

**AN EXPLORATION OF SOCIAL PRESENCE AMONGST FIRST YEAR
UNDERGRADUATE STUDENTS IN A FULLY ASYNCHRONOUS WEB-BASED
COURSE: A CASE AT THE UNIVERSITY OF SOUTH AFRICA**

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I declare that the above dissertation/thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Signature

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ABSTRACT

With the growing trends in favour of online learning in higher education, further research is needed on the social experiences of students enrolled in online courses. The purpose of this qualitative study was to explore the ways in which social presence manifested itself amongst first-year undergraduate students who had studied in a fully asynchronous web-based course at Unisa in 2014. The Community of Inquiry framework, which posits that meaningful online learning experience results from interaction of cognitive presence, social presence, and teaching presence, guided this inquiry. Purposive sampling was utilised to select 18 participants who met the selection criteria. Through semi-structured, telephonic interviews, couched with the social constructivism stance, the participants' perceptions of social presence were thematically analysed.

The findings revealed that first-year online undergraduate students manifested social presence through affective responses, interactive responses, group cohesion, interaction, instructor presence and internet access. Overall, social presence manifested itself through participation and interaction within the discussion forums. The findings specified further that a blended online learning approach can be crucial in meeting the learning needs of some students. Furthermore, the findings alluded to a lack of interaction and feedback from the online instructors. In addition, the findings revealed a limitation in terms of internet access, particularly for students in rural areas, which is of concern in an ODL milieu heading online. Implications of the study findings, study limitations and avenues for future research are discussed.

Keywords: Asynchronous, Community of Inquiry, Distance Education, Open Distance Learning, online learning, social constructivism, social presence, teaching presence.

ABBREVIATIONS

CoI	Community of Inquiry
CMC	Computer-Mediated-Communication
DE	Distance Education
E-Learning	Electronic Learning
ICT	Information Communication Technologies
LMS	Learning Management System
ODL	Open Distance Learning
ODeL	Open Distance Electronic Learning
SC	Signature Course
TA	Teaching Assistant
US	United States
USA	United States of America
Unisa	University of South Africa

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CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

With the growing trends in favour of online learning in higher education (Allen, Seaman, Poulin, & Straut, 2016; Cobb, 2009; Kear, 2010), further research is needed on the social experiences of students enrolled in online courses (Cobb, 2009; Lowenthal, 2012; Kear, 2010; Yamada & Kitamura, 2011; Yuan & Kim, 2014). The concept of social presence has been explored in relation to the quality of social interaction in an online learning environment (Cobb, 2009; Kim, Kwon, & Cho, 2011; Yamada & Kitamura, 2011). A shared universal definition of social presence is lacking in the literature, yet, for the purposes of the current study, social presence has been defined as students' ability to express themselves as real people (Garrison, Anderson, & Archer, 2000), and to connect with others in a virtual class (Lyons, Reysen, & Pierce, 2012). This qualitative study sought to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at the University of South Africa (Unisa), a dedicated Open Distance Learning (ODL) institution which is situated in South Africa. The study participants were a purposefully selected group of 18 first-year undergraduate students who had studied in a fully asynchronous web-based course which is called AFL1501, entitled Language through an African perspective, in the College of Human Sciences at Unisa, in the second semester of the 2014 academic year. Semi-structured, telephonic interviews were used to gain a deeper understanding of the phenomenon of social presence. It was anticipated that the knowledge generated from this inquiry might affect online learning practice, specifically in an ODL context.

This chapter introduces the inquiry undertaken, by starting with the problem statement grounding the current study. Following this is a brief outline of the impact of social presence on online learning, and the South African studies on social presence which further justify the need for conducting the current study in an ODL context. Also included is an overview of the conceptual framework, the purpose statement and accompanying research questions. Thereafter, an overview of the research method, the significance of the study and clarification of terms used in the study will be discussed.

1.2 STATEMENT OF THE PROBLEM

As Information and Communication Technology (ICT) advances, higher education institutions worldwide are increasingly adapting online learning to expand access to education (Bawa, 2016; Mbatii, 2012; Yamada & Kitamura, 2011), and utilising Computer-Mediated Communication (CMC) to facilitate interaction between the students and the institution (Yamada & Kitamura, 2011). The definition of CMC varies; however, scholars refer to CMC as computer conferencing, blended learning, synchronous or asynchronous text-based interaction (Abrams, 2003; Matodzi, Herselman, & Hay, 2007; Oztok, Zingaro, Brett, & Hewitt, 2013; Wei, Chen, & Kinshuk, 2012; Yamada & Kitamura, 2011). Computer conferencing CMC is an electronic mail system employed to facilitate small group discussion over a computer network (Rourke, Anderson, Garrison, & Archer, 2007). Blended learning offers an aggregate of technology-based resources and traditional face-to-face lectures (Allen et al., 2016; Mashile, 2015). Synchronous CMC entails real-time, text-based interaction, which requires participants to be logged in at the same time and collaborate immediately (Peterson, 2009; Wei et al., 2012). Asynchronous CMC refers to time-delayed, text-based interaction where participants log in and collaborate at different times (Hirotani, 2009; Wei et al., 2012). The time-delayed and place-independent, asynchronous text-based interaction was of interest for the current study.

The online delivery system has revolutionised educational technology and expanded access to education for multitudes of students, including many who have been unable to attend post-higher education prior to this revolution (Bawa, 2016). An all-inclusive agreed upon definition of online learning is deficient in the literature. Researchers frequently use terms such as online learning, electronic learning, digital studying, virtual learning, web-based learning, to refer to an approach in which all or most aspects of teaching and learning instruction are delivered primarily through the electronic media and the internet (Allen et al., 2016; Moore, Dickson-Deane, & Galyen, 2011; Moore & Kearsley, 2011; Sangrà, Vlachopoulos, & Cabrera, 2012; Thoms, 2016). In the present study, the terms online learning, digital studying, virtual learning, web-based learning and asynchronous learning will be used interchangeably, to refer to teaching and learning instruction which is delivered fully online (Allen et al., 2016).

Enrolment in virtual universities continues to be a major trend in institutions of higher education (Allen et al., 2016; Capra, 2011; Cobb, 2009). Allen et al. (2016) report that more than 6 million students were enrolled in at least one online course in the United States of America (USA) in the fall of 2014. Further, it is estimated that the growth in enrolments in online higher education will continue to represent the majority of distance education offerings, with growth rates about ten times that of traditional, classroom-based higher education (Shea & Bidjerano, 2009). Higher education institutions in South Africa, a developing country, have also witnessed a rapid growth in the use of online learning, although this is not without challenges (Matoane & Mashile, 2015). ICT access in South Africa is still viewed as extremely uneven, making it impossible for higher education providers to fully harness the potential of using ICT to enhance teaching and learning (Department of Higher Education and Training, 2013). With the developing trends in favour of digital studying in higher education (Allen et al., 2016), additional research on the social experiences of students who studied in online courses remains important (Cobb, 2009; Lowenthal, 2012; Kear, 2010; Yamada & Kitamura, 2011; Yuan & Kim, 2014).

Online learning has been credited with numerous advantages, such as expanded access to education, the flexibility for students to study independently of time and place constraints, and the convenience to share and discuss ideas with other participants anytime and anywhere (Capra, 2014; Wei et al., 2012; Regan et al., 2012; Ruey, 2010; Sung & Mayer, 2012; Willging & Johnson, 2009). Other benefits include decreased travel costs, student-paced studying, learning while you earn, access to a wide variety of courses and resources and the use of the latest technologies (Bawa, 2016; Bowers, Justice, & Valley, 2015).

While the rapid rise of online education has presented laudable opportunities for institutions and students, high dropout rates in fully online courses continue to be one of the primary concerns for most distance education institutions (Bowers et al., 2015; Capra, 2011; Lee & Choi, 2010; Lee & Nguyen, 2007; Rovai, 2007; Sung & Mayer, 2012; Wilson, 2008; Yukselturk, Ozekes, & Türel, 2014). In general, fully online programmes have high dropout rates compared to traditional classes (Patterson & McFadden, 2009; Yukselturk et al., 2014). Patterson and McFadden (2009) found the online programmes' dropout rate to be six to seven times higher compared to the traditional programmes. Further, there is an estimation of 40% to 80% of students who will drop out of online programmes every year (Smith, 2010). Persistent failure and dropout have significant monetary implications for students and the

institutions; this is mainly so in the light of government's outcomes-oriented funding framework, that is, the funds allocated to higher education institutions have to generate the student throughput returns for which they are meant (Crosling, Heagney, & Thomas, 2009; Van Schoor & Potgieter, 2010).

Online dropout is attributed to complex and interdependent motives such as, but not limited to, financial constraints, lack of time management, unmet learning preferences, lack of motivation, information workload, poor programme design and instruction, and lack of ICT access and literacy (Bawa, 2016; Capra, 2014; Yuan & Kim, 2014; Yukselturk et al., 2014; Willging & Johnson, 2009). The students have also indicated a lack of social presence, recognised as feelings of isolation (Lee & Choi, 2010; Lee & Nguyen, 2007; Rovai, 2007; Willging & Johnson, 2009; Yuan & Kim, 2014), and a lack of interpersonal connectedness (Sung & Mayer, 2012), amongst the reasons leading to dropout. Tinto (1993) emphasises the significance of developing online social presence in decreasing the dropout rate, arguing that persistence in an online programme can follow if students feel involved, linked and have developed relationships with other members of the digital classes. Social presence in the online learning context has been commonly defined as the degree to which participants are able to express themselves as real people (Garrison et al., 2000; Gunawardena, 1995; Kear, 2010), and feel connected to others in an online learning community (Garrison & Arbaugh, 2007; Kear, 2010; Lyons et al., 2012; Oztok & Brett, 2011; Picciano, 2002; Richardson & Swan, 2003). For the purpose of this study, social presence has been defined as students' ability to express themselves as real people (Garrison et al., 2000), and connect with others in a virtual class (Lyons, et al., 2012).

Distance online students are prone to experience isolation and disconnection due to the transactional distance between students and the institution (Bowers et al., 2015; Rovai, 2007; Sung & Mayer, 2012). Compared to traditional face-to-face courses, students are likely to perceive a lack of social presence and interactions in online courses due to the absence or constrained face-to-face contact with peers and instructors (Bowers et al., 2015). The transactional distance can be mediated through a sense of presence, where students experience being there and being together with real human beings in the virtual studying environment (Lehman, & Conceição, 2010). While it can be easy to establish social presence in traditional classrooms, developing presence in a virtual learning environment can be challenging due to the absence of any overt social cues that are available in a face-to-face context (Bowers et al.,

2015; Rodriguez, 2015). Nonetheless, it is imperative for course designers and facilitators to design online programmes that promote social connection due to the isolated nature of these virtual instructional settings (Aragon, 2003), thereby mediating the transactional distance and enriching the online student's learning experience (Sung & Mayer, 2012).

The concept of social presence has been widely explored in relation to the quality of social interaction in a virtual learning context (Bulu, 2012; Cobb, 2009; Ke, 2010; Lowenthal, 2012; Yamada & Kitamura, 2011; Yuan & Kim, 2014). Social presence has been identified as one of the important factors that influence positive online learning experience and success (Capra, 2014), as well as satisfaction with online courses (Akyol, Garrison, & Ozden, 2009; Alman, Frey, & Tomer, 2012; Bulu, 2012; Cobb, 2009; So & Brush, 2008). However, most of the research has been conducted in blended learning environments, which offer a combination of traditional face-to-face classes and online activities (Nandi, Hamilton, & Harland, 2012). Limited studies have looked at social presence in fully online asynchronous courses, which provide time-delayed interaction and no face-to-face interaction (Lowenthal, 2012; Rodriguez, 2015). Kehrwald (2008) as well as Lowenthal (2012) note that a comprehensive understanding of social presence in a fully asynchronous online learning environment is lacking; this lack of such understanding limits the development of online learning and teaching best practices.

Establishing social presence in fully online asynchronous courses can be more challenging due to the lack of physical interaction amongst the students and the instructors (Rodriguez, 2015). Richardson and Swan (2003) support this view by stating that fully asynchronous courses have been criticized with claims that the web-based or online learning context is not as effective as traditional classroom learning because of the time-delayed collaboration and no face-to-face interaction. Kear, Chetwynd and Jefferis (2014) add that low social presence can be a particular issue in time-delayed, text-based, asynchronous systems such as discussion forums, leading to feelings of impersonality and disengagement from online learning. Nonetheless, asynchronous courses afford participants the opportunity to work at their own pace, to reflect on classmates' contributions, to develop individual contribution, and improve on individual writing skill before posting to the virtual class (Richardson & Swan, 2003). Further, asynchronous web-based courses enable mutual meaning construction provided that communities of learners that encourage knowledge building and social reinforcement are specifically created (Moller, 1998). Thus, the current study aimed to contribute to the existing

body of literature, by exploring ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course, within the South African ODL institution. It was anticipated that the knowledge generated from this inquiry might affect online learning practice, especially in an ODL context.

1.3 THE EFFECT OF SOCIAL PRESENCE IN THE ONLINE LEARNING ENVIRONMENT

Education is inherently a social process (Swan & Shih, 2005); online learning environments should thus be able to support the social process of learning (Yamada & Kitamura, 2011). The construct of social presence often seems to be used to measure the quality of social interaction in digital studying environments (Lowenthal, 2012; Oztok & Brett, 2011; Yamada & Kitamura, 2011). Short, Williams, and Christie (1976) have been the first to introduce the social presence theory, to give an explanation of how a range of communication media influences the outcome of interaction amongst people. Short et al. (1976) defined social presence as the degree to which a person is conscious of every other character in a technology-mediated conversation setting. In their model of social presence, social presence is conceptualised in two ways. Firstly, they agree with social presence being a characteristic of the communication medium. They posit that communications media differ in their degree of social presence, and these differences are essential in deciding the result of interaction amongst people (Short et al., 1976). The authors contend that the communication medium which can best mimic face-to-face interaction is prone to a high degree of social presence and is perceived as being warm and sociable, while a medium with a low degree of social presence is seen as impersonal. Secondly, social presence is perceived as a subjective perception of users towards the communication medium. Thus, although social presence is based on the objective quality of the communication medium, it is also a subjective quality of the medium as perceived by the user (Short et al., 1976). Short et al. (1976) emphasise that it is imperative to comprehend how users perceive the communication medium, what their emotions are, and what their 'mental set' is (p. 65).

The importance of students' perceptions of social presence has been well documented within the international literature (Cobb, 2009; Ke, 2010; Lowenthal, 2012; Yamada & Kitamura, 2011; Yuan & Kim, 2014). The findings from diverse studies point to the significance of social presence in the online learning process. The researchers have verified to various

degrees that social presence in virtual studying has an impact on students' satisfaction (Akyol et al., 2009; Alman et al., 2012; Arbaugh & Benbunan-Finch, 2006; Bulu, 2012; Cobb, 2009; Richardson & Swan, 2003; So & Brush, 2008). Further, research has proven that social presence is also associated to students' perceived learning (Caspi & Blau, 2008; Picciano, 2002; Richardson & Swan, 2003; Swan & Shih, 2005). Furthermore, social presence has been found to relate to online interaction (Cobb, 2009; Kim et al., 2011; Swan & Shih 2005; Wei et al., 2012), as well as retention in online programmes (Alman et al., 2012; Liu, Gomez, & Yen, 2009).

A lack of social presence may lead to a high degree of frustration, a negative attitude towards the instructor's effectiveness and a lower level of effective learning (Garrison et al., 2010; Kear, 2010). The ultimate goal for creating social presence in any learning environment, whether it is online or face-to-face, is to create an environment where students feel at ease around peers and the instructor, which facilitate mutual learning (Reio & Crim, 2013). Without attaining this goal, the virtual learning environment can turn into one that is not fulfilling or successful for both the instructors and students (Aragon, 2003).

1.4 THE STUDY'S SIGNIFICANCE WITHIN THE SOUTH AFRICAN CONTEXT

Compared to the substantial body of international research in the online learning field, research into students' perceptions of social presence in South African contexts is in its infancy. Further, the handful existing studies emanate from traditional-based institutions. For example, Greyling and Wentzel (2007) conducted a case study at the University of Johannesburg with a focus on the importance of social presence as a building block of successful learning environments and presented some of the ways in which lecturers can purposefully create and maintain social presence. Nagel and Kotzé (2010) used the Community of Inquiry survey to compare the existence of cognitive presence, teaching presence and social presence of two blended postgraduate courses, one predominantly online and the other mostly utilising contact mode at the University of Pretoria, Gauteng. Cognitive presence and teaching presence were found to be significantly high within the two classes, while social presence was the weakest. Phahlane and Kekwaletswe (2012) also conducted a case study at the University of Pretoria, aimed at conceptualising social presence awareness in an e-collaboration of postgraduate masters' students. The lack of social presence amongst

students and instructors was found to hinder an effective learning experience, often leading to delayed or incomplete learning tasks. A large action inquiry at the University of the Free State by Ndeya-Ndereya (2008) as reported in Nel and Ndeya-Ndereya (2011) resulted in the development of a framework for the enhancement of online social presence within the context of South African traditional-based higher education institutions. Kehrwald (2008), as well as Lowenthal (2012), note that a comprehensive understanding of social presence in a fully asynchronous online learning environment is lacking, and that this lack of such understanding limits development of online learning and teaching best practices. In light of the deficiency of scholarly work, particularly in the South African context, the present study aimed to build on previous research by exploring in greater depth the ways in which social presence manifested itself in a fully asynchronous web-based course at an ODL institution which is located in South Africa. The study context is described briefly below:

1.5 THE STUDY'S CONTEXT AND PARTICIPANTS

The current study sought to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa. Unisa has been the first dedicated, largest ODL institution on the African continent, with a history spanning 140 years (Baijnath, 2014; Queiros & De Villiers, 2016; Sonnekus, Louw & Wilson, 2006). With over 300 000 active students, Unisa is counted as one of the mega-universities internationally (Queiros & De Villiers, 2016; Sonnekus et al., 2006). The size of the university and the aggregated resources at its disposal, place it in a role to make a vital contribution to development in Southern Africa, while the geographical reach allows the university to support excessive capacity development throughout the continent (Baijnath, 2014). In this light, Unisa aspires to position itself amongst the top mega-universities globally (Baijnath, 2014). Its vision is to differentiate itself from other top universities through its dedication to promoting social justice, development, and service to humanity (Baijnath, 2014).

The university comprises seven colleges, namely College of Human Science, College of Law, College of Science Engineering and Technology, College of Agricultural Science, College of Accounting Sciences, College of Economics and Management Science, and College of Education. The College offerings include short courses (non-formal qualification), undergraduate degrees, higher certificates and diplomas, postgraduate certificates, honours

degrees and postgraduate diplomas, and masters and doctoral degrees. The current study focused on students who had studied for undergraduate Bachelor degree programmes in the College of Human Sciences.

Like other Distance Education (DE) institutions, Unisa has migrated through various generations of DE, from predominately print-based correspondence, multimedia interaction, video conferencing, online learning (Sonnekus et al., 2006), and transition into Open Distance Electronic Learning (ODEL) (Queiros & De Villiers, 2016). As part of the endeavour to reposition itself in the open distance and e-learning arena, Unisa has designed and developed six modular courses (one module per College) referred to as 'Signature Courses' (SCs) (Baijnath, 2014). The SCs were charged to pilot the transition of Unisa from a predominantly correspondence institution into online learning (Hülsmann & Shabalala, 2016). Further, the SCs form part of an extended process of curriculum transformation in the search for a Unisa unique brand of ODL (Mischke & Le Roux, 2012). Since digital technology has become extremely important in all spheres, the university anticipates that the SCs will ensure that every graduate will be able to learn and function effectively in the digital age (Baijnath, 2014). Further, through enrolment in SCs, Unisa anticipates to support and mediate the transactional distance between the students and the institution (Hülsmann & Shabalala, 2016). The design features of the SC under study were as follow:

- The SCs were implemented fully online from 2013, and are deemed compulsory for all first entry undergraduate students at Unisa (Mischke & Le Roux, 2012).
- The SC under study is called AFL1501, entitled Language through an African perspective, in the College of Human Sciences.
- An asynchronous model was used for delivering the SC through the university's Learning Management System (LMS), called myUnisa. Asynchronous refers to time-delayed, text-based interaction where participants log in and collaborate at different times (Wei et al., 2012).
- The SCs are generally courses with high enrolments. Baijnath (2014) notes that 4900 students studied for AFL1501 in the second semester of 2014. The students are grouped into classes of 50 participants and supported by a Teaching Assistant (TA). Each TA supports four classes and hence there is a student-TA ratio of 200:1 (Hülsmann & Shabalala, 2016).

- The SC runs through Semester 1 (January-June) and Semester 2 (July-December) every year. This study focused on students who have studied for the SC in the second semester of 2014.
- The focus of the SCs is on a student-centred online teaching and learning approach and extensive student online mentoring and support (Bajjnath, 2014).

In summary, the current study sought to explore the ways in which social presence manifested itself amongst students who have studied for a fully asynchronous SC, AFL1501, in the College of Human Sciences at Unisa. Purposeful sampling was utilised to select 18 first-year undergraduate students who have studied (either passed or failed) for AFL1501 in the second semester of 2014. Semi-structured, telephonic interviews were utilised to gain a deeper understanding of the phenomenon of social presence. It was anticipated that the knowledge generated from this inquiry might influence online learning practice, particularly in an ODL context.

1.6 THEORETICAL FRAMEWORK: THE COMMUNITY OF INQUIRY FRAMEWORK

The Community of Inquiry (CoI) framework, initially developed by Garrison, Anderson and Archer (2000), served as the theoretical framework for the current inquiry. The CoI framework is one of the few theoretical frameworks that endeavours to systematically provide an explanation for the academic dynamics underlying online learning environments (Shea & Bidjerano, 2009), and arguably the most widely used model for conceptualising online learning practice within the higher education context (Annand, 2011; Garrison, 2011; Taghizadeh & Vaezi, 2011). The framework is based on the assumption that significant and quality learning takes place within a community of inquiry comprising teachers and students in the online classroom, through the interaction of three core elements: cognitive presence, teaching presence and social presence (Garrison et al., 2000). Garrison and Akyol (2013) define an educational community of inquiry as a group of individuals who collaborate in purposeful critical discourse and reflection, with the intention of constructing personal meaning and verify mutual understanding. According to Garrison et al. (2000), a meaningful educational experience takes place where the three presences meet, as shown in Figure 1 below.

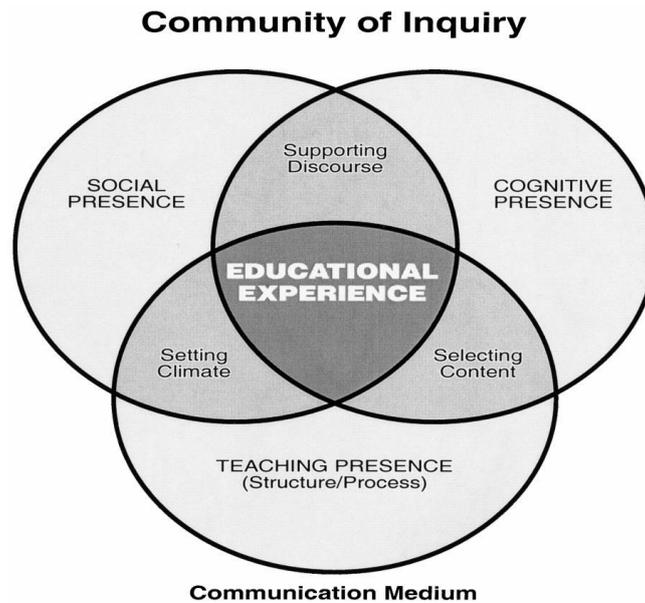


Figure 1: Community of Inquiry Framework

(Source: Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105. doi:10.1016/S1096-7516(00)00016-6)

Cognitive presence refers to the extent to which students can assemble and affirm meaning through sustained verbal exchange (Garrison et al., 2000). Garrison et al. (2000) argue that cognitive presence through itself is not sufficient to sustain a critical community of learners; a sufficient degree of social presence with accompanying degrees of commitment, collaboration and participation is integral for meaning construction. Teaching presence is conceptualised with three components, namely instructional design and organization, facilitating discourse (building understanding), and direct instruction (Garrison & Arbaugh, 2007). Garrison et al. (2000) posit that students' social presence is directly affected by instructors' actions as they select the communication medium, design discussion topics, establish communication expectations, as well as facilitate and maintain discourse. The element of teaching presence is consequently a means to an end to support and enhance social and cognitive presence for the purpose of realising personally meaningful and educationally worthwhile learning outcome (Garrison et al., 2000). Social presence within the framework refers to participants' ability to project their personal characteristics into the community of inquiry, thereby presenting themselves to other participants as 'real people' (p. 89).

For the purpose of the current study, social presence has been defined as students' ability to express themselves as real people (Garrison et al., 2000), and connect with others in virtual learning environment (Lyons et al., 2012). The concept of social presence is based on the assumption that learning is not an independent exercise, but rather a collaborative endeavour, requiring genuine interaction between individuals (Garrison et al., 2000). Moore and Kearsley (2012) argue that since online distance education can be accompanied by a sense of isolation due to the transactional distance between the students and the institution, one of the first and critical considerations for educators is to create online learning communities in which participants can establish and maintain a social presence. The primary function of a social presence element in virtual learning is to support the cognitive and affective objectives of learning within a Community of Inquiry (Garrison et al., 2000; Garrison, 2011; Garrison & Akyol, 2013; Rourke et al., 2007). Further, the concept of social presence can be used to examine the quality of social interaction in an online learning environment (Kim et al., 2011; Yamada & Kitamura, 2011).

1.6.1 Categories and indicators of social presence

According to the CoI framework, amended by Rourke et al. (2007), social presence can be identified through a collection of indicators that fall into three categories, namely affective responses, interactive responses and cohesive responses. Affective responses are indicated by participants' capability to express emotions associated with the instructional experiences (Garrison et al., 2000). Interactive responses refer to verbal exchange that is reciprocal and respectful (Garrison et al., 2000), which is core to mutual learning outcomes (Taghizadeh & Vaezi, 2011). Cohesive responses are exemplified by activities that build and sustain a sense of online group dedication (Garrison et al., 2000; Rourke et al., 2007). When group members feel dedicated to their group, a sense of belonging to the group and connectedness develops (Garrison et al., 2000). Garrison (2011) explains that it is cohesion that sustains the communication and purpose of a community of inquiry, particularly in an online learning group separated by time and space. More specifically, meaning construction, confirming understanding and compelling collaborative activities can only be successfully achieved in a cohesive community (Garrison, 2011).

In summary, the current study utilised the CoI framework; the social presence element in particular was used to formulate the research questions, and to guide coding and analysis of the findings. A more detailed discussion of the CoI framework is outlined in Chapter 3.

1.7 THE STUDY PURPOSE AND RESEARCH QUESTIONS

The purpose of this study was to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course, at an ODL institution which is situated in South Africa, a developing country. The central question guiding this inquiry was: “How do first-year undergraduate students manifest social presence in a fully asynchronous web-based course?” According to the CoI framework, as amended by Rourke et al. (2007), social presence can be understood through three categories (i.e., affective responses, interactive responses, and cohesive responses) and a list of indicators (Garrison et al., 2000; Rourke et al., 2007). As such, the following sub-questions were derived from the central question to better explore the phenomenon of social presence.

1. How do students describe their learning experience in terms of affective responses?
2. How do students describe their learning experience in terms of interactive responses?
3. How do students describe their learning experience in terms of cohesive responses?

1.8 OVERVIEW OF THE RESEARCH METHOD

In the section below, I briefly provide an overview of the research methodology which was employed to carry out the current inquiry. A detailed discussion of the research method is outlined in Chapter 4.

1.8.1 Rationale for the qualitative approach

Oztok and Brett (2011) conducted a review of literature with a focus on social presence in online learning. Although their review directed that social presence has been widely studied quantitatively through content analysis of discussion threads and online surveys, a lack of qualitative, in-depth understanding of social presence was identified. Even though a large population can be reached through content analysis of discussion threads and online surveys, it is difficult to gain a deeper understanding of students’ perceptions of social presence with these methods (Dreyer, 2010). In view of the limited qualitative studies with a focus on social presence within the literature, the current study adopted a qualitative case study approach to explore the ways in which social presence manifested itself amongst first-year undergraduate

students in a fully asynchronous web-based course at Unisa, an ODL institution. Qualitative research is the study of a phenomenon or a research topic in context; the phenomenon tends to be explorative in nature, as the researcher tends to research topics that have not been widely investigated or needs to be investigated from a new angle (Creswell, 2013). This study was explorative on the grounds that the literature exposed the dearth of publications on students' perceptions of social presence in fully asynchronous online courses (Lowenthal, 2012), particularly in the South African ODL context. In using a qualitative research, the participants were given a voice to reflect unique perspectives on the phenomenon of social presence (Creswell, 2013; Dreyer, 2010).

Due to the considerable size of potential participants, purposeful sampling was utilised to select 18 first-year undergraduate students who had studied (either passed or failed) for the Signature Course, AFL1501, in the second semester of 2014. Semi-structured, telephonic interviews were convenient to reach participants who were geographically dispersed in various locations. The interviews made it viable to probe deeply into the participants' experiences, in order to gain a better understanding of how social presence manifested itself amongst online undergraduate students (Creswell, 2013; DiCicco-Bloom, & Crabtree 2006; Dreyer, 2010). The analytical approach was thematic analysis, which is the search for and identification of common themes that extend throughout the set of data (Braun & Clarke, 2006). The approach was chosen due to the flexibility of analysing data obtained through various types of qualitative methods (Creswell, 2013).

1.9 SIGNIFICANCE OF THE STUDY

While the improvements of digital studying have been progressing rapidly (Allen et al., 2016; Cobb, 2009; Mashile & Pretorius, 2003), additional research is needed on the social experiences of students studied in online courses (Cobb, 2009; Ke, 2010; Lowenthal, 2012; Yamada & Kitamura, 2011; Yuan & Kim, 2014). The importance of students' experiences of social presence has been well documented in the international literature (Cobb, 2009; Ke, 2010; Lowenthal, 2012; Yamada & Kitamura, 2011; Yuan & Kim, 2014). However, there is a void in the literature on how social presence manifests itself in fully asynchronous web-based courses, particularly in the Distance Education context (Kehrwald, 2008; Lowenthal, 2012; Rodriguez, 2015). There is a need to understand the social experience of participants in fully asynchronous online programmes (Cobb, 2009; Lowenthal, 2012). Such understanding could

provide insight into whether students learning in an asynchronous virtual environment perceive and experience social presence (Crim, 2006). Equipping facilitators and instructional designers with such knowledge may enable the design of courses that best support affective web-based learning. The present study aimed to make a contribution to the existing body of literature, by presenting information on how first-year undergraduate students in fully asynchronous web-based courses manifested social presence. The findings from this study might influence the design and facilitation of fully asynchronous online programmes. A unique contribution can also be made to the area of ODeL context, because the qualitative method of studying social presence is understudied (Oztok & Brett, 2011). Most studies have been quantitatively driven, possibly limiting the depth and breadth as far as learner experiences are concerned (Oztok & Brett, 2011).

1.10 CHAPTER SUMMARY AND ORGANISATION OF THE DISSERTATION

The current study set out to explore the ways in which social presence manifested itself amongst first-year undergraduate students in an entirely asynchronous web-based course. The content of this dissertation is organised into six chapters, including the current one. This chapter provides background which sets in place a need to conduct the current study. Chapter 2 reviews the literature that provides the theoretical contexts framing the study. Chapter 3 outlines the Community of Inquiry (CoI) framework which guided the current study. Chapter 4 describes the research methodology utilised to carry out the study. Chapter 5 discusses the study findings. The final chapter, Chapter 6, distils and synthesises key conclusions, recommendations, limitations of the study and suggestions for further research.

1.11 DEFINITIONS OF KEY TERMS

The following definitions are given to clarify terms used in the current study:

Asynchronous online learning: refers to a time-delayed learning event in which participants are not connected to the facilitator or peers at the same time (Hirotsani, 2009; Wei et al., 2012).

Community of Inquiry (CoI): is the conceptual framework for studying and guiding the practice of online education proposed by Garrison, Anderson and Archer (2000). The framework is based on the assumption that quality learning takes place within the CoI comprising teachers and students in the online classroom through the interaction of three core

elements: cognitive presence, teaching presence and social presence (Garrison et al., 2000). Cognitive presence refers to the extent to which participants in a community of inquiry are capable of constructing meaning through continuous communication (Garrison et al., 2000). Teaching presence refers to the capability of the instructor to support and enhance social and cognitive presence through instructional management, building understanding and direct instruction (Garrison et al., 2000). Social presence within the framework refers to the “participants” ability to project their personal characteristics into the community, thereby presenting themselves to other participants as “real people” (Garrison et al., 2000. p. 89).

Dropout: refers to students who drop out of their study programmes, or received an academic failing grade (Kemp, 2002).

Fully Online Course: refers to an online learning model, wherein 100% of the course content is delivered online (Allen et al., 2016).

Open Distance Learning (ODL): the Unisa ODL policy defines ODL as a multi-dimensional concept aimed at bridging the time, geographical, economic, social, educational and communication distance between student and institution, student and academics, student and courseware and student and peers. Open distance learning focuses on removing barriers to access learning, flexibility of learning provision, student-centeredness, supporting students and constructing learning programmes with the expectation that students can succeed (Unisa ODL policy, 2016).

Distance Education (DE): is a set of methods or processes for teaching a diverse range of students located at different places and physically separated from the learning institution, their tutors/teachers as well as other students (Department of Higher Education and Training, 2012; Heydenrych & Prinsloo, 2010; Moller, 1998; Moore & Kearsely, 2012; Wand & Sun, 2001; Unisa ODL policy, 2016).

First-year students: refer to first-year of registration of an undergraduate student in a higher education institution (Krause & Coates, 2008).

An all-inclusive agreed upon definition of online learning is lacking in the literature. Researchers commonly use terms such as online learning, e-learning, virtual learning, web-

based learning, to refer to an approach in which all or most aspects of teaching and learning is based on the use of electronic media and internet to access learning material, to interact with the content, the students and instructors, and to obtain support during the learning process in order to acquire personal meaning and to grow from the learning experience (Allen et al., 2016; Moore et al., 2011; Moore & Kearsley, 2011; Sangrà et al., 2012; Thoms, 2016). In the current study, the terms online learning, digital studying, virtual learning, web-based learning and asynchronous learning will be used interchangeably to refer to teaching and learning approach which is delivered fully online (Allen et al., 2016).

Social presence: refers to students' ability of to express themselves as real people (Garrison et al., 2000), and to connect with others in a virtual learning environment (Lyons et al., 2012).

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This qualitative research aimed to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa, a dedicated Open Distance Learning (ODL) institution, which is located in South Africa. To carry out this study, it was essential to review the salient literature to provide background for the current study. The review starts with an overview of the evolution of distance education from its earliest correspondence form to online learning. I will then define social presence, discuss computer-mediated communication in relation to social presence. Thereafter, the discussion will focus on how to establish social presence, measuring social presence and studies with an impact on social presence. I will conclude the chapter by elucidating research opportunities in the Open Distance Electronic Learning (ODEL) context.

2.2 OVERVIEW OF THE EVOLUTION OF DISTANCE EDUCATION

Distance education (DE) has evolved over centuries and its one distinctive characteristic was, and still is, the physical separation between the delivering institution and the students (Heydenrych & Prinsloo, 2010; Moller, 1998; Moore & Kearsley, 2012; Wand & Sun, 2001). The advancing Information and Communication Technology (ICT) has been used to continuously improve the quality of teaching and learning, thereby mediating the transactional distance between the educators and the students (Heydenrych & Prinsloo, 2010; Moore & Kearsley, 2012; Wand & Sun, 2001). Alruhaimi (2011) posits that DE is a movement that sought not so much to challenge or change the structure of higher learning, but to expand the traditional universities and to overcome its inherent problems of scarcity and exclusivity. Higher education institutions have thus introduced DE in order to expand access to teaching and learning as a matter of equity, providing opportunities for enhancing skills required at the workplaces, improving the cost-effectiveness of educational resources, improving the quality of the existing education system, balancing inequalities between age groups, offering a combination of education with work and family life and adding a global dimension to the education experience (Moore & Kearsley, 2012; Wand & Sun, 2001). Relatively, the policy for the provision of DE in South African universities emphasises that the role of DE is to provide access to students for whom either because of work commitment, personal social

circumstances, and geographical distance, contact-based education context is either inappropriate or inaccessible (Department of Higher Education and Training, 2012).

Researchers have categorised different generational models of the development of DE as it responded to changes in technology and learning theories (Heydenrych & Prinsloo, 2010; Moore & Kearsley, 2012; Wand & Sun, 2001). It is important to note that the concept of generations is frequently used to explain the different phases of development, that the new and current technologies are hierarchically combined to increase technology capacity and choice in designing effective DE. The technology media of DE have been described as consisting of a number of generational models, ranging between three and five. However, most scholars proposed that DE has evolved through five generations (Alruhaimi, 2011; Heydenrych & Prinsloo, 2010; Moore & Kearsley, 2012). Following is a discussion of five generations of DE:

The first generation of DE, as put forward by various researchers, encompasses all forms of correspondence education (Alruhaimi, 2011; Heydenrych & Prinsloo, 2010; Moore & Kearsley, 2012; Wand & Sun, 2001). The correspondence education is generally considered to have started in the early 1880s in the United States of America (USA) (Moore & Kearsley, 2012). The defining characteristic of correspondence technology was the mass printed press production of study content (Alruhaimi, 2011; Heydenrych & Prinsloo, 2010), which required a reliable postal service system (Alruhaimi, 2011). The learning materials were delivered to students by postal mail; students could then complete their course work and send it back to the educator through the postal mail delivery (Alruhaimi, 2011). The interaction between students and the delivering institutions was content-based, dominated by the limitations of print technology (Heydenrych & Prinsloo, 2010).

The second generation of DE introduced a number of new mass media technologies, first radio and then television, that enabled study content to be delivered to students anywhere while requiring minimal equipment (Heydenrych & Prinsloo, 2010). The education tuition of this period was independent study and the transmission of content, with little (if any) interaction between students and the delivering institution (Heydenrych & Prinsloo, 2010). These two generations of distance learning were based on one-way communication that is asynchronous (Alruhaimi, 2011). Students mainly depended on student-content interaction (Heydenrych & Prinsloo, 2010; Alruhaimi, 2011).

In the 1960s, the systems approach appeared with the arrival of the University of Wisconsin's AIM Project in the USA and the Open University in Great Britain (Alruhaimi, 2011). This kind of learning was based on sending the printed material, audio and videotape through the postal mail and broadcasting it through the radio, television and telephone conferences (Moore & Kearsley, 2012). This was regarded as the third generation. Although this was a form of interactive learning (human and computer), it did not yet represent an efficient two-way communication over a distance (Heydenrych & Prinsloo, 2010).

The appearance of teleconferencing technology in the United States in the 1980s was classified as the fourth generation (Alruhaimi, 2011; Heydenrych & Prinsloo, 2010; Wand & Sun, 2001). One-way video and two-way audio communications were used at this stage (Alruhaimi, 2011; Heydenrych & Prinsloo, 2010). This generation featured three critical types of interactions identified by Moore (1989), namely learner-content interaction, learner-instructor interaction, and learner-learner interaction. These three types of interaction are believed to enhance effective teaching at DE (Moore, 1989). The latter two generations were characterized by using both methods of communication, synchronous and asynchronous (Alruhaimi, 2011; Heydenrych & Prinsloo, 2010).

In 1992, online learning started; this is considered the fifth generation of DE (Alruhaimi, 2011; Moore & Kearsley, 2012). The growth of the Internet and World-Wide-Web (WWW) has had a profound effect on higher education by enabling the phenomenal growth of online learning (Alruhaimi, 2011). By the early 1990s, web-based programmes were popular globally; numerous universities and colleges in the USA and Africa began offering courses and programmes online (Alruhaimi, 2011). This generation of DE with its interactive media has the potential to nurture social learning that contributed to the development of the online learning community (Cobb, 2009; Gunawardena, 1995; Gunawardena & Zittle, 1997; Lowenthal, 2012; Wei et al., 2012).

With the growing trends in favour of online course offerings in higher education (Allen et al., 2016), further research is needed on the social experiences of students studying through online courses (Cobb, 2009; Kear, 2010; Lowenthal, 2012; Yamada & Kitamura, 2011; Yuan & Kim, 2014). Hence, the focus of this study was to explore social presence amongst first-year undergraduate students who had studied in a fully asynchronous web-based course at

Unisa. Unisa is the dedicated, largest DE institution in South Africa, a developing country (Queiros & De Villiers, 2016; Sonnekus et al., 2006). With over 300 000 active students, Unisa qualifies as one of the mega-universities in the world (Queiros & De Villiers, 2016; Sonnekus et al., 2006). Like other DE institutions, Unisa has migrated through various generations of DE, from predominately print-based correspondence, multimedia interaction, video conferencing, online learning (Sonnekus et al., 2006), and transitioned into Open Distance Electronic Learning (ODEL) (Queiros & De Villiers, 2016).

2.3 DEFINING SOCIAL PRESENCE

The theory of social presence appears to be the most popular construct utilised to understand the quality of social practice in online learning environments (Gunawardena & Zittle, 1997; Lowenthal, 2012; Oztok & Brett, 2011). However, despite its popular appeal, a universal, agreed upon definition of social presence is lacking in the literature (Oztok & Brett, 2011). For instance, Short et al. (1976) first defined social presence as the “degree of salience (i.e. quality of being there) of the other person in the interaction and the consequent salience of the interpersonal relationships” (p. 65). Two decades later, social presence in online learning has been commonly defined in three ways. Firstly, social presence has been defined as the degree to which participants are able to express themselves as real people (Garrison et al., 2000; Gunawardena, 1995; Kear, 2010). Secondly, social presence refers to the extent to which participants feel connected to one another in an online learning community (Garrison & Arbaugh, 2007; Kear, 2010; Lyons et al., 2012; Oztok & Brett, 2011; Picciano, 2002; Richardson & Swan, 2003). Lastly, social presence refers to participants’ sense of being present with another person in a virtual environment and belonging in an online course (Allmendinger, 2010; Picciano, 2002; Tu & McIsaac, 2002).

For the purpose of the current study, social presence has been defined as the participants’ ability to express themselves as real people (Garrison et al., 2000), and to connect with others in a virtual learning class (Lyons et al., 2012).

2.4 COMPUTER-MEDIATED COMMUNICATION AND SOCIAL PRESENCE

As Information and Communication Technology (ICT) advances, higher education institutions worldwide have shown an increased interest in adopting online learning and utilising Computer-Mediated Communication (CMC) to facilitate active interaction between

the students and the institution (Yamada & Kitamura, 2011). The definition of CMC varies; however, scholars refer to CMC as computer conferencing, blended learning, synchronous or asynchronous text-based interaction (Abrams, 2003; Matodzi et al., 2007; Oztok et al., 2013; Wei et al., 2012; Yamada & Kitamura, 2011). Computer conferencing CMC is an electronic mail system employed to facilitate small group discussion over a computer network (Rourke et al., 2007). Blended learning offers a combination of technology-based resources and traditional face-to-face lectures (Mashile, 2015). Synchronous CMC entails real-time, text-based interaction, which requires participants to be logged in at the same time and collaborate immediately (Matodzi et al., 2007; Wei et al., 2012). Asynchronous CMC refers to time-delayed, text-based interaction where participants log in and collaborate at different times (Wei et al., 2012). The time-delayed and place-independent asynchronous text-based interaction is of interest for the current study.

The importance of examining the social factors that impact on communication and learning in CMC has been emphasised by various researchers (Cobb, 2009; Kear, 2010; Lowenthal, 2012; Yamada & Kitamura, 2011; Yuan & Kim, 2014). It is imperative for educators to understand the social experience of students in online programmes (Lowenthal, 2012), considering that students' sense of social presence in online courses has the potential to influence the positive online learning experience (Capra, 2014). Although the construct of social presence has been widely researched (Oztok & Brett, 2011), the majority of the studies has been conducted in blended learning environments, which offers a combination of traditional face-to-face classes and online activities (Nandi et al., 2012). Few studies have looked at social presence in fully online asynchronous courses (Lowenthal, 2012; Rodriguez, 2015), in which there are time-delays and no face-to-face interaction between students and instructors (Rodriguez, 2015; Wei et al., 2012). The current study was interested in exploring the social presence created within the asynchronous or time-delayed text-interaction online learning environment. Asynchronous web-based courses provide an opportunity to create meaningful learning, provided that communities of learners that encourage knowledge building and social reinforcement are specifically created (Moller, 1998). But, in an asynchronous learning environment, social interactions tend to be usually complex because of the time-delayed response (Gunawardena, 1995; Tu, 2001). Failures tend to occur at the social level far more than they do at the technical level (Gunawardena, 1995). Jones (1995, cited in Gunawardena, 1995) discusses the social construction of knowledge on computer networks, posits that knowledge is constructed within the social network of CMC users and it is crucial

to understand the social network of users. Nonetheless, asynchronous courses afford participants the opportunity to work at their own pace, to reflect on their classmates' contributions while creating their own, and on their own writing before posting them (Richardson & Swan, 2003). Further, asynchronous web-based courses enable mutual meaning construction, provided that communities of learners that encourage knowledge building and social reinforcement are specifically created (Moller, 1998).

2.5 ESTABLISHING SOCIAL PRESENCE

As Distance Education institutions are increasingly adopting online learning around the globe (Allen et al., 2016), social presence has been emphasised as an important factor to be nurtured in order to mitigate the transactional distance between the delivering institution and the students (Aragon, 2003; Kim et al., 2011). The instructional designers, instructors and students are accountable for developing and maintaining social presence in an online learning environment (Garrison et al., 2000; Lowenthal, 2012).

Within the Community of Inquiry (CoI) framework, Garrison et al. (2000) posit that teaching presence plays an integral role in developing an online learning environment conducive to social presence. Teaching presence is conceptualised through three categories, namely course design and organisation, facilitation of discourse, and direct instruction (Garrison et al., 2000). Firstly, course design and organisation is described as the teacher's role on the development of the process, structure, evaluation, and interaction components of the online course (Garrison et al., 2000). Secondly, Rourke et al. (2007) describe facilitation of discourse where teachers establish and maintain classroom interaction through modelling of behaviours, encouragement, support, and creating a positive learning atmosphere. Lastly, the direct instruction speaks of the teachers' role in providing intellectual and scholarly leadership, and share their subject matter knowledge with students (Rourke et al., 2007). Ngoyi et al. (2014) submit that the instructor's presence holds the potential to enhance social presence in an online learning environment considering that students will tend to feel that even though their instructor is not physically within reach, the responses to the questions or queries make it seem as though the instructor is physically present. Gunawardena (1995) adds that student perceptions of the social and human qualities of the online medium depend on the social presence created by the online instructor within the online learning community.

Garrison et al. (2000) explored social presence further by conducting content analysis of educational conferencing transcripts of graduate students at the University of Alberta, Canada (Rourke et al., 2007). Their findings culminated in a template with three categories, namely affective responses, interactive responses and group cohesion, which can serve as strategies for nurturing social presence (see Table 1 below). Rourke et al. (2007) hypothesised that if participants within a virtual class express feelings related to their educational experience, express humour, disclose personal information, and use features of emoticons to express feelings, then the affective element of social presence can be cultivated (Rourke et al., 2007). Group cohesion can be established when participants greet each other, address each other by name, use inclusive pronouns, share appropriate personal information and reflect on the course openly (Rourke et al., 2007). Lastly, interactive response can be established when online participants refer directly to others' postings, agree or disagree with others' postings, express approval, ask questions and provide support to peers (Rourke et al., 2007).

Table 1: Strategies of establishing social presence by Rourke et al. (2007)

Categories	Strategies
Affective	<ul style="list-style-type: none"> Expression of emotions Use of humour Self-disclosure of personal information Expression of personal values Use of emoticons
Cohesive	<ul style="list-style-type: none"> Greeting others Addressing others by name Use of inclusive pronouns like “we”, “our”, “us”, or “group” Share personal information Reflect on the course openly
Interactive	<ul style="list-style-type: none"> Refer directly to others' postings Agree or disagree with others' postings Express approval Ask questions Offer advice to peers

(Source: Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2007). Assessing social presence in asynchronous text-based computer conferencing. *International Journal of E-Learning & Distance Education*, 14(2), 50-71.)

Aragon (2003) proposes a list of guidelines related to the strategies provided by Rourke et al. (2001), which can be also be utilised to promote online social presence. Three components were listed, namely the role of course design, the role of the instructor, and the role of the students (refer to Table 2 below). Firstly, for the course design component, Aragon (2003) hypothesises that social presence can be created through the development of welcoming messages, by including student profiles in the online courses, incorporation of audio learning material, limiting the class size, and embedding structured collaboration between students and instructors within the course design (Aragon, 2003). Secondly, instructors can establish social presence by contributing to discussion boards, promptly answering students' emails, providing frequent feedback, striking up a conversation, sharing personal stories and experiences, use of humour, use of emoticons, addressing students by name and allowing students options for addressing the instructor (Aragon, 2003). Students can create social presence by contributing to discussion boards, promptly answering email, striking up conversations, sharing personal stories and experiences, use of humour, use of emoticon and appropriate titles (Aragon, 2003).

Table 2: Strategies of establishing social presence by Aragon (2003)

Course design	Instructors	Students
Develop welcome messages	Contribute to discussion boards	Contribute to discussion boards
Include student profiles	Promptly answer email	Promptly answer email
Incorporate audio	Provide frequent feedback	Strike up a conversation
Limit class size	Strike up a conversation	Share personal experiences
Structure collaborative learning activities	Share personal experiences	Use emoticons
	Use humour	Use humour
	Use emoticons	Use appropriate titles
	Address students by name	
	Allow students options for addressing the instructor	

(Source: Aragon, S. R. (2003). Creating social presence in online environments. *New Directions for Adult and Continuing Education*, 2003(100), 57-68. <http://doi.org/10.1002/ace.119>)

2.6 MEASURING SOCIAL PRESENCE

There is no generally acceptable measure of social presence in the literature (Crim, 2006, Lowenthal, 2012). Short et al. (1976) measured social presences through a survey which required participants to rate the communication media on a sequence of a seven-point, bipolar scale such as sociable/unsociable, personal/impersonal, sensitive/insensitive, and warm/cold. Communication medium with a high degree of social presence was found to be warm, personal and sociable, while a medium with a low degree of social presence was viewed as impersonal.

Gunawardena and Zittle (1997) developed a social presence scale consisting of 14 Likert items to explore student perceptions of social presence in a computer-mediated conferencing setting. Some of the items asked students to rank, on a scale of 1 to 5, the extent to which they agree or disagree that CMC is an excellent medium for social interaction or if CMC was social, interesting or stimulating. They found that students rated conferencing discussion as highly interactive and social.

Few years later, Garrison et al. (2000) developed a survey which has been widely utilised to design and measure the three elements of the CoI framework (i.e., cognitive presence, social presence and teaching presence). Rourke et al. (2007) extended the work of Garrison et al. (2000) further by measuring social presence through analysing online discussions. The authors identified three categories of social presence, namely affective responses, interactive responses, and cohesive responses. They then developed the social presence template with 12 indicators of social presence, which can be used to measure transcripts of CMC.

Tu (2001) argued that the social presence instruments developed by Gunawardena and Zittle (1997), Rourke et al. (2007) and Short et al. (1976), were unable to capture a thorough perception of social presence because several important variables were not considered (e.g., social relationship, communication style, privacy, recipients, topics). Consequently, Tu (2001) developed the social presence and privacy questionnaire, that consisted of 17 Likert

items addressing social presence and 13 privacy items, and emphasised that social presence is a complicated construct involving privacy, social relationships, communication styles, the nature of the task, feedback, and immediacy, among other items.

Hostetter and Busch (2006) argued that relying solely on questionnaires to measure social presence can be problematic, since respondents may be providing socially desirable answers. With the same argument in mind, Swan and Shih (2005) developed and validated a social presence interview instrument in an exploratory social presence study among online graduate students at a large public university in the North East of America. Given the different measures of social presence, the current study has mainly adapted the interview questions from the validated social presence instrument by Swan and Shih (2005), the social presence template by Rourke et al. (2007) and the CoI survey by Garrison (2011), to extend an understanding of social presence in an asynchronous learning environment (see the interview schedule in Appendix C).

2.7 RESEARCH WITH INFLUENCE ON SOCIAL PRESENCE

The studies on social presence have indicated various educational implications, particularly the significance of social presence in online learning. The next section examines the three main themes which the literature suggests to have an impact on social presence, namely social presence and satisfaction, social presence and interaction, and social presence and student learning. The literature reviewed indicated that the majority of the studies were mainly conducted in blended, computer conferencing and synchronous CMC. Few studies have focused on asynchronous CMC, which justifies a need for conducting the current study in a fully asynchronous, web-based course.

2.7.1 Social presence and satisfaction

The majority of researchers contend that students' perception of social presence is a predictor of satisfaction with CMC (Bulu, 2012; Cobb, 2009; Gunawardena, 1995; Gunawardena & Zittle, 1997; Hostetter & Busch, 2006; Richardson & Swan, 2003; So & Brush, 2008); however, contradiction on the findings is reported by other researchers (Kim et al., 2011; Leong, 2011).

Gunawardena (1995) and Gunawardena and Zittle (1997) conducted two foundation studies with Globaled conference participants (Gunawardena, 1995; Gunawardena & Zittle, 1997). The first study sought to evaluate and measure participants' perceptions of the social presence of others in a computer conference (Gunawardena, 1995), while the second study aimed to explore whether social presence was a predictor of satisfaction in a computer-mediated conferencing environment (Gunawardena & Zittle, 1997). The participants in the study were graduate students from different universities in the USA who attended the spring computer conferences during the years 1992 and 1993. The instrument for data collection was a social presence and satisfaction questionnaire developed by Gunawardena (1995) and Gunawardena and Zittle (1997). In the two separate studies, the researchers found that students rated computer conferencing discussion as highly interactive, active and social (Gunawardena, 1995; Gunawardena & Zittle, 1997). Gunawardena (1995) concluded that, although CMC is described as a medium that is low in non-verbal and social context cues, participants in conferences create social presence by projecting their identities and building online communities. Further, the researchers found the significant relationship between perceived social presence and satisfaction with the computer conference.

Richardson and Swan (2003) explored the role of social presence in relation to student satisfaction with a course delivered asynchronously. The participants for this study were 97 students who completed Empire State College's (ESC) online learning courses in the spring of 2000. The social presence scale originally constructed by Gunawardena and Zittle (1997) was amended and utilised to conduct data on students' overall perception of the instructor, learning, and perception of social presence, as well as the value of learning activities and overall satisfaction. The findings showed that students who perceived a high degree of social presence also felt that they learned more than those students who perceived a low level of social presence. Further, students who scored high in social presence indicators expressed high satisfaction with their instructor and overall learning experience.

Picciano (2002) utilised a modified version of Gunawardena and Zittle (1997) and Richardson and Swan's (2003) self-report questionnaire to study students' perception of social presence in relation to perceived learning and satisfaction with course instructors. The study consisted of 97 undergraduate and graduate participants taking blended online courses at Empire State College in the USA. The findings revealed that perceptions of social presence correlated positively to perceived learning and perceived satisfaction with the instructor. Relative to the

study by Richardson and Swan (2003), it was further found that students with high social presence scores perceived that they learned more than students with lower scores, consequently indicating a relationship between students' perceived social presence and students' perceived learning. They have also found a positive relationship between student satisfaction with their instructor and perceived learning. Furthermore, students with high social presence scores were highly satisfied with their instructor.

Recent studies have also found the relationship between social presence and satisfaction with online programmes (Bulu, 2012; Cobb, 2009; Reio & Crim, 2013). For instance, Cobb (2009) conducted a study to assess social presence in blended online nursing courses and its relationship to student satisfaction and perceived learning. The Social Presence scale and the Satisfaction scale were administered to 128 students in an online RN-BSN programme. Results indicated a significant relationship between perceived learning and social presence and comfort with the online course. Further, the relationship between social presence and satisfaction with CMC was reported, and instructor performance.

Contrary to the majority of research findings, the study by Kim et al. (2011) did not find the relationship between social presence and satisfaction. The study investigated the structural relationships between the perceived level of social presence, the perceived usefulness and ease of online tools, and learner satisfaction and persistence among 709 undergraduate students at South Korean Online University. The study examined the associations of three variables, namely media integration, quality instruction and interactivity with social presence and learning satisfaction. The study results indicated that media integration, quality instruction and interactivity are good predictors of social presence while only media integration and quality of instruction predict learning satisfaction.

The opposite view was also presented by Leong (2011) in investigating the relationships between social presence, cognitive absorption, interest, and student satisfaction in online learning with students enrolling for blended online courses at the University of Hawaii. The participants consisted of 294 students who were studied in 19 online hybrid courses. Through the survey questionnaire, the study determined that social presence does not have a direct impact on satisfaction. It was concluded that while social presence is related to student satisfaction, its impact is not direct but rather mediated by cognitive absorption.

In summary, studies with a focus on the relationship between social presence and student satisfaction are inconsistent since the recent findings contradict the earlier findings. However, it is imperative for online instructors to recognise the important role of student satisfaction as a result of perceived social presence in online learning communities in an attempt to retain students and mitigate the high online dropout rate (Lowenthal, 2012).

2.7.2 Social presence and interaction

Moore (1989) identified three types of interaction that are believed to enhance effective teaching, namely Learner-content interaction, Learner-instructor interaction and Learner-learner interaction. Learner-content interaction implies the process of intellectually interacting with the study material that results in constructive understanding of course content (Moore, 1983). Learner-instructor interaction involves strengthening the learner content interaction utilising instructors' feedback, discussion, and application of examples (Moore & Kearsley, 2012). Learner-learner interaction among members of a class or group is regarded as an extremely valuable resource for learning (Moore, 1989). This interaction encourages a student-centred learning and prepares students for real life where they will need to cooperate with peer colleagues in the workforce (Moore et al., 2011).

The relationship between social presence and interaction in CMC environments has been reported by various researchers (Cobb, 2009; Dow, 2008; Wei et al., 2012; Swan & Shih, 2005; Tu & McIsaac, 2002). For instance, Tu and McIsaac (2002) conducted a mixed methods study within a blended online learning context at the George Washington University and Arizona State University. Their findings revealed that social presence influenced online interaction. Further, they found that the quantity or frequency of online participation did not necessarily result in high social presence; rather, it was the quality of online interactions that made the difference (Tu & McIsaac, 2002).

Kim et al. (2011) examined the relationship among students' different demographics and other variables, such as social presence, instructor quality, interactivity and learning satisfaction at the K Cyber University in Korea. It is important to note that the authors defined interaction as synonymous with interactivity. An online self-report survey developed by the authors entailing quality instructor, social presence, satisfaction, and interactivity scale was utilised to collect data of 81 online students. Their results showed that demographic variables,

such as gender, online learning experience and work status were not significant factors in terms of influencing either social presence or learning satisfaction. The integration and instructor's quality of teaching were significant predictors of both social presence and learning satisfaction; interactivity among participants was a predictor of social presence but not of learning satisfaction. Wei et al. (2012) investigated social presence and its relationship to learning interaction and performance with high-school students and undergraduates at Taiwan institutions through online self-report surveys. They found evidence that social presence had a significant relationship with learning interaction which, in turn, has significant effects on learning performance. In summary, studies support the relationship between social presence and online interaction which point to the importance of social presence in online learning.

2.7.3 Social presence and student learning

There is agreement among researchers that students' perception of social presence relates to perceived learning (Capsi & Blau, 2008; Cobb 2009; Hostetter & Busch, 2013; Picciano, 2002; Richardson & Swan, 2003; Swan & Shih, 2005).

Hostetter and Busch (2013) conducted a mixed method study to examine the relationship between social presence and students' learning outcomes. The participants were 121 undergraduate students in four sections of a blended online seminar at the Indiana University of Bloomington. Richardson and Swan's (2003) modified survey was used to collect data on students' perception of social presence. The qualitative data was collected through analysing students' postings in discussion forums and PowerPoint presentations. The discussion forum data was analysed utilising the social presence indicators template devised by Rourke et al. (2007). A Classroom Assessment Technique (CAT) aimed at asking about the course knowledge was used to measure the relationship between social presence and students' learning outcomes. Students were found to demonstrate high levels of social presence in the discussion forum, with an average of 86.45% of posting reflecting affective, interactive, and cohesive components. Students who displayed more social presence in the discussion forum also perceived more social presence in the survey. Further, the regression model revealed that students with higher demonstrations of social presence in discussion forum posts had statistically significantly higher ratings on the Classroom Assessment Technique. It was concluded that social presence influences student learning outcomes.

Likewise, Capsi and Blau (2008) found a correlation between perceived learning and three conceptions of social presence seen as (1) a subjective quality of the medium that determines the quality of the communication and perception of others, (2) self-projection onto the group, and (3) identification with the group, and different aspects of perceived learning in online discussion groups. Nieto, Pichastor, Botella, & Nomdedeu (2011) have also found a positive relationship between social presence and perceived learning.

2.8 SOUTH AFRICAN RESEARCH ON SOCIAL PRESENCE

The majority of studies with a focus on students' perceptions of social presence emanates from the USA. Although there are some research efforts specifically dedicated to understanding social presence in virtual learning in South Africa, the existing studies have been conducted in contact-based institutions. For example, Phahlane and Kekwaletswe (2012) conducted a case study at the University of Pretoria, which aimed to conceptualise social presence awareness in e-collaboration of postgraduate masters' students. The social presence template amended by Rourke et al. (2007) was utilised to analyse textual interaction of students that took place through the university's Learning Management System (LMS) and electronic-mails to determine the indicators of social presence among students. The lack of social presence amongst students and instructors was found to hinder an effective learning experience, often leading to delayed or incomplete learning tasks. The authors recommended that the framework for e-collaboration amongst postgraduate students be developed cognizant of the social presence awareness indicators that would help students to establish a sense of togetherness during e-collaboration.

Nagel and Kotzé (2010) used the Community of Inquiry survey to compare the existence of cognitive, teaching and social presence of two blended postgraduate courses, one predominantly online and the other mostly in contact mode, also at the University of Pretoria. The finding showed three things from the two groups of students. Firstly, strong teaching presences were evident due to good organisation, comprehensive online supportive documentation, and automated feedback. Secondly, high cognitive presence was due to peer review, strong constructive alignment between study objectives, activities and assessment in contact base cohort, and in the online class it was due to the constructivist teaching practice of

fostering student ownership of outcomes. Lastly, in both classes social presence was the weakest, although the contact class scored significantly higher on this presence.

Greyling and Wentzel (2007) argued the importance of social presence as a building block of successful learning environments and presented some of the ways in which lecturers can purposefully create and maintain social presence. The authors conducted a case study of 3 000 online students at the University of Johannesburg, Gauteng. It was concluded that while technology cannot replace lecturers, it can facilitate an online social presence that encourages learning. It was further commented that lecturers should become aware of how their presence (or lack thereof) may influence student satisfaction and learning.

A large action inquiry by Ndeya-Ndereya (2008), as reported in Nel and Ndeya-Ndereya (2011), resulted in the development of a framework for the enhancement of online social presence within the context of South African traditional higher education. The authors set out to assess the possibility of implementing a selection of communication strategies which can enhance social presence at the University of the Free State. This was done as part of an ongoing action inquiry project in an undergraduate course that was presented through the blended mode which run through six completed cycles (over a period of almost seven years). The developed framework suggests that the strategies employed by different online facilitators to enhance social presence serve functions that can be categorised within the spheres of learning design, learning facilitation, and learning support. The learning design category entails communication strategies that can be used to develop social presence such as creating opportunities or online communication, determining the basic levels of technological skills required by students to get access to and use of online communication tools. Learning facilitation can be developed by clarifying communication objectives and expectations, establishing social connections, encouraging open communication through the use of two-way communication tools and assisting students in developing online communication skills. Learning support can be developed through enhancing online communication skills, encouraging self-disclosure, providing easily accessible and friendly technical support, the use of Short-Message-Services (SMS) and the development of online cultural skills. It is against this backdrop in the South African literature that the current inquiry finds its significance, describing first year undergraduate students' experiences of social presence in a fully asynchronous web-based course in the South African ODL context.

2.9 RESEARCH OPPORTUNITIES IN THE OPEN DISTANCE ELECTRONIC LEARNING CONTEXT

The construct of social presence has long affected what is currently considered to be a good practice in online learning (Lowenthal, 2012). Despite the popularity of social presence research, a number of research opportunities in the literature remain (Oztok & Brett, 2011). Firstly, the theory of social presence appears to be the most popular construct utilised to design web-based courses and to understand how people interact socially in online learning environments (Lowenthal, 2012; Kim et al., 2011; Yamada & Kitamura, 2011). However, despite its intuitive appeal, a universal, agreed upon definition of social presence is lacking (Oztok & Brett, 2011; Oztok et al., 2013; Picciano, 2002). Lowenthal (2012) stresses this variety of conceptualisations of social presence by arguing that “it is often hard to distinguish between whether someone is talking about social interaction, immediacy, intimacy, emotion, engagement, or connectedness when they talk about social presence” (p. 125).

Secondly, although the construct of social presence has been widely researched (Oztok & Brett, 2011), the majority of studies has been conducted in blended learning environments, which offer a combination of traditional face-to-face classes and online activities (Nandi et al., 2012). Little scrutiny has been given to students’ perceptions of social presence in fully asynchronous web-based courses, which provide time-delayed interaction and no face-to-face interaction, particularly in the Distance Education institutions (Lowenthal, 2012; Rodriguez, 2015). (Lowenthal, 2012; Rodriguez, 2015).

Last but not least, Oztok and Brett (2011) conducted a review of the literature by categorising social presence research into three eras through which the history and evolution of social presence can be summarised. Their review indicated that social presence was extensively studied quantitatively by utilising the self-report survey and analysis of online discussion threads (Bulu, 2012; Cobb, 2009; Gunawardena, 1995; Gunawardena & Zittle, 1997; Hostetter & Busch, 2006; Richardson & Swan, 2003; So & Brush, 2008). Relying mostly on self-report data can be problematic, since students might be providing socially desirable responses (Hostetter & Busch, 2006). A lack of in-depth qualitative understanding of social presence was identified within the literature review (Oztok & Brett, 2011). Few researchers (Hall & Herrington, 2010; Lowenthal, 2008; Morris, 2011; Swan & Shih, 2005) have actually interviewed students to gather an in-depth understanding of students’ perceptions of social

presence in an asynchronous online learning environment. To corroborate an understanding of whether an asynchronous online learning environment has the capability to convey social presence, researchers need to also look at what is said, by interviewing students. Furthermore, the literature foregrounds the dearth of scholarly work on student perceptions of social presence within the South African distance education context. It is against this backdrop that the current inquiry followed a qualitative inquiry approach, interviewed first-year undergraduate students in order to get an in-depth understanding of how social presence manifested itself in a fully asynchronous web-based course at Unisa, the South African distance education institution, in order to add knowledge to the existing literature. It was anticipated that the findings from this study might affect the design and facilitation of fully asynchronous online courses.

2.10 CHAPTER SUMMARY

The purpose of this study was to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa, an ODL institution. To carry out this study, it was essential to review the salient literature to provide background for the current study. In the next chapter, Chapter 3, I will present the theoretical framework, the Community of Inquiry (CoI), which formed the basis of the current study.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 INTRODUCTION

This qualitative research sought to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa, a dedicated Open Distance Learning (ODL) institution which is located in South Africa. Students' views of social presence were guided by the Community of Inquiry (CoI) framework, which posits that meaningful online learning results from the interaction of three core constructs: cognitive presence, social presence, and teaching presence.

This chapter outlines the theoretical framework on which the current study was based. I begin the chapter with a discussion of the background of the social presence theory which is linked to the concepts of intimacy and immediacy. I then discuss the CoI framework, explicating the three elements within the framework (i.e., cognitive presence, teaching presence and social presence). Within the social presence element, I further discuss categories and indicators of social presence.

3.2 THEORETICAL BACKGROUND: SOCIAL PRESENCE THEORY

The research on the social presence theory seems to have evolved through three distinct perspectives, as tabulated below (Oztok & Brett, 2011; Yamada & Kitamura, 2011). This section describes three eras in order to characterize how the concept of social presence has evolved over the years.

Table 3: The evolution of social presence research

Perspectives	Key researchers	Aspects that enhance social presence
First	Short, Williams, and Christie (1976)	The quality of communication medium
Second	Gunawardena (1995); Gunawardena and Zittle (1997)	Subjective perceptions and quality of interaction amongst Computer-Mediated-Communication (CMC) participants

Perspectives	Key researchers	Aspects that enhance social presence
Third	Garrison, Anderson, and Archer (2000)	Subjective perceptions and participants' ability to express themselves as real people

(Source: Yamada, M., & Kitamura, S. (2011). The role of social presence in interactive learning with social software. *Social Media Tools and Platforms in Learning Environments* (pp. 325-335). New York, NY: Springer Heidelberg Dordrecht.)

The first viewpoint emanates from the work of Short et al. (1976) at the University College in London, UK. Short et al. (1976) were the first to introduce the construct of social presence to explain how various communication media affect the outcome of a communication. The authors define social presence as the “degree of salience (or significance) of the other person in the interaction and the consequent salience of the interpersonal relationships between two communicators using a communication medium” (p. 65). Salience refers to the quality or state of being there during interaction (Lowenthal, 2008).

Short et al. (1976) evaluated and compared the effects of different types of communication media (e.g. video, audio-teleconferencing, text, facsimile machines, and voice mail) on social interactions. In their model of social presence, communication media are considered to have inherent capacities to transmit social presence; media which can best mimic face-to-face interaction are considered to have the highest degree of social presence (Shea & Bidjerano, 2009). The less information that a medium is capable of transmitting about facial expressions and gestures, the lower the medium's social presence ranking relative to others (Shea & Bidjerano, 2009). Short et al. (1976, cited in Lowenthal, 2012) alluded that people perceive some communication media as having a higher degree of social presence (e.g. video) than other communication media (e.g. audio teleconferencing, voice mail), and other media having even a lesser degree of social presence (e.g. text, facsimile). These investigations led them to hypothesise that the communications media vary in their degree of social presence, and these variations are important in determining the outcome of interaction amongst people (Short et al., 1976). As a result, Short et al. (1976) conceptualised social presence as a quality of the communication medium that can determine the outcome of interaction amongst people. Most importantly, Short et al. held the view that a communication medium with a high degree of social presence is perceived as being warm, personal and sociable, while a medium with a low

degree of social presence is seen as impersonal. This appears to be a pioneering viewpoint which influenced the research on social presence (Yamada & Kitamura, 2011).

Later researchers have supported Short et al.'s conclusion that communication mediums with a low degree of social presence can be impersonal. Walther (1992) reviewed literature which indicated that text-based CMC can be potentially lean in social presence considering that the non-verbal and relational views that are common in face-to-face communication are filtered out in text-based conversation. Culnan and Markus (1987, cited in Shea & Bidjerano, 2009) referred to this deficit as the cues-filtered-out model, suggesting that the absence of body language and social cues has an impact on social interaction and relationship. Online teaching and learning conducted in asynchronous environments would thus not be expected to result in high levels of social presence nor in productive community of learners due to the leanness of overt social cues (Shea & Bidjerano, 2009). However, to compensate for the leanness of the text-based communications, participants could utilise techniques such as the use of emoticons, to add affective components to computer-mediated conversation (Garrison et al. 2000; Walther, 1992).

As the popularity of CMC use and research proliferated in the late 1980s and early 1990s, the CMC researchers began to interrogate Short et al.'s view on whether the quality of a communication medium determines social presence (Garrison et al., 2000; Gunawardena, 1995; Gunawardena & Zittle, 1997).

Gunawardena (1995) and Gunawardena and Zittle (1997) conducted two studies to examine whether social presence was largely an attribute of the communication medium or user's perception. The participants in the study were graduate students from different universities in the United States of America (USA) who attended the spring 1992 and 1993 global computer conferences. The findings in the two separate studies showed that the quality of interaction amongst participants mattered more than the quality of the medium. They found that social presence can be established amongst conference participants by expressing themselves as real people, a position different from Short et al.'s (1976) view that social presence depends on the quality of the communication medium. The authors thus conceptualised social presence as users' subjective perceptions of interaction that depend on the objective quality of the communication medium (Gunawardena & Zittle, 1997). It was further noted that although CMC is considered to be a medium that is lean in social cues (Walther, 1994), CMC was

found to be interactive, social, personal and stimulating by conference participants (Gunawardena, 1995; Gunawardena & Zittle, 1997). This seems to be the second viewpoint which influenced research on social presence (Yamada & Kitamura, 2011).

The third perspective of social presence reflects the research findings by Garrison, Anderson and Archer (2000). Garrison et al. (2000) have also argued against Short et al.'s (1976) view that social presence depends on the quality of the communication medium. Instead, Garrison et al. held that they do not believe that the effect of the communication media *per se* is the most salient factor in determining the degree of social presence (Garrison et al., 2000). Rather, "participants' capability to project their personality, the communication context created through familiarity, skills, motivation, commitment, learning activities, and length of time in using the media, directly influence social presence that develops" (Garrison et al., 2000, p. 93). Garrison et al. (2000) have thus adopted the subjective perceptual view of social presence, and redefine social presence as "the ability of participants in a community of inquiry to project themselves socially and emotionally, as real people, through the medium of communication being used" (p. 94). This perspective has attracted educational researchers, particularly in distance education and online learning, as evidenced by the increased amount of literature with a focus on social presence (Lowenthal, 2012; Moore & Kearsley, 2012).

Garrison et al. (2000) recognised the need for an online learning framework with a focus on interaction and learning. The authors explored computer conference courses; an analysis of course transcripts revealed various forms of presence which influence a meaningful virtual learning experience. Their research culminated in the CoI framework with three forms of presence, namely teaching presence, social presence, and cognitive presence (Garrison et al., 2000). These three forms of presence contribute to an online community, the goal of which is the construction of new knowledge and learning through mutual collaboration (Shea & Bidjerano, 2009). The CoI framework articulates social presence not as a function of the medium of delivery, but through the capacity of participants to establish satisfying relationships and levels of interaction necessary to engage in discourse that is fundamental to learning (Shea & Bidjerano, 2009). The CoI framework is discussed below.

3.3 THE COMMUNITY OF INQUIRY FRAMEWORK

The CoI framework, originally developed by Garrison, Anderson and Archer (2000), served as the theoretical framework for this inquiry. The CoI has its genesis in the work of John Dewey's (1993, cited in Garrison et al., 2000) reflective inquiry approach to learning (Garrison et al., 2000), and is consistent with the constructivist approach which emphasises the importance of learning through social interaction (Annand, 2011; Garrison et al., 2000). The CoI framework is one of the few theoretical frameworks that attempts to systematically explain the underlying processes and dynamics of student engagement and learning in virtual environments (Shea & Bidjerano, 2009), and arguably the most widely used model for constructivist based e-learning (Annand, 2011; Taghizadeh & Vaezi, 2011). From the original formulation, the framework has been adopted and adapted by educators and researchers worldwide to guide e-learning best practice (Taghizadeh & Vaezi, 2011).

The framework aims to articulate the social and academic factors that are necessary for the development of quality online education (Shea & Bidjerano, 2009). The CoI framework is based on the assumption that meaningful and quality online learning takes place within a community of inquiry comprising teachers and students, through the interaction of three core elements, namely cognitive presence, teaching presence and social presence (Garrison et al., 2000). Garrison and Akyol (2013) define an educational community of inquiry as a group of individuals who collaborate in purposeful critical discourse and reflection, with the intention of constructing personal meaning and confirm mutual understanding. The interaction of cognitive, teaching and social presence in an online course is fundamentally a social phenomenon and manifests itself through interactions amongst the students and instructors (Picciano, 2002). According to Garrison et al. (2000), a meaningful educational experience takes place where the three presences meet, as shown in Figure 1 below.

With the advancement of ICT in the current distance education generation, different media (e.g., chatroom, discussion threads, wikis and blogs) have the potential to enhance cognitive, social and teaching presence (Garrison et al., 2000). The two elements of this model, cognitive presence and teaching presence, will be mentioned as they relate to social presence, but will not be entirely discussed due to the focus of this study being specifically on social presence. The CoI model, particularly the social presence element, served as the conceptual

framework for this study. The research questions, interview questions and data analysis were based on the CoI framework.

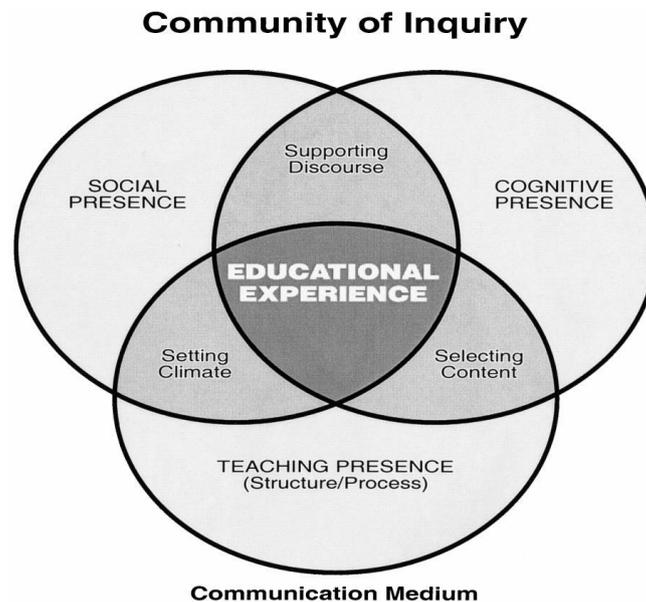


Figure 1: Community of Inquiry Framework

(Source: Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105. doi:10.1016/S1096-7516(00)00016-6)

3.3.1 Cognitive presence

Cognitive presence is defined as the extent to which students can construct and confirm meaning through sustained conversation (Garrison et al., 2000). Garrison et al. (2000) described four essential categories related to students' cognitive presence: a triggering event during which the issue is recognised, individual and social exploration of ideas to better grasp the issue, evaluation and integration of the ideas generated, and resolution of the issue through collaboration. The authors argue that cognitive presence by itself is not sufficient to sustain a critical community of learners, but an adequate level of social presence with accompanying degrees of commitment and participation is necessary for meaning construction and worthwhile educational outcomes.

3.3.2 Teaching presence

Teaching presence is defined as the design, facilitation, and direction of cognitive and social processes for the purpose of realising personally meaningful and educationally worthwhile

learning outcomes (Rourke et al., 2007). Teaching presence is conceptualised through three categories, namely course design and organisation, facilitation of discourse, and direct instruction. Firstly, Garrison et al. (2000) explain course design and organisation as the teachers' role in the development of the process, structure, evaluation, and interaction components of the course. Secondly, Rourke et al. (2007) describe facilitation of discourse where teachers establish and maintain classroom interaction through the modelling of behaviours, encouragement, support, and creating a positive learning atmosphere. Lastly, the direct instruction addresses the teacher's role in providing intellectual and scholarly leadership, and sharing their subject matter knowledge with students (Rourke et al., 2007).

Ngoyi et al. (2014) submit that the instructor's presence holds the potential to enhance social presence in an online learning environment considering that students will tend to feel that even though their instructor is not physically within reach, the responses to the questions and queries make it seem as though the instructor is physically present (Ngoyi et al., 2014). The researchers reported further that that students' and instructors' presence create a feeling of connection essential in a virtual learning environment. Garrison et al. (2000) maintain that teaching presence is a means to an end to support and enhance social and cognitive presence for the purpose of realising personally meaningful and educationally worthwhile learning outcomes (Garrison et al., 2000).

3.3.3 Conceptual framework: Social presence

The social presence element within the CoI framework served as the conceptual framework to gain an understanding of whether social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa, an ODL institution. Of all the elements of the CoI framework, social presence has received the most attention, possibly because of its ties to creating a community in the online learning environment (Moore & Kearsley, 2012). The construct of social presence appears to be commonly utilised to measure and understand the quality of social interaction in virtual learning environments (Lowenthal, 2012). However, despite its popular appeal, a universal, agreed upon definition of social presence is lacking in the literature (Lowenthal, 2012; Oztok & Brett, 2011). Lowenthal (2012) notes that it is often difficult to differentiate between whether scholars are talking about social interaction, immediacy, intimacy, and/or connectedness when they refer to social presence. For the current study, social presence has

been defined as participants' ability of to express themselves as real people (Garrison et al., 2000), and to connect with others in a virtual learning environment (Lyons et al., 2012).

The construct of social presence is grounded in the assumption that learning is not an independent exercise, but rather a collaborative endeavour, requiring genuine interaction between people (Garrison et al., 2000). For this type of interchange to occur, participants must have a "sense of belonging and acceptance in a group (i.e. online course) with common interests" (Garrison, 2007, p. 49). The primary function of the social presence element in virtual learning is to support affective and cognitive objectives of learning (Garrison et al., 2000; Rourke et al., 2007). Social presence supports the affective objective of learning by making the group interactions appealing, engaging, and thus essentially rewarding, leading to an increase in academic, social, and institutional integration (Rourke et al., 2007). At the same time, the affective learning context, with accompanying degrees of commitment and participation, is necessary for meaning construction and worthwhile educational outcomes (Rourke et al., 2007).

Distance online education students are likely to experience isolation and disconnection due to the physical and psychological distance between students and the institution (Bowers et al., 2015; Rovai, 2007; Sung & Mayer, 2012). Aragon (2003) argues that it is imperative for course designers and facilitators to design online programmes that promote social connection due to the isolated nature of these virtual instructional settings, thereby enriching the online student's learning experience (Sung & Mayer, 2012). Asynchronous distance education provides an opportunity to create meaningful learning, provided that communities of learners that encourage knowledge building and social reinforcement are specifically created (Moller, 1998). The current distance education technology offers different media (i.e. instant chat, discussion threads, blogs, electronic whiteboards, audio devices, and video devices) with various potentials to enhance social presence (Moller, 1998). However, the extent to which CMC participants can establish and maintain social presence depends on the effectiveness of course design (Aragon, 2003; Moller, 1998).

3.3.3.1 Categories and indicators of social presence

In an attempt to better understand the phenomenon of social presence, Garrison et al. (2000) explored computer conference courses. The content analysis of computer conference

transcripts and the literature review culminated in a template with three categories of social presence, namely emotional expression, open communication, and group cohesion, with accompanying indicators (Garrison et al., 2000). Rourke et al. (2007) extended Garrison et al.'s (2000) work by conducting content analysis of computer transcripts of graduate students at the University of Alberta, Canada. The researchers augmented their research by studying media capacity, teacher immediacy, and group interaction literature.

Through the process, Garrison et al.'s (2000) initial social presence template was amended. Garrison et al.'s (2000) original social presence categories were re-labelled differently to better reflect the nature of the emergent indicators (Rourke et al., 2007). Emotional expression has been renamed affective responses, open communication as interactive responses, and group cohesion as cohesive responses (Rourke et al., 2007). These categories will be used interchangeably to refer to the same aspects in the current study. The social presence template (see Appendix E), amended by Rourke et al. (2007), was utilised to conduct thematic analysis on all of the interview transcripts in order to explore and identify the types of social presence categories and indicators reflected by participants in the current inquiry.

3.3.3.1.1 Affective responses

Affective responses are indicated by participants' capability to express feelings related to the learning experience (Garrison et al., 2000). Most of the adjectives commonly used to describe emotions are secondary meanings derived from primary meanings related to physical presence, e.g. overt social cues, closeness, warmth, non-verbal expression, facial expressions, eye contact and attraction (Garrison et al., 2000). The capacity to express these emotions is correspondingly reduced or eliminated when communication is text-based and taking place at a distance (Garrison et al., 2000). This is due to the fact that text-based communication is often described as a lean medium with a lack of overt social cues when compared to the richness of the dynamics of face-to-face communication (Garrison et al., 2000; Walther, 1992).

To compensate for the leanness of visible cues in text-based communications, participants can use emoticons to enhance affective components to computer-mediated conversation (Garrison et al., 2000; Walther, Anderson, & Park, 1994). Emoticons are frequently referred to as smiley faces, and are demonstrated by various sideways faces such as ☺ or ☹ (Steinman,

2010). Rourke et al. (2007) add that participants in e-learning communities can also portray feelings through textual elements such as punctuation and capitalisation, which can provide affective non-verbal cues for online participants.

Affective communication can also be recognised through adjectives such as expressions of humour and self-disclosure of personal information in CMC dialogue (Garrison et al., 2000). Expressions of humour in virtual conversations convey friendliness, empathy, warmth, and serve to make a conversation inviting (Garrison et al., 2000). Self-disclosure pertains to sharing of personal information, feelings, attitudes, experiences and interests (Garrison et al., 2000). When online participants share personal information it encourages others to be more forthcoming and to reciprocate, with the outcome being an improved trust, support, and a sense of belonging, which reduces feelings of social isolation in distance learning (Garrison et al., 2000).

3.3.3.1.2 Interactive responses

Open communication refers to communication that is mutual and respectful (Garrison et al., 2000), which is significant to meaningful learning outcomes (Taghizadeh & Vaezi, 2011). Open communication is exemplified by mutual awareness and recognition of each participant's contribution within the online class (Garrison et al., 2000). When online participants are mutually aware of each other's contribution, group cohesion develops (Garrison et al., 2000). Open communication is further realised when participants utilise the reply feature to post messages, continue with thread discussion, quoting directly from the conference transcript, directing a comment to someone in particular, asking questions, and referring explicitly to the content of others' messages (Garrison et al., 2000; Rourke et al., 2007). Recognition, the second example of open communication, is illustrated by expressions of appreciation and agreement, as well as complimenting and encouraging others (Garrison et al., 2000). This aspect of social presence is particularly significant in a text-based environment, where smiles, eye contact, nodding, and other non-verbal means of portraying recognition are filtered out (Garrison et al., 2000).

3.3.3.1.3 Cohesive responses

Cohesive responses are illustrated by activities that build and maintain a sense of group commitment (Garrison et al., 2000; Rourke et al., 2007). When group members feel committed

to their group, a sense of belonging to the group and connectedness develop (Garrison et al., 2000). Garrison (2011) explains that it is cohesion that sustains the communication and purpose of a Community of Inquiry, particularly in an online learning group separated by time and space. In particular, “meaning construction, confirming understanding and compelling collaborative activities can only be successfully accomplished in a cohesive online class” (Garrison, 2011, p. 39). This implies that group cohesion is closely associated with the cognitive aspects of an educational experience (Garrison et al., 2000). The assumption is that critical inquiry and the quality of the discourse can be facilitated when students see themselves as part of a group rather than as individuals (Garrison et al., 2000). However, for group cohesion to manifest itself, there must be activities developed by the online designers and instructors that require students to work together in order to build and maintain a sense of group commitment (Garrison et al., 2000).

Rourke et al. (2007) add that cohesive responses are further exemplified by indicators such as salutation/phatic, vocative communication, and addressing the group using inclusive pronouns. Phatic communication is defined as communication used to share feelings or to establish a mood of sociability (Rourke et al., 2007). Vocative communication, which means addressing participants by name, is also an important expression of cohesion (Rourke et al., 2007). A distinction of the vocative effect occurs at the group level when participants refer to the group with inclusive pronouns such as “we”, “our”, “us”, or “group” (Rourke et al., 2007).

In summary, when the three categories of social presence (i.e. affective responses, interactive responses and cohesive responses) are evident in a virtual classroom, learning is facilitated, and quality educational experience is enhanced (Garrison et al., 2000). The presence of the indicators of social presence reveals the level of social presence in an online community of inquiry (Rourke et al., 2007). Low frequencies indicate that the online social environment is cold and impersonal, while high frequencies indicate that the online social environment is warm and collegial (Rourke et al., 2007).

3.4 CHAPTER SUMMARY

This chapter described the theoretical framework on which the current study was based. The social presence element within the CoI framework offers the specific lens that was utilised to gain an understanding of the ways in which social presence manifested itself amongst first-

year undergraduate students in a fully asynchronous web-based course. In the next chapter, Chapter 4, I will outline the research methodology that was employed to carry out this inquiry.

CHAPTER 4: METHODOLOGY

4.1 INTRODUCTION

The current study set out to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa, a dedicated Open Distance Learning (ODL) institution, which is located in South Africa. A qualitative case study approach was followed to understand the phenomenon of social presence.

This chapter outlines the research methodology which was employed to carry out this study. I will begin by elaborating upon the key features of a qualitative research framework, with specific focus on the rationale for a social constructivism paradigm, qualitative research design and qualitative case study approach. I will further describe the research site, methods of data collection and data analysis. Thereafter I will discuss how measures of trustworthiness and ethical consideration were implemented throughout the process.

4.2 SOCIAL CONSTRUCTIVISM PARADIGM

A paradigm is defined as an overarching system of practice and thinking, which guides the nature of the research along the elements of ontology, epistemology and methodological assumptions (Guba & Lincoln, 1994). This study adopted a social constructivism stance which posits that reality is socially constructed (Lincoln, Lynham, & Guba, 2011). This implies that there is a social basis for what we take to be reality (Lincoln et al., 2011). In social constructivism, individuals seek understanding of the world in which they live and work. They explore subjective meaning of others' experiences; these meanings are varied and multiple, leading the researcher to look for the complexity of views (Creswell, 2013). The depiction is relevant to the aim of the current inquiry, to explore and understand first-year undergraduate students' unique experiences of social presence in a fully asynchronous web-based course at an ODL institution.

The ontology or nature of reality underpinning the social constructivism stance is based on the assumption that multiple realities are constructed through our lived experiences (Guba & Lincoln, 1994). Lincoln et al. (2011) add that reality is constructed intersubjectively through an individual's interaction with other members of the society. This was the key aspiration of

the current inquiry, to explore whether first-year undergraduate students manifested social presence as they interacted with others in a fully asynchronous course. Guba and Lincoln (1994) maintain that epistemology speaks to the nature of the relationship between the knower and what can be known.

The epistemology of social constructivism sees knowledge as created in interaction amongst the researcher and participants (Guba & Lincoln, 1994). Thus, the current research inquiry was co-constructed by the researcher and the participants; as such the researcher and the participants engaged in interview dialogue while constructing mutual understanding of the phenomenon of social presence (Lincoln et al., 2011).

In summary, the current study was guided by the social constructivism stance which provides a platform for creating knowledge socially, understanding multiple subjective experiences of participants (Creswell, 2013), and creating knowledge that is co-constructed by the researcher and participants (Lincoln et al., 2011). Creswell (2013) maintains that the research ontology and epistemology influence the choice of the study approach. The association between the philosophy of social constructivism and the case study approach is supported by Järvensivu and Törnroos (2010) in stating that the case study approach can be placed on a continuum of multiple views consisting of differing ontological, epistemological, and methodological premises. Furthermore, case studies take into account the multiple constructed, community-bounded realities of studied cases (Järvensivu & Törnroos, 2010)). In the current study, the case study approach enabled the generation of rich descriptions of participants' views of the phenomenon of social presence within a specific context (Yin, 2012).

4.3 RATIONALE FOR A QUALITATIVE RESEARCH DESIGN

Oztok and Brett (2011) conducted a review of literature with a focus on social presence and online learning. Although their review indicates that social presence has been extensively studied quantitatively, through content analysis of discussion threads and online surveys, a lack of qualitative, in-depth understanding of social presence was identified. Although a large population can be reached through content analysis of discussion threads and online surveys, it is difficult to gain a deeper understanding of students' perceptions of social presence with these methods (Dreyer, 2010). It was with this deficiency in mind that the current study adopted a qualitative case study approach to explore how social presence manifested itself

amongst first-year undergraduate students in a fully asynchronous web-based course in an ODL institution.

Qualitative research is the study of a phenomenon or a research topic in context; the phenomenon tends to be explorative in nature, as the researcher tends to research topics that have not been widely investigated or needs to be investigated from a different angle (Creswell, 2013). The current study was explorative on the grounds that the literature emphasises the dearth of publications on students' perceptions of social presence in a fully asynchronous online course, particularly within the South African ODL context. The study was further explorative due to the emergent nature, meaning that interaction between the inquirer and the phenomenon under study was largely unpredictable in advance (Lincoln & Guba, 1985). The goal of the study was to explore and describe students' views of how social presence manifest itself in a fully asynchronous web-based course at Unisa (Creswell, 2013).

Merriam (2009) outlines four principles which further qualify this study for a qualitative approach. One of the principles is the emphasis on meaning and understanding; qualitative researchers are interested in how people interpret their subjective experiences, how they construct their world and what meaning they attribute to their experiences. The focus of this study was to understand the subjective meaning that undergraduate students attach to their experiences of social presence in a fully asynchronous course at an ODL institution.

Secondly, qualitative research acknowledges the researcher as the primary instrument for data collection and analysis and places the responsibility for being aware of biases and preconceptions on the researcher (Patton, 1999). Creswell (2013) adds that it is crucial for researchers adopting a qualitative study approach to be transparent about their relationship to the study. Aside from the potential biases involved in a researcher as a human instrument, the other obvious bias was the fact that I was facilitating the module under study from 2013 to 2014, and I was employed as a Student Success Practitioner at the university under study at the time of conducting the study. Toward this end, and to help minimise the bias, throughout the process of data collection and data analysis, frequent debriefing sessions were held with my supervisor as well as with colleagues and disinterested persons to check that participants' views were accurately reflected in the findings (Lincoln & Guba, 1985). Furthermore, I engaged in ongoing reflexivity by way of journaling how my preconceptions had an impact on the research, and how to mitigate my subjectivity (Guba & Lincoln, 1994). The process

followed and measures of trustworthiness have been discussed in the foregoing sections of this chapter.

The third principle of qualitative research involves a process of inductive (data-driven) and deductive (theory-driven) conceptualisation and analysis, since the process is more likely to identify the multiple realities to be found in the data. In striving to derive meaning from the interview data, I assumed a deductive and inductive stance while coding data and deriving themes from participants' interviews. Lastly, the findings of qualitative research are richly described. Towards this end, I have strived to provide a rich description of the phenomenon under scrutiny.

4.4 RATIONALE FOR CASE STUDY APPROACH

This study adopted a descriptive case study approach, since the study focuses on the learning experiences within a defined context to a defined group (Yin, 2012). Creswell (2013) posits that a case study is a good approach when the inquirer has clearly identified cases with boundaries and seeks to provide an in-depth understanding of the case. In the current study, a single case was explored, that is first-year undergraduate students' views of social presence in a fully asynchronous web-based course bounded within an ODL context. Descriptive case studies offer a rich and revealing insight into the social world of participants (Yin, 2012). My intention was to provide an in-depth understanding of the phenomenon of social presence through rich descriptions of participants' views. Merriam (2009, p. 19) provides the following narrative of a case study, which coincides with the purpose of the current study:

A case study design is employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than specific variables, in discovery rather than confirmation. It is an intensive description and analysis of a single unit or bounded system such as an individual, programme, event, group, intervention or community. Insights gleaned from case studies can directly influence policy, practice, and future research.

The current inquiry fits Merriam's depiction, since the study aimed to gain an in-depth perspective on whether social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course, within the South African ODL context. It

was anticipated that the knowledge generated from this inquiry might affect online learning practice, particularly in an ODL context.

Patton (1999) stresses that the researcher is the human instrument in a qualitative inquiry; as such, a qualitative study must include information about the researcher, such as the experience, training, perspective, and personal connections to the participants, programme, or topic under study. Likewise, Creswell (2013) maintains that it is crucial for researchers adopting a qualitative case study approach to be transparent about their relationship to the study. The principle is to report any personal and professional information that may have affected data collection, analysis, and interpretation either negatively or positively in the minds of users of the findings (Patton, 1999). I explain my role as a researcher in the next paragraph.

4.5 THE RESEARCHER'S PERSPECTIVE

I recall when I started facilitating a fully online course in 2013. I was excited about facilitating online and curious at the same time. The thought of sharing and constructing meaning virtually with students and other instructors excited me. But, I was curious about how classroom presence and other aspects that are attributed to a success in face-to-face facilitation translate into an online classroom. Kear (2010) notes that one of the challenges of online learning is the difficulty of establishing one's presence as a real person and connect with others, generally called social presence. The lack of social presence, experienced as isolation and a lack of interpersonal connection with others, is often cited as one of the reasons leading students to drop out (Ali & Leeds, 2010; Lee & Nguyen, 2007; Patterson & McFadden, 2009; Rovai, 2007; Willging & Johnson, 2009; Yuan & Kim, 2014). These findings of the previous studies prompted me to explore whether social presence manifested itself amongst first-year undergraduate students in a fully asynchronous course, within an ODL context. I anticipated that a better understanding of this phenomenon might affect online practice, particularly in the context of distance education, which is characterised by the geographical separation between the students and the institution.

The social constructivism stance emphasises that the subjectivity and what the researcher brings into the inquiry generally influence the research (Guba & Lincoln, 1994). At the time of conducting this study, I was no longer facilitating the online course under study, but rather

was employed as a student success practitioner at the university under study as well as studied for my master's dissertation. Thus, I brought to the inquiry background of facilitating the course under study and knowledge and understanding of the university context. I acknowledge that the same experiences that are valuable in providing insight could serve as a liability to the research design and the interpretation of findings (Bloomberg & Volpe, 2008). However, to mediate my subjectivity, I engaged in ongoing reflexivity by way of journaling my research process, debriefing with my supervisor, and speaking with my colleagues and interested persons about my thinking and remaining open to different views. Reflexivity is the process of reflecting critically on how the self as researcher impact on the research, and how to mitigate the subjectivity (Guba & Lincoln, 1994). Moreover, Lincoln and Guba's (1985) model of trustworthiness as discussed in this chapter was implemented to ensure that the study findings reflect the participants' experiences.

4.6 DATA COLLECTION

In the following paragraphs, I provide background of the research site where data collection took place. I will provide a brief background of the university under study (Unisa), the Signature Course under study and the study participants.

4.6.1 The research site: The University of South Africa

Studies on students' perceptions of social presence, for the most part, emanate from the developed, international countries. In South Africa, the existing few studies were conducted in traditional-based institutions. The distance education context lacks empirical understanding of the construct of social presence (Crim, 2006; Lowenthal, 2012). It was against this backdrop that the current study sought to explore whether social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa. Unisa is the dedicated, largest ODL institution in South Africa, a developing country (Queiros & De Villiers, 2016; Sonnekus et al., 2006).

The university was founded in 1873 as an examining body and later evolved into a university college, offering courses to learners through correspondence (Sonnekus et al., 2006). In January 2004, the university was constituted as a comprehensive ODL university after amalgamating with two similar educational bodies (Sonnekus et al., 2006). The university then became the fifth-largest mega ODL institution in the world, servicing approximately

300 000 active students (Queiros & De Villiers, 2016; Sonnekus et al., 2006). Unisa comprises seven colleges, namely College of Human Science, College of Law, College of Science Engineering and Technology, College of Agricultural Science, College of Accounting Sciences, College of Economics and Management Science, and College of Education. The College offerings include short courses (non-formal qualification), undergraduate degrees, higher certificates and higher diplomas, and postgraduate certificates, honours degrees and postgraduate diplomas, and masters' and doctoral degrees. For the purpose of this study, the focus was on undergraduate Bachelor degree programmes in the College of Human Sciences.

Unisa has moved through various generations of DE, from predominately print-based correspondence, multimedia interaction, video conferencing, online learning (Sonnekus et al., 2006), and transitioned into Open Distance Electronic Learning (ODeL) (Queiros & De Villiers, 2016). In response to the global innovation and Information and Communication Technology (ICT) revolution, the university has designed seven Signature Courses (SCs), one for each of the seven colleges (Mischke & Le Roux, 2012). The SCs were charged to pilot the transition of Unisa from a predominantly correspondence to an online learning institution (Hülsmann & Shabalala, 2016). Since digital technology has become extremely important in all spheres, the university anticipates that the SCs will ensure that every graduate will be able to learn and function effectively in the digital age (Mischke & Le Roux, 2012). Furthermore, through enrolment in SCs, Unisa anticipates to support and mediate the transactional distance between the students and the institution (Hülsmann & Shabalala, 2016).

The design features of the SC under study were as follow:

- The SCs were implemented fully online from 2013, and are deemed compulsory for all first entry undergraduate students at Unisa (Mischke & Le Roux, 2012).
- The SC was named AFL1501, titled Language through an African perspective, in the College of Human Sciences.
- The SC contributes 120 credits towards undergraduate Bachelor degree programmes.
- An asynchronous model was used for delivering the SC through the university's Learning Management System (LMS), called myUnisa. Asynchronous refers to time-delayed, text-based interaction where participants log in and collaborate at different times (Wei et al., 2012).

- The SC was generally a course with high enrolments (e.g. 4 000 students studied for the AFL1501 in the second semester of 2014), the students are grouped into classes of 50 each and are supported by a Teaching Assistant (TA); each TA supports four classes, hence there is a student-TA ratio of 200:1 (Hülsmann & Shabalala, 2016).
- The TAs work under the supervision of the lead lecturer; their tasks include facilitating subject-related student online discussions, marking (grading) student online assignments, giving feedback on student online assignments and providing student support online (Unisa, 2015, cited in Hülsmann & Shabalala, 2016).
- The SCs run through semester 1 (January to June) and semester 2 (July to December) every year. This study focused on students who have studied for the module in the second semester of 2014.
- The objective of the module was to study language from an African perspective; the module aimed to assist students to understand the culturally diverse South African society better, and empowers them to contribute to reconciliation and to improve interpersonal relations in the country (Mischke & Le Roux, 2012).
- To mitigate the high costs of internet access, students were provided with digibands; these are colourful wristbands with integrated USB sticks which carry not only the stable course content but also enable students to down- and upload the dynamic course content (i.e. the contributions to the ongoing on-line discussion in the conference space) while doing most of the work off-line (Baijnath, 2014; Hülsmann & Shabalala, 2016).
- Although Unisa courses usually require one or two assessment items per semester, these SC required students to frequently and actively participate in eight assignments and a final year portfolio within the online conference space. See Table 4 below for a brief description of the assignments.

Table 4: Module: AFL1501 assignments descriptions

Assignment number	Assignments descriptions
01	Topic: What do you think about language diversity? Students were expected to share their views in terms of adopting children from different ethnic groups, submit own assignments in the discussion forum, read the discussions of fellow students and comment on each other's work. Marks were accumulated for assignments discussions.
02	Topic: Exploring language diversity where you live. Students were expected to interview and reflect about others' cultural diversity, submit the assignments to the TA (it was not expected of them to comment on other students' work).
03	Topic: Watch video and storify. Students had to share a story about something that tells how they perceive things, submit own assignments in the discussion forum, read the discussions of fellow students and comment on each other's work. Marks were accumulated for assignments discussions.
04	Topic: Reflect on your own reflection. Students were required to reflect on themselves after looking in the mirror, submit own assignments in the discussion forum, read the discussions of fellow students and comment to their discussions. Marks were accumulated for assignments discussions.
05	Topic: Investigate your name. Students had to investigate their name and its origins, submit own assignments in the discussion forum, read the discussions of fellow students and comment on each other's work. Marks were accumulated for assignments discussions.
06	Topic: Cultural ceremony and language. Students were expected to find some photos or make a video about a cultural ceremony they attended and reflect thereon, and submit the assignment to the TA (it was not expected of them to comments on each other's work).
07	Topic: Collect forms of address. Students were expected to research various language uses and reflect about various forms of address, submit assignment to the TA (it was not expected of them to comments on other students' work).

Assignment number	Assignments descriptions
08	Topic: Oral tradition and Folklore. Students had to share the story in the discussion forum, submit own assignments in the discussion forum, and read fellow students stories and comments on each other's work. Marks were accumulated for assignments' discussions.
09	Topic: Compulsory final assessment portfolio. The portfolio consisted of several elements of activities and assignments that were completed throughout the semester. Apart from the assignments marks, students would not pass the module without submitting the portfolio. The portfolio was submitted to the TA (students were not expected to comment on others students' work).

(Source: University of South Africa (2016). *MyUnisa*. Retrieved from <https://my.unisa.ac.za/portal>)

In summary, the current study sought to explore social presence amongst students who had studied in a fully asynchronous SC called AFL1501, in the College of Human Sciences in the second semester of 2014 at Unisa.

4.6.2 Selection of participants

Patton (1999) notes that purposeful sampling involves studying information-rich cases in-depth with the aim of understanding and illuminating important cases rather than generalising from a sample of a population. Because of the considerable size of the participant group, purposeful sampling was utilised to select first-year undergraduate students who have studied (either passed or failed) for AFL1501 in the second semester of 2014. The sample was deemed relevant for providing an understanding of the phenomenon of social presence in a fully asynchronous web-based course (Creswell, 2013). Baxter and Jack (2008) maintain that the establishment of boundaries in a qualitative case study design should be based on inclusion and exclusion criteria of the study sample. Thus, the selection of participants was based on the following criteria:

- Participants were selected from one college, the College of Human Sciences, at Unisa.
- All participants were first-year undergraduate students who have studied (either passed or failed) for AFL1501 in the second semester of 2014.

- Participants were eligible to provide consent to participate in the study, since they were 18 years and older.

4.7 DATA COLLECTION TECHNIQUE: SEMI-STRUCTURED, TELEPHONIC INTERVIEWS

Interviews are perceived to be a principal data collection method of qualitative research (Patton, 2002). Kvale (1996, p. 1) describes the qualitative research interviews as a researcher's attempt to understand the world from the participant's point of view, to unfold the meaning of peoples' experiences and to uncover their lived world. The interviews were appropriate for the current inquiry due to the potential to elicit rich descriptions of participants' views of social presence in a fully asynchronous web-based course, at an ODL institution. I initially proposed to conduct focus groups interviews; however, due to the ODL nature of Unisa, students are geographically dispersed in various locations. As a result some of the participants were unable to personally come to the interview venue. I then opted for one-on-one, semi-structured telephonic interviews. Telephonic interviews data gathering technique were appropriate for an asynchronous and distance-based students.

Semi-structured telephone interviews were appropriate as they afford the opportunity for personal and intimate encounters in which open-ended questions are used to elicit detailed narratives of participants' views (DiCicco-Bloom & Crabtree, 2006), while still being able to keep some measure of control through a set of predetermined questions (De Vos, Strydom, Fouché & Delpont, 2011). In semi-structured interviews, the researcher develops a list of questions to guide the interview, but there is flexibility for the participants to raise issues that the researcher has not anticipated (Braun & Clarke, 2013). Thus, an interview schedule was developed from the literature review to guide the interviews. A description of how the interview schedule was developed is provided below.

4.8 DATA COLLECTION INSTRUMENT

In line with the qualitative research approach, the researcher is the principal data collection instrument (Creswell, 2013; Merriam, 2009; Kvale, 1996). I was therefore responsible of developing the interview schedule, collecting data and analysing the findings. The initial interview schedule was adapted from a validated social presence interview schedule developed by Swan and Shih (2005). The interview questions from Swan and Shih (2005)

were considered since the schedule was validated in an exploratory social presence study at Kent State University.

After adapting the questions, I followed De Vos et al. (2011), who recommend that a pilot study be conducted to determine whether the relevant data can be obtained from the respondents, and estimating the time that may be involved as well as pre-empting the problems that might arise during the actual interviews (Denzin & Lincoln, 1994, cited in De Vos et al., 2011, p. 395). As such, two pilot interviews were conducted with participants who met the selection criteria for the current study. The findings from the first pilot interview did not entirely address all the categories of social presence (i.e. affective responses, interactive responses and cohesive responses) within the Community of Inquiry (CoI) framework, which guided analysis of this study. The interview schedule was subsequently adapted further by consulting various studies on social presence. The updated interview schedule was finalised since the findings from the second pilot interviews answered the research questions. The final interview schedule with the biographical questionnaire is included as Appendix C.

The semi-structured telephone interviews were conducted to address the central question: “How do first-year undergraduate students manifest social presence in a fully asynchronous web-based course?” and the following three sub-questions which were derived from the central question:

1. How do students describe their learning experience in terms of affective responses?
2. How do students describe their learning experience in terms of interactive responses?
3. How do students describe their learning experience in terms of cohesive responses?

In the paragraph below, I discuss the interview process.

4.9 DATA COLLECTION PROCESS

The Senate Research, Innovation and Higher Degrees Committee (SRIHDC) at Unisa granted study approval (see Appendix B), certifying that the study could be carried out by involving Unisa students. Following ethical approval from the SRIHDC, an email was sent to the university register requesting contact details of students who had studied (either failed or passed) for the SC, AFL1501, in the second semester of 2014. On receipt of the contact details, I sent emails to a total of 3 990 students, inviting them to participate in the study.

The informed consent letter which detailed the study background and ethical consideration was attached to the email (see Appendix D). Students who were interested in voluntarily participating in the study were required to sign the consent form while responding to the email. In the informed consent letter students were also required to provide consent to audio-record the interview. An audio-recording was convenient since it eliminates disruption between participants and the researcher compared to a situation where the researcher takes notes of the conversation (De Vos et al., 2011). A convenient interview date and time were then arranged with students who had responded.

A sample of 18 first-year undergraduate students participated in the study by sharing their experiences of social presence as they studied for the SC, AFL1501, in the second semester of 2014. The decision on the sample size was guided by data saturation, when the data collection was no longer bringing new insights in relation to the study (Robinson, 2014). Data saturation was reached after conducting eight interviews, but I decided to interview 18 participants, considering that qualitative research is said to yield rich views by including at least 15 to 25 participants (Braun & Clarke, 2013).

The interviews took place from December 2014 to March 2015. I was offered consent to utilise one of the distraction-free offices while conducting telephone interviews at the university under study, which allowed for confidentiality. The interviews took place between 08:00 - 16:00, depending on the convenient time for participants. Prior to the interview, I verbally reiterated the study purpose and benefit. Participants were informed that participation was voluntary and they were at liberty to withdraw at any time without providing reasons. Having affirmed that the interviewee fully understood the purpose of the study, they were offered the opportunity to verbally agree to commence with the interview. The interview sessions lasted between 15 and 40 minutes. The telephone interview process began by establishing a degree of comfort between the interviewer and the interviewee through a brief dialogue about participants' general experience of learning the module of interest. Participants were encouraged to express their opinions and experiences openly and honestly. Engaging with participants was a challenge and advantageous. It was challenging considering that I shared upfront that I was facilitating the SC under study from January 2013 until June 2014. I have also shared my position as a Student Success Practitioner at the university under focus. Being transparent about my role at the university was a potential challenge considering the

possibility of participants to adjust their responses to be consistent with the impression they had formed of me (Hawamdeh & Raigangar, 2014). Furthermore, being transparent was also a noted advantage since my background of facilitating the SC and knowledge of the university enabled me to easily establish rapport with participants (Krefting, 1991). Nonetheless, I bracketed my preconceived assumptions about online learning experience and focused on participants' experiences (Krefting, 1991). A reflexivity journal was used to reflect the evolution of my thinking and to document the rationale for all choices and decisions made throughout the research process (Bloomberg & Volpe, 2008).

At the end of the data collection process, I transcribed the audio-interviews verbatim and emailed the transcripts to participants for accuracy checks (Baxter & Jack, 2008; Lincoln & Guba, 1985). In the next paragraph, I explain how the interview data was analysed.

4.10 DATA ANALYSIS: THEMATIC ANALYSIS

Thematic analysis was used to analyse data in exploring the ways in which social presence manifested itself amongst first-year online undergraduate students in a fully asynchronous web-based course. The method was chosen since it is a flexible technique that can be used to analyse data obtained through various types of qualitative methods (Creswell, 2013). Thematic analysis is a method of identifying, describing, analysing and reporting themes within the data set in rich details (Braun & Clarke, 2006). Fereday and Muir-Cochrane (2006) add that thematic analysis is a form of pattern recognition within the data, where emerging themes become the categories for analysis. Boyatzis (1998) defines a theme as a pattern in the information that at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon. Thematic analysis has the potential not only to organise the data into themes through which the social world of the participants are said to be represented (Aguinaldo, 2012), but it also allows for a rich description of the data set related to a detailed description of each particular theme (Braun & Clarke, 2006). This was the aim of the current study, to explore and provide rich description of first-year undergraduate students' view of social presence in a fully asynchronous web-based course. Boyatzis (1998) cautions that thematic analysis is a way of seeing, and often what is seen through thematic analysis does not appear to other people even if they are observing the same information, events or situation.

In a qualitative inquiry the researcher is the primary instrument for data collection and data analysis (Patton, 1999). Data analysis ultimately rests with the thinking and choices of the researcher, and qualitative studies in general reflect the researcher's subjectivity (Bloomberg & Volpe, 2008). As such, it is possible for different researchers to arrive at different interpretations of findings for similar studies. In addition, the fact that I was facilitating the module under study may influence the data analysis. To become aware of the impact of my subjectivity, Lincoln and Guba's (1985) measures of trustworthiness were implemented as explained in the subsequent section, in order to enhance the credibility of the study findings. Following data collection from 18 semi-structured telephone interviews, the recorded audio interviews were transcribed verbatim by the researcher. The interview transcripts were then uploaded into the Atlas.ti 7 programme, and a comprehensive process of data coding and identification of themes was carried out. The Atlas.ti 7 programme was chosen based on its flexibility to organise text codes into themes (Friese, 2013). I provide a summary of a systematic, step-by-step thematic analysis process in the sections below as explained by Braun and Clarke (2006) and Fereday and Muir-Cochrane (2006). Although presented as a linear step-by-step procedure, the research analysis was an iterative, reflexive, ongoing process. A reflexivity journal was used to reflect the evolution of my thinking and documented my rationale for all choices and decisions made throughout the research process (Bloomberg & Volpe, 2008).

Phase 1: Familiarising with data

This phase began with a process of immersion in the data, where I familiarised myself with the data (Braun & Clarke, 2013). In practice, this involved transcribing the recorded interview audio verbatim, reading and re-reading interview transcripts and checking the transcripts back against the original audio-recordings for accuracy control. I was also paying attention to patterns that emerged within the data and made use of a reflexivity journal to take notes of aspects that were interesting during the interviews and throughout the data analysing process. As this study adopts a social constructivism stance which emphasises that the researcher and participants are co-researchers, I sent the interview transcripts to participants for accuracy checks to ensure that the transcripts are an endorsed reflection of their reality.

Phase 2: Generating initial codes

The coding process involves an ongoing segmentation and labelling of text to form descriptions and broad themes in the data (Creswell, 2005). Braun and Clarke (2006)

emphasise that data coding can be done in two ways, namely inductive or data-driven and deductive or theory-driven. Inductive analysis is a process of coding the data without trying to fit it into a pre-existing coding frame, or theoretical framework (Braun & Clarke, 2006). Deductive analysis is driven by the researcher’s theoretical or analytic interest in the area, and is thus more explicitly analyst-driven (Braun & Clarke, 2006). Theory-driven and data-driven coding approaches were both followed. I first referred to the CoI framework developed by Garrison, Anderson, and Archer (2000), which guided the current study. Garrison et al. (2000) identified three categories of social presence, namely emotional expression, open communication, and group cohesion. Rourke et al. (2007) extended Garrison et al.’s (2000) work further by conducting content analysis of computer transcripts of graduate students at the University of Alberta, Canada. The process culminated in the amended social presence coding scheme with categories and specific indicators of social presence (refer to Table 5 below). I utilised Rourke et al.’s (2007) social presence coding scheme to identify the types of social presence categories and indicators reflected by participants in the current inquiry. A data-driven coding approach was simultaneously followed; consequently the initial social presence coding scheme was amended as new themes emerged (see Appendix F for a complete coding scheme).

Table 5: Social presence coding scheme by Rourke et al. (2007)

Category	Indicators	Definition of Indicators
Affective Responses	Expression of emotions	Conventional expressions of emotions, or unconventional expressions of emotion, includes repetitious punctuation, conspicuous capitalization, use of emoticons, teasing, cajoling, irony, understatements, sarcasm
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability
Interactive Responses	Continuing a thread	Using reply feature of software, rather than starting a new thread
	Quoting from other messages	Using software features to quote others’ entire message or cutting and pasting sections of others’ messages

Category	Indicators	Definition of Indicators
	Asking questions	Students ask questions of other students or the moderator
	Recognition, complimenting, expressing appreciation	Complimenting others or contents of others' messages
	Expressing agreement	Expressing agreement with others or content of others' messages
Cohesive	Vocative communication	Addressing or referring to participants by name
	Addresses or refers to the group using inclusive pronouns	Addresses the group as we, us, our, group
	Phatic/salutation	Communication that serves a purely social function, greetings, closures

(Source: Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2007). Assessing social presence in asynchronous text-based computer conferencing. *International Journal of E-Learning & Distance Education*, 14(2), 50-71.)

Phase 3: Summarising data and identifying initial themes

In this phase, I summarised the transcripts by outlining the key points made by participants, noting individual comments in response to the interview questions (Fereday & Muir-Cochrane, 2006). On completion I started to re-focus the analysis at the broader level of themes; this involved sorting the different codes into potential themes, and collating all the relevant interview extracts within the identified themes, and then I ended with a thematic map with a list of candidate themes.

Phase 4: Reviewing themes

This phase involved two levels of reviewing and refining my list of candidate themes. Firstly, I read all the collated extracts for each provisional theme, paying attention to whether they appear to form a coherent pattern. Secondly, I re-read the entire data set, paying attention to whether themes relate to the data from a broader scope, whether the thematic map accurately reflect the meanings evident in the data set as a whole and how the themes support the data

and the overarching theoretical perspective. When I was satisfied with my thematic map, I then moved on to defining and naming themes which emerged outside of the CoI framework.

Phase 5: Defining and naming themes

In this phase I drew on the CoI framework and the literature while defining the essence of what each theme implied. For each identified theme, I wrote a detailed analysis as well as identifying the story (including interview excerpts) that each theme tells in relation to my research questions.

Phase 6: Corroborating the findings

In this phase, triangulation of sources was further carried out. This means comparing and cross-checking the consistency and inconsistency of the current study findings with other researchers (Patton, 1999). Based on my analysis and corroboration with the literature findings, interpretations and conclusions were drawn, and recommendations were presented for both educational practice and further research, as presented in Chapters 5 (Findings) and 6 (Conclusion). In the next section, I explain how Lincoln and Guba's (1985) model of trustworthiness was implemented in order to enhance the credibility of the study findings.

4.11 MEASURES OF TRUSTWORTHINESS

The approach followed to establish the credibility of the current study was drawn from Lincoln and Guba's (1985) model of trustworthiness. The model emphasises that trustworthiness involves establishing credibility, transferability dependability, and confirmability in order to ensure that the findings reflect the truth in the context of the inquiry. The section below outlines the steps taken to enhance the trustworthiness.

4.11.1 Credibility

Credibility implies that the study findings are accurate and credible from the standpoint of the researcher, the participants, and the reader (Bloomberg & Volpe, 2008). I strove to enhance credibility of the current study in five ways. Firstly, Lincoln and Guba (1985) posit that prolonged engagement, which refers to remaining immersed in the context of the study over a period of time, is essential for enhancing the study's credibility. Prolonged engagement was promoted by conducting a literature review which dates back to the foundation of the construct of social presence, from 1976 until 2016, as well as being personally involved in the

ODL context field from 2013 onwards. This provided background and insight into the discourses over time. Secondly, on completion of transcribing the interview audio-recordings verbatim, the interview transcripts were sent to participants for accuracy checks in terms of member-checking (Baxter & Jack, 2008; Lincoln & Guba, 1985). Thirdly, excerpts from the interview transcripts have been incorporated in the findings, to demonstrate how the researcher has reached the findings (Bloomberg & Volpe, 2008). Fourthly, the study findings were interpreted through triangulation of multiple studies published in various journals (Lincoln & Guba, 1985; Patton, 1999). Lastly, frequent debriefing sessions were held with my supervisor as well as with colleagues to check that participants' views were accurately reflected in the findings (Lincoln & Guba, 1985).

4.11.2 Transferability

Lincoln and Guba (1985) define transferability as the extent to which aspects of a qualitative research study can be transferred to another similar context or similar groups of people, while still preserving the meanings and inferences from the completed study. Keeping the findings in context is a cardinal principle of qualitative research (Patton, 1999). As such, it is impossible to demonstrate that the findings and conclusions are completely applicable to other situations and populations (Shenton, 2004).

Nevertheless, it is important to provide a thick description of the phenomenon under study to enable others to compare the instances of the phenomenon to related study context (Shenton, 2004). Further, a case study design requires the researcher to provide a rich description of the study in a specific context (Yin, 2012). Towards this end, I strove to address the issue of transferability by providing thick, rich descriptions of the case study background and context, participants, method of data collection, analysis and findings in various chapters, so that the reader can evaluate the potential for applying the findings to related context (Braun & Clarke, 2013; Lincoln & Guba, 1985). In addition, excerpts from the interview transcripts have been incorporated in the findings to demonstrate how I as the researcher reached the reported findings (Bloomberg & Volpe, 2008), should another study be considered within the ODL environment.

4.11.3 Dependability and Confirmability

Dependability refers to the consistency of the study over time and across researchers (Lincoln & Guba, 1985; Shenton, 2004). Confirmability aims to demonstrate a degree of neutrality or the extent to which the findings of the study are shaped by the respondents and not the researcher's subjectivity (Lincoln & Guba, 1985). Lincoln and Guba (1985) maintain that dependability and confirmability can be established by providing a transparent description of the research process, thereby enabling future researchers to repeat the work. Lincoln and Guba (1985) propose keeping an audit trail which provides evidence of a systematic data collection and data analysis procedure. To assist future researchers, an audit trail with a complete set of data analysis documents has been kept in a password-protected electronic file and is available upon request (Shenton, 2004). This study involved human participants, and as such certain ethical considerations had to be considered. These are discussed in the following section.

4.12 ETHICAL CONSIDERATIONS

The importance of researchers ensuring protection and respect of participants' rights to autonomy and self-determination is of vital concern to any research undertaking (Admur & Bankert, 2011; Oliver, 2010). This study employed various precautions to ensure the protection of and respect for participants. Firstly, the study received ethical clearance at Unisa. Secondly, informed consent, confidentiality, anonymity and non-maleficence remained a priority throughout this study. The implementations of these ethical considerations are discussed below.

4.12.1 Ethical clearance

Upon completion of drafting a proposal to explore the phenomenon of social presence amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa, ethical clearance was sought for the study. The Department of Psychology Research Ethics Review Committee at Unisa provided ethical clearance for the study (see Appendix A). Then the Senate of Research, Innovation and Higher Degrees Committee (SRIHDC) granted study approval (see Appendix B), certifying that the study could be carried out involving Unisa students.

4.12.2 Informed consent

Babbie (2007) explains that the principles of voluntary participation have been formalised into the concepts of informed consent. Informed consent implies that adequate information has been provided to potential participants with regard to the goal of the investigation, the advantages and disadvantages to which respondents may be exposed, as well as the procedures to be followed during the investigation (William, Tutty & Grinnell, 1995, as cited in De Vos et al., 2011). Further, voluntary participation indicates that participants understand the implications of their decision to participate in research and they have actively agreed to such participation (Admur & Bankert, 2011). On receipt of ethical clearance for the study, I requested students to participate in the study by sending individual emails to a total of 3 990 students who have studied for the SC, AFL1501, in the College of Human Sciences, in the second semester of 2014 at Unisa. A consent form was attached to the email (see Appendix D). In the consent form the study background and ethical considerations are outlined. The potential participants were informed of their right to withdraw their participation during any stage of the research process without penalty. Participants were further requested to give their consent to be tape-recorded during the interviews to minimise obstructions.

Students who agreed to voluntarily participate in the research project were requested to sign the consent form in response to the email. Further interview arrangements were then made by considering the convenient time for participants. Prior to the telephonic interviews, I reiterated the study background and ethical implications. The telephonic interviews proceeded after the participants verbally reiterated their signed consent to participate voluntarily.

4.12.3 Confidentiality

The cardinality of maintaining confidentiality is emphasised by De Vos et al. (2011) in reiterating that all participants have rights to privacy and confidentiality. The 1993 Office for Human Research Protection Institutional Review Board guidebook (as cited in Admur & Bankert, 2011) describes privacy as having control over the extent, timing and circumstances of sharing oneself (physically, behaviourally or intellectually) with others. Confidentiality pertains to the treatment of information that an individual has disclosed in a relationship of trust with the expectation that it will not be divulged to others in ways that are inconsistent with the understanding of the original disclosure without permission (Admur & Bankert, 2011).

Privacy and confidentiality were ensured by treating participants' information with the utmost confidentiality. All the documents pertaining to the study (e.g. permission requests and ethical clearances, consent forms, interview transcripts) were either saved in a password-protected folder on a secure computer (if documents were in electronic format), or were filed in a lock-up cabinet (if documents were tangible) at the researcher's home. Access to the documents was obtained by parties who were directly involved in the research project, namely the researcher and my supervisor. The research documents will be kept and locked for five years for auditing purposes. No others person, except for the researcher and the supervisor, has access to the documents. After a period of five years the electronic data will be permanently deleted, and audio tape-recordings will also be permanently deleted, while the tangible documents will be burned.

4.12.4 Anonymity

Anonymity implies that participants should be offered the opportunity to have their identity hidden in a research report (Oliver, 2010). Anonymity was ensured by providing a holistic report that does not entail aspects that may reveal the identity of participants. Further, all participants are assigned pseudonyms (letters in the alphabets) in their interview extracts and reported findings.

4.12.5 Non-maleficence

One of the critical ethical principles of social research is that it must not harm participants (Babbie, 2012). The researcher therefore has an ethical obligation to ensure that participants are protected to all reasonable limits from any form of emotional or physical discomfort as a result of the research (Creswell, 2013). Although no harmful ethical threats were posed to the participants, participants were provided with the contact details (counselling@unisa.ac.za) for the Directorate for Counselling and Career Development at Unisa, should debriefing have been required. No participants showed indications of experiencing distress.

4.13 CHAPTER SUMMARY

This chapter provides an outline of the research methodology that was employed to explore the ways in which social presence manifested itself amongst first-year undergraduate students

in a fully asynchronous web-based course at Unisa, an ODL institution, which is located in South Africa. A sample of 18 first-year undergraduate students who had studied for SC, AFL1501, within the College of Human Sciences at Unisa, was purposefully selected to provide information for the research inquiry. Semi-structured telephonic interviews were used to collect data. Thematic analysis was utilised to analyse data. Lincoln and Guba's (1985) model of trustworthiness was implemented to enhance the credibility of the research findings. Ethical considerations remained a priority throughout the research process. In the next chapter, Chapter 5, I will present the findings which emerged from the outlined methodology.

CHAPTER 5: FINDINGS

5.1 INTRODUCTION

This qualitative study sought to explore the ways in which social presence manifested itself amongst first-year undergraduate students who had studied for a fully asynchronous web-based course at Unisa, a dedicated Open Distance Learning (ODL) institution which is located in South Africa. A shared universal definition of social presence is lacking from the literature, yet, for the purposes of this study, social presence has been defined as students' ability to express themselves as real people (Garrison et al., 2000), and to connect with others in a virtual learning environment (Lyons et al., 2012). It was anticipated that the knowledge generated from this inquiry might affect the online learning practice, particularly within an ODL context. This chapter presents the findings of the current study.

The CoI framework, which posits that meaningful and quality online learning experience takes place within an online classroom comprising teachers and students, through the interaction of three core elements, namely cognitive presence, teaching presence and social presence (Garrison et al., 2000), was utilised to facilitate discussion of the study findings. The social presence coding template (see Appendix E), initially developed by Garrison, Anderson, and Archer (2000), amended by Rourke, Anderson, Garrison and Archer (2007), was utilised to conduct thematic analysis on all of the interview transcripts in order to explore participants' reflections of how social presence manifested itself in a fully asynchronous web-based course. The initial coding scheme was amended with new themes (see Appendix F for a complete coding scheme).

The findings of the current study revealed that first-year online undergraduate students manifested social presence through six themes, namely social presence categories (i.e. affective responses, interactive responses and cohesive responses), interaction, instructor presence and internet access. Each of these themes has a number of sub-themes that describe in detail participants' reflections of social presence indicators and online learning experience. Illustrative excerpts taken from interview transcripts are provided in an attempt to portray multiple participants' perspectives which support the findings. Following is an analysis of participants' demographics. An analysis of themes that emerged will then be discussed in relation to the research questions.

5.2 PARTICIPANTS' DEMOGRAPHICS

The study participants were a purposefully selected group of first-year undergraduate students who have studied (either passed or failed) for a fully asynchronous (time-delayed) module called, AFL1501, within the College of Human Sciences, at Unisa. The module enrolment period was the second semester (from June to December), of the 2014 academic year. Semi-structured telephonic interviews were conducted with the following 18 participants:

Most of the participants were female (n=15), while three were male. The participants were mainly between the age of 25 to 35 (n= 0), while eight of them were between the age of 18 to 24. The African ethnic group was the most prominent, with a representation of 13 participants, followed by five white students and one Indian student. Participants who were studying full-time at the time were more (n=11) than students who were working and studying simultaneously (n=7). Most of the students indicated that the module under study was the first fully online module for which they have studied (n=14), while four participants mentioned that it was the second fully online module taken up to 2014. Most of the students mentioned that they had advanced internet access (n=10), meaning they could log in to the online class whenever they needed, while four participants had intermediate internet access (they could log in at least three times in a week) and the other four had basic internet access (they could log in only once a week). This implies that not every participant had internet access any time that they wished. The literature indicates a lack of internet access as one of the barriers to online learning (Ncube, 2015; Muilenburg & Berge, 2005). Refer to the table below for a summary of participants' demographics.

Table 6: Participants' demographics

Demographics	Demographics	Number of students (n= 18)
Gender	Female	15
	Male	3
Age	18-24	8
	25-35	10
Ethnic group	African	13
	White	5
	Indian	1

Demographics	Demographics	Number of students (n= 18)
Full-time/part-time status	Full-time student	11
	Part-time student	7
Online module (s)	First online module	14
	Second fully online module	4
Internet accessibility	Advanced internet access (log in anytime)	10
	Intermediate internet access (log in at least three times in a week)	4
	Basic internet access (log in once a week)	4
Total		18

5.3 DISCUSSION OF THE STUDY FINDINGS

The central question guiding this study was: “How do first-year undergraduate students manifest social presence in a fully asynchronous web-based course?” The following sub-questions were derived from the central question to better explore the phenomenon of social presence.

1. How do students describe their learning experience in terms of affective responses?
2. How do students describe their learning experience in terms of interactive responses?
3. How do students describe their learning experience in terms of cohesive responses?

In the paragraphs below, the findings in relation to the research questions will be discussed.

Research question 1: How do students describe their learning experience in terms of affective responses?

Affective responses pertain to students’ potential to express emotions related to their educational experience in the virtual class (Garrison et al., 2000; Rourke et al., 2007). The ability to specify feelings in text-based conversation can be challenging considering that the overt social cues are decreased or eliminated when using text-based communication (Garrison et al., 2000). However, to compensate for the leanness of visual cues in text-based

communications, individuals can use strategies such as the use of emoticons, expressions of humour and self-disclosure, to add the affective factors to computer-mediated dialog (Garrison et al., 2000; Walther, 1992).

Although the virtual learning context is said to lack overt social cues (Garrison et al., 2000), all of the participants in the current study manifested emotions related to their educational experience by utilising emoticons and/or written words to express personal emotions and how they felt about peers' work (e.g. assignments and/or learning activities) that were submitted in the discussion forums as discussed below.

Emoticons: Emoticons are symbols and punctuation that have come into popular use in the Computer-Mediated Communication (CMC) (Steinman, 2010). Emoticons are frequently referred to as smiley faces, and are displayed via a variety of sideways faces such as ☺ or ☹ (Steinman, 2010). Half of the participants, students A, B, C, F, G, M, P, Q and R, stated that they used emoticons to express whether they were happy and/or sad when commenting on peers' messages (e.g. assignments/learning activities) which were submitted in the discussion threads. Students G, P and Q, mentioned further that they used a happy smiley face to express appreciation when peers comment positively to the messages. Student F expressed further that a sad smiley face was utilised to express empathy when students shared a painful situation. Students G and R also expressed that it is important to express feelings since people cannot see each other's faces in a virtual class. Some of the participants' comments were as follows:

(Student F) Yes, we could add whatever we want and then highlight text with different colours. The lecturer encouraged us to use emoticons to express our emotions so that people can understand how you are feeling. It is like there are other things that makes one feel emotional when talking about life. So, you have to use sad smiley face so that the other person can understand how you are feeling.

(Student G) Yes, I was using the smiley faces to express my feelings, like when I was happy or sad about the story I shared or the comment from other students. I felt that it was important for other people to know how I felt as a person since they could not be able to see my face as we were learning online.

(Student P) Yes, yes, I remember one of the times where I used emoticons was when we were working on the "getting to know you activity", where we introduced ourselves. It was

not that formal and I was able to use the emoticons to show that I was happy to be part of the group.

(Student Q) Yes, I used smiley faces, for instance there was a time when I submitted my assignment which entailed sharing a story of how we view ourselves after looking at ourselves on the mirror. I mentioned that I see myself as a strong motivated person with eager to work hard in order to achieve my career goals. Some students responded positively, and I responded back including also a happy smiley face to show appreciation.

Similarly, the other half of participants, students D, E, H, I, J, K, L, N and O, expressed that they did not utilise emoticons *per se*, but written words to express personal feelings and how they felt about peers' messages, assignments and/or learning activities that were submitted within the discussion forums. The comments were:

(Student B) No, I did not use emoticons because I did not know what those things were. I thought they were used for social networks and I know they were not allowed for this module because we had to be formal. But, when I was commenting on other students' work I would express in writing if I was happy about their work. I remember in one of the activities where we had to tell the story, I did use words also where I expressed that I was happy about the story that other students were telling.

(Student E) Ahm, no, I did not use any emoticons. I used voice where I expressed myself on how grateful I am to learn about others' diversity, and the positive impact it has had on me, and it has taught me so much more. Well, I was more grateful the emoticon that I used was more voice. It helped me to become a more successful teacher.

(Student H) Not really. I just wrote proper nice words then whenever I write I try and read again so that the receiver of the message can understand what I am saying.

Relative to the above findings, Lowenthal (2012) conducted word count, content analysis, and constant comparison analysis to explore how social presence manifested itself in an online graduate level education course, at the University of Colorado Denver, USA. An amended version of the social presence indicators developed by Rourke et al. (2007) was used to conduct content analysis on all of the threaded discussions. Similar to the current study, social presence was found to manifest itself through the social presence categories (i.e. affective responses, interactive responses and cohesive responses). Expression of emotions was found to be one of the average used indicators of affective responses, with a frequency of 526 counts

throughout the online conference space. Likewise, Steinman (2010) investigated how social interactions within a Web 2.0 virtual environment impacted on learners' social presence, in a graduate level web-based class, at Northern Arizona University, USA. The data sources included archived documents, discussion board posts, blog entries, illuminate and Blackboard Vista chat sessions, a questionnaire, and interviews. Three categories and indicators of social presence emerged in the findings. Similar to the current study's findings, happy emoticons were used to make communications friendlier and to improve the meaning of the written text, while unhappy emoticons were used to display confusion, sadness or difficulty with the coursework.

Research question 2: How do students describe their learning experience in terms of interactive responses?

Interactive responses are demonstrated by mutual awareness and acknowledgement of each participant's contribution to the digital class (Garrison et al., 2000). Mutual awareness and recognition are manifested when online participants are present and respectfully attending to the messages, feedback and contributions of others (Garrison et al., 2000). From the findings in the present study, interactive responses emerged through asking questions and mutual recognition of participants' contributions within the online discussion forums (Garrison et al., 2000; Rourke et al., 2007). These sub-themes are discussed below.

Asking questions: All of the participants in the current study expressed that they were free to ask questions from other students and/or the Teaching Assistant (TA) whenever they needed clarity on the course content. These thoughts were expressed as:

(Student A) I think so (laugh), I think so (laugh). I am a very outspoken person. So, if I don't understand something I ask questions. People might think I am being difficult, I mean people might not always agree with me about wanting to understand and wanting to learn. So it can be a bad thing in a way at times. However, I always require or rather I like to find out if I don't understand. I like to ask until I understand, even if others can say 'she is stupid'. Like, I don't know much about other languages like Sepedi. So, if I was to ask about Sepedi culture it is not about being inquisitive. It is about wanting to learn.

(Student D) Ahm, I communicated with the Teaching Assistant via email or the discussion forum and asked the questions I wanted to ask regarding the course content. I have been

using the email to communicate with the Teaching Assistant. I remember I have sent my Teaching Assistant an email complaining about my assignments that it was disappearing and he told me to contact my lecturer for assistance and he was able to help.

(Student E) Okay, we interacted with our Teaching Assistant by asking a few questions like when is our assignments due and where to post the assignment because there was discussion forums, and which groups are we in because there was like group A, B and C and the Teaching Assistant would tell us, 'okay, you are in group A or B'.

(Student F) Oh, the Teaching Assistant was asking us questions and we would respond back. Whenever we respond to him he will encourage us to explain in details because he was asking us about Ubuntu. We told him that Ubuntu in this days is no longer applicable because gone are those days where a person can come from nowhere in to a home and receive food after asking, because crime rate is high in South Africa and you cannot trust people. We are no longer in speaking terms with our neighbours because we cannot trust one another. But, we must try and bring back Ubuntu and live in harmony like in the past.

(Student G) I was communicating with other students through the discussion forum. Like, if I had a question I would ask other students. We had an assignment where we had to discuss the meaning of our names in the discussion forum. So other students were asking me about the meaning of my name and I would explain to them so that they understand.

(Student I) Ahm, yeah, yeah, I could ask questions when I did not understand anything and my fellow students would come through and help.

(Student J) Yes, I did actually. My Teaching Assistant was always online and active, when we had questions we would ask and he would answer us and give us marks to our work. He was dedicated to us.

The findings are consistent with the study by Taghizadeh and Vaezi (2011), which investigated the extent to which social presence exists in virtual learning environments of 107 students at the Iran University of Science and Technology and Khajeh Nasir Toosi University of Technology. Similar to the current study findings, three categories of social presence emerged. At the indicators level, asking questions was found to be one of the most frequently used ways to engage with others in a virtual class. Similarly, Lowenthal (2012) found asking questions amongst students and the facilitator to be mostly used to clarify course content across the discussions forums, with a frequency of 1 137 count amongst the participants.

Recognition: Recognition emerges when online participants are present and respectfully attending to the messages, feedback and contributions of others (Garrison et al., 2000). All of the participants in the current study expressed that their contributions to the online class were recognised by other students and/or the TA. Amongst these participants, expression of recognition was mainly from other students rather than the TA. This suggests that there was more student-student recognition than TA-student recognition. Most of the participants, students A, B, C, D, E, F, G, I, J, L, Q and R, voiced that when they submitted assignments within the discussion forums, their peers would recognise their work by commenting in a positive or helpful manner. The comments were:

(Student C) Yes, I don't know how to put it (laugh). I think my contribution was recognised by other students because my Teaching Assistant was not commenting on our discussion. I was recognised by other students because they were commenting on my work and if I did not understand something, I wrote that I did not understand and other students would guide me on how to write. I have never saw (seen) the lecturer or Teaching Assistant commenting on our work, it was only the students who were commenting.

(Student E) Well, I am not sure about my TA. I am not entirely sure but with the students maybe, yes, I have made a positive contribution. Okay, like for example, somebody asked me about the cultural belief of a Zulu woman and they asked me why do they dress this way and why do they sing at the wedding. I went on the internet to find out and when I gave the feedback, I said that they use it as a celebration to sing and dance and it is their tradition to dress that way. The students were quite shocked that I knew all that. As an Indian girl, I look up upon all the cultures and try to learn.

(Student F) My contribution into the class was recognised by other students. For example, there was a coloured student from Cape Town who did not understand what to include in the final year portfolio. She sent me an email and I explained what is required. Immediately once she got her final year results she sent them to me and said that she has passed (laugh). She thanked me and said if it was not for me she wouldn't have known what was happening.

(Student K) Yes, I think other students have recognised my contribution because I was very active. In terms of their discussion and their work, like contributing in whatever they do. I don't know in terms of the instructor. Like as I said, I don't know my Teaching Assistant. I don't know if he remembers anything about me.

Two participants, students M and N, reflected that the marks they received from the assignments and portfolio indicated that the TA had recognised their contribution.

(Student M) *My contribution was only recognised by my Teaching Assistant because she is the one who marked my assignments and portfolio. The mark I got shows that she recognised my work.*

(Student N) *I think that my contributions were recognised by the instructor in the sense that she provided marks. I'm not sure about the students as I received feedback from only a few, but this was generally very positive and encouraging.*

A few participants, students H, K, P and Q, expressed that the TA did not recognise their contribution since they did not comment on their work within the discussion forums. This was verbalised as:

(Student H) *Ahm, I wouldn't say so (pause), no, I would say 'no' to that because I don't recall especially on the discussion forum that they encouraged us to discuss. I don't recall my stuff being responded to or anyone commenting on my work, particularly my teaching assistant recognising my work.*

(Student K) *Ahm, not from my instructor, because as I have said I was getting positive feedback from other students. Okay, I was doing like this, I was making sure that the information I publish is of value to other student. Early in the morning I would read like five comments from other students and respond to some students. What I know is that for a lecturer to give you a mark there must be at least two or three comments from other students. I was getting more than three comments from the students, more than what the instructor was expecting. The recognition which the lecture, the teaching assistant or the person who was in charge of the module showed was only marks after submitting the assignments which was not good enough. The lecturer was responding after submitting the assignments which shows how many percentage (the percentage) I got and whether I have done a good job or not. But to me it was a job well done because I have received feedback.*

(Student P) *Well, I could see when I posted my assignment. Some of my fellow students would comment on my assignments. It shows that some of the students acknowledge your work and your point of views. Some would also comment with a different point of view. That would also show that someone has read your work and they had time to think about your work and responded differently. That shows that people acknowledge your presence*

and who you are. I don't think my Teaching Assistant acknowledged my contribution because we did not interact.

(Student Q) I think my contribution was valued by other students because they would positively comment on the assignments I posted on the discussion forum. I don't think my Teaching Assistant recognised my contribution because she has never commented or provided feedback on my assignments.

Garrison et al. (2000) add that recognition is further exemplified when participants explicitly express encouragement and appreciation to each other, which emerged in the current study's findings.

Expression of encouragement: Most of the participants, students A, B, C, E, N, J, L, M, N and R, commented that they have received encouraging comments from other students and/or the TA regarding the assignments which were posted in the discussion forums. Students L and M reflected further that whenever they experienced challenges with the assignments, the TA would encourage them in a positive way on how to resolve the issue:

(Student A) Yes, I had my instructor on few occasions have expressed that my fellow students on the discussion forum should have positive responses or positive remarks. I remember we had an activity to share the meaning of our names and mine was an arrogant name and people did not understand the meaning of my name. After I explained the meaning I got such positive encouragement and positive feedback. I was really happy that I worked hard for the activity and it did not go under-recognised.

(Student C) Yes, I did experience positive remarks because I remember some other day the Teaching Assistant asked us some questions but I can't remember the exact assignment number. The other student commented on my work by encouraging me in a positive way. I just cannot remember exactly the content because we were discussing lot of things.

(Student J) Yes, I remember there was a time where one of the students was not sure of what he was doing and he posted in the discussion that he was lost. And the assistant told him to relax and guided him on the instruction he needs to follow. And after that he was happy saying now, 'I understand what I need to do and I am encouraged to learn from others'.

(Student L) Yes, yes, expression of positive remarks has happened a lot in my group side. The instructor was coming with those motivating and encouraging messages about how we

have to react when we are with people. How we have to respect people's language and culture, that way they are not judging others. And, when I was stuck with anything, she would encourage me in a positive way on how to handle the assignment.

Expression of appreciation: A few participants, students F, G, I, K, O and Q, expressed that the positive comments they had received from other students showed that their work was appreciated. This was verbalised as:

(Student I) Yes, there was (pause), okay, I remember we had to do an assignment of parents who adopted kids from a different cultural background. I remember somebody mentioned something positive like, "we should accept one another regardless of our background", which was a positive thing to express which we mostly appreciated.

(Student O) Yes, especially in discussion forums. When we submit the assignment in the discussion forum, students would positively compliment my work. Some of the students' work would sound artificial. But, some students would respond with encouraging words. For example, there was a time when one of my classmates submitted the assignment in the wrong discussion forum, and other students told her that she was not supposed to submit where she did. And, later she came back and said she was able to submit the assignment in the right discussion forum and she appreciated the help.

(Student Q) Other students expressed positive remarks in a sense that when a student did not understand a question or how to go about responding to an assignment, he/she would send the inquiry in the discussion forum asking for clarity and other students would explain what needs to be done. The students would respond with appreciation after submitting the assignment.

The findings of the current study correspond with the findings of Lowenthal (2012), where recognition and openly acknowledging a previous post by a person was found to be one of the top three indicators used across all of the threaded discussions, with the frequency of 1 137 count amongst the participants. Similarly, Richardson and Swan (2003) found recognition to be one of the top three indicators of social presence. Garrison et al. (2000) posit that when online participants are mutually aware of each other's contribution, group cohesion develops. Group cohesion seems to have manifested itself amongst participants in the current study, as discussed in the next question.

Research question 3: How do students describe their learning experience in terms of cohesive responses?

Cohesive responses are exemplified by activities that build and maintain a sense of group dedication (Garrison et al., 2000; Rourke et al., 2007). When group members feel dedicated to their group, a sense of belonging to the group and connectedness develops (Garrison et al., 2000). Garrison (2011) explains that it is cohesion that sustains the communication and purpose of a CoI, particularly, in an online learning group separated by time and space. More specifically, confirming understanding, meaning construction and compelling collaborative activities can only be successfully accomplished in a cohesive digital class (Garrison, 2011). However, for group cohesion to develop, there must be activities created by the online instructor that require students to work collectively and preserve a sense of group dedication (Garrison et al., 2000). The findings from the current study indicated that various learning activities (e.g. ice-breaker activities, assignments, and blogs discussion), enabled participants to develop group cohesion, which was exemplified by a sense of belonging to the group, bonding, vocatives, and inclusive pronouns (Garrison et al., 2000; Rourke et al., 2007). These sub-themes are discussed below.

Sense of belonging to the group: Social presence becomes apparent when a sense of belonging is recognised within the virtual class (Kyei-Blankson, Ntuli & Donnelly, 2016). However, a sense of belonging to the group can occur when participants are familiar with one another (Garrison et al., 2000). According to the findings from the present study, not every student was able to develop a sense of belonging to the online class. Most of the participants, students A, C, D, E, I, L, N, P, Q and R, commented that they were able to know each other by working together and commenting on peers' learning activities/assignments which were submitted in the discussion forums. The same participants expressed further that they were able to develop a sense of belonging to the group by working together on various learning activities. Few participants, students A, D, and I, reflected that an 'ice-breaker' activity, where they were required to introduced themselves at the beginning of the course, aided in terms of knowing some peers. Below are their comments:

(Student C) *Yes, I was able to know my classmates. We met online, and we were communicating and discussing some different learning activities. We met on the discussion forums and we were communicating about the assignments. By knowing some of the students I was able to develop a sense of belonging into the online group.*

(Student D) *I knew them by communicating with them online but not physically. First, we had ice-breaker activity where we introduced ourselves and that enabled me to know some of them. I have also submitted my assignments in the discussion forums and they have commented on my work, that is how we got to relate.*

Yes, I did develop a sense of belonging more especially when I wrote the assignments and the other students would comment and I would respond back. It showed that the person understood my work better and we have built the friendship and a group because of the teamwork.

(Student E) *Oh yes, while we were having our group discussions. We introduced each other. We got to know each other doing the discussions and put our viewpoint out. That is how we got to know each other.*

Yes, I belonged to them and it helped me understand the module better. Ahm, we all participated together and contributed towards the module. We helped each other when we read each other's comments.

(Student M) *Yes, I did get to know some of them, but some of them were very unfaithful. I did not get to know them. The ones that I got to know left their contact details on the discussion forum and we were discussing activities in the forum. There were different activities that we discussed on the discussion forums which made me familiar with some of the students.*

I think we all got to know each other fairly well. Especially, through the assignments posted in the discussion forums as some of them were inner reflections. Everyone was fairly encouraging throughout the semester. This helped to develop a feeling of belonging.

(Student Q) *Yes, I did feel that I knew some of my classmates even though we communicated online. But, not all of them, some of them. Some of the things we shared were common. We had similar experience, we did the same modules at school and we are doing the same online module.*

Yes, it did give me a sense of belonging, it made me so free and I could go an extra mile when I was responding to what they have posted in the discussion forum. It made me feel more open.

A few participants, students B, G, H, J, M and O, expressed that they could not know their fellow students due to the challenge of limited internet access and studying online without meeting peers face-to-face. However, they further commented that they did develop a sense of belonging to the group.

(Student F) No, I was unable to know my classmates because of the challenge of studying the module online without meeting them face-to-face. I was also challenged by understanding other student's languages because we were using different languages and the module was based on diverse languages.

Yes, I was part of the group because we had developed a WhatsApp group. We have posted our numbers on myUnisa wall page and created the WhatsApp group and we were able to communicate with one another and helped each other's with questions we could not understand.

(Student G) I don't know the classmates but I have learned for the module online. I don't know them because I am coming from the rural area I had to go to town to access the internet. I don't have a smartphone to access the internet so I had to go to town some days for the whole day to access the internet. I was unable to know my classmates because of limitation in internet access.

Yes, in our online module we exchanged phone numbers and email addresses for communication and that enabled us to develop a group

(Student I) Okay, ahm, I didn't really get to know the people that I was studying with the fact being when I joined the discussion forum. Everyone had already introduced themselves before I joined and for the rest of the time I was busy doing my work trying to catch up. I didn't really communicate with other students, the only thing I did was to introduce myself and work. Within the discussion forum we had topics to discuss. So, I just read everyone's work and provided my opinion on the topic or assignment. I only knew them based on what we were required to do for the module.

Ahm, yeah, yeah, I did develop a sense of belonging. I could ask questions when I did not understand anything and my fellow students would come through and help.

Relative to the current study findings, students in the study by Steinman (2010) reported that they were able to get to know their groupmates better and develop a sense of belonging to the online group because of the amount of time they spent working together in order to complete their group projects.

Lack of sense of belonging to the group: Although most of the participants in the current study expressed that they were able to develop sense of belonging to the virtual class, a few participants, students B, F, G, H, J, K, M and O, verbalised that they could not develop a sense of belonging to the group since they have never met their peers face-to-face. The students' challenges are emphasised by Garrison et al. (2000) in stating that the key aspect of establishing social presence in face-to-face settings is visual cues; when online participants have never met, the lack of visual cues may present particular challenges to establishing a social presence amongst other participants. These findings suggest that while other students can easily get to know others and establish a sense of belonging to the virtual group, a need to meet others face-to-face is crucial for other students to get to know group members. The participants' views were:

(Student B) I did not develop a sense of belonging into the group because I did not know my classmates, we have never met personally.

(Student K) As you know, that Unisa is an Open Distance Learning institution, it's not like other institutions where you every day find other students who are doing the same course that you are doing. For me I have never met any student who was doing the module so I have managed to do the module by myself. The difficulty was because the module is online and it is difficult to know people compared to when you meet them face-to-face. This module AFL1501 is in the College of Human Sciences and other students that I know were pursuing careers in other colleges. So for me it was difficult to find help or to find other alternative solutions so that I can be able to master this module. I could not develop a sense of belonging to the group because there was no one to help me.

Bonding: As part of the assignments' requirements, students were required to submit some of the assignments in the discussion threads, comment on peers' work and receive marks for commenting on the discussions post. These requirements appeared to facilitate bonding amongst students, although not every student felt connected to others. Almost half of the participants, students A, D, F, G, J, Q and R, mentioned that they were able to connect with other students by commenting on assignments/learning activities that were submitted in the discussion forums. According to the same participants, bonding seems to have been facilitated by various activities, such as the discussion of assignments that were submitted within the discussion forums, sharing guidelines on how to reply and comment on peers' work,

developing study groups, asking questions and getting clarity from peers, and learning from one another. This was reflected as follows:

(Student A) *Yes, we did bond with each other. We were required to submit some of the assignments in the discussion forums and comment on each other's work. We were given marks for commenting on others' work. So, I engaged with lot of students. I did my entire modules through myUnisa and I had not taken some of my fellow students contact details to communicate afterwards. I did not realise that after they took the module I would not be able to contact them. In that way I regret not being able to do that because everyone's contact details was there on the group site but around November we did not have access into the group site. But, I really thoroughly enjoyed interacting with them.*

(Student D) *Yes, I did bond with others. I was attending the tutorial for another module and I met students who were doing AFL1501. We discussed some of the module content. Then I shared the discussion with some of my classmates online, I shared that we are not supposed to use the social language when we do the module, so I think I built the bond with some of the students.*

It is too important to connect with others. When we have bonded it is easy to guide other students not to use the social language style. I was guiding other students on how to respond to other students. Like starting with the student number, unique number, assignment number and the topic of the assignments, and to make the work neat they have to bold or underline some part of the assignments.

(Student F) *Yes, I did bond with some of the students because I have ended up developing a study group with another student called -- who stays at - for other modules not AFL1501. Bonding with other students has also helped me because if I did not understand something I was able to paste the question on myUnisa and students who understood the question were able to help.*

(Student G) *Yes, I was able to bond with the students was discussing with but to a limited extent because I was unable to have access to the internet most of the time. It is important to bond with others while learning online because students make different decisions and they have different opinions so we can be able to learn from one another.*

(Student Q) *In a way, I could say I did bond with others at the beginning of the semester, but towards the end everyone was focusing on submitting the final year portfolio and there was no interaction. At first we bonded.*

The findings are consistent to the study by Ngoyi et al (2014), which investigated the relationship between students' connection and social presence in online learning at the University of Zambia. They concluded that social presence has a very large impact on how students engage with one another in virtual online classes.

Lack of bonding: In contrast, most of the participants, students B, C, E, H, I, K, L, M, N, O and P, stated that they could not bond with others. Similar to the reasons provided for not developing a sense of belonging, the difficulty of engaging with others online without meeting them face-to-face and limitations in terms of internet access were expressed as barriers to bonding with others. These findings suggest that while some students can easily bond with others online, a need to meet others face-to-face is crucial for most students in the current study to bond with others. Participants E, H, and N commented that bonding with others could have assisted them in terms of facilitating interaction, reducing the feeling of isolation, helping one another, and developing study groups. A feeling of isolation has been found to be one of the reasons for students to drop out of online programmes (Rovai, 2007; Willing & Johnson, 2009). The participants' views were as follows:

(Student C) I could not bond with students because we were learning online we could only bond if we met face-to-face at least.

Yes, bonding is important online because it can only happen if you communicate often enough with others. In my case, I could not communicate with others often because of internet limitation, so, there was no bonding.

(Student E) Ahm, no (laugh), I could not bond because I have never met them face-to-face that was the challenge.

Yes bonding with others is because we could help each other, learn, grow and support one another if we bond.

(Student H) Not really. After my last submission that was it (laugh). I think face-to-face is always better. I think when you see and put a name to a face you engaged better because you feel that somehow you know the person. In online learning it is difficult to engage and know other people. Online learning is something that we still have a long way to go with.

I think bonding is important. I think it can help to some extent, because as much as I was confident and I was submitting somehow I wanted a sense of belonging because sometimes I felt lost and alone though I was submitting where everybody was submitting and

responding. I would feel as if I was alone in an island. Maybe I felt isolated because of my schedule personally. Like I was too busy to try and pursue more engagement.

(Student I) Not really. I would only read the assignments and respond to them. I don't think it is important to bond because we only meet online to learn.

(Student N) I didn't really bond with any particular students. However, I do feel that a sense of bonding is important to online learning as it can make one feel less alone in their studies. Distance learning lacks the personal interactions between students that are common in other institutions. Therefore students should try to bond with a few students.

(Student O) No, why bond? I read in the tutorials that ODL can be a lonely experience, but I have yet to encounter that perception. Saying that my partner is also studying through Unisa, albeit a different degree and level, and possibly that means that any query I have I just go to her for discussion. But saying that, I have yet to really feel a need to interact about anything of a deep nature. I enjoy the solitude of my studies, I enjoy the reward of my studies in terms of marks and knowledge, and I don't need social forms of response.

While most of the respondents explicitly stated that they could not bond with others, student P verbalised mixed feelings in terms of bonding with others. The comment was as follows:

(Student P) On some level yes, but not so much of a bond. Like if somebody commented on my work in the first assignment. They ask relevant questions wanting to know more about my work, I would also comment to their work.

Yes connecting with others is important in a sense that it helps if you have problems and you need to understand something. It becomes easier for us to be able to assist each other with the problem. We can even be able to meet should the need arise. I would also say no in a sense that sometimes having too much bond you can forget about the work that needs to be done. It is not that I don't want to bond with other people but I just want to focus on doing my task.

Vocative communication: Vocative communication, which refers to addressing participants by name, is also an essential expression of group cohesion (Rourke et al., 2007). A few participants, students F, H, O and F, addressed others students and the instructor by name. During the conversation they voiced that:

(Student F) *Yes, I did bond with some of the students because I have ended up developing a study group with another student called -- who stays at -- for other modules not AFL1501.*

(Student H) *I only remember the assistant honestly. The lecturer for me was very far, but the assistant I know she was Mrs - and she was very excellent, very quick to respond. An example was when I told her that I missed a deadline for the assignments. She responded to me and told me that I can still submit. So more she was very approachable all the time.*

(Student O) *-- was her name my teaching assistant. I joined the module late and therefore had to communicate with -- far more than I probably would have purely because I had missed assignment deadlines and needed extensions. I think I formed an impression of her in the sense that she was approachable and accommodating but I never attempted to get to know her per se. The online module requires frequent submission of assignments so when I joined I was four assignments behind and had to continue with the normal tempo of other assignment submission. For that reason I would correspond often as my progress was taking place.*

(Student F) *Yes, I was able to know my Teaching Assistant he was --. We were logging into myUnisa, our group site, every day during the week and we would find his posts asking us questions and that is how we got to know that he is our Teaching Assistant. On our group site wall page he had pasted that he is our tutor and we would be working together until the end of the module.*

In the study by Lowenthal (2012), addressing someone directly by the first name was found to be one of the top three indicators used across all of the threaded discussions, with the frequency of 748 counts amongst the participants.

Inclusive pronouns: A distinction of the vocative impact takes place at the group level when individuals address the group with inclusive pronouns such as “we”, “our”, “us”, or “group” (Rourke et al., 2007). Expression of inclusive pronouns suggests that individuals identify with the online class (Garrison et al., 2000). In the current study, inclusive pronouns, such as “we”, “us”, or “our group”, emerged at some point during the conversation with all of the participants, as shown in the few extracts below.

(Student G) *Yes, in our online module we exchanged phone numbers and email addresses for communication and that enabled us to develop a group.*

(Student K) *Yes, Ahm, first the AFL1501 is a signature module so we were communicating online like there were discussion forums where we met with classmates. There were topics introduced for discussion. We were grouped in groups like A to E, where we met our peers and discussed. We introduced ourselves there in the group and worked together to achieve our shared goal of passing the module.*

(Student L) *Yes, yes, yes, like in my group some of us in fact all of us were coming from different races. Others from Zulu, Xhosa cultures and some were from similar background. The diversity and curiosity to learn from other cultures made me feel belonging to the group.*

(Student N) *I think we all got to know each other fairly well. Especially, through the assignments posted in the discussion forums as some of them were inner reflections. Everyone was fairly encouraging throughout the semester which helped me to develop a feeling of belonging.*

(Student P) *When you are dealing with somebody on a digital level it is very difficult to connect on a personal level. But in a sense, we were able to identify ourselves with the group. I am somebody who always studies on my own, but with this module I was able to interact with others and learn from the group.*

(Student Q) *Yes, I did feel that I knew some of my classmates even though we communicated online. But, not all of them, some of them. Some of the things we shared were common, we had similar experience, we did the same modules at school and we are doing the same online module.*

In summary, it is apparent from the findings above that first-year undergraduate students in a fully asynchronous course manifested social presence through affective responses, interactive responses and group cohesion. The findings pointed out that all participants manifested emotions related to their educational experience through written words and/or emoticons to express how they felt about peers' assignments and/or learning activities that were submitted in the discussion forums, to add the affective component to the virtual class. Interactive responses emerged through asking questions and recognition of participants' contributions in the online class.

The findings of the current study indicated further that various learning activities enabled students to develop group cohesion, which was exemplified by a sense of belonging to the group, a sense of bonding, vocatives, and inclusive pronouns. In relation to group cohesion,

although most of the participants indicated that a sense of belonging to the group was established, some of the participants verbalised that they could not develop a sense of belonging to the group since they have never met others face-to-face. Likewise, most of the participants commented that they could not bond with others due to the difficulty of engaging online without meeting peers face-to-face. These findings suggest that while others students can easily establish a sense of belonging to the online group and bond with others, a need to meet others face-to-face is crucial for some students.

All of the participants had continuously reflected about the mandatory assignments, which required them to post assignments within the discussion forums, comment on peers' work, and accumulate marks for participating within assignments discussion forums. Expressions of social presence (i.e. affective responses, interactive responses and group cohesion) were reflected through participation in the discussion forums by posting messages/assignments and commenting on peers' messages/assignments. These findings suggest that social presence manifested itself through participation in the discussion forums. Furthermore, the design of the online module under study appears to have promoted participation. Arguably, the marks allocation for participation could have likely encouraged students to participate.

In addition to the findings in response to the research questions, three related themes emerged, namely interaction, instructor and internet access. Following is the discussion pertaining to the themes.

Interaction

The fourth theme that emerged from the interviews data was interaction. According to Garrison et al. (2000) and Kyei-Blankson et al. (2016), social presence manifests itself when participants are able to project themselves in the online course as real people through interacting with others. Wei et al. (2012) add that the more students detect social interaction with others, the more they perceive social presence. Interaction is central to a meaningful online education experience (Garrison & Cleveland-Innes, 2005). All of the respondents reflected at some point during the interview conversation that they interacted with other students and/or the TA regarding the module content. However, there was expression of more students-student interaction than student-instructor interaction, as described below:

Student-student interaction: Student-student interaction among members of a class is regarded as a valuable resource for learning (Moore, 1989). This interaction encourages a student-centred learning and prepares students for real life where they will need to cooperate with peer colleagues in the workforce (Alruhaimi, 2011). Most of the participants, students A, C, E, F, I, J, K, P, Q and R, reflected that they were required to submit some of the assignments and/or learning activities within the discussion threads, and comment on peers' work. Interaction was thus expressed in terms of discussion of assignments/learning activities within the discussions threads. Participants E, I, P and Q commented further that they felt that learning took place as a result of the discussion forums. These findings were reflected as:

(Student A) Okay, ahm, when we, some of our, (pause), out of the course some of the activities had to be done under a discussion forum and others were directly uploaded on the myUnisa website. So, sometimes in certain activities everyone had different perspectives of what was required and therefore we interacted on that level. You could read what the other person had written and if their opinion changed your view, then obviously you could contribute or you could say why you do not agree because we were marked on interacting and remarking on other people's opinions or fact that they put on the discussion forum. So, we could express our voice so to speak and say whether we agree or we never thought of it that way or how we can add on what they put in the discussion forum.

(Student C) Ahm, we were given the activities to work on a family tree and that was where we interacted the most because other students did not know how to construct the tree and the Teaching Assistant showed us how to upload the photos and compile the tree. Yes, that was where we interacted with other students. We were able to assist one another as students. Students who understood were able to help others. Even the Teaching Assistant when we did not understand something he would respond immediately or the following day. The interaction was more module content-related.

(Student F) Okay, we were grouped according to different languages such as Zulus, Xhosas, Sepedi and Tswana. So most of us especially the blacks we had the stereotype that other cultures were different from others. Like if you are a Zulu you are better than a Sepedi speaker and if you are a Sepedi speaker you are better than a Tswana. We had the interaction about the topic and discussed that we must not follow the stereotype because we live in the new generation and we understood one another. I remember I used to also talk in Sepedi and students who did not understand the language would ask me to interpret

into English. In our discussion we understood that we are not supposed to undermine other people because of their languages. We accommodated one another in our interaction by interpreting things spoken in our mother tongue into English.

(Student I) We were interacting about the module content. Like we had assignments to submit in the discussion forum, after submitting an assignment I had to comment on other students' assignments and learn from them.

(Student J) Within the discussion forums we had assignments to submit and comment on others students' work. We interacted through the discussions. We were given topics about our names to discuss. People had some interesting names, so we were communicating and got to know each other's (names) better.

(Student P) I am somebody who always studies on my own. But, with this module I was able to interact with others and learn about the diverse cultural perspectives in South Africa.

(Student Q) I interacted with other students by posting my assignments and responded to other students' work. Through the activities we did, I learned about their language and they were also curious to learn about my language.

Student-student interaction has been found to be motivating for students and critical to learning (Richardson & Swan, 2003). Tu (2001) concluded that social presence is directly related to learner-learner interaction, which implies that students need to interact with their peers in order to be perceived as being there and being real in virtual classes (Tu, 2001).

Student-instructor interaction: Student-instructor interaction involves strengthening the student content interaction through instructors' feedback, discussion, mutual understanding and meaning construction (Moore, 1989). From the analysis of the data of the current study, half of the participants, students A, B, E, F, G, H, J, L and O expressed that they interacted with the TA by asking questions which were mainly administrative and technical in nature, such as where to post assignments, how to download film clips included in the course material, how to upload assignments or questions about due dates for assignments. Some of the interviews excerpts were as follow:

(Student F) Oh, the Teaching Assistant was asking us questions and we would respond back. Whenever we respond to him he will encourage us to explain in details because he was asking us about Ubuntu. We told him that Ubuntu in these days is no longer

applicable because gone are those days were a person can come from nowhere in to a home and receive food after asking because crime rate is high in South Africa and you cannot trust people. We are no longer in speaking terms with our neighbours because we cannot trust one another. But we must try and bring back Ubuntu and live in harmony like in the past. The interaction I had with my instructor was more on the content of the module and on social discussion.

(Student G) There is an email address of the instructor within the discussion forums. So, if I had a question about the topics in the modules I would send an email and he would explain what the topic is all about and I would have a clue on what is required for the module AFL1501, which is mainly what we communicated about.

(Student H) I only remember the assistant honestly. The lecturer for me was very far, but the Teaching Assistant I know she was Mrs - and she was very excellent, very quick to respond, an example was when I told her that I missed a deadline for the assignments. She responded to me and told me that I can still submit. She was very approachable all the time.

(Student J) If I did not understand something I would send the Teaching Assistant an email and he would respond. We would also post the questions within the discussion forums and he would respond. The questions were content-related. It was always possible for me to get help.

(Student L) Ahm, okay, the instructor once talked to me when I submitted the wrong assignment. I once submitted the PowerPoint when I was supposed to submit in Word format. The Teaching Assistant would email and say, "no, you submitted the wrong assignment", and I would submit again. She was facilitating the group interaction by the fact that he or she could tell us that we have submitted the wrong assignments.

Kyei-Blankson et al. (2016) explored the elements of interaction and presence that have an impact on quality learning amongst online students studied in graduate programmes at Midwestern University. They found students perceived instructor-learner interaction to be more important to their learning compared to student-to-student interaction. Kyei-Blankson et al. (2016) concluded that instructor-learner interaction produces a perceived sense of connectedness between the instructor and the students. Relatively, Kang & Im (2013) examined factors in learner-instructor interaction which predicts the learners' outcomes in the online learning environment among 654 learners in K Online University. The results showed that student-instructor interaction factors related to instructional interaction predicted

perceived learning achievement and satisfaction. Further, the presence of the instructor significantly predicted learners' perceived satisfaction. Likewise, social presence has been found to be significant in connecting interaction to learning outcome amongst students and instructors (Yamada & Kitamura, 2011).

In short, the findings above indicated that social presence manifested through student-student and student-instructor interaction regarding the module content. Student-student interactions took place when students submitted discussion assignments in the discussion threads and other students commented on the post. Student-instructor interaction was reflected in terms of asking questions which were mainly administrative and technical in nature, such as where to post assignments, how to download film clips included in the course material, how to upload assignments or questions about due dates for assignments.

Instructor presence

While there was expression of interaction amongst the students and the instructor (TA), half of the participants, students C, D, K, F, G, P, L, M and Q, raised concerns regarding a lack of feedback and interaction from the TA, as discussed below.

Lack of feedback: The module under study was composed of two types of assignments' submission format. The first format required students to submit assignments within the discussion forums, while the second format required students to submit the written assignments directly to the TA. A few participants, students D, K, M and Q, complained that the TA did not provide constructive feedback on their written assignments except for marks. Participants K and M commented further that the lack of feedback was a challenge since they were not sure of how to amend the assignments for inclusion into the final year portfolio. These findings were reflected as:

(Student K) Not really, because there was no communication. The Teaching Assistant did not respond to any question that I have emailed. And, when assignments came out there was no feedback on mine except marks. I would ask and still get no responses. I struggled with writing my final year portfolio because there was no constructive feedback on all my written assignments.

(Student M) The interaction I had was mostly with other students because I was required to comment on other students' work. But the Teaching Assistant would not comment on the

written assignments that I have submitted except for giving marks. I am experiencing difficulty with my studies because I stay at KZN and I don't have study groups which makes me feel isolated from other students. I am wondering why we don't have tutorial classes here at KZN for students studying Psychology.

(Student Q) There was no interaction between myself and the Teaching Assistant because most of the students would get their assignments with comment on what they need to improve on. Then all my assignments for the module came back with marks only and I would email him but I would not get any reply. What I have also realised is that I was in a different group with my friend and their Teaching Assistant would always give them constructive feedback on their assignments. But, most of us in my group did not get any feedback on assignments. The other students in my group were also complaining that the teaching assistant does not provide feedback on assignments, but marks only.

Likewise, students C, F, G, K, M and P complained that the TA would respond to their inquiry regarding the module content after a long period of time or not respond at all:

(Student C) I don't know (laugh), we are used to having a tutor in front of us. But, with this module when I have a question I have to wait for a day or more for feedback. Sometimes, they would say I am only available on Tuesdays or Wednesdays because if I ask a question on let's say Friday, I will have to wait until the following week to get response. So, I don't think online learning is a good medium. But now it is better - because I failed this module last year because learning online was difficult. For me I don't think online learning is the right one. I would rather have a tutor in front to answer my questions immediately.

(Student F) Well, the thing is because I didn't know the exact date for assignments submission and I was not informed quite well. So, I feel like maybe it was me that was not clued up or the lecturer or I did not read properly. I was late with one assignment due date but they did extend it and I gave my work late but they did accept my profile but I was not sure because he did not inform me back. I think it is because of all these posts, last year was quite hectic.

(Student K) The assistance that we got from the Teaching Assistant was not sufficient enough in terms of understanding the content of the module. Other students have also failed the module because the assistant did not give feedback on assignments which could have helped them to refine the assignments and develop a better portfolio. They can hire

some professional people with knowledge of the module, who can be able to help and students can benefit a lot from their expertise.

(Student M) I struggle and I cannot get hold of a lecturer to help with my studies because they don't respond to the email which I struggle to send. Throughout the semester when I was studying the module I felt lonely because I have very limited internet access and I don't know even know one student face-to-face who is studying the module.

The current findings are consistent with the study by Shieh, Gummer and Niess (2008), which investigated quality online practice amongst students and one instructor in an undergraduate online course at the North Western University, USA. Relative to the present study, the email correspondence concerns from students showed that the instructor only occasionally provided students with feedback on their assignments, rather than on a regular basis (Shieh et al., 2008). One of the students mentioned “the instructor seemed to travel a lot, so sometimes she did not communicate with students that often” (Shieh et al., 2008, p. 17).

Tu (2001) emphasises that instantaneous response from the online instructor is an integral element of enhancing social presence. In asynchronous CMC response takes place at different times, which may mean longer intervals to obtain a response from the other party (Tu, 2001). However, when an immediate response is expected but is not received, a feeling of low interactivity is created, thus decreasing the level of social presence (Tu, 2001). Likewise, Ngoyi et al. (2014) submit that instructor’s presence holds the potential to enhance social presence in an online learning environment, considering that students will tend to feel that even though their instructor is not physically within reach, the responses to the questions and interaction make it seem as though the instructor is physically present. The researchers concluded that students’ and instructors’ presence creates a feeling of connection essential in a virtual learning environment. Garrison et al. (2000) maintain that Teaching Presence is a means to an end to support and enhance social and cognitive presence for the purpose of realising personally meaningful and educationally worthwhile online learning outcomes.

Lack of interaction: A few participants, students D, G, P and R, expressed concerns regarding a lack of interaction or facilitation from the TA within the online conference space. The participants commented further that interaction with the instructor could have benefited them in terms of clarifying the challenges experienced with the module content. Students commented as follows:

(Student D) *I attempted to interact with my Teaching Assistant about my work. For example, there was an assignment on cultural diversity where he advised which I submitted in the discussion forum and he told me to add more to my work because my assignment was too short. Ahm, I used to ask if I did not understand something in my assignments and ask if what I have posted was the right answers to the questions. Most of the time the Teaching Assistant did not reply to my questions to be honest. But I used to post and ask if they have received my assignments. The Teaching Assistants sometimes they are on and sometimes they are off. Sometimes, I would be stressed to know if they have received the assignments I have submitted but they would not respond to my email on time and sometimes they don't respond at all.*

I think regular and personal interaction with your instructor could have benefited me because at the end of assignment seven where I was not sure if they have received it or not because I had lost the assignment on my computer and on my memory stick and I could not find it anywhere. So, I suggested calling them and having a communication with them over the phone. Then I called the lecturer at Pretoria and he referred me to someone at Johannesburg and he was unhelpful because he did not check if they have received my assignments and no one told me that they have received my assignment. I am still angry about that, although I did not confront him. I have later received the marks and it was only when I knew that they did receive it. I was so stressed and tried to type another assignment, then I saw my assignment marks.

(Student G) *We have been discussing different topics in the discussion forums related to different assignments. When I posted an assignment, like assignment where we discussed the meaning of our names. My name is -, other students would ask me about the meaning and I would explain to them and they would appreciate. The fact that they understood showed that my contribution in the discussion forum was recognised by other students. But my instructor did not show any appreciation of my contribution in the discussion forum because she did not participate in the discussion forum.*

(Student P) *I did not interact with my Teaching Assistant. I think you know, let me give an example, I think I have two online modules this semester. You find that I have eight or nine assignments. Some of the assignments submission dates were close to one another. It was difficult to always be on the internet for around an hour and I had limitations with the internet access. I only had time to do my work and work on the assignment task. I could not have time to interact with my instructor because I once sent an email seeking clarity on*

how to upload my family tree. She only responded after a month, but I got help from other students at that time.

I think having regular and personal interaction with my teaching assistant can benefit me because at a certain level you find that there are things I did not understand, and my classmates did not understand either. So, it becomes better if we can communicate with our lecturers and be able to get clarity. It was very difficult for me to interact with my instructor like when I sent an inquiry today and I need clarity as quick as possible. I would get feedback after a week. It becomes difficult for me to keep on checking the discussion forum everyday if she had responded. With that being said I think it is important to have personal relation with my Teaching Assistant because it would bridge a lot of things, it would be better for my studies.

The study conducted by Hülsmann and Shabalala (2016) offers insight in terms of a lack of feedback and interaction from the TA. The authors carried out a mixed method study to discover interaction and workload implication within the SCs at Unisa. The study focused on SC, AFL1501 within the College of Human Science, particularly for students who have studied for the module in the first semester of 2014. The current study focused on the same module, but for students who have studied for the module in the second semester of 2014. Workload and interaction within the SC were explored in two ways. The first method was quantitative, which focused on counting the number of words and messages posted by students and the TAs within the conference space. The second was qualitative in nature; semi-structured telephone interviews were conducted with the TA and key members of the SC team.

The data from the conference space indicated that the number of messages posted by students appeared to be higher than that of the TAs. The data indicated further that some of the TAs did not facilitate subject-related discussions. Four TAs (20%) posted nothing in the conference space over the entire semester. Thirteen TAs (65%) posted fewer than 10 messages, which is less than one message per week. Six TAs posted between two and four messages per week, which is definitely not sufficient for facilitating an online dialogue (Hülsmann & Shabalala, 2016, p. 229). In order to understand the scenario better, the researchers interviewed two core team members of the SC and four TAs.

Hülsmann and Shabalala's findings from the interviews with the TAs pointed out that an estimate of 60% of TAs' time was used for marking students' assignments. The researchers determined that on account that the SCs combine a large class size, with one TA responsible for 200 students, with regular interaction enforced by ten assignments per semester, which means that a TA had to mark 10 assignments, times 200 students, within a semester of 15 weeks. This leads to high marking workload for TAs, decreasing the time for facilitating online discussion (Hülsmann & Shabalala, 2016, p. 229).

Within the findings of the current study, participants raised concerns regarding a lack of interaction within the discussion forums and feedback from the TAs; this could perhaps emanate from the TAs' high volume of work.

Internet access

Limitations in terms of Information Communication Technology (ICT) are one of the challenges facing South Africa; many students do not have access to electronic devices for online communication and internet access (Ferreira & Venter, 2011). Relatively half of the participants, students B, E, F, G, I, J, K, M and R, commented at some point that a lack of internet access was a challenge to their online learning experience, particularly for students in rural areas. The participants mentioned that the limitation in terms of internet access was a barrier to bonding with peers, completing learning tasks, submitting assignments on time and keeping up with the learning pace of peers. Some of their comments included:

(Student B) I enjoyed the module, except that it is only disadvantaged for people like myself in rural areas without access to the internet. I was challenged because I don't have internet access at home. So, every time when I had to interact with my classmates or submit assignments I had to wait for the following day to go to Unisa where I can access the internet and do my work. Whenever I got to Unisa (a centre) I had to queue for more than four hours because the computer labs was always full, we were given one hour on the computer which was still not enough for me to complete my work. So, that was disadvantage for me because I used to write two activities and submit late. If only I had internet access I would submit my work on time and be able to interact with other students.

(Student E) Due to lack of internet access I would sometimes miss out on the due date for assignments.

(Student F) *Internet access will always remain a problem, for example there was another guy from Pietersburg he said he had access to the internet once in a month because he had to travel a long distance. It becomes unfair to him because of the geographical location in comparison to us because we live at the location and we can be able to access the internet often. We were always ahead of him in terms of work and when he asked us about things we have done previously we became offended because we have long passed the things he was asking about. So, it becomes unfair to them, the problem of internet accessibility is a barrier for some students in online learning. I think Unisa need(s) to consider building computer labs in rural areas to accommodate everyone.*

(Student G) *I don't know my classmates but I have learned from the module online. I don't know them because I am coming from the rural area I had to go to town to access the internet. I don't have a smartphone to access the internet so I had to go to town some days for the whole day to access the internet. I was unable to know my classmates because of limitation in internet access.*

(Student I) *Online class is not a good medium for interaction because online people do not regularly go there but face-to-face you can see the person and always talk. Rather than online sometimes you cannot access the internet. Internet access was the barrier for me to be able to interact with other and submit my work on time. We do not have computer labs close to where I stay. I stay far from the town. I feel that we would benefit a lot if we had a face-to-face class for this module because the online class needs internet every time. I could do my assignment at the library with internet access and submit. When I go home I cannot see other students' comments and I had to go back to the Unisa to access the library. It would be better if we had pen and paper exams for this module.*

(Student J) *Ahm, online learning is good medium provided that you have time for it because it can be time-consuming, sometimes I did not have access to the internet. So that was also a challenge. If only everyone can have access to the internet it can be good.*

(Student K) *Yeah, I can say online learning is a good medium for interaction provided that a student has access to the internet. It can be good it depends, at our campus others students are not attending at the campus. As you know, Unisa is an Open Distance Learning institution, this online class can help students who can access internet at their comfort-zone. For the students like myself with limited internet access, we can fully benefit if the university can provide internet access computer lab.*

There is a lot that the university must do. I am not sure if this is happening in our campus or also in other campuses. But on our campus here in Nelspruit we are not getting any

support which must be there even the management of the computer labs cannot be able to assist us. The information that we have in relation to the module is limited. They must hire some professional people or specialist for the signature module but not people who are teaching for the first time. The assistance that we got from the Teaching Assistant was not sufficient enough in terms of understanding the content of the module. Other students have also failed the module because the Teaching Assistant did not give feedback on assignments which could have helped them to refine the assignments and develop a better portfolio. They can hire some professional people with knowledge of the module, who can be able to help and students can benefit a lot from their expertise.

(Student M) Online class is very hard for me because I struggled with internet access. I don't have access to the internet at home, so whenever I had an assignments I had to travel far to access the internet since I stay in rural area. I was always behind other students. I think Unisa needs to have computer labs in KwaZulu-Natal (KZN) rural areas because the lack of internet access disadvantaged me a lot. Even though I passed the module, I could have done better if internet access was not a problem.

The findings were consistent with research by Ncube (2015), which looked at students' and lecturers' perceptions of e-learning in the Department of Information Science at Unisa. A lack of internet access was found to be one of the challenges amongst students, particularly in rural areas. Likewise, Muilenburg and Berge (2005) conducted an exploratory study of students' barriers to online learning at the University of South Alabama and the University of Maryland in USA. The cost and access to the internet was found to be one of the barriers to online learning.

5.4 CHAPTER SUMMARY

This qualitative study aimed to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course at Unisa. This chapter presented the current study findings. The findings revealed that first-year undergraduate students manifested social presence through six themes: social presence categories (i.e. affective responses, interactive responses and group cohesion), interaction, instructor presence and internet access. Each of these themes has a number of sub-themes that described in detail participants' reflections of social presence and online learning experiences. Illustrative excerpts taken from interview transcripts are provided in an attempt to portray

multiple participant perspectives which support the key findings. In the next chapter, Chapter 6, conclusions arising from the current inquiry will be provided.

CHAPTER 6: CONCLUSION

6.1 INTRODUCTION

The present qualitative study set out to explore the ways in which social presence manifested itself amongst first-year undergraduate students in a fully asynchronous web-based course. A shared universal definition of social presence is lacking from the literature, yet, for the purposes of this study, social presence has been defined as students' ability to express themselves as real people (Garrison et al., 2000), and connect with others in a virtual learning environment (Lyons et al., 2012). The study participants were a purposefully selected group of 18 first-year undergraduate students who had studied for a fully asynchronous web-based course which is called, AFL1501, titled Language through an African perspective, within the College of Human Sciences at Unisa, in the second semester of 2014. Semi-structured telephonic interviews were conducted with 18 participants to answer the central question: "How do first-year undergraduate students manifest social presence in a fully asynchronous web-based course?"

This final chapter distils and synthesises key conclusions, implications of the findings, recommendations, limitations of the study and suggestions for further research.

6.2 RESEARCH QUESTIONS

The central question guiding this study was: "How do first-year undergraduate students manifest social presence in a fully asynchronous web-based course?" According to the CoI framework, amended by Rourke et al. (2007), social presence can be understood through three categories (i.e. affective responses, interactive responses and cohesive responses), and accompanying indicators (Garrison et al., 2000; Rourke et al., 2007). The same social presence analytical categories were used to develop the research questions, code and analyse the study findings (see Appendix E). As such, the following sub-questions were derived from the central question to better explore the phenomenon of social presence.

1. How do students describe their learning experience in terms of affective responses?
2. How do students describe their learning experience in terms of interactive responses?
3. How do students describe their learning experience in terms of cohesive responses?

6.3 OVERALL FINDINGS

From exploring social presence amongst first-year undergraduate students in a fully asynchronous web-based course, the findings indicated that social presence manifested itself through the following themes: social presence categories (i.e. affective responses, interactive responses and group cohesion), interaction, instructor presence and internet access. A summary of these themes is presented below:

Social presence

According to the Community of Inquiry (CoI) framework, the construct of social presence can be understood through three categories (i.e. affective responses, interactive responses and cohesive responses) and accompanying indicators (Garrison et al., 2000; Rourke et al., 2007). The findings from the current study indicated that first-year undergraduate students in a fully asynchronous web-based course manifested social presence through affective responses, interactive responses and group cohesion, as discussed below.

The findings pointed out that all participants manifested emotions related to their educational experience through written words and/or emoticons to express how they felt about peers' assignments and/or learning activities that were submitted in the discussion forums, to add the affective component to the virtual class. Emoticons are symbols and punctuation that have come into popular use within the Computer-Mediated Communication (CMC); they are often referred to as smiley faces (Steinman, 2010). Participants mentioned that happy smiley faces (☺), were utilised to express appreciation when peers commented positively on their post, while sad smiley faces, (☹), were used to portray empathy when students shared painful personal circumstances. Relatively, some of the participants did not use emoticons *per se*, but written words to express feelings related to their educational experiences. A few of the participants expressed further that it is important to express emotions since people cannot see each other's faces in virtual classes.

Interactive responses emerged through asking questions and mutual recognition of participants' contributions to the online class. Participants expressed that they were free to ask questions from other students and/or the Teaching Assistant (TA), whenever they needed clarity on the course content. The students commented further that when they submitted assignments within the discussion forums, their peers and/or TA would recognise their work

by commenting in a positive or helpful manner. There were different views in terms of recognition of contribution within the online class from the TA; some of the participants felt that the TA did not recognise their work since the TA did not comment on their assignments within the discussion forums, while some participants felt that the assignments marks were an indication of recognition from the TA.

The findings highlighted further that group cohesion was established when participants worked together by commenting on peers' post (i.e. assignments and/or learning activities) which were submitted in the discussion forums. The participants commented further that by working together they were able to know each other, develop a sense of belonging to the online group, bond with others, address others by names, and use inclusive pronouns such as "we", "us", or "our group", which illustrated cohesion. Although most of the participants indicated that a sense of belonging to the group was established, some of the participants verbalised that they could not develop a sense of belonging to the group since they have never met others face-to-face. Likewise, most of the participants commented that they could not bond with others due to the difficulty of engaging online without meeting peers face-to-face. These findings suggest that while other students can easily establish a sense of belonging and bond with others, a need to meet others face-to-face is crucial for some students. It can be concluded from these findings that a blended online learning approach can be crucial for meeting the learning needs of some students. Blended learning offers a combination of technology-based resources and traditional face-to-face lectures (Allen et al., 2016; Mashile, 2015).

All of the students had constantly reflected about the mandatory assignments which required them to post assignments within the discussion forums, comment on peers' work, and accumulate marks for participating within assignments discussion forums. Expressions of social presence (i.e. affective responses, interactive responses and group cohesion), as discussed above, were reflected through participating within the discussion forums by posting messages/assignments and commenting on peers' messages/assignments. These findings suggest that social presence manifested itself through participation within the discussion forums. Further, the design of the online module under study appears to have promoted participation. Arguably, the marks allocation for participation could have likely encouraged students to participate. These findings were consistent with the study by Lowenthal (2008), which explored the nature of social presence as experienced by online graduate students at the

Australian University. The findings indicated that social presence was viewed as participation; it was demonstrated by visible activities within the discussion forums such as posting messages, responding to others' messages and participating in the group activities (Lowenthal, 2008). Relatively, Muuro, Wagacha, Oboko, and Kihoro (2014) examined students' perceptions of social presence and online collaborative learning at Nairobi, Kenya University. Social presence was found to manifest itself through taking part within the virtual discussion forums.

Interaction

The fourth theme that emerged through the interview process was that social presence manifested itself through student-student interaction and student-instructor interaction regarding the course content. Student-student interaction took place when students submitted discussion assignments within the discussion threads and other students commented on the post, while student-instructor interaction occurred within the discussion forums, when students asked the TA questions which were mainly administrative, such as where to post assignments, how to download film clips included in the course material, how to upload assignments or questions about the due dates for assignments. A few participants expressed further that they felt learning occurred as a result of participating in the discussion forums. These findings suggest that the discussion forums were conducive to opportunities for interaction. Garrison et al. (2000), as well as Kyei-Blankson et al. (2016), propose that social presence manifests itself when participants are able to project themselves in the online course as real people through interacting with others. Adding to this, Wei et al. (2012) put forward that social presence manifests itself through recognised interaction. The more the students detect social interaction with others, the more they perceive social presence (Wei et al., 2012). With this in mind, it can be concluded that participants within the current study manifested social presence through interacting with other students and/or the TA within the online discussion forums.

Moore and Kearsley (2012) posit that the transactional distance between the students and the instructors in online distance courses can be mediated through increased interaction. Further, researchers contend that interaction is fundamental in online education (Diggins, Risquez, & Murphy, 2013; Kyei-Blankson et al., 2016; Moore & Kearsley, 2012). Interaction has been found to promote social presence (Diggins et al., 2013; Wei et al., 2012; Queiros & De Villiers, 2016). Wei et al. (2012) found social presence to have a significant relationship to

learning interaction, which in turn had significant effects on learning performance. Relatively, Long, Marchetti, and Fasse (2011) found online interaction to influence perceived learning and study success, while Fish and Wickersham (2009) found interaction between instructor and student to enhance the effectiveness of the online learning environment.

Instructor presence

Even though there was expression of interaction amongst the students and/or the TA, half of the respondents raised concerns regarding a lack of feedback and interaction from the TA. The fully asynchronous web-based course under study, AFL1501, was composed of two types of assignments submission formats. The first format required students to submit assignments within the discussion forums, while the second format required students to submit the written assignments directly to the TA. Some of the participants complained that the TA did not provide constructive feedback on their written assignments except for marks. It was further mentioned that the lack of feedback was a challenge since students were not sure how to amend the assignments for inclusion into the final year portfolio. It can be concluded that a lack of feedback from the TA was a barrier to students' learning development. Further, other students complained that the TA would respond to their inquiry regarding the module content after a long period of time or not respond at all. The findings were consistent with the study by Shieh et al. (2008), which investigated quality online practice from the perspective of students and one instructor in an undergraduate online course at the North Western University, USA. The findings pointed out that the instructor only occasionally provided students with constructive feedback within assignments (Shieh et al., 2008). Relatively, Ruey (2010) examined how a constructivist-based instructional design helped adult learners to learn in an online learning environment at a National University in Taiwan. A lack of feedback was found to be a learning obstacle which caused anxiety and reduced enthusiasm and engagement in working on the assignments (Ruey, 2010).

Further, some of the participants in the present study voiced concerns regarding a lack of interaction from the TA within the discussion forums. The participants commented further that interaction with the instructor could have benefited them in terms of clarifying challenges experienced with the module content. The CoI framework posits that social presence is developed as a result of teaching presence (Garrison et al., 2000). Online educators develop social presence through the three components of teaching presence, namely instructional design and organisation, facilitating discourse and direct instruction (Garrison et al., 2000).

Arguably, Ngoyi et al. (2014) submit that the instructor's presence holds the potential to enhance social presence in an online learning environment, since the responses to the questions and interaction make it seem as though the instructor is physically present. The scholars concluded that students' and instructors' presence creates a feeling of connection essential in a virtual learning environment (Ngoyi et al., 2014). Likewise, Tsai (2012) contends that sufficient teaching presence is essential in online learning, and a lack thereof is a stumbling block to students' learning development (Mayes et al., 2011).

Based on the participants' concerns regarding a lack of interaction and feedback from the TA, it can be concluded that there appeared to be inadequate instructor presence. Nevertheless, the study conducted by Hülsmann and Shabalala (2016) sheds some light in terms of a lack of feedback and interaction from the TA. The researchers explored interaction and workload implication within the Signature Courses at Unisa. Their study focused on the Signature Courses, AFL1501, within the College of Human Science, in particular for students who had studied for the module in the first semester of 2014. The present study focused on the same module, but for students who had studied for the module in the second semester of 2014.

The records from the conference space indicated that the number of messages posted by students seemed to be higher than that of the TAs. The records indicated further that with rare exceptions, some of the TAs did not facilitate subject-related discussion. Four TAs (20%) posted nothing in the conference space over the whole semester of 15 weeks. Thirteen TAs (65%) posted fewer than 10 messages, that is less than one message per week. Six TAs (60%) posted between two and four messages per week, which are not sufficient for facilitating an online discussion (Hülsmann & Shabalala, 2016).

The findings from the interviews with the TAs pointed out that most of the TAs' time was consumed by marking, with an estimate of 60% of their time. The researchers concluded that the Signature Courses combine a large class size made of 50 students per class, with one TA assisting 200 students (four classes), with frequent interaction enforced by ten assignments in a semester of 15 weeks. This leads to an excessive marking workload for TAs, lowering the time for facilitating online discussion (Hülsmann & Shabalala, 2016). The conclusion perhaps holds water for the present study; participants in the current study raised concerns regarding a lack of interaction and feedback from the TAs, and this could perhaps emanate from the excessive TAs' workload.

Internet access

ICT access in South Africa, a developing country, is still regarded as extremely uneven, making it challenging for higher education institutions to fully harness the potential of using ICT to support teaching and learning (Department of Higher Education and Training, 2012). Ferreira and Venter (2011) note that many students in South Africa do not have access to electronic devices for online communication and internet access. Relatively, half of the participants in the present study commented at some point that a lack of internet access was a challenge to their online learning experience. Students mentioned that limitation in internet access was a barrier to bonding with others, completing learning tasks, submitting assignments on time and keeping up with the learning pace of peers. It can be concluded that limitations in terms of internet access appeared to have been an online learning barrier for students, particularly in rural areas. As such, social presence cannot be expected to manifest itself when some students have limited internet access.

Various studies found a lack of internet access to be one of the virtual learning barriers (Ferreira & Venter, 2011; Baloyi, 2012; Queiros & De Villiers, 2016). Queiros and De Villiers (2016) explored students' online learning perceptions of Unisa, and found 20% of the students with no internet access. Ncube (2015) investigated students' and lecturers' perceptions of e-learning at Unisa. A lack of internet access was found to be one of the challenges amongst students, particularly in rural areas (Ncube, 2015). The Directorate of Institutional Research at Unisa investigated the students' perceptions of the e-tutorial services since its launch in 2013 at Unisa. A limitation in terms of internet access was found to be one of the reasons for students not participating in the e-tutorials (Molapo & Tladi, 2015). Given the fact that Unisa has started to implement the new Open Distance Electronic (ODeL) business model, which means that teaching and learning will occur mainly online (Molapo & Tladi, 2015; Queiros & De Villiers, 2016), students' support in terms of internet accessibility is a concern.

6.4 IMPLICATION OF THE STUDY FINDINGS FOR OPEN DISTANCE ELECTRONIC LEARNING CONTEXT

Distance online education students are likely to experience isolation and disconnection due to the transactional distance between the students and the institution (Bowers et al., 2015; Rovai, 2007; Sung & Mayer, 2012). The transactional distance can be mediated through online presence, where students experience being there and being together with real people in the virtual learning environment (Lehman & Conceição, 2010). It is imperative for course designers and facilitators to design online programmes that promote social connection due to the isolated nature of these virtual instructional settings (Aragon, 2003), thereby enriching the online student's learning experience (Sung & Mayer, 2012). The CoI framework emphasises that meaningful and quality online learning experience takes place within a Community of Inquiry comprising teachers and students, through the interaction of three core elements, namely cognitive presence, teaching presence and social presence (Garrison et al., 2000).

The findings from the present study shed some light on how social presence can be promoted in a fully asynchronous web-based course. The findings indicated that social presence manifested itself through the following themes: social presence categories (i.e. affective responses, interactive responses and group cohesion), interaction, instructor presence and internet accessibility. Overall, social presence manifested itself through participation and interaction within the discussion forums. This implies that the design and facilitation of fully asynchronous web-based courses could consider these themes in order to nurture social presence. The recommendations of the current study, as discussed below, provide guidelines on how these themes can be embedded within the design and facilitation of fully asynchronous web-based courses.

6.5 RECOMMENDATIONS

The findings from the current study have led to possible guidelines on how educators can design and develop asynchronous web-based courses to promote social presence, as discussed below.

Social presence

In general, the findings from the present study pointed out that social presence amongst first-year undergraduate students in a fully asynchronous web-based course manifested itself

through participation and interaction within the discussion forums. The students had constantly reflected about the mandatory discussion assignments, which required them to post assignments within the discussion forums, comment on peers' work, and accumulate marks for assignments discussions. The compulsory nature of the discussion assignments arguably promoted interaction and participation, since every student had to participate in order to comply with the course requirements. Instructional designers at other universities can perhaps consider this practice, by embedding compulsory discussion assignments with some marks allocated for participating in the assignments discussions, in order to enhance participation and interaction and thus cultivating social presence in virtual classes.

Further, although most of the participants indicated that a sense of belonging to the online group (class) and bonding was established, some of the participants verbalised that they could not develop a sense of belonging to the group and bond due to the challenge of engaging online without meeting others face-to-face. Instructional designers can consider a blended online learning approach to meet the learning needs of some students. As such, instructional designers could implement a mandatory face-to-face orientation tutorial at the beginning of the semester to allow students to get to know one another and the instructors.

Instructor presence

Although there was expression of interaction amongst the students and the TA, some of the participants raised concerns regarding a lack of interaction and feedback on the written assignments from the TA. This implied inadequate instructor presence. Hülsmann and Shabalala (2016) determined that the excessive marking workload for TAs reduced the time for facilitating online discussion (Hülsmann & Shabalala, 2016). This perhaps explains why the participants within the current study experienced a lack of interaction from the TA within the discussion forums. Hülsmann and Shabalala (2016) recommended freeing TA time for facilitation in three ways:

- Firstly, freeing TA time for facilitation can be done by reducing the class size.
- Secondly, freeing TA time for facilitation can be done by reducing the number of assignments.
- Lastly, freeing TA time for facilitation can be done by changing some of the formative assessments into Multiple Choice Questions with automated feedback.

Further, the literature on online pedagogy provides guidelines for quality practices which online instructors could consider to enhance instructor presence. These practices include timely feedback, consistent interaction, and constructive feedback on assignments (Capra, 2014). Muirhead (2004) recommends online instructors to develop strategies that can enhance their engagement with the students, such as creating a timeline for feedback and having an assignments feedback rubric. This may mitigate the challenge faced by instructors when trying to establish a meaningful presence in their online classes (Muirhead, 2004). Furthermore, the instructional designers could develop policy that clearly articulates the roles and responsibilities of an online instructor/TA while facilitating the online module. Perhaps the policy would be more effective if it were to stipulate the consequences for facilitation non-compliance of instructors.

Internet access

Limitation in terms of internet access has emerged as an online learning challenge, particularly for students in rural areas. The availability of the internet as an access tool should be provided to all students. Subsidising students with the purchase of laptops as well as internet bundles will benefit students. Further, students should be continually informed about accessing free ICT support at the Unisa Telecentres as well as the public libraries around the country.

6.6 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

The limitations of the present study stem from the method that was employed and the small study sample. Firstly, the researcher intentionally conducted semi-structured telephonic interviews with only 18 participants who had studied for a fully online Signature Course, AFL1501, in the second semester of 2014 at Unisa, to explore the phenomenon of social presence as a starting point. Relying on interviews only is limiting. The entire virtual conference of the course is rich in data for researchers to mine (Lowenthal, 2012). In addition, the email and telephone conversation between students and instructors or even assignments provides avenues for further exploration. To gain a comprehensive understanding of the phenomenon of social presence in fully asynchronous web-based courses, mixed methods study should be employed. Future researchers should explore the entire virtual conference

space, augmented by interviews, administer a social presence survey to a large sample, and explore the email conversation and assignments interaction.

Secondly, the findings discovered in the current study warrant a degree of caution. The research sample was small, comprising interview data of only 18 online undergraduate students. While the depth of the inquiry provided insight on how social presence manifested itself in a fully asynchronous web-based course, the findings are only specific to the case at hand. Findings of this study should be interpreted with caution and may possibly hold transferability potential to only highly similar contexts.

Thirdly, aside from the potential subjectivity involved in a researcher as a human instrument, I further acknowledge possible additional subjectivity in analysing the findings because I was employed as a student success practitioner at the university under study, at the time of conducting the study. Toward this end, and to help being aware of my subjectivity, Lincoln and Guba's (1985) model of trustworthiness was employed throughout the inquiry to ensure that participants' views were endorsed in the findings.

Moreover, there are themes that emerged from the current study which foreshadow areas for further research in the field of ODeL. The participants mentioned that learning took place as a result of interacting with others within discussion forums. Future studies can explore the impact of social presence on perceived learning outcomes. In addition, a concern regarding a lack of interaction and feedback from the TA raises two lines of research. Firstly, researchers need to explore online facilitation best practice. Secondly, future research should investigate the effective professional development and support for online instructors (Capra, 2014). Allen and Seaman (2011, cited in Capra, 2014) submit that part of the problems in terms of online facilitation stems from ambiguous perceptions that faculty still possesses about online education. Although the educational landscape is becoming more receptive and accepting of online teaching, it still has far to go (Capra, 2014). Research can help to bridge this gap by investigating the effective role of an instructor from a pedagogical perspective (Capra, 2014).

6.7 CHAPTER SUMMARY

With the growing trends in favour of digital studying in higher education (Allen et al., 2016), further research is needed on the social experiences of students enrolled in online courses

(Cobb, 2009; Lowenthal, 2012; Kear, 2010; Yamada & Kitamura, 2011; Yuan & Kim, 2014). The concept of social presence has been explored in relation to the quality of social interaction in an online learning environment (Cobb, 2009; Kim et al., 2011; Yamada & Kitamura, 2011). Kehrwald (2008) as well as Lowenthal (2012) note that a comprehensive understanding of social presence in a fully asynchronous online learning environment is lacking in the literature; this lack of such understanding limits development of online learning and teaching best practices. The current study adds to the literature by shedding some light on the ways in which social presence manifested itself in fully asynchronous courses. Further, a unique contribution is made to the field of ODeL context, since the qualitative approach of studying social presence is understudied (Oztok & Brett, 2011). Most studies were quantitatively driven, possibly limiting the depth and breadth as far as learner experiences are concerned (Oztok & Brett, 2011).

The findings from the current study revealed that first-year undergraduate students manifested social presence through six themes: social presence categories (i.e. affective responses, interactive responses and group cohesion), interaction, instructor presence and internet access. Overall, the findings indicated that social presence manifested itself through participation and interaction within the discussion forums. The findings pointed further that a blended online learning approach can be crucial in terms of meeting the learning needs of some students. Furthermore, the findings alluded to a lack of interaction and feedback from the instructors (TAs), which signifies a need of exploring online facilitation best practice. In addition, the findings revealed limitation in terms of internet access, particularly for students in rural areas, which is of concern in an ODL milieu heading online.

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APPENDICES

Appendix A: Ethical clearance from the Department of Psychology at Unisa



Ethical Clearance for M/D students: Research on human participants

The Ethics Committee of the Department of Psychology at Unisa have evaluated this research proposal for a Higher Degree in Psychology in light of appropriate ethical requirements, with special reference to the requirements of the Code of Conduct for Psychologists of the HPCSA.

Student Name: Violet Kgatla

Student no. 36304522

Supervisor/promoter: Ms. C Laidlaw

Affiliation: Dept. of Psychology, Unisa

Title of project:

An exploration of social presence in an online learning community at the University of South Africa

Ethical clearance is given to this project without any further conditions

X

Ethical clearance is given on conditions that certain requirements are met (as appended)

Ethical clearance is deferred as the matter was referred to the Ethics Committee of the CHS, Unisa

Ethical clearance is deferred until additional information is supplied (see the appended list)

Ethical clearance cannot be granted on the basis of the information as presented (for reasons as listed in an appendix)

Signed:

Prof P Kruger

[For the Ethics Committee]
[Department of Psychology, Unisa]

Date: 24 October 2013

Appendix B: Ethical clearance from Unisa Senate Research and Innovation Committee



PROF L LABUSCHAGNE
EXECUTIVE DIRECTOR: RESEARCH DEPARTMENT
Tel: +27 12 429 6368 / 2446 Fax: +27 12 429 6960
Email: llabus@unisa.ac.za
Address: Theo van Wijk Building, 10th Floor, Office no. 50 (TvW 10-50)

16 May 2014

Ms VM Kgatla
Department of African Languages
College of Human Sciences

Dear Ms Kgatla

PERMISSION TO DO RESEARCH INVOLVING UNISA STAFF, STUDENTS OR DATA

A study into "An exploration of social presence in an online learning community at the University of South Africa"

Your application regarding permission to conduct research involving Unisa staff, students or data in respect of the above study has been received and was considered by the Unisa Senate Research and Innovation and Higher Degrees Committee (SRIHDC) on 17 April 2014.

It is my pleasure to inform you that permission has been granted for this study as set out in your application.

We would like to wish you well in your research undertaking.

Kind regards

A handwritten signature in black ink, appearing to be "L Labuschagne", written over a horizontal line.

PROF L LABUSCHAGNE
EXECUTIVE DIRECTOR: RESEARCH



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Appendix C: Interview guide

Section A: Biographical information

1. What is your gender?

Female

Male

2. What is your age group?

18– 24

25– 34

35– 44

45+

3. What is your race?

Black

White

Coloured

Indian

4. How many fully online course have you studied for before AFL1501.

First online module

Two previous online modules

Three or more previous online courses

5. Please share the level of your internet accessibility while studying AFL1501.

Basic (login one in a week)

Intermediate (login at least three times in a week)

Advanced (login anytime)

7. When enrolling for AFL1501 were you a

Full time student

Working and studying

Section B: Interview Questions on social presence

The following questions aims to explore students' view on social presence. To shape your response, social presence is defined as students' ability of to express themselves as real people (Garrison et al., 2000), and perceptions of feeling connected to others students and/or the instructor (Teaching Assistant (TA)/lecturer) (Lyons et al., 2012).

Probe: While responding to the questions please reflect on your previous experience of studying the module, AFL1501, in second semester of 2014.

1. Please share whether you were able to know some of your classmates, even though you communicated with them online? Please explain and give examples. Were you able to develop a sense of belonging in the group by knowing other participants? (Gunawardena & Zittle, 1997; Swan & Shih, 2005).
2. Please share whether you were able to form an impression or know your instructor (your teaching assistant or lecturer)? Please explain and give examples? Do you think it is important that you have regular and personal interaction with your instructor? Why or why not? (Gunawardena & Zittle, 1997; Swan & Shih, 2005).
3. Please reflect and give examples of the interactions that you had with other students. Kindly explain how these interactions affected or influenced your engagement in the course.
4. Please reflect and give example of the interactions that you had with the instructor. Explain how these interactions affected or influenced your engagement in the course. (Gunawardena & Zittle, 1997; Swan & Shih, 2005).
5. When responding to other students' messages (assignment or blogs) was there a criteria you used while choosing which students to respond? Have you built a sense of bonding with those students? Do you think a sense of bonding is important to learning online? Why or why not? (Gunawardena & Zittle, 1997; Swan & Shih, 2005).
6. Can you recall any instances where you or your classmates or the instructor expressed positive/negative emotions such as encouragement, humour, compliments, or support in

their communications? Did this have any impact on how you felt towards the student or instructor? Please explain and give examples (Steinman, 2010).

7. Did you use any strategies to express your feelings (e.g. emoticons) in order put personal touches in your messages? If so, what did you use and why did you want to make yourself sound more personal in online discussions? If no, why not? (Steinman, 2010).
8. Did you feel that your contributions to the class were recognized and valued by your instructor and other students? Please explain and give an example. (Gunawardena & Zittle, 1997; Swan & Shih, 2005).
9. Compared to a traditional face- to-face classroom, do you think an online class is a good medium for social interactions among participants or not? Please explain and give examples? Can you recall a moment where you felt isolated from what was happening while studying the module online? (Gunawardena & Zittle, 1997; Swan & Shih, 2005).
10. Is there any other thing you would like to add in relation to your online learning experience?

Appendix D: Information letter and consent form

Dear Potential Participant,

My name is Violet Kgatla. I am currently completing a qualitative study in fulfilment of Masters in Psychology (Research Consultation) at the University of South Africa. This is a research study to explore online undergraduate students' perception of social presence in a fully asynchronous web-based course. For the purpose of this study, social presence has been defined as students' perception of feeling personally connected to others while engaging in social interactions through online learning medium (Lyons, Sreysen, & Pierce, 2012). You are invited to participate in the semi-structured, telephone interviews, since you had studied for Signature Course, AFL1501, in second semester of 2014 at Unisa. Participant should be 18 years and older.

Participating in this study is voluntary, and your identity will remain confidential. At any stage you can refuse to answer any questions or end the interview without providing a reason. Non-participation or withdrawal from the study will not have any negative consequences for your studies.

The telephone interviews will take approximately 45 minutes of your time. With your permission, the interviews will be audio-recorded and later transcribed. The interviews transcripts will be sent to you for accuracy check. The transcriptions will be included in the final work with all identifying comments and names changed.

All information obtained during the course of this research will be kept strictly confidential, and will be securely stored electronically in a password protected file, to which only myself, and my supervisor, will have access. The records will be kept for a period of five years for audit purposes, where after, the records will be permanently deleted.

Due to the nature of this study, physical or emotional harm is not anticipated. However, should you experience any discomfort, it will be attended to by providing you with contact details for debriefing.

You will not be reimbursed or receive any incentives for your participation. Further, there is no direct benefit from the study, except that, it will provide a platform to share your perception of online social presence. It is anticipated that the insight we gain from this study might inform online learning practice, particularly in distance education context.



Feedback regarding the study's outcomes will be made available to all those interested through Unisa's libraries and potentially professional journals aligned to the discipline of psychology and education in future.

This research was reviewed and approved by the Senate of Research, Innovation and Higher Degrees Committee (SRIHDC) at Unisa. Should you have any questions regarding the ethical aspects of the study, you can contact the chairperson of the SRIHDC, Dr M Molapo: molapmp@unisa.ac.za. Should you have any queries regarding the research please contact me or my supervisor.

Thank you for taking the time to read through this information letter. If you would like to participate in this study please complete the informed consent form on the next page.

Yours sincerely,

v. Kgatla

Christine Laidlaw

Researcher: Violet Kgatla
Email: mashadivioletk7@gmail.com

Supervisor: Ms Christine Laidlaw
Email: laidlc@unisa.ac.za

Piet Kruger

Chair of Department of Psychology Ethics Committee: Prof. Piet Kruger
Email: krugep@unisa.ac.za

Informed consent by the participant

I, the participant, hereby confirm that I understand the nature of the study, the conduct, the benefits and potential risks of the study, and the means by which my identity will be kept confidential. I am aware that, I may, at any stage, refuse to answer any questions or withdraw from the interview without providing a reason. I know that my withdrawal from the study will not have any negative consequences to my studies. It has been explained to me that the interviews will be audio-recorded and later transcribed. Then, the interview transcript will be sent to me for accuracy check. I have been informed that the study outcome will be anonymously processed into a research report. Everything was explained to be in English, the language I understand, and I consent to the following:

I understand the study background and would like to voluntarily participate in the telephone interviews [please select one]:

Yes No

I agree to have the interview audio-recorded [please select one]:

Yes No

Please note the convenient day and time in which you prefer to be contacted for a telephone interview.

Date: _____

Time: _____

Participant's name: _____ Signature: _____ Date: _____

Researcher's name: Violet Kgatla Signature: _____ Date: December 2014 - March 2015

Appendix E: Initial social presence coding scheme

Table 7: Initial social presence coding scheme

Category	Indicators	Definition of Indicators
Affective Responses	Expression of emotions	Conventional expressions of emotions, or unconventional expressions of emotion, includes repetitious punctuation, conspicuous capitalization, use of emoticons, teasing, cajoling, irony, understatements, sarcasm
	Self-disclosure	Presents details of life outside of class, or expresses vulnerability
Interactive Responses	Continuing a thread	Using reply feature of software, rather than starting a new thread
	Quoting from other messages	Using software features to quote others' entire message or cutting and pasting sections of others' messages
	Asking questions	Students ask questions of other students or the moderator
	Recognition, complimenting, expressing appreciation	Complimenting others or contents of others' messages
	Expressing agreement	Expressing agreement with others or content of others' messages
Cohesive	Vocative communication	Addressing or referring to participants by name

Category	Indicators	Definition of Indicators
	Addresses or refers to the group using inclusive pronouns	Addresses the group as we, us, our, group
	Phatic/salutation	Communication that serves a purely social function, greetings, closures

(Source: Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2007). Assessing social presence in asynchronous text-based computer conferencing. *International Journal of E-Learning & Distance Education*, 14(2), 50-71.)

Appendix F: Complete social presence coding scheme

Table 8: Complete social presence coding scheme

Main Themes	Sub-themes	Participants' responses
Affective Responses	Expression of emotions	A, B, C, D, E, F, G, H ,I ,J , K, L, M, N, O, P, Q, and R
Interactive Responses	Asking questions	A, B, C, D, E, F, G, H ,I ,J , K, L, M, N, O, P, Q, and R
	Recognition	A, B, C, D, E, F, G, H ,I ,J , K, L, M, N, O, P, Q, and R
	Recognition: Expression of encouragement:	A, B, C, E, N, J, L, M, N and R,
	Recognition: Expression of appreciation:	F, G, I, K, O and Q,
Cohesive Responses	Sense of belonging to the group	A, C, D, E, I, L, N, P, Q and R,
	Lack of sense of belonging to the group	B, F, G, H, J, K, M and O
	Bonding with others	A, D, F, G, J, Q and R
	Lack of bonding	B, C, E, H, I, K, L, M, N, O and P
	Vocative communication	F, H, O and F
	Inclusive pronouns	A, B, C, D, E, F, G, H ,I ,J , K, L, M, N, O, P, Q, and R
Interaction	Student-student interaction	A, C, E, F, I, J, K, P, Q and R
	Student-instructor interaction	A, B, E, F, G, H, J, L and O

Main Themes	Sub-themes	Participants' responses
	Learning as results of interaction	E, I, P and Q
Instructor presence	Lack of feedback	C, D, F, G, K, M, P and Q
	Lack of interaction	D, G, P and R
Internet access	Lack of internet access	B, E, F, G, I, J, K, M and R,