackle the same issue from different fronts." Participant FM.

Wearing clothes that are not comfortable could be a source of discomfort during email communication

"I feel relaxed, have been eating a lot and feel uncomfortable in my clother and with a lot of energy." Participant FM.

While in another instant tiredness was a source of distraction.

"An hour earlier, I drove from home through a heavy traffic to this place. I feel a bit exhausted but need to be ready to host a productive meeting aiming at effectively engaging the volunteers in the new project for the next two hours. I quickly checked the inbox but cannot fully focus on email correspondence." Participant SC.

It seemed some participants found a way of dealing with email stress by taking a pause. This was achieved by allowing some time to pass before replying to emails without the pressure and at another time taking a holiday altogether.

"It's the first work day after the 2018 New Year holiday. I should write a few emails to follow up on things that have been pending since last month. Nevertheless, I don't want to rush and put pressure on myself to deal with emails right away. I might do it later today" Participant SC.

"A couple of colleagues may be waiting to hear from me. I hope they are aware that we have been on a holiday, where everyone is supposed to be relaxed and stop thinking about work, spend time with family, and so on. I don't feel a pressure to write an email or even read those in the inbox." Participant SC.

The sight of a landscape can induce a relaxing feeling.

"The landscape passing by is quite relaxing, new images flowing in and out. It helps to empty the mind." Participant OB.

5.2.3 Mental activity awareness

Emotions

People felt annoyed by email communication when they are always asked to do the task that others are supposed to do, this breeds frustration that results in anger. Other times, it is questioned in the form of an email that suggests to the individual that they are expected to do a task which is not their responsibility. Some of the frustration is fuelled when there are no clear-cut duties among staff members so that the work subtly returns to the person who is always happy to help. This reduces the individual's productivity and as a result of being overloaded by other peoples' tasks.

"Intention on emails is to solve the problem, but my feeling is that instead of trying some people just ask me to solve, without providing the tools for me to help, that frustrates me even when it comes from a good intention, I understand that solving many problems look good but are they actually solving them? Or just sending emails for others to solve? Responsibilities are not clear and that tires me." Participant FM.

People tend to feel frustrated if they are finding it difficult to communicate their feelings to others.

"It's also very important for me because it involves the salary of people, it's funny because I'm too strict with myself trying to give a break to others. I get frustrated when I can't communicate this in the best way possible." Participant FM.

Participant felt connected because colleagues tried to help or assist with work, this kind of commitment from others also gave a sense of being appreciated.

"Feeling connected, coworkers try their best, they also see the importance of third-party salaries and want to help, sometimes the process is not clear or coordination

with multiple parties is difficult, I connect and feel connected and valued, I prioritize problem-solving because of that feeling, coworkers know they can count on me for support and help, that level of connection and trust is very important for me...I want to connect more, deeper today, see emails different, get less triggers for frustration on emails, feel more connected but this time not because there's a deadline and a task, it's just connected, maybe personally but without a clear goal, feel the same from the emails I'm getting, more general questions, just co-workers asking for help." Participant FM.

When an individual misses a pet, the feeling translates or follows them into the work environment.

"I'm happy after a big breakfast that I can only have when I work from home, missing my dog that stayed in Mexico for the last two months." Participant FM.

The findings from the participant still confirm the claim from the earlier case studies that email has some physiological and psychological impact on its users. For instance, the participant felt happy when good news came from an email and anxious as a result of other emails that had compliant.

"A second email made me feel excited as one colleague had joined one of my projects. At that moment, other colleagues came into the office, and I got distracted. Then, I got an update from a team member commenting on a couple of emails that I am expected to read and that made me feel anxious given that the two messages were complaining. I'm exhaling longer now." Participant FM.

Another situation that adds to happiness was having the privilege of having a big breakfast at work. This might mean that having an unusual privilege causes happiness.

"I'm happy after a big breakfast that I can only have when I work from home, missing my dog that stayed in Mexico for the last two months." Participant FM.

Again the power of emails on emotions presented, when another individual felt happy after receiving a pleasant email from someone. This shows that the content of an email affects the emotions and vice versa.

"I got a great positive email and it made me feel so so so well. I am smiling and feeling happy. Now thinking how to share the good news with my team. I just sent the email replying and was so full of love. My heart fills expanded." Participant LJ.

Anxiety, Stress, and Tension

Negative emotions also present as anxiety, stress, and tension develop when emails are received from superiors with whom people have complicated relationships. This shows that email could have a stronger influence than presence. The participant might not have the sender in the room, but the impact of his/her email is already felt in the participant's body so that it caused some tension and stress on the participant. This still goes to re-echo the impact email communication has on people's physiology and psychology.

"I got an email from a senior leader who triggers me very easily. Got a bit worked up before opening it. I took a breath and open. It was a neutral email. Just action is done. I was nice in my reply. But feel how my body gets tense and my breathing gets shorten. My body contracts. My back is not straight. Need to exhale longer through the mouth." Participant LJ.

Apart from the stress, email communication tends to bring out some rough feelings in other respondents. People seemed to struggle with the feeling of tension.

"I breathe first. I can feel a shift when I try to connect with others. I feel more relaxed. It's not comfortable. Emailing generates a lot of triggers for me. Moreover, doing this exercise is uncomfortable because it makes me confront those triggers. I also feel that I'm not able to reply to emails until I feel fully prepare and ready for something to send to people. I'd love to learn to respond easily without so much work in preparation." Participant LJ.

"Emailing stresses me out a lot. I don't like the practice at all. I contract and hold my breath constantly. I'm usually expecting people to tell me bad news or something negative. It triggers me terribly. I don't like to reply emails. I read quick like I don't want to get involved. And I don't know what to say most of the time. I use email to "feel" I'm working but at the end of the day is more a distraction that gives a sense of "getting something done"/or accomplishing something. Once I open an email, I start getting distracted by skype chat and doing whatever the email told me to do, instead

of just finishing up with my inbox. The breathing helps. Also setting the intention to connect with others." Participant LJ.

Attitude

Other types of mental activity awareness manifested in peoples' attitudes. It revealed how people react or decide to confront situations around email communication. This shows up when a person shows commitment and determination to achieve a task. For instance, a participant was determined to finish the task, and because of that determination, there seemed to be a focus of attention to finish the task. This shows a personal commitment to ensure that things went well. It might be suggested at this point that concern for the welfare of others was at the heart of the participant's actions. It leads to a commitment to complete the task so that others received their salaries. Hence the determination and focus to complete the task reasonably. This statement also relates to empathy as the participant thought about how others will feel if he/she left out working on the salaries.

"It's funny that I set this deadline myself, we have more time, but I want to have everything done today for the finance team to have more time processing and be able to go on holidays without thinking about it, it's also essential for me because it involves the salary of people, it's funny because I'm too strict with myself trying to give a break to others. I get frustrated when I can't communicate this in the best way possible." Participant FM.

Therefore, the participant focused on making priorities, especially problem solving and that has led to others relying on the participant for assistance. This might mean that when a person solves a problem for others, it develops to co-dependence in the sense that others go out of their way to render assistance to them. It seems that when others can rely on you to solve their problems, it leads to trust, which in turn leads to interconnectedness. When people are interconnected, then a relationship is established.

"I prioritize problem-solving because of that feeling, coworkers know they can count on me for support and help, that level of connection and trust is very important for me." Participant FM.

People sometimes think about what they want to do while doing email communication. These thoughts can be of little or significant accomplishments.

"I'm thinking about new projects I have in mind and trying to make time to start executing them." Participant FM.

Also, having less work to do appeared to give people the purpose of looking for more work. This shows that having leisure time fosters good intentions and productivity.

"Want to do a lot of things, feel like I have more time since I've been receiving fewer emails and have less work to do, my teammate and I have more time to work on projects that we normally don't have time, this keeps my brain active thinking what can I do next if I still have time ". Participant FM.

"I have been communicating with fewer people these days, most people are on holidays, my teammate and I have been working together and having a lot of Skype communication, we have come so far in fixing problems in our team, we finally have time to think about doing new things." Participant FM

It appears when people feel relaxed; it increases their focus and productivity

"I'm feeling relaxed because I had time to finish everything for this year and have everything updated and under control for now, had time to do some extra things that wanted to do for a long time, found time to do certifications, learn about some tools I want to use next year, I'm planning my year and making sure I have time to do these things that are important for me." Participant FM.

People can manage their emotions when they can notice their emotions and can take the next cause of action. Moreover, that is what Mindsight is about, that people are not carried away by their emotions but can direct channel them appropriately. Therefore the participant noticed his/her feelings and took control of it.

"I'm feeling a bit rushed and with no time to do this exercise. I just want to go ahead and work. Trying to use my breath to let go of that feeling/thought." Participant LJ.

Emails tend to create the thoughts of feeling overloaded and overwhelmed with many tasks to be done. This might cause stress and pressure; this also translates into an individual's physiology as participant reported being slouched.

"Too many emails and Skype calls and messages, need some time without solving other's problems to start working on my projects, thought this week was going to be easier but there's a lot of work, I slouch." Participant FM.

Another participant felt unable to connect with the sender of the email, their relationship is ordinarily awkward and the presence of all those might contribute to ineffective communication between the two persons.

"Another person with whom I feel super awkward all the time. Don't know how to communicate well with him. Perhaps, I feel I don't know how to connect and understand him. Moreover, feel not capable. Feel I experience a bit of shame there. Keep breathing and exhaling." Participant LJ.

Tension is now paramount in email communication; this has also revealed the kind of relationship that existed between the communicators before the email communication. It seems that a relationship that has been difficult with the communicator could trigger anxiety and tension in the receiver so that the participant is now reporting email as a trigger to certain unwanted emotions.

"I need to breathe. I can feel how emailing triggers me easily with certain people. I get thoughts related to my beliefs that I'm not good enough, that I have not done a good job, that I have no relevance. Emailing stresses me out. It puts me in a rapid mode, not mindful at all. It takes me on a roller coaster of emotions. A lot of people I interact with represent something I need to work on. UfffI. Also realize, how easily distracted I get when I want to ignore an email or to write back to something that has triggered me." Participant LJ.

Household noise can also cause a distraction

"I am hearing the hum of my laundry finishing its cycle, as well as some unidentifiable sounds coming from my neighbors' houses. Also, the sound of new emails coming in as I am typing this, as well as my phone buzzing. I feel distracted." Participant OB.

Clutter around the office can be offensive to others as it distracts their attention.

"I can see my coworker's stuff, coat, scarf, lunch box, folders, charger, etc, in front of me and from the corner of my eye. The clutter annoys me a little bit." Participant OB.

5.2.4 Interconnectedness Awareness

Interconnectedness awareness is in the fourth quadrant of the wheel of awareness which makes up one of the categories for the thematic analysis. This category is further broken down into three other main themes. They are communication, empathy, and compassion.

The compassion people experienced were understanding, sympathy, self-compassion and compassionate response. Some participants showed compassion toward others. When people are helpful, it is demonstrated through solving problems for others which leads to trust. Then trust leads to the feeling of interconnectedness which establishes relationships.

"I prioritize problem-solving because of that feeling, coworkers know they can count on me for support and help, that level of connection and trust is very important for me." Participant FM.

"I want to help, offer everyone in the office may help, want to give, want to spend more time with them, want to share more and make them feel valued from the Global office." Participant FM.

Communication

One participant reported being open-minded when working with a colleague. The respondent recognised that people process things differently or think differently from one another, therefore the participant recognised that such case required being open-minded in order to achieve a goal. Secondly, the participant was happy to go along with the individual because of a shared goal and that disposition in itself reveals how the respondent is ready to link differentiated parts in the sense that, himself/herself and colleague have different ways of thinking but want to work together in order to achieve an important goal. That discovery showed that the individual had achieved a deeper level of integration (therefore for an individual to achieve integration the person must have an open mind to receive other people's views and characteristics, by possessing the flexibility to accommodate people with their views and also be willing to work wholeheartedly together).

"Just read one of the emails. Comes from a man I appreciate. We have different points of view about something we both care deeply. Working with him is a bit challenging

because from my perspective he uses his intellect and I use my emotions more to guide me. I'm learning how to collaborate with people who have different a different way to do things but share a vision with me. I don't know if I can collaborate with someone who does not share a vision with me. My emotions are great here. I felt triggered, I had to breathe and let go. I had to wait and contain a bit. I still chose to share what felt important to me. Kept breathing". Participant LJ.

Communication moves in the right direction when people are friendly and willing.

"One colleague, who I've been expecting to hear from, has sent me a message. Her response can go one of two ways, and I am nervous to open her email. I'm in defense-mode, we need to finish something together, and she's only sent me an email on Sunday afternoon -this is late, if we won't make it, it's her fault. When I open the email: prospects are good, we'll get this done today! I worried for nothing, which causes a great sense of relief. This affects my mood significantly. Most likely it influenced my decision to partake in this exercise. This also seeps through in my response to her and to the other people I am writing to today. There's a cheerful undertone; I am friendlier and more willing to do them any favours than I otherwise might have been" Participant OB.

Did not understand (disengaged thoughts)

Sometimes participants do not understand what the email received requires, therefore, there was a sense of getting lost in the loop, and as a result, the action required by the sender might not have been achieved. To the receiver that alone caused distraction because of the feeling of frustration (it is crucial for senders of email to write in an understandable language so that the receivers can understand what has been required of them). This might imply that there is a connection between not understanding communication and been distracted.

"My first email. I don't understand what I'm asked to do. Feel a bit lost. It has some links I clicked and that got me into other random links pages. It distracted me and took me to my personal email"...Got distracted again and looked at my cellphone." Participant LJ.

This might imply that there is a connection between not understanding communication and been distracted. This made the participant further develop an attitude of disengagement on the comment that followed.

"Realized that I went to do follow up on an email and did not continue doing email. Though, I know how to reply to that email."..... I'm reading emails but don't feel like need to reply. I like all the people I'm working with and the projects. I feel so fortunate!" Participant LJ.

Another participant seemed to have a solution to the problem by considering context, especially when replying to mobile devices. It appears email communication done with a mobile device seems to elicit short messaging format which might have a way of helping people understand what is required of them.

"I am short and practical in my emails. Mainly because I am answering them on my phone, in part because they are only to my Dutch team members. They are a simple information exchange." Participant OB.

Sometimes, participants were able to feel connected to those he/she was communicating on email with. The person's non-judgemental disposition might have enhanced this. Could it be possible that if we are non-judgemental that we will be able to connect easily with others. In summary, the themes identified in the organisational case study. This is as a result of heightened attention and alertness, this case study yielded some additional themes, like commitment, feeling appreciated, interconnectedness, uncomfortable clothes, fear, feeling appreciated, not understanding and disengagement. It shows that the participants were able to identify some awareness of themselves, others and their environment.

5.3 Third case study

Introduction

This section presents the analysis of the third case study of the research. This was conducted at a University in United Kingdom within a group of postgraduate students. This is the continuation of the educational case. The exercise that was utilized came from the edited version of the exercise that was used by the organizational case study in the USA. Therefore, 13 diaries were analysed this case study.

The participants were distinguished through predetermined initials for confidentiality reasons. The demographics of the participants were not collected, at the time it was thought information about their genders were not important. There were no incentives provided for the participants. Their entries were entered into Nvivo software using their initials as identification for the analysis. In this case, only the joint analysis of the participants was undertaken, because the clarity of the process has been established. It was thought necessary to still utilize the wheel of awareness by using the senses at each quadrat as categories. Then the themes and sub-themes in the subsequent layers.

5.3.1 Sensory awareness

The participants had hearing awareness, for instance working in a quiet environment helps with focus and attention.

"The library is fairly quiet, and the silence allows me to hear myself think clearly; mentally prioritising all the tasks I need to complete today." Participant CEFB.

Moreover, it also helps people not to be distracted.

"I am sat at a desk with a privacy screen behind the monitor, so I cannot see the people opposite me, and I am not distracted. There is not much noise here – it's late and it's quiet. Apart from the odd key typing from others and shuffling around, all I can hear is a constant whir/hum coming from the ceiling. I am eating some oranges as I type, so this is what I taste in my mouth. The desk feels ever so slightly sticky when I rest my forearms on it." Participant FSFB.

A quiet environment enables productivity

"The environment around me is very quiet which makes me feel very productive." Participant KAFB.

5.3.2 Bodily awareness

The participants experienced bodily awareness both in comfort and discomfort. It was discovered that it is essential to sit in a comfortable chair that would help with good body posture.

"My body is comfortable as I am sitting in an ergonomic chair that is supporting and improving my posture. I am breathing at a steady rate." Participant ABFB.

Additionally, people tend to feel relaxed when they work from a quiet environment

"I feel relaxed in my surroundings as the work area is quiet, but background noise is audible. I am feeling relaxed as I have no urgent deadlines." Participant ABFB.

Also working in a familiar environment with the sun shining through gives a feeling of relaxation.

/I am relaxed and content as I am in my home surroundings eating breakfast, which is providing me with energy along with the natural daylight shining through the windows. I am steadily breathing." Participant ABFB.

It also seemed that feeling relaxed also enables people to focus attention on work; it might also be a breeding ground for a positive attitude.

"Although I am relaxed, I am thinking of the tasks that I need to complete today. I am feeling optimistic with a positive attitude going into the day, as I do not have many activities to complete. My mind is creating a to-do list by focusing on my university and personal tasks and prioritising these tasks." Participant ABFB.

Not having deadlines or urgent task to do seems to enable people to relax.

"I have no other activities to complete this evening so my brain is able to unwind. In contrast to the previous days where I have been thinking of what I need to do for the day ahead, this evening my thoughts have been able to leave my mind. Earlier today, I attended an event discussing graduation arrangements and results, which is making me excited to graduate" Participant ABFB.

When the room or surrounding is uncomfortable people tend to do something to make it more comfortable

"I am currently sat at the desk in my bedroom and the metal chair is quite cold and uncomfortable so I have put a blanket on top of it to try and make it comfier. I am

quite tired after a long day and have the main light off but have candles and fairy lights on to feel cosier. Although my bedroom door is closed, I can hear the television from the front room downstairs however it's not too distracting." Participant CEFB.

Additionally, feeling relaxed sometimes combined with proper breathing

"I feel tired but relaxed this morning, there is no weight on my shoulders, which is making me calm. My breathing is still in sync, and I am ready to open my emails". Participant JGFB.

The body felt relaxed because of good posture.

"Currently feeling very relaxed and content. Yes because of my straight posture and shoulders feeling relaxed I recognized once I had finished observing my surroundings I released my breathing." Participant RBFB.

Discomfort is recognised when people get an immediate sense of awareness of their lousy posture when their bodies begin to pain them, and that awareness prompts them to adjust their posture.

"I am not able to hold my breath as well as I would like due to me attending to problems via email, such as outstanding tasks that I need to resolve (such as refunds/customer support issues that I have raised). I am aware that I currently have a bad posture, hence my back hurting." Participant NNFB.

Discomfort comes as a result of feeling cold

"My body is tense as it is cold and my fingers feel stiff. However, I am calm and my breathing seems to be long and slow. My movements are slow." CEFB.

Anxiety causes tension in the chest

"I feel a very slight sense of tension inside the chest – I think it's a faint feeling of anxiousness." Participant FSFB.

Lack of sleep breeds tension which also causes a distraction.

"I didn't feel that relaxed today as I hadn't slept well the day before and felt behind on some of my university work, this made me feel very tensed up and anxious and because of this my concentration in university whether that was doing work in the

library or in lectures and seminars was very poor, felt distant to what was going on”.

Participant JMFB

Moreover, noise could also add to it

“Today again my mental activity was very distracted due to the fact a lot was going on around me as it was busy in the university library, so it was hard to concentrate with what I was doing. I noticed that I felt tensed and my posture wasn’t the greatest. This causes me to be unorganized with what I am doing for the day, so therefore my intentions are always muddled up”. Participant JMFB.

Lastly, anxiety causes heavy breathing

“Although it is Sunday I do not feel too relaxed, I have a slight anxious feeling in my stomach, and I have noticed that I have been subconsciously breathing heavier than usual.” Participant JGFB.

5.3.3 Mental activity awareness

The emotion of anger was felt when there was a misuse of public space; this anger came from feeling anxious about a crying child. Music could not minimize it, and the result is a distraction.

“I have noticed the screaming child is starting to make me feel anxious and tense, therefore I noticed that I subconsciously turned up my music. I think that there is an annoying child sat opposite me, when this is a quiet coach, and the family had a choice to choose the ‘family carriage.’ I have tried to occupy myself by looking at my emails on my phone, to ignore the background noise. However, it is still annoying to me that the child will not stop screaming.” Participant LEFB.

People tend to get angry when they are hungry and in a noisy place

“I feel slightly agitated being hungry and on a busy bus as I would like some peace and quiet on my own. My breathing is particularly quick and short and I am sweating a little more than usual.” Participant CEFB.

Moreover, a passive-aggressive attitude from another person can make others angry

“I am communicating with a woman whom messaged me a few months ago when I was selling a bundle of clothes. During our previous conversation she showed interest in purchasing, however, never replied after that. Enquiring if I still had the bundle, I felt

frustrated that she had not communicated efficiently. She now desired my sale, but they were no longer available. Her attitude came across quite passive aggressive which influenced my mood and made me feel angry." Participant CEFB.

It is possible that an email could both make a person to be happy and angry at the same time; however, the anger can be minimized if the sender uses a professional and calming tune.

"Here is another email from Morgan Harvey regarding my marks for the my Business Intelligence module, the group mark in my email is 74% which I am very pleased with and gives me a proud sensation in the upper half of my body. However, this is only short lived as there is another email of my individual mark which has dropped 8% due to the peer assessments. This has greatly caused my mood to drop, and has made me angry with the other members of the group as I feel they have been very dishonest with their peer reviews as I put a lot of effort into the work. The language used by Morgan in the email however was very professional; this helped the situation as it made clear it was from peer reviews, not a judgement from Morgan." Participant JGFB.

Anxiety beclouds focus and causes a distraction.

"My mind keeps drawing itself to thoughts about project work for my 'Smartech' module as I need to begin my field testing. This is what I believe is causing me to feel anxious, this is amplified by the issue that am struggling to reduce my hours at work and this is causing me to worry." Participant JBFB.

Some emails unconsciously ask the receiver to think negative thoughts

"I have an email from the NSS thanking me for participating in the survey. This makes me think about my answers and whether or not the university will act on the responses given. I gave positive answers however the email itself makes me dwell on some of the negative experiences such as module I do not like." Participant TMFB.

Having spam emails or generic emails tend to give people the feeling of being overloaded, this is because they come in large quantities and then overpowers the individual

"The last email that I have received today is just an automated email stating content has been uploaded to blackboard for a certain module. Whenever I get these

automated emails, I do feel a certain amount of pressure to do the work related to the update as fast as possible. These emails create a negative response because they make me feel like I am not able to keep up with all the information and workload of the course.” Participant TMFB.

Readers of an email can pick out when the sender is in a hurry by the number of mistakes that appear in email communication.

"The sender of an email telling me information on one module appears to be rushed, and probably stressed. There are repeated requests in the email to avoid nagging certain lecturers in regards to grades. There are spelling mistakes in the email, leading me to think they're rushed. I can relate to the feeling of needing to send out emails (and complete tasks in general) as quickly as possible, and therefore occasionally making mistakes (such as spelling mistakes). I am hoping that the follow-up email with grades is sent to me soon to stop anticipation." Participant NNFB.

Having an organised thought led to focus and focus enables productivity

"My mind feels organised and I am able to think clearly about my plans and priorities. I feel productive and write a to do list based on my thoughts.” Participant CEFB.

People tend to get distracted when they are doing email on public transport or while commuting.

“I feel pretty distracted on the bus and find it hard to concentrate on what I am doing or even understand the thoughts which are whizzing around in my head. I am conscious of not missing my stop and therefore cannot fully commit my attention to anything else”. Participant CEFB.

Additional distraction and noise go hand in hand.

“My immediate environment when checking my emails was that I was sitting in the library basement at university. As I came into university later today than normal the basement was very busy which caused a lot of distraction as it was very loud and hard to concentrate on what I was doing. I'm touching the greasy key board, and can smell food coming from the coffee shop. I just finished my lunch so all I can taste still is what I had.” Participant JMFB.

Also, hunger and distraction goes hand in hand

“My mind does again first go to the work that I am currently carrying out for my final year project. However, I do also think that I am a little hungry and begin to think about food and what I could have for my lunch. I notice that my thoughts often change quickly and are often unrelated to one another.” Participant KAFB.

When an email comes with positive energy, it affects the emotions of the receiver, so that the positive attitude of the sender rubs off on the receiver and the receiver also feels positive after reading the email communication.

“I have received an email from a colleague in another department updating me on new developments, in regards to a project we work on together. The update is brief, but informative and has an overall feeling of positivity. There seems to be hope attached to the message, that the delivery of some technical changes will be completed next week. It leaves me with a positive frame of mind and gives me energy to continue my tasks for the rest of the day.” Participant SMFB.

Sometimes, it might be that people feel positive and can focus after they are relaxed and have had a good night's sleep and have gone to the gym.

| “After the deep breaths I don’t feel anxious about checking my emails. I have slept well and been to the gym so my body is energized.Since I’m starting the day energized, I am positive and very focused on what I am going to achieve. I am able to maintain focus on the emails at hand without my thoughts and environment distracting me. I am very organized this morning; the emails I am sending/ receiving are ones which I have been expecting Participant VRFB.

And other times, individual changed anxious emotions with the positive thing and breathing exercise.

“I have started to focus my mind on positive thoughts, such as my dog and I have started to relax my shoulders, taken deep slow breaths, which has enabled me to start feeling calmer and relaxed.” Participant LEFB.

Conversations that informal tend to enable people to be contained, because they need not rush themselves in such communication. People tend to be relaxed in informal communication.

“Graduation. My course mates and I are feeling positive after the event and anticipating graduation. My tone is informal and relaxed as the topic of conversation is light. Since the conversation topic is not urgent, I have taken my time to reply to the messages and lowered the priority of the communications. This is in contrast to the previous days partaking in the observation where I have prioritised a prompt reply. Although I am not completing any other activities, I have lowered the priority of my timely replies since I am taking time to relax away from all university and work-related activities. Through the reflection thus far, I have realised that I am prioritising messages that are not important or urgent ahead of tasks that are more important. I do not feel any difference in pressure by messaging a group or an individual”. Participant ABFB.

Good news can be motivating, and that might encourage them to focus on their work.

“I have received another email from my tutor Jackie, she is emailing to give me my grade and feedback on one of my assignments. The email is professional and friendly this promotes the sense of a connection, this is through the language she uses, which gives the sense that she wants me to achieve my potential through utilising her constructive criticism. This increases my determination; although I got a 2:1 for the assignment it pushes me to achieve an even better mark for the next task. This has changed my outlook on the day, as I no longer want just to go home, I now want to stay in longer and get some reading completed for my dissertation.” Participant JGFB.

5.3.4 Interconnectedness Awareness

Interconnected is the awareness people have about other people and how a connection with other people is achieved through communication, empathy, and compassion. Sometimes empathy is shown by reassuring another person. For instance, the participant gave another person assurance while acknowledging the person’s concerns.

“I am communicating with a friend who is also helping to organise the fundraising ball. I sense that my friend is also excited about the upcoming ball but at the same time is nervous since it is her first time organising a large event. I reacted warmly to my friend and reassured her that the event would run smoothly and that a lot of the organising is already done. I also reassured her that many people are helping in the organisation that can support her. My friend’s reaction has furthered my excitement

for the ball, but I am feeling more anxious after discussing her concerns as I feel that I have taken ownership and shared responsibility for her concerns. However, I feel better within my inner state for reassuring and supporting a friend.” Participant ABFB.

When an individual tries to understand the situation of others as to why they behave in a certain way, then the person is giving empathy. While giving the empathy, they are careful with the way they communicate so that they do not project frustration unto their receivers.

"Their replies appear to be quite rigid, perhaps they are under a lot of stress and pressure themselves. They may well be working within a very tight procedure/process when trying to resolve such issues as the ones that I have raised...I am trying to resolve the issues that I have had via email. I am doing so by making sure that the way that I am coming across in email is not seen as aggressive or too negative, despite my frustration.” NNFB.

Writing with the right tone is also preceded by thinking about how others will feel when they read your email

"I am currently focusing on emails between Waterstons and I in regards to my graduate position in London. I am trying to be get my conditions across without sounding too demanding. Other emails regarding this are quite straight to the point from both Waterstons and I."NNFB

When mistakes occur, it is empathy and understanding that helps individuals to respond appropriately to the situation without being judgmental of others.

"The sender of an email telling me information on one module appears to be rushed, and probably stressed. There are repeated requests in the email to avoid nagging certain lecturers in regards to grades. There are spelling mistakes in the email, leading me to think they're rushed. I can relate to the feeling of needing to send out emails (and complete tasks in general) as quickly as possible, and therefore occasionally making mistakes (such as spelling mistakes). I am hoping that the follow-up email with grades is sent to me soon to stop anticipation. I have recently been sending messages out to members of a group very quickly, so understand the pressure to inform people accordingly." NN2FB.

Giving empathy to someone that stops you from giving negative responses. As the saying goes, you can quickly change your mood, but you will not be able to change what you said.

"I have had an email from my client for my final year project. She says she has been busy, but is not ignoring my previous email and will look at it later. I think she intends to be polite and remind me that she will read it soon. However, I also think maybe it is a way of justifying and extending the delay in her reading it. My inner emotions to the message are negative; I have had trouble recently getting a response from her, and it is holding my project up. I feel like this message shows that it is going to happen once again. I am no longer thinking about the deadline I am just feeling negative about this delay. I feel disconnected from her – I don't think it requires much time or thought to view and respond to the last email I sent her. However, I try to empathise because I know that she is swamped, and I am grateful that she has agreed to be part of my project in the first place. I appreciate that she has sent me this last email; she could have chosen not to respond until she read it, which could be a long time." FSFB.

Giving empathy to someone might entail thinking about the choice of words not to complain to them about some shortcomings, but constructing words that will convey an understanding of the situation they are in.

"I send an email to the head of department regarding the CIS building access issues. I wonder if I should contact someone else further down the hierarchy first about this - maybe the university's Ask4help service. However, I justify my decision to email the head of the department as he encouraged students to contact him with any questions about the new building. I sense that he is probably busy and stressed about the new building since it has been delayed so much and caused a ripple of issues such as timetable changes and other problems I won't even know about. I word the email to inform him of the issue, not to demand a quick fix. I don't express any of my frustration in my email; it is not his fault, so that would be unfair. I appreciate how much has been done for the students to make up for the delay, so I can understand that there will be some teething issues. I feel less frustrated thinking about it this way." FSFB.

When a receiver feels that the message sender has empathy for them, they immediately feel connected to them

"I have received an email from my dissertation tutor Jackie; she has sent a friendly email reminding me of the tasks that I should have completed for my dissertation. Although her email is friendly and light hearted, it is causing me a greater sensation of anxiety in my stomach because of the dissertation work that I need to complete. I feel a connection with Jackie as her email is very supportive and it is clear that she wants me to achieve a good mark with my work." JGFB.

Communication

People have an agreement when they value the relationship they are in with the person they are communicating with, and so they are happy to make sacrifices.

"I have been communicating with a friend over Facebook to organise meeting up for lunch. I was looking forward to lunch since I have not seen my friend in a long time. I desired to meet at a convenient place that was close to where I was working. I was also thoughtful of my friend and his location, so we arranged to meet at a mutually beneficial location. The communication was instantaneous, and I stopped eating my breakfast to send messages to my friend. Even though this communication disrupted my breakfast, I felt that it was essential to provide an instant response so that I could also receive an instant response. Although the topic of conversation was unimportant, I wanted to be perceived as reliable." Participant ABFB.

A team can feel a sense of connectedness when they understand another and also have the feeling that they are all on the same page and that they believe that others in the group will not misunderstand what they say or see them in a bad light. This is the heart that drives a productive virtual team

"Their responses are positive and cooperative to what has been asked and expected of members. I feel that there is a good connection with each member and a mutual respect between us all. The connection that I feel the group has helps me to not feel too paranoid about how they may perceive me as the leader of the group." NNFB.

People tend to be friendly when they are relaxed

I am looking at my work emails on my work phone and responding promptly to the emails I am sure are easy to respond too, I am keeping my shoulders relaxed and responding with friendly manners. I have however, left the complex emails until I am at my desk." LEFB.

When you can read between the lines, you might be able to sense and understand the intentions of others and that in a way promotes relations and connections.

“I sense that the person's intentions are kind and polite, I notice this due to the style of writing used within the email. The nature of the email makes me want to reply to the email in order to reciprocate this back to them in order to build a connection with them”. Participant KAFB

I have had some replies from ones that I have previously followed up on and they have been quite abrupt replies, which I understand, and also feel guilty as I am only adding pressure onto the individuals that have received my emails. I feel that the people that have previously replied intend to try and keep time spent on emailing students in regards to grades, such as me, to a minimum.” NN2FB.

5.4 Comparing Outcomes between the Educational and Organisational Contexts

The reports generated by the participants came from three case studies. The exercise was improved after the pilot study, and then it was worked upon after the first case study. This was because the students from the first case study found the instructions long and were confused at times about what they were expected to do. As such, the exercise was shortened from four pages to two pages to accommodate the busy lifestyle of professionals in the organisation. However, there were some comparisons made between the first and second case studies which used the different exercise.

The students tended to be distracted by people, animals, noise and mobile devices. While the professions tend to focus. Some students were distracted by their pets, while most of the professionals tend to see their pets as sources of relaxation. The same pets triggered distraction in students, but the pets triggered relaxation to the professionals. Could this mean that different age groups or people's circumstances trigger them differently? Could it mean that the students were easily distracted because of their age? Alternatively, they are more relaxed because they are working for themselves and so the results of their actions have only a direct consequence on them as opposed to the professionals who have a lot at stake, as the result of their attitude toward their work could have negative consequences on others.

Secondly, the professionals tend to think about their actions, and they seem to be more connected to themselves. However, the students tended not to behave in the same way

as the professionals. The professionals contemplated their actions and think about them afterwards, while the student data had less account about having after thoughts. This might be due to the fact that they might not always deeply consider the consequence of their actions and might have lesser responsibilities. The professionals, on the other hand, tend to think seriously about their next cause of action. This might imply that they do it out of their experience of having more commitments in their lives. They had more things at stake because their customers, their organisations and their families depended on them. That is not to say that the students do not have responsibilities. Their type of responsibilities tends to be small-scale regarding group work, their internships, and jobs. They tend not to be in managerial roles but they fall within the early careers category. So, they carry fewer responsibilities compared to the professional cohort. As a result of deep thinking from the professionals, more themes emerged and additional themes emerged from analysing the professional diaries. The same exercise that the professionals used was handed to the last case which was the business students.

A comparison between the case studies shows that the first case study showed a 28% level of sensory awareness, this might be due to the students finding the exercise cumbersome, and the instructions were difficult to follow, or the preferences of the cohort were different. Additionally, some of the participants reported about other activities which did not have direct links to the research and so the section was not recorded. Other times they wrote about other similar activities to what they did in the exercise. So, the second and third case studies had 88% and 100% respectively of sensory awareness. These case studies had the same exercise. Therefore, the professionals' numbers were different; this might be because the exercise was shortened compared to the first exercise that was cumbersome or it was because the organisational participants were more attuned to themselves so, they were able to notice what was happening within their environment. Since the same exercise was given to the students in the third case study, their awareness percentage was 100%. This shows that all the participants in the third case study experienced awareness in one area of their senses or the other.

Most participants seemed to be attuned to their bodies. The engineering students in the first case study had a score of 56% for bodily awareness while the participants of the second and third case studies achieved 100% bodily awareness. It might be due to the

change in questions and also some personal tendencies of being aware of their bodies based on their accounts. Therefore the last two cases were successful regarding the levels of the experiences the participants had. That shows that each person had at least experienced one form of bodily awareness or the other.

On the mental activities awareness levels, there was a significant improvement from the engineers' accounts as 86% of mental activities awareness was achieved. The awareness of mental activities has always been the highest kind of awareness participants achieved. The rest of the participants from the other cases studies all achieved 100% awareness of mental activities. This means that they got aware of one form of mental activities or the other. This might be due to them engaging more with their mental faculties because it is not possible to communicate without using mental abilities. However, the account from the individuals showed that the exercise called them to notice their mental activities as they communicated and that meant that they got aware of their thoughts, emotions, and attitude. Moreover, then they had the chance of addressing them to more positive experiences.

Most of the participants in all the cases have expressed one form of communication or the other. The collective results show that individuals could attain awareness of their tendencies and also address those tendencies while communicating virtually. From the account of perceived outcomes on improving email communication. Everybody should be able to apply what these participants have developed as his or her guidelines. It is important not to rush any communication; it is also important to consider one's emotional state while communicating especially in organizational outfits. It is also good to take care of oneself because a healthy body and mind can achieve anything including proper email communication. Therefore, it might be helpful to think about what the Mindsight exercise would imply to individuals and organizations as a whole.

5.5 Summary

After the end of analysing the data from 55 diaries utilizing the wheel of awareness in the process, it was discovered that what comes into people's awareness could either encourage or hinder their abilities to communicate effectively in email communication. Therefore the themes that emerged from the analysis were categorized according to how best they were thought to enhance or deter

communication. Therefore all the themes were categorized as either facilitators or inhibitors to communicating effectively on virtual spaces.

The facilitators made the difference to whether people were going to enjoy and engage with the individual they were communicating with. These include a sensory awareness of how quiet the room participants were using to communicate was. It also depends on whether respondents enjoy music while they were communicating via email. Subtle elements like the lighting in the room could enhance the communication experience.

Table 5.1 shows the qualities that enable or deter email communication among individuals, the facilitators of the first column were reported to aid meaningful communication. The Analysis of the three case studies has satisfied research objective four which is to conduct primary research by applying mindsight communication process in academic and business contexts.

Table 5.1: Facilitators/inhibitors to virtual communication

Awareness	Facilitators	Inhibitors
Sensory Awareness	✓ Music	✓ Cry
	✓ Quiet	✓ Noise
	✓ White noise	○
	✓ Light	○
Bodily Awareness	✓ Breathing	✓ Back discomfort
	✓ Feeling comfortable	✓ Hangover
	✓ Good posture	✓ Heat
	✓ Seeking comfort	✓ Hunger
	✓ Stress relief	✓ Illness
	✓ Taking breaks	✓ Negative energy
	○	✓ Pain
	○	✓ Physical discomfort
	○	✓ Stress
Mental Activity Awareness	✓ Open mindedness	✓ Procrastination
	✓ Attention	✓ Not assertive
	✓ Focus	✓ Annoyance
	✓ Thankful	✓ Anxiety
	✓ Intention	✓ Disconnection
	✓ Reflective	✓ Embarrassment
	✓ Determination	✓ Frustration
	✓ Balancing emotions	✓ Nervous
	✓ Calmness	✓ Sadness
	✓ Confidence	✓ Stress
	✓ Feeling positive	✓ Distraction

	✓ Good mood	✓ Less aware
	✓ Happiness	✓ Misinterpretation
	✓ Motivation	✓ Wondering mind
	✓ Sense of connection	✓ Conditional empathy
	✓ Relief	✓ Not receiving empathy
Communication Awareness	✓ Empathy	✓ Inability to empathise
	✓ Focusing on others feelings	✓ Communicating impatience
	✓ Getting understood	
	✓ Positive response	
	✓ Receiving empathy	
	✓ Right tone	
	✓ Sensing others expectations	
	✓ Thinking of others feelings	
	✓ Giving empathy	
	✓ Kindness toward others	
	✓ Clear language	
	✓ Connectedness	
	✓ Considering context	
	✓ Listening	
	✓ Listening skills	
	✓ Mutual agreement	
	✓ Professional tone	
	✓ Relationship building	
	✓ Being helpful	
	✓ Compassion toward others	
	✓ Compassionate response	
	✓ self-compassion	
	✓ Sympathising	
	✓ Understanding	
	✓ Giving assurance	
	✓ Getting understood	

Table 5.1 Facilitators/inhibitors to virtual communication, continued.

Chapter Six: Discussion

6.0 Introduction

This chapter discusses the final findings of the research and explains how the domains (categories and themes) of awareness enhance email communication. The perceived solutions of the participants towards a better email communication is summarized. This explains what the respondents understood as their commitment to improved communication. These pieces of evidence add significance to the gaps discovered in knowledge and demonstrated the solutions that were obtained from the respondents' reports. Furthermore, some inferences were made for personal and organisational development. Lastly, the practical solutions to virtual communication based on the research findings are mapped out, which ultimately presents the updated Mindsight Utility for Virtual Communication (MUVVC).

6.1 Themes in the Participants' Experience of Applying Mindsight to Virtual Communication via Email

This section explains the various themes that were identified in the participants' diaries. The themes demonstrated how MUVVC facilitated respondents' awareness from within the four quadrants of the Wheel of Awareness which impacted on communication. These four senses were the awareness of senses (5th sense), bodily awareness (6th), mental activities awareness (7th) and awareness of interconnectedness (8th). The first category was the awareness of the senses which generated themes and sub-themes. These showed the heightened awareness of senses. People reported being able to notice the happenings in their environment. Such events were noticed when attention was paid to external situations. The five senses of seeing, hearing, touching, smelling and tasting (which were the initial themes from the sensory awareness category) were captured.

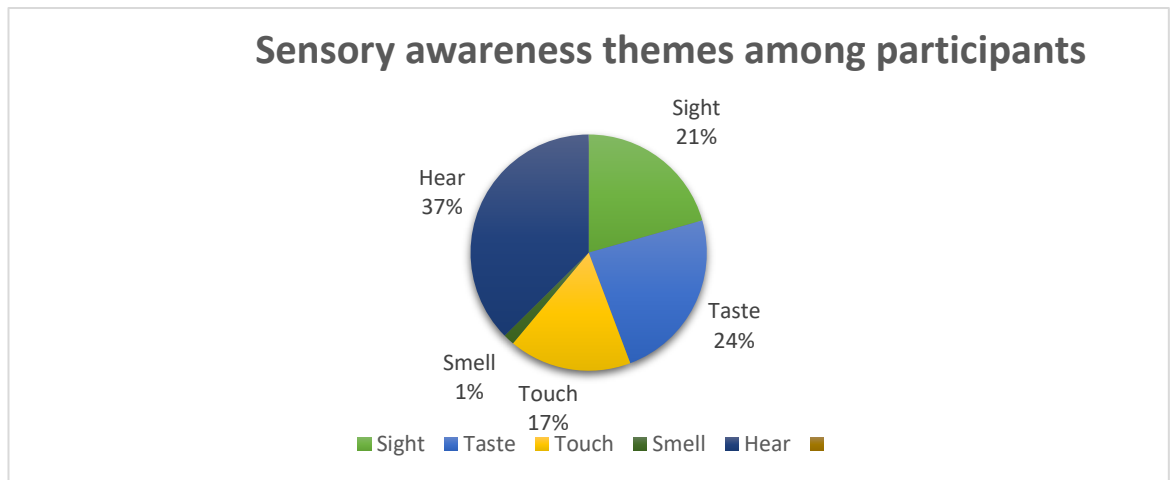
Therefore, when people were alert to what they felt through their senses it gave them clues to what was happening in their environment. For instance, some participants felt cold (which is a sense of touch). The individual therefore realized that the environment was cold which in turn affected the body (see section 5.3.2). This sensation can make a person distracted as reported in chapters 4 (section 4.3.4 and 4.3.6) and 5 (section 5.2.3 and 5.3.3). When a person is distracted it affects communication negatively. Thus, it shows that the senses are connected to the body and the body to mental

activities which then affects communication (although the relationships are not linear but complex between the four quadrants of awareness). Siegel (2012) supports this claim that people are both embodied and socially complex systems which are self-organizing because the organisation starts from the self and other relationships. This implies that the experience that is captured by the senses is projected on email communication. Thus, it shows that the subjective experience is fundamentally relational and interconnected (Siegel 2012, Baldini, Parker, et al. 2014, Siegel 2016). When the participant experiences the awareness of cold, they may then decide to solve the problem by putting on an extra layer of clothing. This action helps them to concentrate on the email communication better. When the environment gets to the optimal temperature, the participant is encouraged to focus on the communication at hand. Thus, achieving sensory awareness enabled the individual to be able to communicate virtually. Experiencing the awareness is not a stand-alone experience but an interconnected experience that self-organises with other forms of awareness (bodily, mental activities and interconnected). Such an occurrence of the interaction with other people via VC is projected. Sensory awareness could either facilitate or hinder effective virtual communication (see Table 5.1). Thus when people are comfortable they write better emails.

Furthermore, the sensory awareness among the participants is demonstrated by Figure 6.1. 31% of the participants experienced sight awareness, while 24% experienced taste awareness and 1% of participants were aware of smell. This implies that the sight awareness was high because people tend to utilize their sight more often to meet the needs of living in their environments. Thus, humans are always aware of what they see. With sight people can make decisions and perform activities and it is the gate that links the individual's environment to the brain.

Taste awareness followed closely behind with 24%. Other senses (touch, smell and hearing) had fewer occurrences compared to sight and the taste. Sight and Taste awareness elicited some actual action, although this is not to say that other senses were dormant (smell and touch).

Figure 6.1: Sensory awareness and sensory themes among participants. 52% of participants reported they experienced awareness of their senses. From this, 37% were aware of their hearing, 21% were sight aware, 24% were taste aware, 17% were touch aware, and 1% were smell aware

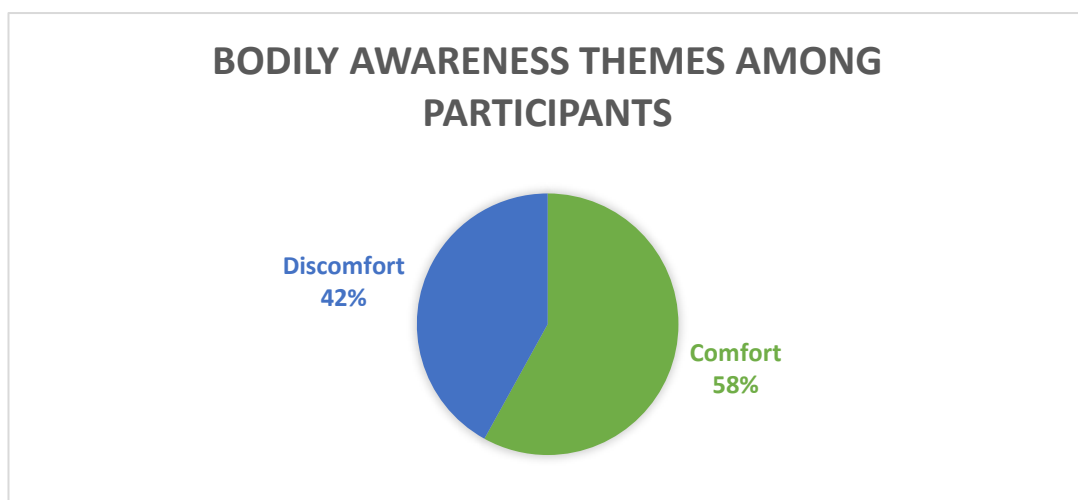


Furthermore, there was also the awareness through bodily sensations which were sometimes triggered by the senses. Participants seemed to have heightened awareness of their bodies. Up to 73% of bodily awareness among the respondents was reported. It might be that individuals were more attuned to their bodies compared to their senses. 42% of individuals were able to recognise the negative impact of the sensations of bodily discomfort (pain, illness, and stress) (see Figure 6.2) and 58% recognised when their bodies were comfortable (feeling relaxed). The sensations of pain, stress and illness allowed participants to recognize the impact of such uncomfortable sensations and the negative impact it had on their communication. This would suggest that some individuals decided not to continue the communication but took breaks to ease the stress or they decided not to reply immediately but went away to address such issues before coming back again. Other times, people were able to recognize that their sitting position was not comfortable and were then able to adjust their posture to ensure that their bodies were in a suitable position for communication. If their bodies were in a relaxed or comfortable state they noticed the positive impact it had on their communication.

The awareness of the body influenced email communication because individuals that were aware of sickness or tiredness had the discretion to address the underlining issues that were reported in Chapters 4 and 5. Addressing such issues meant that participants would not send a confused or inappropriate reply. It was discovered that there is a relationship between tiredness and anger and stress and frustration (see sections 5.2.2,

5.2.3 and 5.3.2). Therefore, bodily awareness made these individuals notice the indirect impact their bodies had on their email communication. This discovery is supported by Siegel (2010b)'s argument which claims that the way people perceive the world is not limited to the five senses of seeing, touching, smelling, tasting and hearing. Individuals also take into perception the worlds of others through their bodies which drive energy and information through their hearts, intestines and other organs. It helps them to know and to connect with others in an attuned manner.

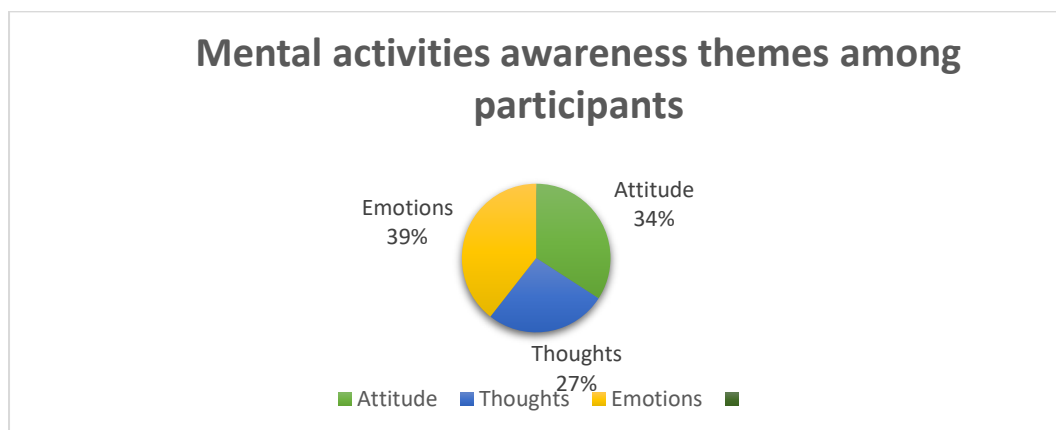
Figure 6.2: Bodily awareness and awareness themes among Participants. 72% of participants reported they experienced awareness of their bodies. From this, 42% of the 72% were aware of the discomfort and 58% were aware of their comfort.



This suggests that the individual's awareness their bodies and senses might have been enhanced so that they could identify sensations that either hinder or facilitate their communication (see Table 5.3). The participants may have experienced some integration in their consciousness which according to Siegel (2010a) asserts that when we are aware of our bodies we have become more attuned to ourselves. The participants came to the awareness of what was happening physically but this might have also made them aware of how their bodies felt. This therefore confirms the statement that an organism behaves according to what it senses (Sice, et al. 2018b). Therefore, when people experience self-awareness and awareness of their bodies connecting to their bodily experience they are not self-indulgent, but they are on a path way to self-understanding and self-compassion. This allows them to see their inner world and get to know themselves more profoundly which will in turn help them to know other people (Siegel 2012). It is this kind of experience that is beneficial to email communication.

The third category containing themes that were reported in the research was the awareness of mental activities. This happened when individuals became aware of a range of mental activities which came in the form of attitudes, thoughts, emotions and intentions. These were the themes which further developed into sub-themes of distraction and focus among others. Therefore, noticing all these mental activities revealed to them the state of their minds and they were able to observe how these states obstructed or encouraged their email communication and as such the individuals were able to take steps to overcome or harness such tendencies. The facilitation and hindrance can be seen in Table 5.3. Figure 6.3 depicts the extent to which the participants were aware of their mental activities. 91% of participants were able to notice mental activities. In this group 39% were aware of their emotions, 34% noticed their attitudes and 27% were aware of their thoughts. This heightened awareness might have been due to individuals having to engage with their mental faculties while communicating.

Figure 6.3: Mental activities awareness and mental activities awareness themes among participants. 91% of participants reported they experienced awareness of mental activities. From this 39% were aware of their emotions, 34% were aware of their attitude and 27% were aware of their thoughts.



The focus on attitude, which forms part of mental activities, stood out in enhancing virtual communication among individuals. This attitude was gradually developed by participants as an antidote to distracting thoughts. Initially, some of the participants (particularly students) complained about getting distracted. That is, they came to the awareness that they had distracting thoughts which came in through their senses either through hearing or seeing. They had to address such situations over time as they progressed in the exercise. To overcome distracting thoughts they had to decide to

focus their attention on their task. When they did focus, they reported that they were able to achieve their purpose.

Additionally, emotions that were perceived as positive encouraged email communication as when individuals noticed positive mental activities they were able to communicate effectively. For example, when people were committed to a task it lead them to determination and focus. On the contrary, when people felt angry, afraid, stressed and anxious when they received certain types of emails or some other external factors this had a detrimental effect on their communication. For instance, some participants felt annoyed when they were given task they need not have been given through email communication. This reduces the individual's productivity as a result of being overloaded by other peoples' tasks. At other times anxiety, stress, and tension surfaced when emails came from people with whom the individuals had difficult relationships. It was revealed that emails could have a stronger influence on the receiver than probably the sender's presence. Even though the sender is not physically present in the room the impact of their email was already felt in the participant's body. It means that a relationship that is always difficult with the communicator could trigger anxiety and tension in the mind of the receiver whenever they sight an email from the individual. This awareness grants the participants the ability to mitigate such cases. They came to accept that such difficult relationships exist but they decide to focus on other aspects of the communication or activity that would cushion such impacts such as taking a break or not replying to the emails immediately. They waited to have a settled mind before attending to such communication.

At other times, external factors affected the participants' minds which would have an indirect impact on the way they communicated via email. For instance, the environment people use for email communication affects how they feel. Such feelings range from getting distracted to feeling cold or hot. This also shows the impact of the environment on the body and on the mind. Their attention levels heightened or dropped according to what was happening within the environment. For instance, some people get easily distracted in noisy places, when pets are around or hearing something as simple as another person chewing. It was also reported that using mobile devices added to the problem of distraction because such devices had a collection of applications on peoples' fingertips and it was easy to get drawn away from the communication at hand. The extent to which an individual got distracted from their

virtual communication, however, depended on their level of attentiveness or being mindful and centred within themselves.

It appears that participants might have become aware of their mental activities which either encouraged them or discouraged them from engaging in virtual communication (see Table 5.1). As such, their heightened awareness might have facilitated effective virtual communication because without this enhanced awareness they might not have become aware of the tendencies that fuelled their communication problems. Therefore, when they became aware they knew what to do to address such issues. Thus, addressing the issues led to their development of guidelines or deep reflections. Therefore, the knowledge people have is usually limited to what they are aware of. In addition to this, the quality of understanding is enhanced when individuals intentionally develop their awareness (Sice, et al. 2018b). Thus, the claims of awareness of senses, body, mental activities and communication reported by the participants have satisfied the second part of objective two of the research which is to develop a utility of engaging Mindsight when using virtual communication. This includes developing self-awareness, monitoring and managing the self in the communication process.

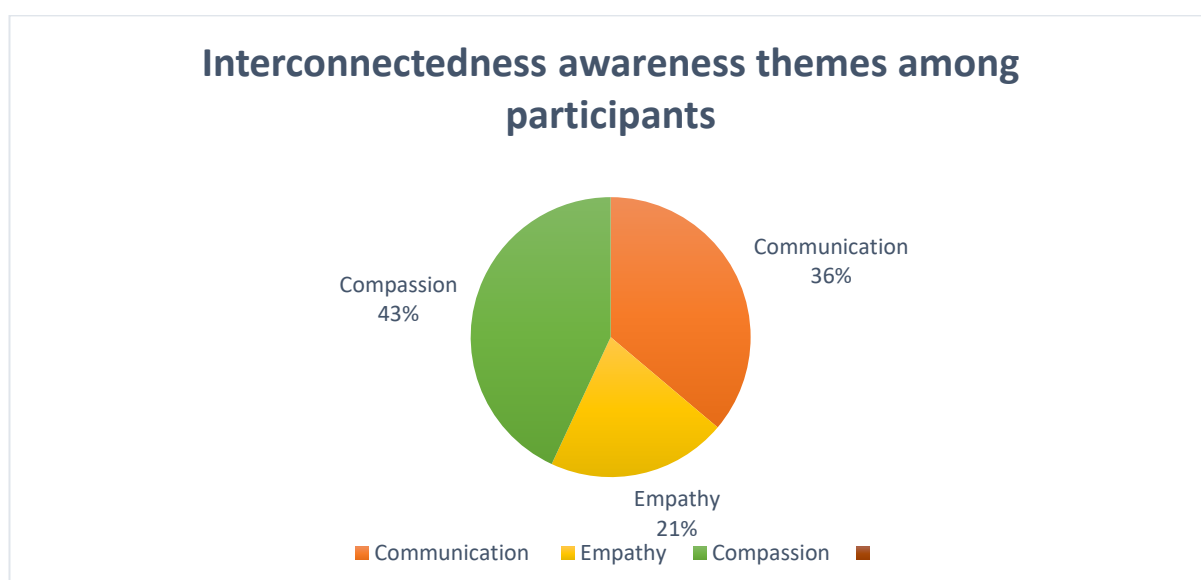
Therefore, participants became aware of their environment and mental activities and developed some skills to prepare for the process of VC. If their emotions were negative they controlled their emotions by either removing themselves from the situation (this was achieved by either taking breaks or doing something else) or taking control of the mental activity (deciding to focus and not get distracted). Their mental activities and sensations were adjusted and they then focussed on being the best version of themselves. This was not a forced feeling but the type of feeling or disposition that came naturally as a result of being attentive to their bodies or mental activities. This resonates with Siegel's (2010a) claims that when people are aware of their bodies they have the tendency to be attuned to themselves. This kind of awareness is encouraged by Heydenfeldt (2010) who asserted that individuals should recognise the importance of emotions in mental activities because information processing is emotional. Thus, emotions organize behaviour that enables people to accomplish a task (Siegel 1999).

Lastly, 71% of participants were aware of their communication. This may imply that there have been elements of attuned communication. The chart shows that 43% of the

people were compassionate, some empathized with the scores of 21% and 36% of the participants were aware of the way they communicated (see Figure 6.4). not sure what this means

Consequently, most of the participants empathized with their senders and receivers of communication. These sometimes came in the form of thinking about what others would feel about their communication. As they empathized, they were able to connect with the experiences of others by knowing others in a way that allowed them to have an accurate representation of them within themselves (Dickey and Ungerleider 2007).

Figure 6.4: Interconnectedness awareness themes among participants. 72% of participants reported that they experienced interconnectedness awareness. From this 43% were aware of compassion, 36% were communication aware and, 21% were empathy aware.



Since their awareness was heightened they could consciously and intentionally select the appropriate tone and words for their emails and write their communication in clear and professional language. This resonates with the fact that for a person to become a professional they need to dedicate time to consider their approach, attitude and decision-making when engaging in practice (Brooke, et al. 2018). The awareness they developed ensured that the receivers of their communication could understand what they were saying. Individuals on several occasions reported having a sense of connectedness with the individuals they were communicating with. They were able to achieve this because they understood how to be aware. It was easier for them to connect to others while feeling and thinking of what their fellow communicators might

feel when communicating with the virtual. The reported attuned and connected communication awareness had satisfied the two separate parts of objective two of the research:

To develop a utility of engaging Mindsight when using virtual communication which includes developing self-awareness, monitoring and managing the self in the communication process.

The claims made were based on the analysis of the participants' levels of awareness according to the four quadrants of awareness. It was discovered that individuals developed awareness of their communication tendencies by becoming aware of their senses, bodies, mental activities and interconnectedness awareness. These reports align with the fact that people experience things personally, yet it manifests in the public because such experiences translate into relationships and interactions with humans and the environment as a whole (Sice, et al. 2018b). This shows that communication awareness that was personal to the participants was felt in the communication process or the experience of communication they were having with others; their recipients could feel the receptiveness of their communication. This answers research question one: can the qualia of experience reported by participants applying Mindsight in virtual communication indicate improved communication as perceived by participants?

6.2 Perceived Implication for improved Communication in Virtual Communication

6.2.1 A Recap the Gap in Knowledge

Having explained the various themes that were prevalent in the participants' accounts of the experience of Mindsight via virtual communication it is important to discuss the initial problems and gaps that were revealed in the literature. From Table 2.1. it can be seen that problems such as not knowing one another, difficulties in connecting with people, lack of trust, lack of interpersonal clues, reduction in communication quality, lack of connection, not having shared knowledge and psychological problems were pinpointed by various scholars (Whittaker and Sidner 1996; Soucek and Moser 2010; Januska 2011; Galambos et al. 2012; Morgan et al. 2014; De Paoli 2015; Hedman and Valo 2015; Gupta et al. 2016; Hanrahan and Pérez-Quñones 2015 and Liu and Moh 2016). It is also important to note that literature lacks the investigation of the mental

state of individuals and also the effect of their environment on them while they communicate virtually.

Thus, the exploratory introduction of mindsight into virtual communication was designed to address the gap identified in attempted solutions in literature and to solve practical communication problems. Some of the solutions suggested in literature were mechanical or manual, especially those of overcoming stress and overload issues. The suggestions were limited because they failed to understand the impact of the environment and the emotions of communicators in their solutions. For instance, Soucek and Moser (2010) maintained that people should be taught how to apply specific techniques that would enable them to manage their communication. It includes processes that decrease the number of messages an individual receives (which might include messaging filters that help to separate essential emails from unrequested emails) (Jerejian et al., 2013) and additionally suggested a manual intervention to email filtering.

Other scholars suggested giving guidelines to organizations on how a company's emails should be used. This suggested solution may reduce the number of emails individuals receive but this has not addressed the frequency with which they check their emails because it is a psychological process. Although Gupta et al. (2016) reported that reducing the number of emails employees receive in an organization improves their work quality and it reduces the levels of stress. It still, however, does not cover the impact it has on people about the number of times they have to check their emails. Recently other scholars such as Iyengar et al. (2017) talked about spam detection, Kumaresan and Palanisamy (2017) suggested spam classification and Liu and Moh (2016) recommended email filtering to tackle information overload

Levy (2016), however, recommended checking emails at certain times of the day fuelled by the individual's guidelines. This was recommended in order to harness better attention from the individual. He also addressed the attention issues of individuals and tried to reduce information overload tendencies by developing a reflective exercise that prompts people to observe themselves and to learn from their behaviour (which was adopted by this research and upgraded with the Wheel of Awareness exercise). This brought in awareness research into virtual communication but the approach was more on the reflection and thinking side which encourages

individuals to develop guidelines for themselves personally; hence, the need for a prescriptive approach. Although one main emphasis of Levy (2016)'s work was to encourage individuals to dedicate certain times to perform virtual communication, it might not have taken into cognizance the impact of prolonged absence from email communication if the workers have to attend to such emails as it might be entirely linked to their jobs. Some participants of the research did affirm, however, that they decided to designate specific times for email communication.

Tables 2.1 shows the VC problems identified in literature. Thus, the present research argues that an enhanced awareness might indirectly address the problems highlighted. Moreover, Levy (2016)'s exercise was adopted to the wheel of awareness to address the problems and in the process attempted to bridge the gap in the literature. The next section presents the implication of the participants' experiences from applying the exercise to their virtual communication.

6.2.2 Perceived Implication for improved Communication in Virtual Communication

The participants of the research prescribed some perceived solutions. After they narrated their experiences over six days they had a section in their diaries where they wrote reflections regarding the decisions they were taking forward in future virtual communication. Although most of their experiences were captured, the guidelines served as a final version of their instructions for themselves. Some of the guidelines re-echoed what they noticed about themselves and the steps they were taking to ensure their communication was good for them and their fellow communicators. Therefore, some of the perceived implications for improved virtual communication by the participants is outlined in table 6.1. It is interesting to point out that some were contradictory to each other.

It could be argued that participants recognised that change begins with them as they had to decide to focus on taking steps that would improve their communication experience. Therefore, they paid attention to their emotions and practiced pausing before taking action. They also recognised that exercise and rest were essential for good communication. These seemed like a combination for enhanced calmness in the individual. While they remained calm, they were able to connect with others. They would do this by connecting and empathizing with others while maintaining a

professional tone and finally reviewing real written communication before it is sent. They recognised the need to have a better relationship with technology. They participants also recognised that emails should be done at consistent times and in consistent environments and that the timing must be convenient so that the communication will not be rushed. The above guidelines have revealed what is essential for the people's virtual communication and as such have also answered research question one which questions whether the qualia of experience reported by participants applying Mindsight in virtual communication indicates improved communication as perceived by participants?

Table 6.1: Perceived implications for improved virtual communication by participants

Communication Quality	<ul style="list-style-type: none"> - It is good to have a connection from the heart while communicating with others. - People should be mindful of their responses and be sensible. - Using a professional tone is appropriate.
Time of Communication	<ul style="list-style-type: none"> - Individuals should have a set time for email communication. - Replying to emails during busy times of the day could detrimental. - Urgent emails need an urgent response. - Reply to emails on work days before official closing hours. - Emails should not be replied to on weekends. Weekends should be reserved for friends and family time. - Check emails at consistent times and environments.
How to reply email communication	<ul style="list-style-type: none"> - People should reply as they can at the moment and reply with a focus on the expected task. - Respond to emails according to their urgency. - Do not rush emails. - Pause and ponder more while checking emails. - Connect and empathize. - Review responses.
How to maintain good communication	<ul style="list-style-type: none"> - People should relax and ensure they are in a good mood before embarking on or continuing with email communication.

	<ul style="list-style-type: none"> - Individuals should ensure that they are in the right mindset before replying to email communication. - It is not right to reply to emails immediately. - Stay organised.
Place for email communication	<ul style="list-style-type: none"> - Quiet place. - Good space to write.
Communication tool and styles	<ul style="list-style-type: none"> - Mobile phones: communicate anytime and in any place. - Focus too while using mobile phones for email communication. - Check emails on computer systems.
Bodily Awareness and self-care	<ul style="list-style-type: none"> - Sensitive emails should be written in the morning when the body and mind are fresh. This may increase focus. - Also take some rest and exercise. - Practise awareness and breathing exercises while doing emails.
Awareness of emotions	<ul style="list-style-type: none"> - Being in a good mood helps with good communication responses. - Pay attention to emotions. - Pay attention to emotions and mental states.

Table 6.1 Perceived implications for improved virtual communication by participants continued. The next section discusses the implications of these guidelines on VC as a whole.

6.2.3 Practical outcomes for virtual communication

Having explained all the perceived implications by participants it is essential to discuss what these implications mean for virtual communication. The outcomes of this research provide a more holistic approach to email communication in the sense that people experience awareness of their environment, mental activities, other people and the way they relate to technology. The awareness they experienced helped them to monitor and manage themselves as they communicated virtually. This implies that they were potentially able to address the complex issues of virtual communication which include difficulties in connecting with people, lack of trust, lack of interpersonal clues, reduction in communication quality, not having shared knowledge and psychological problems.

Consequently, the MUVVC gave them the tool for effective communication (see section 5.5). This shows that the process of investigating the problems and solutions

obtained might be integrative compared to the ones suggested by other scholars (Soucek and Moser 2010; Januska 2011; Galambos et al. 2012; Morgan et al. 2014; De Paoli 2015; Hedman and Valo 2015; Gupta et al. 2016) which seemed to be unidirectional. Their submissions were either mechanical, manual or policy-based methods. They did not consider the impact of the environment, mental states, and other people on email communication. To sum this up, the present research has covered a broader view of this problem taking into consideration most of the interconnected circumstances that might lead to problems in virtual communication.

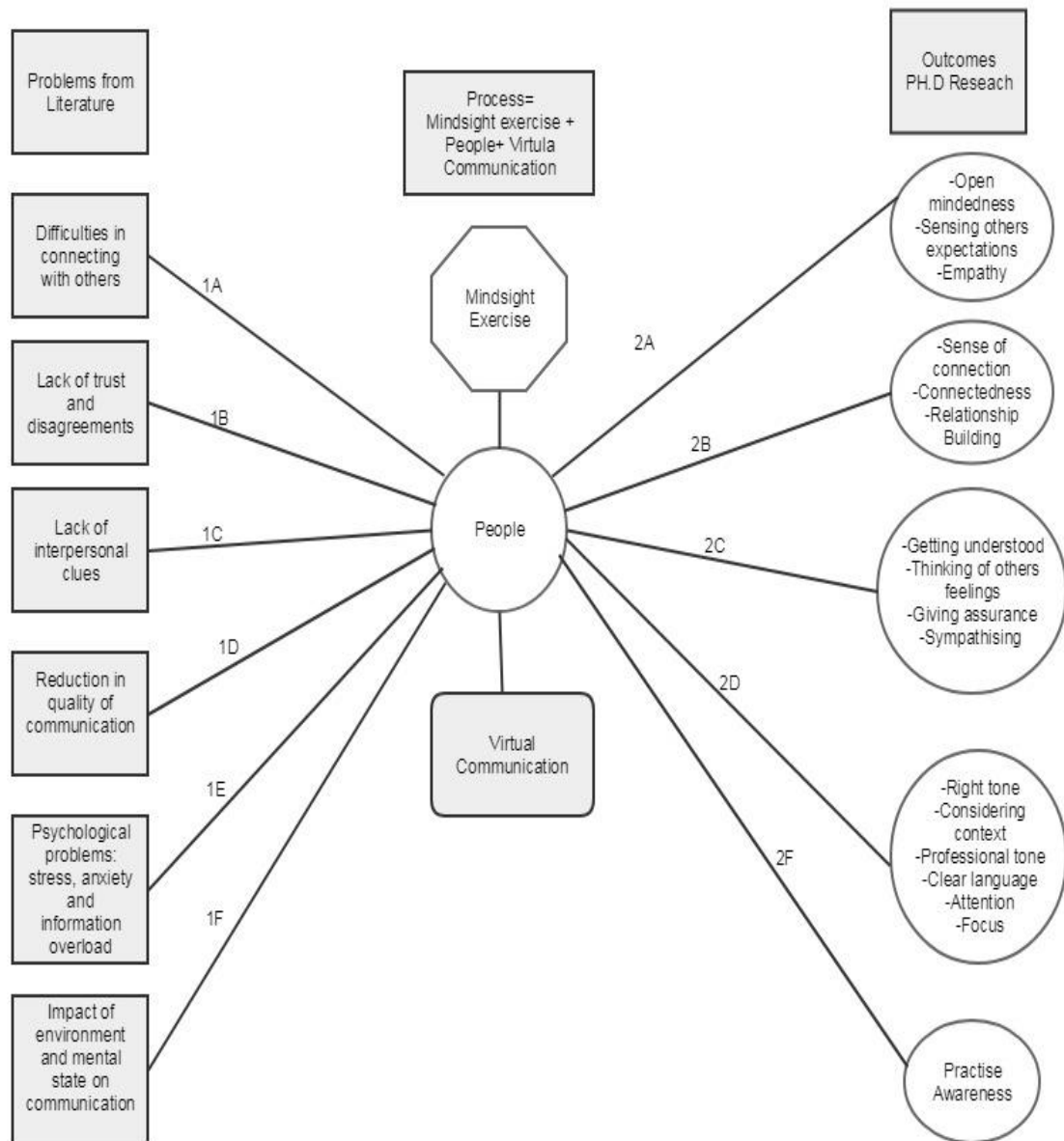
Thus the findings of the present research affirms Sice et al. (2018)s' claims that, our nervous systems, our minds, and our environment are interconnected, which implies that there are different aspects of an entity and so entities must be studied as unified wholes. Therefore, human beings are not separated from their environment which implies that the human mind has its own effect on the environment. It can be claimed that human experience is a complex composition that is intertwined with the mind, the environment and the world at large. Therefore, participants have experienced awareness that encompasses attuned connection with themselves, others and the virtual communication technology email. The heightened awareness was demonstrated by their accounts as they communicated virtually thus making them discover the internal qualities they had to cultivate in order to experience good virtual communication. This meant that they were connected with their communication. Such thinking (evidenced in chapters 4 and 5) might have led people to cultivate good communication habits that presented as responsive communicators from their side of the communication whether as senders or receivers of email communication in organisations and personal dealings. Figure 6.5 depicts the holistic mappings of the problems of virtual communication from literature and the attempted solutions from present research.

From Figure 6.5, there are three columns; the first column represents the problems of VC found in the literature. All of the problems have been numbered from 1A to 1F on figure 6.5. The second column on figure 6.5 depicts the Mindsight process. The first circle shows the Mindsight exercise that is applied to people and then people applying what they have learned in virtual communication. The second column is linked to the third column from the people. The last (third) column displays the extracted solutions reported by the participants themselves and that represents the solution to VC obtained

from the Ph.D. research. Therefore, the next section shows how the solutions could be applied to the problems. The solutions are numbered 2A to 2F.

- Open-mindedness and empathy (aligned as 2A) tackled the difficulties faced in connecting with others virtually due to differences in background (aligned as 1A). It could be claimed at this juncture, that the possible way to connect with another person from a different background is to empathize with them. That is, trying to view the world through their own lens.
- Lack of trust and disagreement (aligned as 1B) were tackled by building relationships (aligned as 2B) with the people virtually and also developing a sense of connection with them (see section 5.3.4).
- The lack of interpersonal clues (aligned as 1C) was confronted by giving assurance, thinking of how others will feel, sympathizing and trying to understand (aligned as 2C) because in the absence of interpersonal clues one can only communicate in a clear language and select words that will convey what the person is feeling or expecting. Moreover, on the other hand, the receiver tries to sympathize if it is a situation that calls for communication in that aspect (see section 4.3.5, 4.3.6 and 5.2.4).
- The lack of communication quality (aligned as 1D) was resolved by ensuring that the context of communication was understood, using the right and professional tone (aligned as 2D). This kind of disposition ensured that the communication was well received with all the seriousness and clarity required.
- Psychological problems (1E) were handled by ensuring proper postures while communicating virtually. Relieving stress was tackled by taking breaks and balancing emotions (aligned as 2E). That way, both physical and internal wellbeing was taken care of. The other important aspect that has been overlooked in literature was the problem of not knowing how the environment, mental activities and the effects of one's self on virtual communication.

Figure 6.5: Practical Solutions to Virtual Communication Problems



6.2.4 The Implication for personal development

It was interesting to notice the extent to which the research had an impact on individuals' lives. The individuals which participated in the research tried the exercise on virtual communication which also affected other areas of their lives. Some of the participants decided that they would continue utilizing the exercise. Not only were their virtual lives influenced, but their achievements from doing the exercise applied to other aspects of their lives such as work and family lives. Some reported managing their interpersonal relationships with their family and co-workers better. They

achieved that by showing empathy, for instance, an individual that does not like clutter was able to understand his/her colleague's tendency to scatter things around when working. The person did not get annoyed because of the clutter but considered how the colleague was working hard for the organization. This goes to show that when someone empathizes with others, space for misunderstanding is taken away. Sometimes, it is the decision of the people to help others in and out of virtual communication that portrays the willingness of individuals to assist others. For example, there was one instance of an individual who decided to help a friend with their preparation for an interview. Other times, it was the willingness to assist others with a difficult task. Personal satisfaction is also attained when one sees how helpful and useful they have been to others. The joy and happiness derived from that gives them a sense of purpose and accomplishment. This supports the saying that goes in the Bible which says "it is more blessed to give than to receive." (Acts 20:35).

Others saw an improvement in their sporting activities such as in boxing and snooker competitions. They reported having the heightened ability to concentrate which enabled them to perform better than they used to do.

"I have played snooker for the last 5 years... Up until this point I was unsure how much the awareness exercise have affected my attention. I believe that the natural increase in work rate...I believe that the participation in this module and these exercise has improved my attention and awareness of myself." Participant 7

Other participants felt relaxed and also noticed some improvement in their mood.

"I've been meditating for a while now, and I'm usually able to focus well and keep a natural pace with my breathing. On top of that, at the end of each sitting I do feel better, my mood improves and I get on with my day more relaxed."..."I really noticed a difference within myself, especially when I worked on the introspection focuses. The meditations were good because they had a big impact on many different skills that I wanted to improve - such as my awareness of others, my concentration levels as well as my management of stress. Therefore I am very happy to continue using this technique in my life, and it may prove even more useful when I am confronted with stressful times in my life." participant 26.

Others reported the feeling of calm in difficult adverse situations.

"This week actually saw me go through one of the most stressful times in my recent life, as I travelled to Italy lost my passport and had to sit at an airport for 16 hours waiting for a flight that was almost impossible to arrange. Although it was an ordeal I can say that it was interesting to see how I reacted in comparison to how I think I would have reacted previously having not tried any of these practices or read what I have read...During the trip to Italy it became apparent I didn't have my passport on the return leg of the journey therefore I was stuck in the country. I had an incredibly stressful time, however looking back and reviewing how I acted I do think I saw a change in how I dealt with the difficult situation and emotions involved. To be summarise I was less angry, a bit calmer than I expected to be". Participant 31.

The above quotations have shown that, when individuals apply the exercise with the intention to improve their virtual communication, it affects other aspects of their lives (see table 6.1). They notice some improvement in their concentration, sports, relationships and their work lives. It shows that individuals might be able to experience improvements in their lives as a whole. It is perceived that when people continue to practise the MUVIC, they will have the privilege of continued communication with people and organizations. This implies that there will be continued good interpersonal virtual communication in relation to others and organizations. It also means that individuals will not be overwhelmed by all the demands of email communication that usually weighs people down. It has been argued that they might be able to control and regulate the emotions that are not only beneficial to them only but to their fellow communicators. The participants would have been followed up after some months of utilizing the exercise but because they were students and they graduated it was not possible to follow up to check about further impact.

6.2.5 The Implication for Organisations and Stakeholders

The implication of this research for stakeholders and organisations is that the process could address the problems of virtual communication in organisations. The MUVIC could be developed further into commercial products for organisations to utilize to improve employee communication. Additionally, MUVIC will address tension and misunderstanding among virtual teams when it is practised. This will foster understanding among the team and when there is understanding and mutual respect the goals of the team will be achieved. Heydenfeldt (2010) argues that organisations that foster interpersonal relations can thrive in the fast-moving world.

This kind of achievement could lead to productivity in organisations because the most significant asset an organisation has is the people in it and when the people in it are united by mutual respect and understanding the organisation prospers. Malmelin (2007) argues that the success of a business depends on its ability to communicate with customers and stakeholders effectively. This comprises communication that is done both within and outside of an organisation which is also known as communication capital.

Secondly, when employees are the right frame of mind to communicate and carry out their daily task it eliminates the usual lack of productiveness or lack of job satisfaction which was reported as a result of information overload. This is because the employees now have tools that will enable them to cope adequately in a seemingly fast-paced world. Therefore, the extent to which organisations and individuals are aware of important details (to take note of flaws in a process) the more they are able to collectively use their competence to correct what has been observed (Barry and Meisiek 2010). This is because their time and selves are managed adequately and they now have a free mind to be more productive. Other Aspects of Environmental solutions obtained from research for employees' wellbeing include:

- Office design should be done in such a way that it will enhance an individuals' psychological well-being. Many people talked about how looking at the garden or landscape enhanced the feeling of calmness and relaxation. Therefore, it is recommended that offices should be designed like parks and beautiful gardens having landscape designs inside. The carpets should look like lawn grass. Grass should cover extra chairs. There should be real or artificial plants around. The design of the office should be as if someone is sitting in his or her back garden. If possible, there should be a stream like white noise in the background of offices to simulate the sound of a moving stream and birds tweeting in the background. This will enhance working in a relaxed atmosphere.
- Employees should be encouraged to take few minutes of regular breaks at work. That way, the attention of people could be enhanced for better productivity as the respondents claimed to have taken breaks to calm down from difficult email communication.

6.2.3 Practical outcomes for virtual communication

Having explained all the perceived implications by the participants, it is essential to discuss what these implications mean for virtual communication. The outcomes of this research provided a more holistic approach to email communication in the sense that people experienced awareness of their environment, mental activities, other people and the way they relate to technology. The awareness they experienced helped them to monitor and manage themselves as they communicated virtually. This implies that they were able to potentially address the complex issues of virtual communication which include, difficulties in connecting with people, lack of trust, lack of interpersonal clues, reduction in communication quality, not having shared knowledge and psychological problems.

Consequently, the MUV C gave them the tool for effective communication. This demonstrates that the process of investigating the problems and solutions obtained are holistic compared to the ones suggested by other scholars (Soucek and Moser 2010; Januska 2011; Galambos et al. 2012; Morgan et al. 2014; De Paoli 2015; Hedman and Valo 2015; Gupta et al. 2016) which seemed to be unidirectional. Their submissions were either mechanical, manual or policy-based methods. They failed to look at the impact of the environment, mental states and other people. To sum this up, the present research has covered a broader view of the problem taking into consideration most of the interconnected circumstances that might lead to problems in virtual communication.

Thus, the findings of the present research affirm Sice et al. (2018)'s claims that, our nervous systems, our minds, and our environment are interconnected. Consequently, there are different aspects of an entity and so entities must be studied as unified wholes. Therefore, human beings are not separated from their environment which implies that the human mind has effects on the environment. It can be acclaimed that human experience is a complex composition that is intertwined with the mind, the environment and the world at large. Therefore, participants have experienced an enhanced awareness that encompasses attuned connection with themselves, others and the virtual communication technology email. The heightened awareness was demonstrated by their accounts as they communicated virtually. Thus, making them discover the internal qualities they had to cultivate in order to experience good virtual communication; meaning that they and the communication are connected. Such

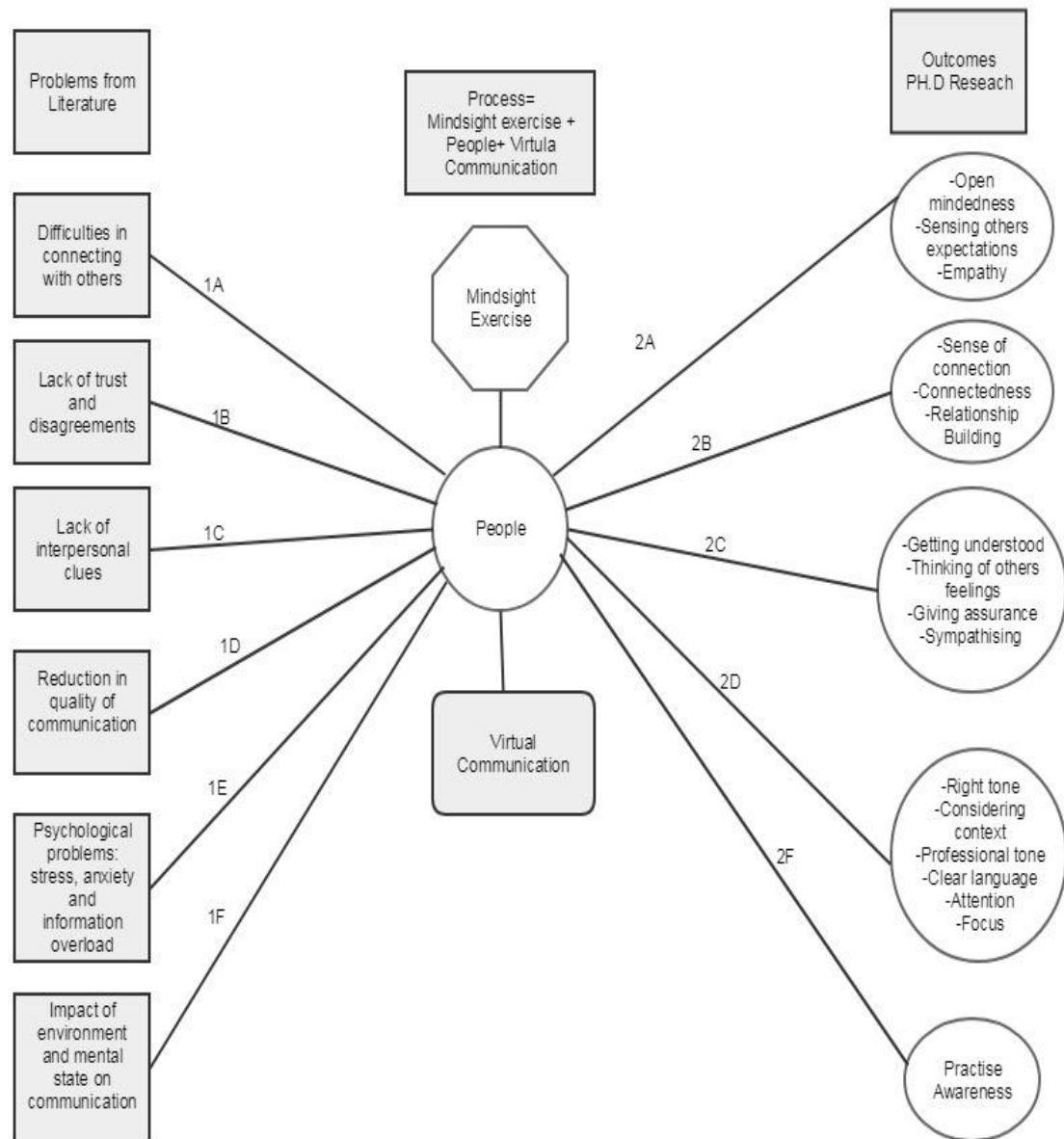
thinking leads people to cultivate good communication habits that present as better communicators from their side of the communication whether as senders or receivers of VC in organisations and personal dealings. Figure 6.5 depicts the holistic mappings of the problems of virtual communication from literature and the attempted solutions from the present research.

From Figure 6.5, there are three columns; the first column represents the problems of VC found in the literature. So all the problems have been numbered 1A and 1F. The second column depicts the Mindsight process. The first circle shows the Mindsight exercise that is applied to people and then people applying what they have learned in virtual communication. The second column is linked to the third column from the people. The last (third) column displays the extracted solutions reported by the participants themselves, and that represents the solution to VC obtained from the Ph.D. research. Therefore, the next section shows how the solutions could be applied to the problems. The solutions are numbered 2A to 2F.

- Open-mindedness and empathy (aligned as 2A) tackled the difficulties faced in connecting with others virtually due to differences in background (aligned as 1A). It could be claimed at this juncture, that the possible way to connect with another person from a different background is to empathize with them. That is, trying to view the world through their own lens.
- Lack of trust and disagreement (aligned as 1B) were tackled by building relationships (aligned as 2B) with the people virtually and also developing a sense of connection with them (4.2.4).
- The lack of interpersonal clues (aligned as 1C) was confronted by giving assurance, thinking of how others will feel, sympathizing and becoming understood (aligned as 2C); because in the absence of interpersonal clues one can only communicate in a clear language and select words that would convey what the person is feeling or expecting. Moreover, on the other hand, the receiver tries to sympathize if it is a situation that calls for communication in that aspect (see 4.2.4 and 5.3.4).
- The lack of communication quality (aligned as 1D) was resolved by ensuring that the context of communication was understood, using the right and professional tone (aligned as 2D). This kind of disposition ensured that the communication was well received with all the seriousness and clarity required (see section 5.3.4).

- Physiological problems (1E) were handled by ensuring proper postures while communicating virtually. Relieving stress is tackled by taking breaks and balancing emotions (aligned as 2E). That way, both physical and internal wellbeing is taken care of. The other important aspect that has been overlooked in literature was the problem of not knowing the environment, mental activities and the effects of self on virtual communication (see sections 4.2.2, 4.3.3, 5.1.2, 5.2.2 and 5.3.2).

Figure 6.6: Practical Solutions to Virtual Communication Problems



6.3 Virtual Communication Process for Individuals and Organizations

This section delivers the Mindsight virtual communication process to be used by individuals and organisations. This was updated at the end of the research to accommodate the busy life styles of people. Therefore the updated process is found in Appendix D. When individuals utilize the MUVVC, they might be awakened to experience awareness in their bodies, senses, mentally and communication, the process is coupled with the right body posture while the person is communicating virtually according to the MUVVC. As they are communicating, they are using the right selection of words while considering context and seeking to be understood.

It is envisaged that by undertaking this exercise, the participant will be able to improve in the virtual communication world continuously. Thus this developed virtual communication utility satisfies research objective two which is to develop a utility of engaging Mindsight when using virtual communication, which includes developing self-awareness, monitoring and managing self in the communication process.

6.4 Summary

The chapter presented the findings for the case studies, the gaps that have been addressed include difficulties in connecting with people, lack of trust, lack of interpersonal clues, reduction in communication quality, not having shared knowledge and psychological problems. The gaps were addressed as a result of utilizing the MUVC which enabled participants to experience sensory, bodily, mental activities and interconnectedness awareness; this awareness has enhanced VC.

The impact of the MUVC has added knowledge to literature concerning Mindsight and VC. The success of the MUVC in achieving improved communication is presented. Where participants presented their commitment to actions that would improve VC. The decisions include quality of communication, time of communication, the language of communication and how to handle communication devices.

Chapter Seven: Conclusion

7.1 Purpose of the Research

This study aimed to explore the application of Mindsight in virtual communication and to provide a utility that would aid personal awareness, reflection and action via email, the rationale being that, first, some problems were identified by the following scholars: Whittaker and Sidner, 1996; Soucek and Moser, 2010; Januska, 2011; Galambos et al., 2012; Morgan et al., 2014; De Paoli, 2015; Hedman and Valo, 2015; Gupta et al., 2016; Hanrahan and Pérez-Quñones, 2015; Liu and Moh, 2016. Other problems were, overlooked by the literature; for example, awareness of self and environment. Additionally, the solutions suggested were narrow (Soucek and Moser, 2010; Jerejian et al., 2013; Hanrahan and Pérez-Quñones, 2015; Levy, 2016; Liu and Moh, 2016; Gupta et al., 2016; Iyengar et al., 2017; Kumaresan and Palanisamy, 2017), such that they were either mechanical or policy based. Therefore, the research explored addressing the problems identified by suggesting the use of the Mindsight utility (MUVU) by individuals in both educational and organisational environments.

7.2 Summary of Research Question

The research asked the question (see page 18): Can the qualia (quality as perceived by an individual) of experience reported by participants applying mindsight in virtual communication indicate improved communication as perceived by participants?

The research question determined the scope and direction of the research. Therefore, it sought answers from the participants by narrowing the focus on what they reported, and the findings were the outcomes of participants' reports and their discoveries of themselves, their environment, their mental faculties, and the other people they communicated with. These discoveries will later lead them to develop their guidelines for how to participate in email communication effectively. However, the purpose of the research would not have been achieved and the question not answered without breaking the process into manageable steps. Therefore, the research had five objectives, which were:

Objective One

To critically evaluate the literature on mindsight and virtual communication in organisational and business contexts and identify the gaps that Mindsight addresses. This objective was achieved by identifying the gaps in the literature and exploring ways these may be covered by the application of the theory of Mindsight. (See Chapter Two).

Objective Two

To develop a utility of engaging Mindsight when using virtual communication, which includes developing self-awareness, monitoring and managing self in the communication process. This was achieved by the wheel of awareness mindsight practice, together with elements of the practices found in the mindfultech literature. (See Appendices A to D)

Objective Three

To conduct a pilot to test the application of the mindsight virtual communication utility in virtual communication. One pilot study was conducted to determine the best way to explore mindsight on virtual communication. The Mindsight exercise was tested in three pilot studies; these helped in streamlining the exercise to be ready for the main study. By the time the exercise reached the first case study, only one last amendment of the exercise was necessary for the rest of the case studies. (See Chapter Four, sections 4.2 to 4.2.4).

Objective Four

To conduct primary research by applying the mindsight communication process in academic and business contexts. This objective was achieved through the streamlining of the Mindsight process by the pilot studies. Thus, the Mindsight virtual communication utility was applied for six days in three case studies, which made up the educational and business contexts. It would have been interesting to try other contexts and to apply it for a more extended period, probably one month. (See Chapter Four and Chapter Five).

Objective Five

To compare findings from the different contexts. The contexts were compared in the discussion chapter, and it was found that individuals seemed to have heightened awareness if exposed to a clear utility of the virtual communication. As such, the mindsight virtual communication utility used during the research was upgraded to include the new areas where individuals need to pay attention during their communication in order to have a good experience as senders or receivers of email communication. (See Chapter Six, section 6.1.2)

7.3 Contribution to Knowledge

The contribution of the study is as follows:

1. The identification of gaps in knowledge of virtual communication and how they could be addressed through the theory of Mindsight, and the insights gained because of this.
2. The participation of the respondents as researchers. The methodology was innovative in the sense that it enhanced the participants' awareness of their experience and developed them as researchers of their practices and, in particular, in their practice of virtual communication.
3. The development of a utility for the engagement and application of mindsight in virtual communication (Mindsight Utility for Virtual Communication MUVVC) via email for individuals and organisations is another contribution. The MUVVC first to forth version are attached at the of this chapter.
4. The development and application of case studies of a Mindsight virtual communication utility in education and business contexts.

7.4 Limitations and Recommendations of the Study

The limitations and recommendations of the study are as follows:

- Opportunistic samples were used where the researcher had access to participants in a UK university and a USA organisation. The participants were happy to commit to completing the exercise. This technique gave depth to the findings rather than breadth, because the findings were explored in a thorough manner so to understand the levels of awareness that were achieved by participants.

- The research did not include cultural context regarding countries; because it considered the UK and USA. It is recommended that future research should explore other cultural settings in other countries.
- The scope of the research required two contexts (organisational and educational); however, it is recommended there be different contexts in future research.
- The duration of the application of the Mindsight virtual communication utility was six days. Further research might explore an extension of the application of the utility and how it might affect user behaviour.
- The study focused on email communication because this is the popular virtual communication utilized in organisations; however, the utility is transferable and can be extended to other types of communication media.

References

Acts 20 :35, Holy Bible. King James Version.

Ale Ebrahim, N., Ahmed, S. & Taha, Z. (2009). Virtual teams: a literature review. *Australian Journal of Basic and Applied Sciences*, 3, 2653-2669.

Aronson, J. (1995). A pragmatic view of thematic analysis. *The qualitative report*, 2(1), 1-3.

Avison, D. E., Lau, F., Myers, M. D., & Nielsen, P. A. (1999). Action research. *Communications of the ACM*, 42(1), 94-97.

Aylor, B. and P. Oppliger (2003). "Out-of-class communication and student perceptions of instructor humor orientation and socio-communicative style." *Communication education* **52**(2): 122-134.

Baas, M., Nevicka, B. & Ten Velden, F. S. (2014). Specific mindfulness skills differentially predict creative performance. *Personality and Social Psychology Bulletin*, 40, 1092-1106.

Babu, S. (2014). "Leadership and Mindfulness." *Business Today* **23**(7): 52-53.

Baeva, L. V. (2016). "Virtual Communication: Strengthening of Real Relationships or Simulation?" *International Journal of Technoethics (IJT)* **7**(1): 51-61.

Baldini, L. L., et al. (2014). "The Clinician as Neuroarchitect: The Importance of Mindfulness and Presence in Clinical Practice." *Clinical Social Work Journal* **42**(3): 218-227.

Barry, D. and S. Meisiek (2010). "Seeing more and seeing differently: sensemaking, mindfulness, and the workarts." *Organization studies* **31**(11): 1505-1530.

Beckers, R., van der Voordt, T., & Dewulf, G. (2016). Why do they study there? Diary research into students' learning space choices in higher education. *Higher education research & development*, 35(1), 142-157.

Benbasat, I., Goldstein, D. K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS quarterly*, 369-386.

Bhaskar, R. (1975). *A realist theory of science*: York Books.

Biasutti, M. (2015). "Creativity in virtual spaces: Communication modes employed during collaborative online music composition." *Thinking Skills and Creativity* **17**: 117-129.

- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M. & Velting, D. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice*, 11, 230-241.
- Bonoma, T. V. (1985). Case research in marketing: opportunities, problems, and a process. *Journal of marketing research*, 199-208.
- Bosch-Sijtsema, P. M. and A. Sivunen (2013). "Professional Virtual Worlds Supporting Computer-Mediated Communication, Collaboration, and Learning in Geographically Distributed Contexts." Professional Communication, IEEE Transactions on **56**(2): 160-175.
- Boyatzis, R. E. and B. Yeganeh (2012). "Mindfulness." Leadership Excellence **29**(3): 4.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brooke, P., Prickett, T., Keogh, S. & Bowers, D. (2018). Becoming Professional A University Perspective. *ITNOW*, 60, 16-17.
- Bryant, B. and J. Wildi (2008). "MINDFULNESS." Perspectives for Managers(162): 1-4.
- Bryman, A. (2016). *Social research methods*: Oxford university press.
- Burgess, A., Jackson, T. & Edwards, J. 2005. Email training significantly reduces email defects. *International Journal of Information Management*, 25, 71-83.
- Burns, A. C., & Bush, R. F. (2007). *Basic marketing research using Microsoft Excel data analysis*: Prentice Hall Press.
- Carey, J. W. (2008). Communication as culture, revised edition: Essays on media and society, Routledge.
- Cezar, B., George, C. & Botezatu, C. P. (2011) Virtual enterprise specific management systems. Computer Research and Development (ICCRD), 3rd International Conference on, 11-13 March 2011 2011. 400-404.
- Chandler, D. and R. Munday (2011). A dictionary of media and communication, Oxford University Press.

- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298. doi:10.1080/17439760.2016.1262613
- Clinton, T. and G. Sibcy (2012). "Christian Counseling, Interpersonal Neurobiology, and the Future." *Journal of Psychology and Theology* 40(2): 141-145.
- Collard, P. and J. Walsh (2008). "Sensory Awareness Mindfulness Training in Coaching: Accepting Life's Challenges." *Journal of Rational-Emotive Cognitive-Behavior Therapy* 26(1): 30-37.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.
- Creswell, J. W. & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*, Sage publications.
- Dane, E. and B. J. Brummel (2014). "Examining workplace mindfulness and its relations to job performance and turnover intention." *Human relations* 67(1): 105-128.
- Darke, P., Shanks, G., & Broadbent, M. (1998). Successfully completing case study research: combining rigour, relevance and pragmatism. *Information systems journal*, 8(4), 273-289.
- Davidsson, P. and A. Jacobsson (2009). Towards norm-governed behavior in virtual enterprises. *Intelligent Agents in the Evolution of Web and Applications*, Springer: 35-55.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research* (4th ed. ed.). Thousand Oaks: Sage.
- De Paoli, D. (2015). "5. Virtual organizations: a call for new leadership." *Leadership in Spaces and Places*: 109.
- De Paoli, D., et al. (2014). Disappearing bodies in virtual leadership? *The Physicality of Leadership: Gesture, Entanglement, Taboo, Possibilities*, Emerald Group Publishing Limited: 59-79.
- Dickey, J. & Ungerleider, R. (2007). Managing the demands of professional life. *Cardiology in the Young*, 17, 138-144.
- Feldman, M. S., Bell, J., & Berger, M. T. (2004). *Gaining access: A practical and theoretical guide for qualitative researchers*: Rowman Altamira.

- Forrester, M.A. ed., (2010). *Doing qualitative research in psychology: A practical guide*. Sage.
- Freed, M., Carbonell, J. G., Gordon, G. J., Hayes, J., Myers, B. A., Siewiorek, D. P., Smith, S. F., Steinfeld, A. & Tomasic, A. (2008). Radar: A Personal Assistant that Learns to Reduce Email Overload. AAAI,). 1287-1293.
- Galambos, P., Weidig, C., Baranyi, P., Aurich, J. C., Hamann, B. & Kreylos, O. (2012). Virca net: A case study for collaboration in shared virtual space. Cognitive Infocommunications (CogInfoCom), (2012) IEEE 3rd International Conference on, (2012). IEEE, 273-277.
- Gazella, K. A. (2005). "JON KABAT-ZINN, PHD BRINGING MINDFULNESS TO MEDICINE." Alternative Therapies in Health and Medicine **11**(3): 56-64.
- Gilbert, P. (2014). "The origins and nature of compassion focused therapy." British Journal of Clinical Psychology **53**(1): 6-41.
- Godwin, L. and J. Rennecker (2000). "Connecting Across Miles and Wires: Examining Collaborative Capital Development in Virtual Spaces." Adv Interdisciplinary Stud Work Team V11 **11**: 91.
- Gregor, S. (2005). The struggle towards an understanding of theory in information systems. *Information Systems Foundations: Constructing and Criticising* (Hart, D. and S. Gregor, Eds.), 3-11.
- Guba, E. G. (1990). *The paradigm dialog*: Sage publications.
- Gupta, R., Liang, G., Tseng, H.P., Holur Vijay, R. K., Chen, X. & Rosales, R. Email Volume Optimization at LinkedIn. Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, (2016). ACM, 97-106.
- Hanrahan, B. V., Pérez-Quñones, M. A., & Martin, D. (2014). Attending to email. *Interacting with Computers*, 28(3), 253-
- Hedman, E. and M. Valo (2015). "Communication challenges facing management teams." Leadership & Organization Development Journal **36**(8): 1012-1024.
- Hernez-Broome, G. (2011). "Transformation, emotional intelligence, and brain science." Journal of Psychological Issues in Organizational Culture **2**(1): 76-79.

- Heydenfeldt, J. A. (2010). "Leading through crisis: Applied neuroscience and mindsight." Performance Improvement **49**(7): 33-37.
- Hole, J. D. (2008). Email overload in academia, ProQuest.
- Iida, M., Shrout, P. E., Laurenceau, J.-P., & Bolger, N. (2012). Using diary methods in psychological research.
- Iyengar, A., Kalpana, G., Kalyankumar, S. & Gunanandhini, S. (2017) Integrated SPAM detection for multilingual emails. Information Communication and Embedded Systems (ICICES), 2017 International Conference. IEEE, 1-4.
- Jackson, T., Dawson, R. & Wilson, D. (2001). The cost of email interruption. *Journal of Systems and Information Technology*, 5, 81-92.
- Jacob, E. 1987. Qualitative research traditions: A review. *Review of educational research*, 57, 1-50.
- Januska, M. (2011). "COMMUNICATION IN VIRTUAL ENTERPRISE PARADIGM." Annals of DAAAM & Proceedings.
- Jerejian, A. C., et al. (2013). "The contribution of email volume, email management strategies and propensity to worry in predicting email stress among academics." Computers in human behavior **29**(3): 991-996.
- Kabat-Zinn, J. (2009). *Wherever you go, there you are: Mindfulness meditation in everyday life*, Hachette UK.
- Kellerman, A. (2014). "The Satisfaction of Human Needs in Physical and Virtual Spaces." The Professional Geographer **66**(4): 538-546.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). The action research planner : doing critical participatory action research.
- Kull, F. R. (2005). A year in wilderness solitude. Ann Arbor, The University of British Columbia (Canada). **NR10522**: 622-622 p.
- Kruger, J., Epley, N., Parker, J. & NG, Z.W. (2005). Egocentrism over e-mail: Can we communicate as well as we think? *Journal of personality and social psychology*, 89, 925.
- Kumaresan, T. & Palanisamy, C. (2017). E-mail spam classification using S-cuckoo search and support vector machine. *International Journal of Bio-Inspired Computation*, 9, 142-156.

- Kushlev, K. & Dunn, E. W. (2015). Checking email less frequently reduces stress. *Computers in Human Behavior*, 43, 220-228.
- Lancy, D. F. (1993). Qualitative research in education: An introduction to the major traditions.
- Langer, E. J. (1992). "Matters of mind: Mindfulness/mindlessness in perspective." *Consciousness and Cognition* 1(3): 289-305.
- Levy, D. M. (2016). *Mindful tech: How to bring balance to our digital lives*, Yale University Press.
- Lewis-Beck, M., Bryman, A. E., & Liao, T. F. (2003). *The Sage encyclopedia of social science research methods*: Sage Publications.
- Life, R. S. (1994). Qualitative data analysis.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75): Sage.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research*, 4, 97-128.
- Liu, P. & Moh, T.-S. Content Based Spam E-mail Filtering. (2016) International Conference on Collaboration Technologies and Systems (CTS), 2016. IEEE, 218-224.
- Malmelin, N. (2007). "Communication capital: Modelling corporate communications as an organizational asset." *Corporate Communications: An International Journal* 12(3): 298-310.
- Marlow, S. L., et al. (2017). "Communication in virtual teams: a conceptual framework and research agenda." *Human Resource Management Review* 27(4): 575-589.
- McMurtry, K. (2014). Managing email overload in the workplace. *Performance Improvement*, 53, 31-37.
- Men, L. R. (2014). "Strategic internal communication: transformational leadership, communication channels, and employee satisfaction." *Management Communication Quarterly*: 0893318914524536.
- Men, L. R. (2015). "The internal communication role of the chief executive officer: Communication channels, style, and effectiveness." *Public Relations Review* 41(4): 461-471.

- Miller, W. L. & Crababtree, B. F. (1992). Primary care research: A multimethod typology and qualitative road map.
- Minjie, Y. and W. Wei (2010). Research on internet based information communication system of the performance evaluation in virtual enterprises. Information Management and Engineering (ICIME), 2010 The 2nd IEEE International Conference on, IEEE.
- Montoya, M. M., et al. (2009). "Can You Hear Me Now? Communication in Virtual Product Development Teams*." Journal of Product Innovation Management **26**(2): 139-155.
- Morgan, L., et al. (2014). "Leading effective global virtual teams: The consequences of methods of communication." Systemic Practice and Action Research **27**(6): 607-624.
- Myers, P., 2007. The interplay of virtual communication and emotion in dispute sensemaking.
- Ndubisi, N. O. (2012). "Mindfulness, reliability, pre-emptive conflict handling, customer orientation and outcomes in Malaysia's healthcare sector." Journal of business research **65**(4): 537-546.
- Ndubisi, N. O. (2014). "Consumer Mindfulness and Marketing Implications." Psychology & Marketing **31**(4): 237-250.
- Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*: SIU Press.
- Ogwu, S., et al. (2016). Virtual collaborative research communication the impact of mindsight. European Conference on e-Learning, Academic Conferences International Limited.
- Ostafin, B. D. and K. T. Kassman (2012). "Stepping out of history: Mindfulness improves insight problem solving." Consciousness and Cognition **21**(2): 1031-1036.
- Pauleen, D. J. and P. Yoong (2001). "Facilitating virtual team relationships via Internet and conventional communication channels." Internet Research **11**(3): 190-202.
- Pavlovich, K. and P. D. Corner (2014). "Conscious Enterprise Emergence: Shared Value Creation Through Expanded Conscious Awareness." Journal of Business Ethics **121**(3): 341-351.

- Piccoli, G., Powell A. & Ives, B. 2004. Virtual teams: team control structure, work processes, and team effectiveness. *Information Technology & People*, 17, 359-379.
- Pickard, A. J. (2007). *Research methods in information*. London: Facet.
- Pignata, S., Lushington, K., Sloan, J. & Buchanan, F. (2015). Employees' perceptions of email communication, volume and management strategies in an Australian university. *Journal of Higher Education Policy and Management*, 37, 159-171.
- Pinjani, P. and P. Palvia (2013). "Trust and knowledge sharing in diverse global virtual teams." *Information & Management* **50**(4): 144-153.
- Plowright, D. (2011). *Using mixed methods: Frameworks for an integrated methodology*, SAGE Publications.
- Powell, A., Piccoli, G. & Ives, B. (2004). Virtual teams: a review of current literature and directions for future research. *ACM Sigmis Database*, 35, 6-36.
- Prieto-Arranz, J. I., Juan-Garau, M. & Jacob, K. L. (2013). Re-imagining cultural identity: Transcultural and translingual communication in virtual third-space environments. *Language, Culture and Curriculum*, 26, 19-35.
- Ray, J. L., Baker, L. T. & Plowman, D. A. (2011). Organizational mindfulness in business schools. *Academy of Management Learning & Education*, 10, 188-203.
- Reason, P. (1988). *Human inquiry in action: Developments in new paradigm research*: Sage.
- Reason, P. & Bradbury, H. (2001). *Handbook of action research: Participative inquiry and practice*, Sage.
- Renaud, K., Ramsay, J. & Hair, M. (2006). " You've got e-mail!"... shall I deal with it now? Electronic mail from the recipient's perspective. *International Journal of Human-Computer Interaction*, 21, 313-332.
- Rice, R. E. & Bair, J. H. (1984). New organizational media and productivity. *The new media*, 185-216.
- Rodriguez, N. M. & Ryave, A. (2002). *Systematic self-observation: A method for researching the hidden and elusive features of everyday social life*, Sage.
- Saunders, M., Thornhill, A. & Lewis, P. 2012. *Research methods for business students*, Harlow, England.

- Schaubroeck, J. M. and A. Yu (2017). "When does virtuality help or hinder teams? Core team characteristics as contingency factors." Human Resource Management Review **27**(4): 635-647.
- Schroeder, R. (2012). The social life of avatars: Presence and interaction in shared virtual environments, Springer Science & Business Media.
- Shapiro, S. L., Oman, D., Thoresen, C. E., Plante, T. G. & Flinders, T. (2008). Cultivating mindfulness: effects on well-being. *Journal of clinical psychology*, 64, 840-862.
- Shaw, S.-L. and H. Yu (2009). "A GIS-based time-geographic approach of studying individual activities and interactions in a hybrid physical–virtual space." Journal of Transport Geography **17**(2): 141-149.
- Sice, P., Bentley, E. & Rauch, L. (2018)a. Ontology, epistemology and the complexity of human neurobiology. *Human Systems Management*, 37, 353-360.
- Sice, Petia, Koya, Kushwanth and Mansi, Safwat (2013) **Leadership capability: An autopoietic perspective.** *Human Systems Management*, 32 (2). pp. 95-103. ISSN 0167-2533
- Sice, P. V., Thirkle, S. A. & Ogwu, S. A. (2018)b. MIKE: Management, Information and Knowledge Ecology. *International Journal of Systems and Society (IJSS)*, 5, 13-27.
- Siegel, D. 2010a. *Mindsight: Transform your brain with the new science of kindness*, Oneworld Publications.
- Siegel, D. J. 2010b. *Mindsight: The new science of personal transformation*, Bantam.
- Siegel, D. J. (2009). "Mindful awareness, mindsight, and neural integration." The Humanistic Psychologist **37**(2): 137-158.
- Siegel, D. J. (1999). *The developing mind*, Guilford Press New York.
- Siegel, D. J. (2007). *The mindful brain: Reflection and attunement in the cultivation of well-being*: WW Norton & Company.
- Siegel, D. J. (2012). Pocket Guide to Interpersonal Neurobiology: An Integrative Handbook of the Mind (Norton Series on Interpersonal Neurobiology), WW Norton & Company.

- Siegel, D. J. (2015). The developing mind: How relationships and the brain interact to shape who we are, Guilford Publications.
- Siegel, D. J. (2016). Mind: A journey to the heart of being human, WW Norton & Company.
- Sköld, O. (2011). "The effects of virtual space on learning: A literature review." First Monday **17**(1).
- Soucek, R. and K. Moser (2010). "Coping with information overload in email communication: Evaluation of a training intervention." Computers in Human Behavior **26**(6): 1458-1466.
- Stich, J.-F., Tarafdar, M., Stacey, P. & Cooper, C. L. (2018). E-mail load, workload stress and desired e-mail load: a cybernetic approach. *Information Technology & People*.
- Suter, E., Arndt, J., Arthur, N., Parboosingh, J., Taylor, E. & Deutschlander, S. (2009). Role understanding and effective communication as core competencies for collaborative practice. *Journal of interprofessional care*, **23**, 41-51.
- Ting-Toomey, S. (1984). Qualitative research: an overview.
- Valorinta, M. (2009). "Information technology and mindfulness in organizations." Industrial and corporate change **18**(5): 963-998.
- Watson, R. (2012). Research is ceremony: Indigenous research methods by Shawn
- White, C., Vanc, A. & Stafford, G. (2010). Internal communication, information satisfaction, and sense of community: The effect of personal influence. *Journal of Public Relations Research*, **22**, 65-84.
- Whittaker, S. and C. Sidner (1996). Email overload: exploring personal information management of email. Proceedings of the SIGCHI conference on Human factors in computing systems, ACM.
- Wilson. *The Canadian Geographer/Le Géographe canadien*, **56**(2), 294-295.
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*, Sage.

Yu, H. and S. L. Shaw (2008). "Exploring potential human activities in physical and virtual spaces: a spatio-temporal GIS approach." International Journal of Geographical Information Science **22**(4): 409-430.

Appendices

Appendix A: Version one of MUVIC: Used for the pilot study

How to Do Email Observation Exercise

Box 1 summarizes the six steps in the exercises

Step 1: Perform the primary practice (do email)

The heart of the exercise is simple and straightforward: just do your email. For twenty minutes or half an hour, pay attention to your inbox (or to multiple inboxes, if you prefer). Scan your inbox. Open and read messages. Reply to some of them. Compose new messages. Do this “primary practice” once a day for several days, or preferably for an entire week.

As you perform these activities, I ask you just pay attention to your email. But I realize that not everyone normally works with their email as a solo activity. Some of us prefer to multitask when we use email, switching between email as a discrete activity (we do not do email in “sessions”). If these descriptions apply to you, you have two choices; for the period devoted to this exercise, you can limit yourself just to email, artificial though this may feel. Or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email.

Box 1: The Steps of the Email Observation Exercise

Step 1: Perform the primary practice (do email)

Conduct one or more email sessions, as you normally would do.

Step 2: Observe what you are doing and feeling

Pay attention both to the email activities you are performing (reading and writing email messages, scanning your mailbox etc.) and to what you are feeling (what is happening in or to your breathe and body, your thoughts and emotions, your attentional focus) as you perform these activities.

Step 3: log what you are observing

Keep a running record of what you observe in Step 2.

Step 4: consolidate (Summarize) your observations

Review your log, looking for larger patterns. How do you habitually react to certain emails events? How effective are these patterns?

Step 5: formulate personal guidelines

What do these patterns suggest about how to use email in healthier and more effective ways?

Step 6: Share and discuss

Step 2: observe what you are doing and feeling

While you are using email, you should also pay attention to what you are experiencing as you use it. The mindful check-in guides you to notice what is happening in your mind and body- the quality of your attention, your emotional state, the state of your breathe and body- while you are on email. Observing in this way will give you the chance to identify bottlenecks, points of constriction, in your email practice, as well as places where your efforts are easy and free flowing. Identifying such places allows you to ask, “What is going on here? What does this tell me about the way I currently use email?”

Step 3: log what you are observing

Begin by getting into a comfortable position, and we suggest you center yourself with a deep breath before moving on.

Now, turn your attention to to focus your awareness on what you’re seeing, hearing, smelling, tasting and touching. Spend a few moments getting aware of your immediate environment.

Next, focus your attention on the inner sensations of your own

body. Take a few moments to move your focus throughout your entire body, becoming aware of sensations you feel from inside your physical being, from the muscles and bones of your head, limbs, and torso, to feeling the sensations in the organs of your body.

Now it is time to focus on the activities of your mind itself. These include emotions, thoughts, beliefs, images, attitudes and intentions. This portion of the practice is separated into two parts. First, begin by just becoming aware of what enters your mind – invite any mental activity to come into awareness. Spend a few moments getting to know what arises in your mind.

Now it is time to try something a little different.

Direct your attention to focus on your awareness. With this part of the practice, you are working on “awareness of awareness” and feeling what that is like. This will take some practice, so try to be patient.

Next, Start with focusing your awareness on the people who you are communicating with (receiving or sending email). Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, feelings, thoughts, desires.

Step 4: Consolidate (summarize) your observations

Now read through your notes and reflect on them. You might think that this step is unnecessary, but it is actually quite important. The entries in your log are likely to be fairly raw and terse, and specific to the moment. Looking back over everything you’ve written will give you the chance to notice patterns that may not have been obvious in the moment, and to fill out your understanding by comparing and contrasting multiple observations. Are there times when you use email as a distraction from other more important activities? Why do you check email when you do, and how well does this work for you? Does it make a difference whether you are checking email on your computer or on your phone?

This is where paying attention to your immediate experience can really pay off. When your email practice is problematic (whatever that means for you), you may find that you have been holding your breath, or collapsing your chest, or feeling anxious or upset. And when your email practice is going well, you may find indications of that in your mind and body—a greater sense of relaxation, a lightness of mood.

I also suggest that you write about patterns that you are discovering. This can serve two useful purposes. First, it can help you clarify your thoughts, as writing and journaling often do. Second, it will give you valuable material to share with others in step 6 below. Box 2 provides some questions to help you organize your thinking and writing.

Step 5: Formulate personal guidelines

The summary remarks that you’ve just created will give you good sense of what’s currently working well and what isn’t. This understanding provides the basis for making useful changes, which you should now formulate as personal guidelines for future behavior. But let me stress that these guidelines are personal: they are particular to your observations and habits. They don’t need to work for anyone else. What’s more, they are provisional: subject to further change as you discover more about yourself, or as your circumstances change.

Broadly speaking, there are two kinds of changes you might consider making to your online practices (or what you do) and to yourself (to how you are). When you see changes you can make that will improve your effectiveness— for example, by reducing the amount of email you have to deal with or by limiting the number of times you check email during the day— then by

all means make them. In this instance, you might write a guideline that says, “empty my inbox at the end of each day” or “deal with email no more than three times a day”. (Some people find that techniques like inbox zero can help, as well as software that limits which apps they can access).

Box 2: Noticing Patterns in Your Email Behavior

1. *What did you do?*

How many sessions did you observe? For how long? During the sessions, did you work exclusively on email, or did you interleave other tasks at the same time? Was this your normal mode of behavior?

2. *In observing breathe, body/posture, emotions, and attention, which of these dimensions of your present experience were most salient?*

What did they reveal to you about how you currently use email (about what’s working well and what isn’t)? Did you notice any of these aspects of your body changing over the course of a session? In what ways and on what basis?

3. *Were you able to notice the impulse to check email?*

What was going on in your mind and body at the moment? What does this tell you about when and why you check email?

4. *Were you able to notice the state of your mind and body when you first laid eyes on your inbox?*

What does this tell you?

5. *While you were using email, did you notice the impulse to switch to some other task?*

Did you switch (sometimes, always, never)? What does this suggest about your current online behaviors/habits?

6. *Summarize what you learned from the exercise*

Talk with others about what you’ve been discovering.

But if you find that you can't change the external conditions-because, for example, your job requires you to be online and continuously handling a torrent of email messages-you still have the possibility of changing the way you deal with these circumstances *inside yourself*.

Thus noticing the resistance you feel to handling all this email and how it affects your body and your emotions, you might decide to reduce your stress by acknowledging what you're feeling and making a conscious effort to relax in the face of torrent.

And while you're carefully noticing constrictions and bottlenecks in your current practice, don't ignore those aspects that are currently working well. Those times when you are relaxed, attentive, and effective-when your actions are easy and free flowing can also be a source of useful information and guidance. A doctoral student named Jonathan was surprised to see how good email actually made him feel, and while many of his classmates were deciding to limit their use of it, he realized that he needed to maintain his current level of use, and possibly even increase it.

Step 6: Share and discuss

At this point, you will have three written sources of insight: a log of your observations, a consolidation of your log entries that summarizes your main discoveries, and a set of personal guidelines that express the changes you intend to make. In this final step, I strongly urge you to share with others what you've been learning, showing them your summary and guidelines and discussing the discoveries contained in them.

This kind of sharing is an essential element in my classes and workshops. And it is something the students greatly enjoy. It gives people the chance to compare their experiences with those of others, and to learn about patterns of behavior that they themselves may want to investigate. It also reveals the diversity in their online practices, and illustrates, in a visceral and concrete way, that no single set of rules will ever work for everyone. The back-and-forth discussion that is provoked by these conversations becomes an additional source of clarification and learning.

If you are reading this with others as part of a workplace study group or a community-reading group, I urge you to exchange your written remarks with one another and take the time to discuss them. And if you are doing the exercises alone, I still suggest you find a way to share your insights with others. (You might blog about them, for example) But if you are determined not to write up what you have been learning, consider having a conversation with a friend or a coworker, even if he or she hasn't done the exercise. Your discussion with an interested listener will further, your own thinking, and it may stimulate your dialogue partner to undertake the exercise for him- or herself.

Appendix B: Second Version of MUV C used for the first case study

How to Do Email Observation Exercise

Box 1 Summarizes the Six Steps in the Exercises

Step 1: Perform the Primary Practice (Do Email)

The following has been adapted from Levy, David (2016) *Mindfultech*, Yale University Press.

The heart of the exercise is simple and straightforward: just do your email. For twenty minutes or half an hour, pay attention to your inbox (or to multiple inboxes, if you prefer). The emails you should focus on should be the ones you received from people directly and not some generic emails from your organization or institution. Scan your inbox. Open and read messages. Reply to some of them. Compose new messages. Do this “primary practice” once a day for several days, or preferably for an entire week.

As you perform these activities, I ask you just pay attention to your email. But I realize that not everyone normally works with their email as a solo activity. Some of us prefer to multitask when we use email, switching between email as a discrete activity (we do not do email in “sessions”). If these descriptions apply to you, you have two choices; for the period devoted to this exercise, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email.

Step 2: Observe What you are Doing and Feeling

Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable, do not slouch) and I suggest you take a couple of deep breaths, exhaling slowly through your mouth.

Now, turn your attention to what you’re seeing, hearing, smelling, tasting and touching within your environment, keep your spine straight and shoulders relaxed. Spend a few moments getting aware of your immediate environment.

Next, focus your attention on the inner sensations of your body. Take a few moments to focus your attention on your entire body, becoming aware of the sensations you feel from inside your body, your face, head, chest, your tummy, limbs, etc. Keep your spine straight and shoulders relaxed.

Now it is time to focus on the activities of your mind itself. These may include emotions, thoughts, beliefs, images, attitudes and intentions. First, begin by just becoming aware of what enters your mind. Spend a few moments getting to know what arises in your mind: how do they enter your mind, how do they leave, etc. Keep your spine straight and shoulders relaxed. *Now it is time to try something a little different.*

Start by forgetting about junk emails but focus on emails that have been sent to you by individuals (individuals that are within or outside your organisation, who basically have a link to your organisation)

Now focus your awareness on the people who you are communicating with (receiving or sending email). Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Keep your spine straight and shoulders relaxed.

Step 3: Log What you are Observing

The next step consists of logging (taking note) what you have been observing, as preparation for step 4, where you will be consolidating and summarizing what you've observed. I suggest that you maintain a written log, either digitally or on paper, where you jot down observations as they arise- or shortly after the primary practice is over, if you prefer.

So what exactly should you record? I suggest that you note the date and time you began observing and the time you stopped. You might also note the current environment in which you're performing the exercise. (Are you at home, bus, sitting in a noisy coffee house?)

Then you will want to note specifically what was happening and how it made you feel. Are you suddenly aware that you've been holding your breath? What were you doing at the moment, and what does this tell you? Do you now notice whether you feel relaxed and content, or tense and anxious? Any sensations in your body? Any feelings, desires, attitudes, etc., that you have become aware of? Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Has the exercise helped you to understand yourself and others better?

These are all the instructions offered about logging in. In practice, you log whatever is most important to you.

Step 4: Consolidate (summarize) your Observations

Now read through your notes and reflect on them. You might think that this step is unnecessary, but it is actually quite important. Looking back over everything you've written will give you the chance to notice patterns that may not have been obvious in the moment, and to fill out your understanding by comparing and contrasting multiple observations.

Are there times when you use email as a distraction from other more important activities? Why do you check email when you do, and how well does this work for you? Does it make a difference whether you are checking email on your computer or on your phone?

This is where paying attention to your immediate experience can really pay off. When your email practice is problematic (whatever that means for you), you may find that you have been holding your breath, or collapsing your chest, or feeling anxious or upset. And when your email practice is going well, you may find indications of that in your mind and body-a greater sense of relaxation, a lightness of mood, easiness of communication, etc. Box 2 provides some questions to help you organize your thinking and writing.

Box 1: The Steps of the Email Observation Exercise

Step 1: Perform the Primary Practice (do email)

Conduct one or more email sessions, as you normally would do.

Step 2: Observe what you are Doing and Feeling

Pay attention both to the email activities you are performing (reading and writing email messages, scanning your mailbox etc.) and to what you are feeling (what is happening in or to your breath and body, your thoughts and emotions, your attentional focus, your sense of connecting with others) as you perform these activities.

Step 3: Log What you are Observing

Keep a running record of what you observe in Step 2.

Step 4: Consolidate (summarize) your Observations

Review your log, looking for larger patterns. How do you habitually react to certain emails events? How effective are these patterns?

Step 5: Formulate Personal Guidelines

What do these patterns suggest about how to use email in healthier and more effective ways?

Step 5: Formulate Personal Guidelines

The summary remarks that you've just created will give you good sense of what is currently working well and what isn't. This understanding provides the basis for making useful changes, which you should now formulate as personal guidelines for future behavior. But let me stress that these guidelines are personal: they are particular to your observations and habits. They don't need to work for anyone else. What's more, they are provisional: subject to further change as you discover more about yourself, or as your circumstances change.

Please also take note of the time and place where you are doing your email observation

Broadly speaking, there are two kinds of changes you might consider making to your online practices (or what you do) and to yourself (to how you are). When you see that there are changes that can be made, that will improve your effectiveness and connectedness with others- for example, by reflecting on your responses, emphasizing with others, or by limiting the number of times you check email during the day- then by all means make them. In this instance, you might write a guideline that says, "deal with email no more than three times a day", "pay attention to emotions and how this may affect communication.

But if you find that you can't change the external conditions, because, for example, your job requires you to be online and continuously handling a torrent of email messages-you still have the possibility of changing the way you deal with these circumstances *inside yourself*.

Thus noticing the resistance, you feel to handling all this email and how it affects your body and your emotions, you might decide to reduce your stress by acknowledging what you're feeling and making a conscious effort to relax in the face of torrent.

Box 2: Noticing patterns in your email behaviour

- *What did you do?*
 - How many sessions did you observe? For how long? During the sessions, did you work exclusively on email, or did you interleave other tasks at the same time? Was this your normal mode of behavior?
- *In observing breath, body/posture, emotions, and attention, which of these aspects of your present experience were most impressive?*
 - What did they reveal to you about how you currently use email (about what's working well and what isn't)? Did you notice any of these aspects of your body changing over the course of a session? In what ways and on what basis?
- *Were you able to notice the impulse to check email?*
 - What was going on in your mind and body at the moment? What does this tell you about when and why you check email?
- *Were you able to notice the state of your mind and body when you first laid eyes on your inbox?*
 - What does this tell you?
- *Were you able to have empathy with the person or persons you are communicating with.*
- *While you were using email, did you notice the impulse to switch to some other task?*
 - Did you switch (sometimes, always, never)? What does this suggest about your current online behaviors/habits?

Appendix C: Third and Final Version of Exercise used in the Research

How to Do Email Observation Exercise

Box 1 Summarizes the Six Steps in the Exercises

Step 1: Perform the Primary Practice (Do Email)

The following has been adapted from Levy, David (2016) *Mindfultech*, Yale University Press.

The heart of the exercise is simple and straightforward: just do your email. For twenty minutes or half an hour, pay attention to your inbox. The emails you should focus on should be the ones you received from people directly and not some generic emails from your organization or institution. Do your normal email activity and do this “primary practice” once a day for several days, or preferably for an entire week. For the period devoted to this exercise, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email.

Step 2: Observe What you are Doing and Feeling

Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable, do not slouch) and I suggest you take a couple of deep breaths, exhaling slowly through your mouth.

Now, turn your attention to Spend a few moments getting aware of your immediate environment. What you’re seeing, hearing, smelling, and touching within your environment.

Next, focus your attention on the inner sensations of your body. Take a few moments to focus your attention on your entire body, becoming aware of the sensations you feel from inside your body.

Now it is time to focus on the activities of your mind itself. These may include emotions, thoughts, beliefs, images, attitudes and intentions. First, begin by just becoming aware of what enters your mind Spend a few moments getting to know what arises in your mind: how do they enter your mind, how do they leave, etc. Keep your spine straight and shoulders relaxed.

Now it is time to try something a little different.

Now focus your awareness on the people who you are communicating with (receiving or sending email). Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Keep your spine straight and shoulders relaxed.

Step 3: Log What you are Observing

The next step consists of logging (taking note) what you have been observing, as preparation for step 4, where you will be consolidating and summarizing what you’ve observed. I suggest that you maintain a written log, either digitally or on paper, where you jot down observations as they arise- or shortly after the primary practice is over, if you prefer.

So what exactly should you record? I suggest that you note the date and time you began observing and the time you stopped. You might also note the current environment in which you’re performing the exercise. (Are you at home, bus, sitting in a noisy coffee house?)

Then you will want to note specifically what was happening and how it made you feel. Are you suddenly aware that you’ve been holding your breath? What were you doing at the moment, and what does this tell you? Do you now notice whether you feel relaxed and content, or tense and anxious? Any sensations in your body? Any feelings, desires, attitudes, etc., that you have become aware of? Any sense of connecting/disconnecting with others? How is this

related to what you've just been doing or thinking? Has the exercise helped you to understand yourself and others better?

These are all the instructions offered about logging in. In practice, you log whatever is most important to you.

Step 4: Consolidate (summarize) your Observations

Now read through your notes and reflect on them. You might think that this step is unnecessary, but it is actually quite important. Looking back over everything you've written will give you the chance to notice patterns that may not have been obvious in the moment, and to fill out your understanding by comparing and contrasting multiple observations. Are there times when you use email as a distraction from other more important activities? Why do you check email when you do, and how well does this work for you? Does it make a difference whether you are checking email on your computer or on your phone?

This is where paying attention to your immediate experience can really pay off. When your email practice is problematic (whatever that means for you), you may find that you have been holding your breath, or collapsing your chest, or feeling anxious or upset. And when your email practice is going well, you may find indications of that in your mind and body—a greater sense of relaxation, a lightness of mood, easiness of communication, etc. Box 2 provides some questions to help you organize your thinking and writing.

Step 5: Formulate Personal Guidelines

The summary remarks that you've just created will give you good sense of what is currently working well and what isn't. This understanding provides the basis for making useful changes, which you should now formulate as personal guidelines for future behavior. But let me stress that these guidelines are personal: they are particular to your observations and habits. They don't need to work for anyone else. What's more, they are provisional: subject to further change as you discover more about yourself, or as your circumstances change.

Please also take note of the time and place where you are doing your email observation

Broadly speaking, there are two kinds of changes you might consider making to your online practices (or what you do) and to yourself (to how you are). When you see that there are changes that can be made, that will improve your effectiveness and connectedness with others- for example, by reflecting on your responses, emphasizing with others, or by limiting the number of times you check email during the day- then by all means make them. In this instance, you might write a guideline that says, "deal with email no more than three times a day", "pay attention to emotions and how this may affect communication.

But if you find that you can't change the external conditions, because, for example, your job requires you to be online and continuously handling a torrent of email messages- you still have the possibility of changing the way you deal with these circumstances *inside yourself*.

Thus noticing the resistance, you feel to handling all this email and how it affects your body and your emotions, you might decide to reduce your stress by acknowledging what you're feeling and making a conscious effort to relax in the face of torrent.

Suggestions on what to Jot about your observation.

- *What did you do?*
- *In observing breath, body/posture, emotions, and attention, which of these aspects of your present experience were most impressive?*
- *Were you able to notice the impulse to check email?*
- *Were you able to notice the state of your mind and body when you first laid eyes on your inbox?*
- *Were you able to have empathy with the person or persons you are communicating with.*
- *While you were using email, did you notice the impulse to switch to some other task?*

Appendix D: Mindsight Process Refined at the End of PhD Research

How to Do Email Observation Exercise

Box 1 Summarizes the Six Steps in the Exercises

Step 1: Perform the Primary Practice (Do Email)

The following has been adapted from Levy, David (2016) *Mindfultech*, Yale University Press.

The heart of the exercise is simple and straightforward: just do your email. For twenty minutes or half an hour, pay attention to your inbox. The emails you should focus on should be the ones you received from people directly and not some generic emails from your organization or institution. Do your normal email activity and do this “primary practice” once a day for several days, or preferably for an entire week. For the period devoted to this exercise, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email.

Step 2: Observe What you are Doing and Feeling

Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable, do not slouch) and I suggest you take a couple of deep breaths, exhaling slowly through your mouth.

Now, turn your attention to Spend a few moments getting aware of your immediate environment. What you’re seeing, hearing, smelling, and touching within your environment.

Next, focus your attention on the inner sensations of your body. Take a few moments to focus your attention on your entire body, becoming aware of the sensations you feel from inside your body.

Now it is time to focus on the activities of your mind itself. These may include emotions, thoughts, beliefs, images, attitudes and intentions. First, begin by just becoming aware of what enters your mind Spend a few moments getting to know what arises in your mind: how do they enter your mind, how do they leave, etc. Keep your spine straight and shoulders relaxed.

- Do you feel angry, frustrated or irritated? Then take a break, leave and do something else before you come back to communicate again.
- Do you find that you are distracted or are having distractive thoughts? Then focus your attention to the communication.

Now it is time to try something a little different.

Now focus your awareness on the people who you are communicating with (receiving or sending email). Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Keep your spine straight and shoulders relaxed.

- Sometimes you will find that you are disconnected from those you are communicating with. Then commit to empathize with them.

Step 3: Log What you are Observing

The next step consists of logging (taking note) what you have been observing, as preparation for step 4, where you will be consolidating and summarizing what you’ve observed. I suggest that you maintain a written log, either digitally or on paper, where you jot down observations as they arise- or shortly after the primary practice is over, if you prefer.

So what exactly should you record? I suggest that you note the date and time you began observing and the time you stopped. You might also note the current environment in which you're performing the exercise. (Are you at home, bus, sitting in a noisy coffee house?)

Then you will want to note specifically what was happening and how it made you feel. Are you suddenly aware that you've been holding your breath? What were you doing at the moment, and what does this tell you? Do you now notice whether you feel relaxed and content, or tense and anxious? Any sensations in your body? Any feelings, desires, attitudes, etc., that you have become aware of? Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Has the exercise helped you to understand yourself and others better?

These are all the instructions offered about logging in. In practice, you log whatever is most important to you.

Step 4: Consolidate (summarize) your Observations

Now read through your notes and reflect on them. You might think that this step is unnecessary, but it is actually quite important. Looking back over everything you've written will give you the chance to notice patterns that may not have been obvious in the moment, and to fill out your understanding by comparing and contrasting multiple observations. Are there times when you use email as a distraction from other more important activities? Why do you check email when you do, and how well does this work for you? Does it make a difference whether you are checking email on your computer or on your phone?

This is where paying attention to your immediate experience can really pay off. When your email practice is problematic (whatever that means for you), you may find that you have been holding your breath, or collapsing your chest, or feeling anxious or upset. And when your email practice is going well, you may find indications of that in your mind and body—a greater sense of relaxation, a lightness of mood, easiness of communication, etc. Box 2 provides some questions to help you organize your thinking and writing.

Step 5: Formulate Personal Guidelines

The summary remarks that you've just created will give you good sense of what is currently working well and what isn't. This understanding provides the basis for making useful changes, which you should now formulate as personal guidelines for future behavior. But let me stress that these guidelines are personal: they are particular to your observations and habits. They don't need to work for anyone else. What's more, they are provisional: subject to further change as you discover more about yourself, or as your circumstances change.

Please also take note of the time and place where you are doing your email observation

Broadly speaking, there are two kinds of changes you might consider making to your online practices (or what you do) and to yourself (to how you are). When you see that there are changes that can be made, that will improve your effectiveness and connectedness with others—for example, by reflecting on your responses, emphasizing with others, or by limiting the number of times you check email during the day—then by all means make them. In this instance, you might write a guideline that says, “deal with email no more than three times a day”, “pay attention to emotions and how this may affect communication.

But if you find that you can't change the external conditions, because, for example, your job requires you to be online and continuously handling a torrent of email messages—you still have the possibility of changing the way you deal with these circumstances *inside yourself*.

Thus noticing the resistance, you feel to handling all this email and how it affects your body and your emotions, you might decide to reduce your stress by acknowledging what you're feeling and making a conscious effort to relax in the face of torrent.

Suggestions on what to Jot about your observation.

- *What did you do?*
- *In observing breath, body/posture, emotions, and attention, which of these aspects of your present experience were most impressive?*
- *Were you able to notice the impulse to check email?*
- *Were you able to notice the state of your mind and body when you first laid eyes on your inbox?*
- *Were you able to have empathy with the person or persons you are communicating with.*
- *While you were using email, did you notice the impulse to switch to some other task?*

Appendix E: Example of a Participant's Diary

IS0627. Task: Email Observation Primary PRACTICE

Do your normal email activity and do this “primary practice” once a day for twenty minutes for 6 days. For the period devoted to this practice, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email. The emails you should focus on, need to be the ones, you received from people directly, not generic emails from your organization or institution.

The Intention is to Observe what you are Doing and Feeling.

Day 1.

Monday – 22nd January 2018 @ 17.37pm Northumbria University City Campus Library floor 3.

Follow the steps 1-5 and record your observations during this practice.

Step 1. Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable. Do not slouch. Take three deep rhythmic breaths, inhaling through your nose and exhaling slowly through your mouth.

Breathing smoothly and feeling relaxed.

Step 2. Now, turn your attention to your immediate environment. What are you seeing, hearing, smelling, touching? Any taste in your mouth? *Log what you are observing in the space below:*

Seeing many students working with their headphones in, speaking to colleagues or friends, shelves with many academic books and hearing the sounds of keyboards typing.

Step 3. Next, focus your attention on the inner sensations of your body Do you notice whether you feel relaxed and content, or tense and anxious? Are you suddenly aware that you've been holding your breath? Any sensations in your body? *Log what you are observing in the space below:*

Currently feeling very relaxed and content. Yes because of my straight posture and shoulders feeling relaxed I recognized once I had finished observing my surroundings I released my breathing.

Step 4. Now, turn your attention to any mental activity: intentions, images, attitudes, thoughts, and feelings. First, begin by just becoming aware of what enters your mind. Spend a few moments getting to know what arises in your mind. Notice, how it comes about, and when it subsides. Are you aware of your state of observing what arises? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

It is a Monday I like to start the week of in a productive manner by continuing to work to meet my daily goals and objectives I have set for today. Each day I like to set myself daily targets to meet, this makes me feel productive and that I have accomplished something.

Step 5. Now focus your awareness on the people who you are communicating with (receiving or sending email).

Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

I received an e-mail from Stephanie Graham Placement co-ordinator for my module Student Tutoring. Each week Stephanie sends an agenda on the work and classes I will assisting. This makes me feel at ease as I like to know where I am being scheduled and what duties I need to carry out.

Email Observation Primary PRACTICE

Do your normal email activity and do this “primary practice” once a day for twenty minutes for 6 days. For the period devoted to this practice, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email. The emails you should focus on, need to be the ones, you received from people directly, not generic emails from your organization or institution.

The Intention is to Observe What you are Doing and Feeling.

Day 2.

Tuesday 23rd January @ 18.35pm at my house.

Step 1. Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable. Do not slouch. Take three deep rhythmic breaths, inhaling through your nose and exhaling slowly through your mouth.

Feeling comfortable and relaxed.

Step 2. Now, turn your attention to your immediate environment. What are you seeing, hearing, smelling, touching? Any taste in your mouth? *Log what you are observing in the space below:*

It is currently evening time I am relaxing and Watching my housemate prepare and cook food, smelling fresh food (i.e. steak and vegetables) with sound of a hot pan.

Step 3. Next, focus your attention on the inner sensations of your body Do you notice whether you feel relaxed and content, or tense and anxious? Are you suddenly aware that you've been holding your breath? Any sensations in your body? *Log what you are observing in the space below:*

I am feeling rather tired this afternoon after a long day at University and going to the gym, however I am feeling at ease and happy with my productive day.

Step 4. Now, turn your attention to any mental activity: intentions, images, attitudes, thoughts, feelings. First, begin by just becoming aware of what enters your mind Spend a few moments getting to know what arises in your mind. Notice, how it comes about, and when it subsides. Are you aware of your state of observing what arises? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

It's a Tuesday afternoon I have intentions and thoughts to complete some additional reading for my dissertation work, this provides me with positive mental attitude to achieve my goals and targets.

Step 5. Now focus your awareness on the people who you are communicating with (receiving or sending email).

Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

I received an e-mail from clothing retail outlet ASOS who sent notified me that I received a £10 gift voucher. This made feel very happy as it was somewhat unexpected, when I purchase my next item of clothing £10 will automatically be deducted.

Email Observation Primary PRACTICE

Do your normal email activity and do this "primary practice" once a day for twenty minutes for 6 days. For the period devoted to this practice, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email. The emails you should focus on, need to be the ones, you received from people directly, not generic emails from your organization or institution.

The Intention is to Observe What you are Doing and Feeling.

Day 3.

Wednesday 24th January @ 9.34am at my house.

Follow the steps 1-5 and record your observations during this practice.

Step 1. Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable. Do not slouch. Take three deep rhythmic breaths, inhaling through your nose and exhaling slowly through your mouth.

Feeling tired and but relaxed.

Step 2. Now, turn your attention to your immediate environment. What are you seeing, hearing, smelling, touching? Any taste in your mouth? *Log what you are observing in the space below:*

Watching the morning news (Good morning Britain) hearing the weather forecast for the upcoming day, with a taste of coffee in my mouth.

Step 3. Next, focus your attention on the inner sensations of your body Do you notice whether you feel relaxed and content, or tense and anxious? Are you suddenly aware that you've been holding your breath? Any sensations in your body? *Log what you are observing in the space below:*

Feeling very tired this morning due to the lack of sleep with continuous yawning. My eyes are also watering and I am continually rubbing them again as a result of a lack of sleep.

Step 4. Now, turn your attention to any mental activity: intentions, images, attitudes, thoughts, feelings. First, begin by just becoming aware of what enters your

mind Spend a few moments getting to know what arises in your mind. Notice, how it comes about, and when it subsides. Are you aware of your state of observing what arises? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

On a Wednesday I have no lectures or seminars therefore I tend to follow up on what I have learned on Monday and Tuesday reading over lecture material and seminar tasks to gain more of an understanding. This feels rewarding as I feel I am gaining more knowledge with my modules.

Step 5. Now focus your awareness on the people who you are communicating with (receiving or sending email).

Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

I received an e-mail from Northumbria University library I opened this e-mail through my smartphone. The e-mail was about unreturned library books and that I must return them immediately, if I do not return the library books a financial penalty will be issued. This made feel worried and anxious my breathing and heartrate also increased.

Email Observation Primary PRACTICE

Do your normal email activity and do this “primary practice” once a day for twenty minutes for 6 days. For the period devoted to this practice, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email. The emails you should focus on, need to be the ones, you received from people directly, not generic emails from your organization or institution.

The Intention is to Observe What you are Doing and Feeling.

Day 4.

Thursday 25th January @ 13.15pm at Northumbria Library

Follow the steps 1-5 and record your observations during this practice.

Step 1. Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable. Do not slouch. Take three deep rhythmic breaths, inhaling through your nose and exhaling slowly through your mouth.

Feeling Comfortable and relaxed.

Step 2. Now, turn your attention to your immediate environment. What are you seeing, hearing, smelling, touching? Any taste in your mouth? *Log what you are observing in the space below:*

Seeing other students working on assignments and studies, taste of food in my mouth just after lunch.

Step 3. Next, focus your attention on the inner sensations of your body Do you notice whether you feel relaxed and content, or tense and anxious? Are you suddenly aware that you've been holding your breath? Any sensations in your body? *Log what you are observing in the space below:*

Feeling relaxed and confident as I have met my daily targets and goals, I plan to go home early and have some downtime with my housemates.

Step 4. Now, turn your attention to any mental activity: intentions, images, attitudes, thoughts, feelings. First, begin by just becoming aware of what enters your mind Spend a few moments getting to know what arises in your mind. Notice, how it comes about, and when it subsides. Are you aware of your state of observing what arises? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

As previously mentioned my thoughts and feeling is relaxed again this due to me meeting my daily goals.

Step 5. Now focus your awareness on the people who you are communicating with (receiving or sending email). Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

I received an e-mail from Andrew Turnbull updating me on the progress of the new CIS building, he updated me on the opening and that it is partially open on some areas. All CIS students get three free hot drinks which made me feel very happy and proud to be part of the faculty.

Email Observation Primary PRACTICE

Do your normal email activity and do this “primary practice” once a day for twenty minutes for 6 days. For the period devoted to this practice, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email. The emails you should focus on, need to be the ones, you received from people directly, not generic emails from your organization or institution.

The Intention is to Observe What you are Doing and Feeling.

Day 5.

Follow the steps 1-5 and record your observations during this practice.

Friday 26th January 8.30am at Northumbria Sport Central

Step 1. Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable. Do not slouch. Take three deep rhythmic breaths, inhaling through your nose and exhaling slowly through your mouth.

Feeling positive and healthy.

Step 2. Now, turn your attention to your immediate environment. What are you seeing, hearing, smelling, touching? Any taste in your mouth? *Log what you are observing in the space below:*

Seeing other people working out in the gym, touching and feeling dumbbell weights with the taste of flavored protein water in my mouth.

Step 3. Next, focus your attention on the inner sensations of your body Do you notice whether you feel relaxed and content, or tense and anxious? Are you suddenly aware that you've been holding your breath? Any sensations in your body? *Log what you are observing in the space below:*

Positive mental attitude with the aim to complete my gym workout and university tasks. Feeling a sense of happiness in my body with an increased heart rate due to my high intensity workout.

Step 4. Now, turn your attention to any mental activity: intentions, images, attitudes, thoughts, feelings. First, begin by just becoming aware of what enters your mind Spend a few moments getting to know what arises in your mind. Notice, how it comes about, and when it subsides. Are you aware of your state of observing what arises? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

Observing the physical state of my body feeling tired however with the positive attitude to complete my tasks. I have two classes in the afternoon therefore my thinking was I need to do some back round reading prior the classes.

Step 5. Now focus your awareness on the people who you are communicating with (receiving or sending email).

Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

I received an e-mail from Morgan Harvey who issued my results for my first assignment. I was really happy and proud of my result as I achieved 70%. My first thoughts was to contact my parents to inform them of my progress and positive result.

Email Observation Primary PRACTICE

Do your normal email activity and do this "primary practice" once a day for twenty minutes for 6 days. For the period devoted to this practice, you can limit yourself just to email, artificial though this may feel; or, you can maintain your normal multitasking behavior, but focus your attention primarily on your email. The emails you should focus on, need to be the ones, you received from people directly, not generic emails from your organization or institution.

Day 6

Follow the steps 1-7 and record your observations during this practice.

Saturday 27th January at my house.

Step 1. Begin by getting into a comfortable position with your feet firmly on the floor, your spine straight with shoulders relaxed, you may choose to move and adjust posture until you feel comfortable. Do not slouch. Take three deep rhythmic breaths, inhaling through your nose and exhaling slowly through your mouth.

Feeling tired but relaxed at the same time.

Step 2. Now, turn your attention to your immediate environment. What are you seeing, hearing, smelling, touching? Any taste in your mouth? *Log what you are observing in the space below:*

Smelling food as I have just cooked breakfast with the taste of porridge in my mouth.

Step 3. Next, focus your attention on the inner sensations of your body Do you notice whether you feel relaxed and content, or tense and anxious? Are you suddenly aware that you've been holding your breath? Any sensations in your body? *Log what you are observing in the space below:*

Feeling very good as I feel I have completed a good week completing all my daily targets.

Step 4. Now, turn your attention to any mental activity: intentions, images, attitudes, thoughts, feelings. First, begin by just becoming aware of what enters your mind Spend a few moments getting to know what arises in your mind. Notice, how it comes about, and when it subsides. Are you aware of your state of observing what arises? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

My intentions is to meet and socialise with my friends with image of going out for food. Feeling happy that it is the weekend.

Step 5. Now focus your awareness on the people who you are communicating with (receiving or sending email).

Spend a few moments to sense their intention, mood, expectations, desires, etc. Be patient with yourself, focus on developing an intent to connect with others. Observe your own reactions, sensations, feelings, thoughts, desires. Any sense of connecting/disconnecting with others? How is this related to what you've just been doing or thinking? Keep your spine straight and shoulders relaxed. *Log what you are observing in the space below:*

Received an e-mail from my final year supervisor Jackie Adamson who provided me positive feedback on me final year project with the thoughts and desires to complete more work.

Step 6: Consolidate (summarize) your Observations

Now read through your notes and reflect on them. You might think that this step is unnecessary, but it is actually quite important. Looking back over everything you've written will give you the chance to notice patterns that may not have been obvious in the moment, and to fill out your understanding by comparing and contrasting multiple observations. Are there times when you use email as a distraction from other more important activities? Why do you check email when you do, and how well does this work for you? Does it make a difference whether you are checking email on your computer or on your phone?

This is where paying attention to your immediate experience can really pay off. When your email practice is problematic (whatever that means for you), you may find that you have been holding your breath, or collapsing your chest, or feeling anxious or upset. And when your email practice is going well, you may find indications of that in your mind and body—a greater sense of relaxation, a lightness of mood, easiness of communication, etc.

Step 7: Formulate Personal Guidelines

The summary remarks that you've just created will give you good sense of what is currently working well and what isn't. This understanding provides the basis for making useful changes, which you should now formulate as personal guidelines for future behaviour. These guidelines are personal: they are particular to your observations and habits. They don't need to work for anyone else. What's more, they are provisional: subject to further change as you discover more about yourself, or as your circumstances change.

Broadly speaking, there are two kinds of changes you might consider making to your online practices (or what you do) and to yourself (to how you are). When you see that there are changes that can be made, that will improve your effectiveness and connectedness with others—for example, by reflecting on your responses, emphasizing with others, or by limiting the number of times you check email during the day—then by all means make them. In this instance, you might write a guideline that says, “deal with email no more than three times a day”, “pay attention to emotions and how this may affect communication.

But if you find that you can't change the external conditions, because, for example, your job requires you to be online and continuously handling a torrent of email messages—you still have the possibility of changing the way you deal with these circumstances *inside yourself*.

Thus noticing the resistance, you feel to handling all this email and how it affects your body and your emotions, you might decide to reduce your stress by acknowledging what you're feeling and making a conscious effort to relax in the face of torrent.

Appendix F: The Domains of Integration

There are nine domains of integration according to mindsight theory. There is what is known as the integration of consciousness which means someone is awakened and not lost in thought (Making mental activities into part of their living) or not even aware of thought as a process. Integrated consciousness overlaps with the concept of mindfulness. People can regulate their mind with more unified consciousness, which keeps it from energy and information chaos and rigidity. An integrated mind is also referred to as an as a stabilized mind (Siegel 2012).

The next is the horizontal or bilateral integration which entails the integration in the nervous system, which leads to the understanding of the lack of understanding between the right and left side of the brain; because Integration helps to link these two sides. Moreover, vertical integration is one's ability to be able to be aware of what is below and above the cortex. While memory integration enhances synaptic connections which enable memories of behavior, memory retrieval and memory modification lead to integration (Siegel 2012).

Narrative integration takes all the elements of both intrinsic and explicit memory, everything we experience from awareness, the sensations we have from within our bodies and bring everything together through an intricate process that allows us to make sense of our lives. This presents a linear sequence of autobiographical narrative. This makes people be historians; an integrated narrative is the responsibility of the person (part of ourselves that is an autobiographer) to be an active narrator of their experiences. Autobiographical reflective, actives sense of ourselves (Siegel 2012). The future is actively thought and planned and not passively experience. The present becomes a creative construction of an active author's life, which produces a rich perspective of self. Cultures are shaped by the stories we tell. It is a historical understanding of reality. Our narrative must embed the triangle of wellbeing within our narrative. We should be able to channel energy and information to sense it with more clarity and move it towards integration. There is a direct relationship between what people experience in life and their narrative. Their early childhood experience profoundly influences people sense of self. Which reveals that dissociation is precise because of disorganized attachment patterns. (Siegel 2012).

State integration enables people to be aware that they are made up of many selves making a functional whole. While interpersonal integration is an integrative

communication, realizing that another person is different from another person promotes differences and highlights compassionate communication with the person. Temporal integration is the ability to learn and reflect on the past, and understanding the finality of our mortality. Moreover, transpiration integration has it that if we are aware of so many things at the same time, we become mad, we need to have a regulatory scale (Siegel 2012). State integration has three components there are different states we need to be in, sometimes we need to be social, and sometimes we need to be alone. There is an exciting state: where we need to be able to sustain our interest and attention to be able to perform a specific duty. We should be able to come to the right state of mind for any given activity or circumstance. Do we let ourselves free when we are supposed to be playful and not having a project based kind of mindset? Intrastate integration is when we allow the different states (social, solitary, project-based, work base) of our minds to coexist and collaborate without getting angry that a particular state of mind is present at the time (Siegel 2012).

Interpersonal integration is how do we achieve a 'we' state, a 'we' state is a part of health because we are social human beings that are why in the depression people feel isolated. There are different types of 'weness' and our ability to be able to select or let ourselves into being we by our temperament is very important. Honoring each other's differences and promoting linkages is a healthy interpersonal integration. Temporal integration knows that nothing is permanent and still longing for permanence, uncertainty, and longing for certainty. The fact that we are going to die is a critical issue and coming to peace with these issues is temporal integration (Siegel 2012).

Appendix G: E-learning Conference 2016

Virtual Collaborative Research Communication the Impact of Mindsight.

Suzannah Ogwu, Shelagh Keogh, Petia Sice

Northumbria University, Newcastle Upon Tyne, United Kingdom

suzannah.a.ogwu@northumbria.ac.uk

shelagh.keogh@northumbria.ac.uk

petia.sice@northumbria.ac.uk

Abstract: This research investigates the impact of mindsight on communication in virtual spaces. Businesses and organisations utilize virtual teams and virtual enterprises; therefore the ability of people to communicate effectively in virtual spaces is important. Some problems of communication in virtual spaces have been identified as lack of mutual trust and extensive communication among individuals (De Paoli, 2015; Januska, 2011). This aspect of interaction is because communication in virtual spaces involves people from different backgrounds and there are different expectations. A mental health theory called mindsight has been used extensively in relationships; the theory specifies that, people must understand themselves first, before being able to understand others. Mindsight facilitates connection with self and others through a combination of insight and empathy; this enables individuals to resonate with their experiences. The theory has not been applied to communication in virtual spaces and it is has been interesting investigating its impact on communication in virtual spaces. A qualitative pilot action research was conducted within a virtual group of university students using two blogs. The students were divided into two groups between the blogs. And all the students had little or no knowledge about mindsight. The first group of students were given some mindsight instructions to follow while engaging with the blog and the second group engaged without instructions. At the end of the interactions, questionnaires were handed to them to evaluate the levels of their communication. From the preliminary evaluation of the students' feedback from the session and the communication pattern on the blog; It was observed that the students that had mindsight instructions communicated more calmly and they were able to accommodate different opinions with a sense of acceptance and focus. The findings suggest that mindsight has the potential of improving an individual's communication levels to be more open to others as a result of self-awareness and integration. This a pilot study and more development of a mindsight virtual communication model will be used for the Researcher's main data collection.

Keywords: Virtual collaborative research, virtual spaces, mindsight, communication, virtual communication.

Introduction

Until recent times, a lot of people were not interested in communication that was internet enabled because, first, it was too expensive and distant from the reach of most people; and so, it was not easy then to reach people. Modernised communication has altered this phenomenon and has changed people's interest (Ale Ebrahim, Ahmed and Tara, 2009). The

past two decades have witnessed the maturing of the internet and now, activities that were only possible in physical spaces are now obtainable in virtual spaces, (Ale Ebrahim et al, 2009; Kellerman, 2014; Skold, 2011; Yu and Shaw, 2008) . Also, diverse activities that were unattainable in physical spaces are now feasible in virtual spaces (Kellerman, 2014). For instance, the sophistication of the virtual space has permitted the synchronic presence of people in both physical and virtual spaces (De Paoli, 2015; Shaw, 2008). This process has made life flexible, people are no longer constrained by time and place to perform certain activities; they can function virtually in virtual spaces (Shaw and Yu, 2009). This has paved the way for individuals who live in distant places to be cognitively close to one another (Rodriguez, Bertone and Garcia-Martinez, 2010a) and has positively altered the way people interact (Yu and Shaw, 2008) .

Going beyond individual realms, enterprises now have the ability to partner further with other organisations beyond their geographic and organisational horizon (Godwin and Rennecker, 2000). Job activities have been made different by a way of virtual distribution (Ale Ebrahim, Ahmed, and Tara, 2009). This collaboration is made possible via virtual spaces such as, emails, websites and video conferencing facilities (Bosch-Sijtsema and Sivunen, 2013; De Paoli, Ropo and Sauer, 2014). Communication in virtual spaces triggers some sensations more than others. People who do not know one another have to communicate sensitive issues (De Paoli, 2015), and communication done over the internet is usually different from face-to-face communication (Prieto-Arranz, Juan-Garau and Jacob, 2013). Consequently, there have been complaints about difficulties that are encountered when communicating and connecting with people from different countries, religions and identities. Most times people have never known one another, or physically met before (De Paoli, 2015; Januska, 2011). Other problems that are outside the scope of this research include online trolling, where some individuals behave in a disruptive and deceptive way, on social media for no reason which causes unnecessary chaos. This can make their victims to appear or seem to be too nervous and irrational when approaching virtual communication (Buckels, Trapnell and Paulhus, 2014). This paper will address these problems by investigating the impact mindsight has on communication in virtual collaborative research being a type of a virtual space.

Related Literature

2.1 Virtual Spaces

A virtual space is defined through each word that is contained in the term, where 'virtual' means a functionality that is aided by computer networks; 'space' is an interactive setting (Sköld, 2011). To sum it; A virtual space is the conceptualization of the interactions that happen over a *computer network* (Chandler and Munday, 2011; Welinder et al, 2014) these interactions are said to be enhanced by a means of *electronic connections* for the purpose of information exchange among people while they are located in different locations (Yu and Shaw, 2008). This is likened to a room that is created by a means of a *computer application* installed solely for the purpose of content sharing among people that also provide forum for communication and interaction (Welinder et al, 2014).

Virtual space is a universal term in literature that connotes virtual environment, virtual world, and collaborative virtual environment (Sköld, 2011) and it is used in diverse ways (Schroeder, 2012). It is also an umbrella term that represents others such as: virtual world (VW), virtual learning environment (VLE), collaborative virtual environment (CVE) and multi-user virtual environment (MUVE) (Sköld, 2011). Other scholars like Galambos, Weidig et al (2012) use virtual space interchangeably with virtual reality and virtual environment. While Yu and Shaw (2008) said virtual space is also called cyber space. Drawing a stance, virtual space is an umbrella term that represents all the terms mentioned above with the exclusion of virtual world and virtual environment due to the inherent difference in the experience of the users of these two environments. This is because, virtual world and virtual environment are displays that are generated by computer which enable users to feel that they are present in an environment which is not real and are able to interact with it (Schroeder, 2012) the focus of this research is on the virtual spaces people use for the purpose of communication which does not entail any form of artificial environment or experience. This means network connections that are established for the sole purpose of communication. To this end there are some network communication connections that are developed for research purposes called virtual collaborative research.

2.2 Virtual Collaborative Research

A research team can consist of people that are not necessarily from the same institution or nation but the only prerequisite they need is to have a common research group. This is because virtual communities are formed by people who may be geographically dispersed but close cognitively. The concept of virtualization has encouraged the impression that groups are not a summation of people but an outcome of a network of the representative of systems, reflections and practices. In this network that is about the sharing of meanings between researchers about the item and project of research, a type of institution is

developed where status is gained and the outcome of the research is appreciated.

(Rodríguez, Bertone and García-Martínez, 2010b)

Hall Jones et al (2015) in their research about collaborative argumentation construction for participants that collaborate synchronously cited that human conducts that promote collaboration are coordination, communication, and sharing of information. Table 1 displays the conceptualization of the collaborative technologies that are used for the purpose of virtual collaboration.

	Same Time Communication	Different Time Communication
Coordination	Location Tracking. Session management. Floor control systems.	Calendar Scheduling Workflow management
Sharing of information	Meeting facilitation systems. Whiteboards Application sharing systems	Team workspace. Websites. Wikis.
Communication	Instant messages. Text messages. Telephone calls. Video conferencing.	Social media sites. Blogs Emails Voice mails.

Table 1: Conceptualise collaboration technologies, Adopted from Hall, Jones et al (2015)

2.3 Mindsight Theory

Mindsight is a theory developed by Dr Daniel Siegel; he discovered that when he communicated with his patients, “they said they felt, felt by him”. They had a sense that he understood what they meant and felt. Therefore he termed the process of feeling felt *mindsight* (Siegel, 2010). He stated that, mindsight is the ability to discern thoughts and identifying them as activities of the mind and it is being able to appreciate or notice the thoughts of others so to really understand their point of view, which enables responses to be compassionate and effective. This enable people to direct their feelings and thoughts and not to be driven by them, and are then able to balance their emotions, to achieve a state of equilibrium (Siegel, 2010).

Having claimed that, the mind is a process that coordinates the flow of energy and information, while relationships show how energy and information are managed and shared among persons through the technique of engagement, connection and random communication (Siegel, 2010), these relationships do not only apply to personal levels but can be applied on larger entities like communities (Clinton and Sibcy, 2012). Therefore, it was concluded that mindsight forms the base for social and emotional intelligence (Hernez-Broome, 2011). For instance, Heydenfeldt (2010) agreed that, companies that nurture socially intelligent behaviour (awareness, empathy, flexibility and resilience) have a better chance of surviving crisis and are able to prosper in the midst of it.

2.4 The Impact of Mindsight on Communication in Virtual Collaborative Research

It can be asserted that virtual collaborative research is important to researchers; hence the utilization of the setup could be directionally proportionate to individual user’s ability to communicate effectively. This claim is indirectly supported by Malmelin (2007)’s argument about communication that the success of businesses depend on effective communication. This argument is paramount in the sense that communication is important to any business set up, and this communication could include communication in virtual spaces.

Hence, communication is a process where one mind affects another and also a mechanism that affects another mechanism. This could be in the form of oral and written communication. It can also take the form of images and sounds (Shannon and Weaver, 2015). Looking deeply into the collaborative process of communication; Hedman and Valo (2015) stated that, it is an ongoing process through which individuals produce their perceptions and actions in a collaborative manner with others. This technique creates social worlds instead of just disseminating information between people. The fact that

communication is not just a mere means of disseminating information only but also a means of developing social entities for co-creation of our understanding should lead to the decision to approach it with a sense of awareness of ourselves and others. Consequently, individuals that are utilizing virtual spaces meant for research should be more akin to this fact as they try to birth knowledge together. Regrettably, this is an experience that eludes many as they struggle to communicate via this connection. Just as De Paoli, Ropo and Sauer (2014), reports that, people find it difficult to communicate effectively with others in virtual spaces the reasons being that people come from different backgrounds and they have not known one another before. If communication must not just be a mere exchange of information, then how can effective communication are achieved, most especially in a virtual collaborative research.

This leads to the inclusion of the bridge of mindsight formed on the bases that it enables individuals to envision what is going on within them and to understand their minds and to resonate with their experiences. It helps them to be mindful of their mental operations and stop them from being carried away by them. This ability to comprehend the workings of the mind within a group also helps leaders in organisations (Siegel, 2010).

3. Research Methods

Much deliberation was carried out in selecting qualitative approach in retrospect to the research questions and objectives of the research. Having the question: can mindsight facilitate an individual's ability to communicate effectively in a virtual space? The question seemed to present with it a challenge to be investigated more deeply, hence the choice of the qualitative research instead of a quantitative method which will involve the counting numbers. Hence the phenomenon under investigation will be explored fully until some level of understand is achieved.

Hence, the pilot study was carried out on an online participatory action research. This was conducted within a virtual group of university students using two blogs. The students were divided into two groups between the blogs. And all the students had little or no knowledge about mindsight. The first group of students were given some mindsight instructions to follow while engaging with the blog and the second group engaged without instructions. At the end of the interactions, questionnaires were handed to them to evaluate the levels of their communication. This was a research with the people and for the people as opposed to performing research on people as Reason (1988) argued.

The Secondly another blog will be developed to collect narratives from participants about the impact of mindsight on their communication; potential participants have been identified from a Mindsight conference that was held at the Sage Centre, Newcastle, in April 2015. People have already shown interest in participating on the follow-up study after the conference.

This will form an online participatory action research (PAR) will be developed among the researchers. These researchers will first study more about mindsight and its applications to their work and daily lives. Then they shall study how mindsight has enabled their communication within the online facility (virtual space) they have been using for the study. This process will help advance the idea of mindsight, according to Chevalier and Buckles (2013) PAR encourages ideas that are very important to the development of knowledge that is very useful to knowledge systems. This will help the researchers to be able to democratically produce and use the knowledge they have generated (Brydon-Miller, Greenwood and Maguire, 2003). Furthermore, it implies that all the participants in the research will contribute to the innovative thinking, which means that they will be involved in taking the decision on what to look at, about the processes that will be involved and they will collectively make sense of what is going to emerge as a result of their research together. They will be expected to take action on the subject of the research (As they will be told to apply the concept of mindsight to their communication in their organisational virtual spaces). This whole process diminishes the distinction between the researcher and his subjects as both the researcher and participants of the research become co-researchers (Reason, 1988). Hence the successive logical steps that connect the research question to the data that will be obtained will navigate toward the recommendation and conclusion of the study.

4. Conclusions and recommendations

There is evidence observed from the pilot study, that mindsight might affect more particularly enhance communication and there is need to build this evidence in a more rigorous manner through the main data collection of the research. This will be achieved by a process of further qualitative research that will give more depth to the phenomenon so as to gain additional understanding and to create additional impact in organisations and setups of virtual communication. Hence an additional action research event with practitioners from different organisations, studying mindsight together in a virtual collaborative research will be done as earlier mentioned. Hence, the process will concentrate on the communication of individuals in their organisational virtual spaces.

Other aspects of the research related to this activity include the exploring of the definition of communication and what effective communication implies; Because it has been discovered that, there are so many contradictory definition of communication exist in literature, and so a selection of communication definitions that relate directly to mindsight and virtual communication shall be chosen to compliment the purpose of the research; which is to investigate the impact of mindsight on communication in virtual spaces. It has been projected that the research will proffer solutions that would lead to expressive communication in virtual spaces. Further clarity about the technology platforms that would be utilised in the research will be considered because the platforms and technology chosen will be the ones that will facilitate the purpose of the research; further thoughts will be placed into that (This also includes the decision whether to consider synchronous and/or asynchronous media).

Reference

Ale Ebrahim, N., Ahmed, S. and Taha, Z., (2009) Virtual teams: a literature review. *Australian Journal of Basic*

and Applied Sciences, 3(3), pp.2653-2669.

Bosch-Sijtsema, P.M. and Sivunen, A., (2013) Professional virtual worlds supporting computer-mediated

communication, collaboration, and learning in geographically distributed contexts. *Professional*

Communication, IEEE Transactions on, 56(2), pp.160-175.

Brydon-Miller, M., Greenwood, D. and Maguire, P., (2003) Why action research?. *Action research*, 1(1), pp.9-

28.

Buckels, E.E., Trapnell, P.D. and Paulhus, D.L., (2014) Trolls just want to have fun. *Personality and individual*

Differences, 67, pp.97-102.

Chandler, D. and Munday, R., (2011) *A dictionary of media and communication*. OUP Oxford.

Chevalier, J.M. and Buckles, D., (2013) *Participatory action research: Theory and methods for engaged inquiry*.

Routledge.

Clinton, T. and Sibcy, G., (2012) Christian Counseling, Interpersonal Neurobiology, and the Future. *Journal of*

Psychology & Theology, 40(2).

De Paoli, D., (2015) Virtual organizations: a call for new leadership. *Leadership in Spaces and Places*, p.109.

De Paoli, D., Ropo, A. and Sauer, E., (2014) Disappearing bodies in virtual leadership?. In *The Physicality of*

Leadership: Gesture, Entanglement, Taboo, Possibilities (pp. 59-79). Emerald Group Publishing

Limited.

Galambos, P., Weidig, C., Baranyi, P., Aurich, J.C., Hamann, B. and Kreylos, O., (2012) December. *Virca net*: A

case study for collaboration in shared virtual space. In *Cognitive Infocommunications (CogInfoCom)*,

2012 IEEE 3rd International Conference on (pp. 273-277). IEEE.

Godwin, L. and Rennecker, J., (2000) Connecting Across Miles and Wires: Examining Collaborative Capital

Development in Virtual Spaces. *Adv Interdisciplinary Stud Work Team V11*, 11, p.91.

Hall, M.J., Jones, K., Bermell-Garcia, P. and David Hansen, D., (2015) April. Argumentation in virtual

collaborative environments addressing complex issues through remote synchronous collaboration.

In *Systems Conference (SysCon)*, 2015 9th Annual IEEE International (pp. 249-255). IEEE.

Hedman, E. and Valo, M., (2015) Communication challenges facing management teams. *Leadership &*

Organization Development Journal, 36(8), pp.1012-1024.

Hernez-Broome, G. (2011) 'Transformation, emotional intelligence, and brain science', *Journal of Psychological*

Issues in Organizational Culture, 2(1), pp. 76–79. doi: 10.1002/jpoc.20055.

Heydenfeldt, J.A., (2010) Leading through crisis: Applied neuroscience and mindsight. *Performance*

Improvement, 49(7), pp.33-37.

Januska, M., (2011) Communication in virtual enterprise paradigm. *Annals of DAAAM & Proceedings*, pp.571-

573.

Malmelin, N., (2007) Communication capital: modelling corporate communications as an organizational

asset. *Corporate Communications: An International Journal*, 12(3), pp.298-310.

Prieto-Arranz, J.I., Juan-Garau, M. and Jacob, K.L., (2013) Re-imagining cultural identity: Transcultural and

translingual communication in virtual third-space environments. *Language, Culture and*

Curriculum, 26(1), pp.19-35.

Reason, P. ed., (1988) *Human inquiry in action: Developments in new paradigm research*. Sage.

Rodríguez, D., Bertone, R. and García-Martínez, R., (2010) Collaborative Research Training Based on Virtual

Spaces. In *Key Competencies in the Knowledge Society* (pp. 344-353). Springer Berlin Heidelberg.

Rodríguez, D., Bertone, R. and García-Martínez, R., (2010) Collaborative Research Training Based on Virtual

Spaces. In *Key Competencies in the Knowledge Society* (pp. 344-353). Springer Berlin Heidelberg.

Schroeder, R. ed., (2012) *The social life of avatars: Presence and interaction in shared virtual environments*.

Springer Science & Business Media.

Shannon, C.E. and Weaver, W., (2015) *The mathematical theory of communication*. University of Illinois press.

Shaw, S.L. and Yu, H., (2009) A GIS-based time-geographic approach of studying individual activities and

interactions in a hybrid physical–virtual space. *Journal of Transport Geography*, 17(2), pp.141-149.

Siegel, D., (2010) *Mindsight: Transform your brain with the new science of kindness*. Oneworld Publications.

Sköld, O., (2011) The effects of virtual space on learning: A literature review. *First Monday*, 17(1).

Welinder, N.P., Kleinpeter, T., Wright, T., Balakrishnan, R., Wen, T. and Nayak, R., Dropbox, Inc., (2014) *Systems*

and methods for preserving shared virtual spaces on a content management system. U.S. Patent

Application 14/247,494.

Yu, H. and Shaw, S.L., (2008) Exploring potential human activities in physical and virtual spaces: a spatio-

temporal GIS approach. *International Journal of Geographical Information Science*, 22(4), pp.409-430.

Appendix H: ELearning Conference 2017

Exploring Mindsight via Email Communication in Learning Environment

Suzannah Ogwu, Shelagh Keogh, Petia Sice

Northumbria University, Newcastle Upon Tyne, United Kingdom

suzannah.a.ogwu@northumbria.ac.uk

shelagh.keogh@northumbria.ac.uk

petia.sice@northumbria.ac.uk

Abstract: This paper explores mindsight in virtual communication, examining problems people face while communicating in virtual spaces with a focusing on email communication. Many have documented the problems encountered when they are communicating with others on email. Face to face communication includes facial and interpersonal clues that enhances interaction. Other problems people face include misunderstanding in communication and information overload. These problems disrupt workflow, and can cause stress among workers, which in turn reduces job satisfaction and production. These problems are common in academic world, especially among people found in learning environment, who have to use email communicate continuously because of the nature of their job and activities. It is believed that every learning environment utilizes one form of email communication or the other on several levels and for different purposes. Scholars have put forward suggested technical solutions that are mainly software and policy inclined.

This paper attempts to understand the human in-depth factors to the problem. Data collection for the study commenced by sending questionnaires to students to assess the levels of their communication in relation to their environment, personal tendencies, being understood and understanding others during email communication etc. Evidence in the data analysis suggested that most of the students found it difficult to retain attention while doing their emails and they were unable to understand how others felt. It was also discovered that people do not necessarily seek to be understood when they send email communication. Based on the findings, it was concluded, that an intervention, such as mindsight, might enable people to retain attention with some level of personal and environmental awareness that might enhance their ability to understand their feelings and that of others while communicating on email. Therefore, it is recommended that a more rigorous application of mindsight exercise should be explored by students who engage in virtual communication in learning environments.

1.0 Background

Email communication is popularly used for business and personal communication despite the existence of other forms of communication technology, such as mobile applications, social media and other types of electronic communication (Mujtaba 2017). Email has been in existence for a couple of decades now and it gives individuals the privilege of having independent space and time to do work (Sobotta 2016). It also provide individuals with the opportunity to interact and share work together (Brown et al. 2016). It is mostly straightforward to use and it gives rapid means of information exchange in organizations and around the globe (Soucek and Moser 2010; Brown et al. 2016).

However, there are challenges that come along with the use of email communication that cannot be ignored (Browns et al. 2016), the increased use of email communication has seen the multiplication of emails received by individuals. An average email user receives 40 to 50 emails in a day, while others receive hundreds of emails per day. A significant amount of users' time is used in sorting out email communication (Mujtaba 2017). Having to deal with these tasks causes more difficulties and scholars have explored and addressed the phenomena.

1.1 Email Communication Issues.

Oher problems of email communication include the absence of interpersonal clues (Morgan et al. 2014; Sampson et al. 2016), these hints are present in face to face communication. People gain more contextual indications through interpersonal interactions and body language in face to face communication. Meaning and depth are gained because, the receiver is able to decode the feelings of the sender (Morgan et al. 2014). These signs are missing in electronic communication, because replies are delayed and with a lack of face to face interaction, receivers are often not being able to see physical hints which leads to misunderstanding and misinterpretation. In addition, people in a face-to-face communication have the opportunity to interact and develop a shared understanding about the processes they need to undertake to achieve their shared goals. However, the case with electronic communication, is that, the frequency of interaction is limited and as such the capacity to develop a shared knowledge of processes is distorted due to distance and time differences and as such having a shared knowledge and feeling connected to one another becomes a problem (Morgan et al. 2014).

Another challenge with email communication is information overload, with the dependence on email communication, employees have to deal with a rapid increase in the volume of emails they receive. It has been reported that information overload is affecting workers (Soucek and Moser 2010; Hanrahan et al. 2014; Sobotta 2016). Information overload increases the levels of stress among workers as they receive great amount of emails due to their work (Jerejian et al. 2013; Sobotta 2016). This occurs when individuals receive information that is beyond their processing ability, it happens when there is a distribution of countless messages that an individual is able to cope with, and this disrupts workflow (Soucek and Moser 2010). It is also described as an excessive supply of information that overwhelms the receiver (Sumecki et al. 2011) this reduces the quality of communication (Gupta et al. 2016), for example, employees could lose course of their workflow due to the mixtures of emails that need their attention. This mean that employees can also lose concentration on work because of constant inflow of emails interruption, making them to lose direction on their communication (Soucek and Moser 2010; Hanrahan et al. 2014). Similarly, having many unnecessary messages reduces people's effectiveness in communication as they have to separate important from less important messages (Gupta et al. 2016). This ultimately cumulates to job dissatisfaction and acute psychological problems in employees (Soucek and Moser 2010) that affects wellbeing (Hanrahan et al. 2014).

For example, a research carried out by Jerejian, Reid et al. (2013) on university faculty members found out that, academic staff members had high level of burnout because of the high volume of emails they had to encounter. This happens because they depend on email communication as part of their work, they use email communication both in and out of working hours to meet up with the demands of their work. The reason is that, teaching professionals are expected to be accessible at all times by their students and also because they conduct researches all over the world, in different time zones. That is the reason they have to be approachable anytime, this creates a great deal of stress and workload. The above study was based on the premise obtained from Hole's (2008) research, where he reported that the stress faculty members experience from email communication is partly due to overload from high volumes of email, emails that have not been read and the need to take decisions because of emails received and anticipated responses from email communication were the main source of stress triggers.

These cumulate to deficient communication, this occurs because of an overflow of emails and that makes people to often think that email communication is impromptu, so they

consider it as an informal method of communication compared to other business printed letters. This casual disposition toward email affects the quality of messages written so that most times, they are often sketchy and inconclusive without sufficient information for the reader to take decision to act upon and that causes misunderstanding. It leads to ambiguity, where rules of communication, contexts and societal clues are misplaced as a result of obscure messages, and then leaves a gap in communication. So that the receiver is unable to take the desired action that the sender expect within a particular period (Soucek and Moser 2010).

1.2 Methods of Reducing the Stress of Email Communication

Some of the authors above, put forward suggestions on how people interact with emails and gave solutions to overcome stress and overload issues. Soucek and Moser (2010) suggested that, people should be taught how to apply certain techniques that would enable them to manage their emails. This include processes that decrease the number of messages an individual receives, which makes a great difference. Some organizations provide intervention in the form messaging filters that helps to separate important emails from unrequested emails. While others draft guidelines on how a company's emails should be utilized. The same authors tried to address email information overload in their research by providing ways of increasing people's capability to processing information. They provided training in relation to improving communication proficiency that enable people manage great volumes of email communication and provided ways of enhancing the flow of their work and to also improve email articulateness. Additionally, Jerejian et al. (2013) also suggested that, people should embrace the email management techniques of filtering and filling by people manually and that emails should be monitored constantly.

These processes seemed to be successful measures because; it was reported later by Gupta et al. (2016) that reducing the number of emails employees receive in an organization improves their work quality and it reduces their levels of stress. The researchers claimed that, older publications tend to focus on the recipient of email issues. Therefore, Gupta et al. (2016) focused their research on addressing the senders of email by a way of suggesting email optimization, where the sender will have to determine if the email they are about to send is more or less important to the receiver and then suggested to tag emails according to priorities.

Our own research addresses cognitive problems, it is assumed that, if people thought carefully about the necessity of a message, and then there will be less emails in circulation.

Levy (2016) suggested that emails should be read from the receiver's perspective. He claimed that individuals are constantly email checking, and proposed that emails should be done at set times in a day, in order to harness better attention from the individual. He added that individuals should fit technologies that will automatically empty their inboxes at the end of the day.

This paper puts forward the investigation that attempts to explore the non-technical issues the receivers of emails encounter and possibly proposes an intervention that is mindsight driven that will enable people to connect and execute emails with the right focus and attention. Therefore, Mindsight is the ability to perceive opinions and distinguishing them as activities of the mind. In addition, having the capacity to appreciate or note the thoughts of others, in order to genuinely comprehend their views, enables responses to be compassionate and effective. This help individuals to direct their feelings and thoughts and not to be driven by them, and are then able to balance their emotions (Ogwu et al. 2016).

2.0 Method

The study is a preliminary research situated among undergraduate engineering students in a learning university environment who relied on email communication for their studies. The email communication of the students were examined by giving them a mindsight baseline questionnaire to complete in order to assess their levels of affective communication using email. The blueprint of the research represented by figure 1 shows the plan of activities that was performed.

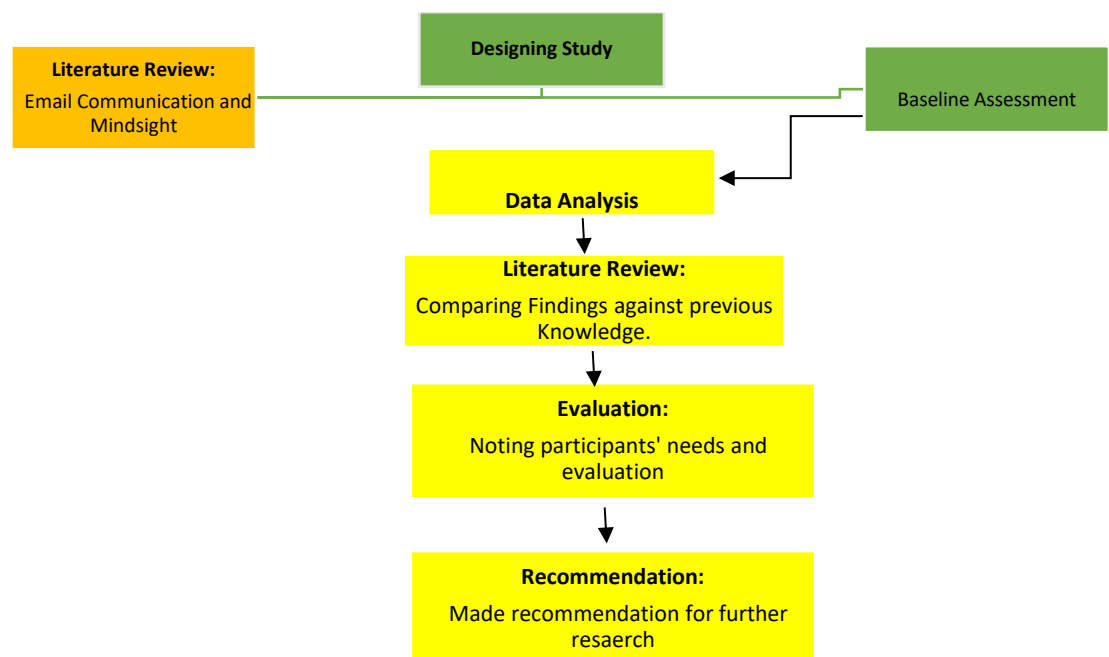


Figure 1.

A simple spreadsheet and thematic analysis were employed to analyse the data obtained from the questionnaires. Many rounds of reading the completed questionnaire was performed to capture emerging themes. First the responses were read several times to understand and capture clues and meanings, then the emerging themes and statements were underlined. Then the underlined sentences and themes were categorised according to what, how and why things happened. These were later represented on tables and maps, to sort out relationships. Thereafter a narration of the categorizations were used to present the data in a narrative format for anybody to understand. Elliott (2005) claims that narrative analysis is a discourse that has a sequential order that is clear which connects events in a meaningful way for a distinct audience; therefore the analysis of the study provides an insight into the impact of the exercise on the students.

3.0. Implications

It was deduced based on the evidences presented at the end of the study that, first the environment used for virtual communication has an effect on the quality of communication. It is important therefore; to have an environment that is void of noise and distractions in order to communicate effectively, because respondents tend to be distracted in noisy environment. They find that some activities within an environment were strong enough to pull them away from their email while communicating. There is therefore need to enable people strengthen their attention and awareness levels or techniques. Being aware of communication without the environment and *verse vasa* is a problem that affects the communication process and the communicator. Additionally, respondents were aware of their bodily sensations pointing to the fact that email communication had the tendency of triggering uncomfortable bodily sensation. The body sensations show the negative effect email communication poses to individuals if not properly managed to enhance the reason why they are using email communication in the first place. It seems email communication, has the potential of affecting the mind and body. Therefore, there is need to teach people that some sensations and emotions come from the workings of the mind which comes as a form of reaction to things, hence people should understand and not be carried away by such sensations and feelings, but to acknowledge and let go (Siegel 2010). Some form of awareness practises can be developed for individuals through mindfulness that might integrate people's state of awareness of mind, body and emotions in order to achieve some state of equilibrium.

Secondly, making others to understand an email is a direct function of going straight to the point. This sends a clear message and the receiver is able to respond accordingly; that was the view of some participants. It was discovered that for someone to get others to understand them, then the person has to go straight to the point without including unnecessary details that will confuse others and at the same time making some effort to understand the person they are communicating with. This can be achieved by focusing on what the person is saying so as to understand them. This kind of approach and disposition seemed to generate positive results among the participants. Other ways participants explained how to be understood, was by structuring communication in ways that ensured readers understood. First, they only send what was relevant for the communication and then ensured that their thoughts were outlined properly for the other person to understand. It was concluded that such participants have unique connection with themselves. Such connections with self brings out thoughts and ideas that would enable others to understand them. Others thought that getting some understanding from recipients involves giving explanations and words, and also focusing on the main deal of what is important. It can be claimed that an effective communication happens when an individual understands others and others understand them by giving clear information and correct answer to the person they are communicating with and they also getting an expected response from the receiver.

4.0 Conclusion

The findings of this study concluded that most people do not have the ability to focus attention on email communication in an environment that is noisy and full of distractions. Evidence that supported this conclusion was derived from comments from participants on attention, awareness, understanding and getting understood. In addition, respondents are overly distracted by their environment and situations; therefore, it is important to suggest a further study that would include an exercise that would enable people to integrate their attention, awareness and interpersonal relationships while communicating on email. The study used a sample of eight individuals, this has given the researcher the opportunity to engage deeply with the responses and to extract both manifest and latent meaning, which may not have been possible with a large sample. The research study provided the bases for an in-depth exploration of the concept of mindsight among students. The participants did not have knowledge of mindsight at the outset and it

is clear from the findings that by using mindsight interventions participants may be able to develop high levels of attention, awareness, empathy and interpersonal relationship techniques as the people communicate online. It is recommended therefore, that a more rigorous application of mindsight through an exercise should be adopted for students when they engage in virtual communication in learning environments.

References

Baldini, L. L., et al. (2014). "The clinician as neuroarchitect: The importance of mindfulness and presence in clinical practice." Clinical Social Work Journal **42**(3): 218-227.

Brown, S. A., Fuller, R., & Thatcher, S. M. (2016). Impression Formation and Durability in Mediated Communication. *Journal of the Association for Information Systems*, 17(9), 614.

Elliott, J. (2005). *Using narrative in social research: Qualitative and quantitative approaches*. Sage.

Gupta, R., Liang, G., Tseng, H. P., Holur Vijay, R. K., Chen, X., & Rosales, R. (2016, August). Email Volume Optimization at LinkedIn. In *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (pp. 97-106). ACM.

Hanrahan, B. V., Pérez-Quñones, M. A., & Martin, D. (2014). Attending to email. *Interacting with Computers*, 28(3), 253-272.

Hole, J. D. (2008). *Email overload in academia*. ProQuest.

Jerejian, A. C., Reid, C., & Rees, C. S. (2013). The contribution of email volume, email management strategies and propensity to worry in predicting email stress among academics. *Computers in human behavior*, 29(3), 991-996.

Levy, D. M. (2016). *Mindful tech: How to bring balance to our digital lives*. Yale University Press.

Morgan, L., Paucar-Caceres, A., & Wright, G. (2014). Leading effective global virtual teams: The consequences of methods of communication. *Systemic Practice and Action Research*, 27(6), 607-624.

Mujtaba, G., Shuib, L., Raj, R. G., Majeed, N., & Al-Garadi, M. A. (2017). Email Classification Research Trends: Review and Open Issues. *IEEE Access*.

Ogwu, S., Keogh, S., & Sice, P. (2016, October). Virtual collaborative research communication the impact of mindsight. In *European Conference on e-Learning* (p. 527). Academic Conferences International Limited.

Sampson, R., Barbour, R., & Wilson, P. (2016). Email communication at the medical primary–secondary care interface: a qualitative exploration. *Br J Gen Pract*, 66(648), e467-e473.

Siegel, D. (2010). Mindsight: Transform your brain with the new science of kindness, Oneworld Publications.

Sobotta, N. (2016). Why Forwarded Email Threads are Hard to Read: The Email Format as an Antecedent of Email Overload. *CAIS*, 39, 2.

Soucek, R., & Moser, K. (2010). Coping with information overload in email communication: Evaluation of a training intervention. *Computers in Human Behavior*, 26(6), 1458-1466.

Sumecki, D., Chipulu, M., & Ojiako, U. (2011). Email overload: Exploring the moderating role of the perception of email as a ‘business critical’ tool. *International Journal of Information Management*, 31

MAIN POINTS:

- Don't start sentence with 'However'
- Be careful when using semicolons ;
- Don't put comma before 'and'
- Don't start sentences with 'And'

-Capital Letters: Mindsight , Wheel of Awareness, Mindsight Utility for Virtual Communication (MUVC).