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A case study examining perceptions of female Saudi university students regarding the use of asynchronous online discussion boards

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ABSTRACT

A CASE STUDY EXAMINING PERCEPTIONS OF FEMALE SAUDI UNIVERSITY
STUDENTS REGARDING THE USE OF ASYNCHRONOUS ONLINE
DISCUSSION BOARDS

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This phenomenological case study explored undergraduate Saudi female students'

perceptions of using asynchronous online discussion boards (AODB) as a learning tool. In

addition, the current study explored factors that helped students learn skills, specifically their

language learning. The current study sought to add to knowledge about how asynchronous online

discussion forums can benefit undergraduate Saudi female students' development of learning.

Data were collected during the Spring 2016 semester through focus group and individual

interviews with ten undergraduate students in an online course as well as their narrative

reflections and the researcher reflections and notes. Participants were undergraduate Saudi

female students at the junior academic year level who were studying English as a second

language as a core degree requirement for their business management major. The results showed

the three main themes that emerged from the current study included a) students' perceptions of

asynchronous online discussion boards, b) learning opportunities offered by AODBs, and c)

factors that helped or hindered the participants' learning. Each theme covered some category of

students' perceptions toward their experiences of using asynchronous online discussion boards.

The first theme of students' perceptions comprised four categories: (a) the value of using AODB, (b) engagement, (c) collaboration, and (d) convenient communication. The second theme, learning opportunities offered by AODB, involved two categories: (a) empowerment and (b) cognitive learning skills. The third theme regarding participants' perceptions of the factors that hindered or helped their learning displayed categories related to a) challenges of using AODB, b) teacher presence, and c) course structure. Regarding the current study's findings, dissuasion on participants' perceptions was explored; implications for effective use of AODB along with several recommendations are provided.

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A CASE STUDY EXAMINING PERCEPTIONS OF FEMALE SAUDI

UNIVERSITY STUDENTS REGARDING THE USE OF

ASYNCHRONOUS ONLINE DISCUSSION BOARDS

BY

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DEDICATION

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CHAPTER 1

INTRODUCTION

Rationale for the Study

The evolution of online learning has brought about positive changes in the field of education. Because the power of online learning lies in its ability to link people across vast distances and between different sources of information, people have increasingly started to use it to pursue their education via online courses. Computer-mediated communication (CMC), including two types (synchronous and asynchronous) of online discussion forums, has been generally used as a collaborative platform in higher education (Garrison & Anderson, 2003; Lewis, Snow, Farris, Levin, & Green, 1999).

Online learning environments, for example using an online discussion forum, are collaborative platforms that have been designed as an instructional technology tool to address a variety of educational needs (Chin, Sum, & Foon, 2008; Jarosewich et al., 2010; Theoret & Luna, 2009; Topcu & Ubuz, 2008; Zhao & McDougall, 2008). While some fully online courses can simulate face-to-face classrooms using synchronous online discussion forums as a means of class interaction, other courses only use asynchronous online discussion forums as an embedded part of the class interaction. Online discussion forums provide learners with the opportunity to exchange information and help them communicate with instructors and other learners as well as utilize the course content (Du & Xu, 2010; Fernandez, 2007). A study by Chin et al. (2008) revealed that online discussion forums help assess and assist learners' learning and improve their

literacy skills, such as reading and writing. Furthermore, asynchronous online discussion forums offer international and foreign language learners an alternative opportunity to actively participate in discussions (Du, Zhang, Olinzock, & Adams, 2008; Zhao & McDougall, 2008). Asynchronous online discussion forums can give students time to formulate their thoughts, write vocabulary, and structure their responses before posting to the forum (Theoret & Luna, 2009). As asynchronous online discussion forums replace face-to-face interaction (Andresen, 2009) via written message, learners' motivation to write better may increase their effort to deliver meaningful messages to their peers in that learning environment (Vinther, 2011). Accordingly, online discussion forums are commonly an integral part of fully online courses and even hybrid courses (Levine, 2007).

Incorporating technology such as online discussion forums as an instructional tool clearly can influence students' knowledge, skills (Bassett, 2011; Kol & Schcolnik, 2008; Shana, 2009), attitudes, expectations, and perceptions (Shaff, Altman, & Stephenson, 2005) in online learning courses. Studies note that online discussion forums may serve a satisfactory purpose in learning as compared to the traditional classroom (Bassett, 2011; Yeh & Lahman, 2007). They are a place in which students can post messages, read other students' and the instructor's messages, and reply to them to exchange ideas, thoughts, and feelings, which gives all students a chance to communicate and engage in learning equally (Topcu & Ubuz, 2008). An asynchronous online discussion forum is a more inclusive learning environment because it is flexible, convenient, motivational, reflective, structured, and supportive (Bassett, 2011). These discussion forums offer students the opportunity to work together while supporting successful teaching/learning practices (Ajayi, 2010; Jahnke, 2010). It is a tool that may give students access to complete their learning at any time and in any place. Furthermore, it provides online learners with the

opportunity to expand their learning through the process of discussion, enhances their understanding of the subject under study, and helps them to engage in learning (Chin et al., 2008; Kol & Schcolnik, 2008).

However, even gifted instructors who engage students in online discussion cannot guarantee high-quality knowledge, discussion posts, and/or interaction (Buraphadeja & Dawson, 2008). If asynchronous online discussion forums are not structured in a way that meets the class needs and do not encourage students to actively engage with course materials, the meaningful learning experience of this useful tool may diminish. A study by Bassett (2011) highlighted the need for good structure, planning, and time management when using online discussion as a learning environment to improve students' learning skills. Instructors should prepare their students to be familiar with online discussion forums before using them, provide students clear guidance for what is expected and give students sufficient time to reflect on their learning and to participate with their peers. Interestingly, Bassett (2011) found that students in asynchronous online discussions were less frightened about discussing their ideas versus how they felt in face-to-face courses.

Other studies (Balaji & Chakrabarti, 2010; Du & Xu, 2010) applied the media-richness theory to investigate the relationship between student interactions and perceived learning from the perspective of students in a traditional lecture-style classroom when a discussion forum is included in the face-to-face course. Both studies found the perceived richness of an online discussion forum had a positive effect on students' involvement, interaction, and learning. It was not simply the addition of an online discussion written message to a traditional classroom setting that potentially positively influenced student involvement, interaction, and learning but also the

role of the instructors to facilitate students' discussions in the forum and provide students with constructive feedback (Spiliotopoulos & Carey, 2005).

Using written text in online discussion forums as a form of communication is a meaningful element for students' participation and learning because it can enable students to gain ideas from other learners with diverse cultures and ethnicities, to exchange more information and experiences (Du & Xu, 2010; Fernandez, 2007; Thompson & Ku, 2005), and to support learning and advance individuals' knowledge and identities (Fernandez, 2007; Spiliotopoulos & Carey, 2005). However, communicating with other learners in asynchronous online discussion forums limited to the written text is a main issue or challenge for some learners because they are not able to read the emotion that is visible in face-to-face settings (Murphy & Coleman, 2004). Likewise, the problem of miscommunication and misunderstanding while learning regarding the lack of verbal cues and facial expressions appears with written text (Yeh & Lahman, 2007; Zhao & McDougall, 2008) because of a failure to appropriately use clear writing (Vinther, 2011). Also, students with poor writing skills hesitate to participate in asynchronous online discussions and sometimes prefer not to participate at all (Shaff et al., 2005). Accordingly, writing skill is an important factor that affects how students perceive and participate in online discussion forums (Shaff et al., 2005; Vonderwell, Liang, & Alderman, 2007) as well as influences the amount of learning that is articulated and how instructors evaluate students' responses in online discussion forums (Vonderwell, Liang, & Alderman, 2007).

However, asynchronous online discussion forums have been seen as an alternative way to provide a space for students to express their thoughts and debate further content and topics covered in the classroom at their own pace with other students and teachers, which might

otherwise be limited in face-to-face discussion (Zhao & McDougall, 2008). More significantly, the potential of asynchronous online discussion forums using numerous resources such as a website, books, and others' experiences as well as recording and saving students' conversation transcripts make it possible for the students to retrieve and review the subject content later, build their arguments and knowledge (Thompson & Ku, 2005), and plan for powerful discussions and negotiations with others (Topcu & Ubuz, 2008).

Participants in online discussion forums are expected to be inclusive, helpful, and open to others' thoughts and insights. It could be argued that students use a range and a combination of discourse strategies that are helpful, promote community, and are comprehensive (Fauske & Wade, 2004). Students' interactions in online discussion forums facilitate the social construct of knowledge and help them express their thoughts and opinions through writing (Fernandez, 2007), thereby improving learning outcomes (Jahnke, 2010). Students are ready to share similar experiences, think critically, evaluate, and challenge others' assumptions, opinions, and ideas. Inviting feedback techniques and reflection assignments could potentially sustain students' participation and help to contribute to more postings and involvement in online discussions (Lim, Cheung, & Hew, 2011). Students might discuss and reflect on how involvement in online discussion forum activities helps improve their learning. The activity of writing in online discussion forums itself and reflecting on one's personal knowledge regarding influences to one's personal cognitive development may help control future actions and promote students' in-depth learning and critical thinking skills (Lim et al., 2011; Theoret & Luna, 2009). A study by Theoret and Luna (2009) focused on how writing in a statistics course using online discussion forums helped students improve their statistical thinking. Their findings showed that writing assignments, including reflection journals and responses to original posts in online discussions,

helped students engage in reflective thinking, enhanced their understanding of statistics and increased their communication about statistics. Reading peers' reflections could influence students' cognitive progress through the course by highlighting different perspectives (Kessler, Bikowski, & Boggs, 2012; Lin &Yang, 2011). Students' posts to online discussions and reflections on their own knowledge help them make connections between the activities they are engaging in during asynchronous online discussion forums and constructing their knowledge and validating their ability to enhance their learning (Topcu & Ubuz, 2008). Asynchronous online discussions can encourage thoughtful exchanges between students (Kol & Schcolnik, 2008), improve their learning experiences, shift learning from an isolated to a social activity, and move learning from passive to active processes that affect cognitive activities (Ajayi, 2010).

Although online discussion forums may help students reflect on their learning, construct new knowledge, and think critically, there is no guarantee these benefits will be achieved (Murphy & Coleman, 2004). It could be argued that students may face some challenges regarding their experiences with asynchronous online discussions. These challenges include students' behavior, online communication, quality of discussion, and forum features (Murphy & Coleman, 2004; Zhao, & McDougall, 2008). However, Murphy and Coleman (2004) clarified that to achieve the benefits from these online discussion forums, the forums need to be managed effectively by the instructors, and students should be well prepared to engage in the discussion forums for communicating and learning.

Critical thinking and communication with others are possibly correlated with reading and writing skills when they are assessed through posts (Larkin, 2009; Lim et al., 2011; Theoret & Luna, 2009). A student who does not have adequate writing skills will not be as adept at demonstrating his/her critical thinking skills through online discussion board posts (Shaff et al.,

2005). It may be possible to apply some of the findings and implications of studies focused on developing critical thinking skills (Lim et al., 2011; Theoret & Luna, 2009) through the use of online discussion board posts to the study of developing reading and writing skills. Regarding the previous studies, written text on discussion forums is the ultimate way for students to express their thoughts critically, to demonstrate improvement of learning outcomes through discussion, and to interact with other cultures to improve intercultural competence in online discussions (Murphy & Coleman, 2004; Ritchie & Black, 2012; Shaff et al., 2005).

In 2013, the Communications and Information Technology Commission (CITC) reported that the Kingdom of Saudi Arabia was one of the fastest growing countries in the world in terms of using online learning. Accordingly, the implementation of CMC in the Saudi educational system has become a top priority of the Saudi Arabian government (National Centre for E-Learning and Distance Learning, 2013). Integrating modern technology such as online discussion forums as a tool for teaching and learning may distinctly impact students' knowledge, abilities, thoughts, anticipation, and views in different online learning classes (Bassett, 2011; Kol & Schcolnik, 2008; Shaff et al., 2005; Shana, 2009). It is a strategy that can give students access to complete their learning equally at any time and in any place without being restricted by time, place, and cultural issues (Bassett, 2011; Topcu & Ubuz, 2008; Yeh & Lahman, 2007).

Although there has been great effort and vast investment in incorporating CMC in the Saudi educational system, there is no clear evidence that the full potential of CMC in teaching and learning processes has been utilized (Albalawi, 2007). Little attention has been paid to the issue of using online discussion forums as the current existing online learning environments that have been set up in the Saudi country. The current study examined undergraduate Saudi female students' perceptions toward using the asynchronous online discussion forums in CMC in their

second language course, as this is the only allowed communication method when the course instructor is male. This research was predicated on the belief that positive perceptions of online discussions are a key factor in using technology to enhance students' learning.

Problem Statement

The Kingdom of Saudi Arabia is a large country in terms of geographical area, with a large number of communities isolated from major population centers. In addition, public transportation to other areas is not available and women are not allowed to drive cars. Therefore, online learning offers the potential to deliver educational services to remote locations, thus reducing inequalities across the various regions and areas. Also in the Saudi Arabian higher education system, men and women receive their instruction in separate classes for cultural and religious reasons. Furthermore, there are a limited number of female instructors in some degree majors in Saudi higher education. This adds more pressure to the limited facilities and human resources available. In this regard, CMC has become a potential way for Saudi female students to access higher education. Additionally, the number of female students enrolled in Saudi institutions of higher education has increased significantly in recent years (CITC, 2007). Because of the increasing number of institutions that use online discussion forums in higher education, there is a great demand to understand female students' learning experiences in online courses using discussion forums as a collaborative platform. Researchers have examined how non-Saudi female university students' communication skills, critical thinking skills, and literacy skills improve through online discussion forums (Ajayi, 2010; Kessler, Bikowski, & Boggs, 2012; Lin &Yang, 2011; Murphy & Coleman, 2004; Ritchie & Black, 2012; Shaff et al., 2005), but there appears to be a lack of research regarding Saudi female students' perceptions of their learning in

fully online learning environments using asynchronous online discussion forums as a learning

tool. This leads to the question: How do Saudi female students perceive using asynchronous

online discussion forums as a learning mode?

The current study sought to add knowledge regarding how asynchronous online

discussion forums in a second language course could benefit Saudi female students' development

of their learning (Potts, 2005; Ritchie & Black, 2012).

<p align="center">Significance of the Study</p>

One goal of the field of instructional technology focuses on how to adequately integrate

technology into online learning to enhance teaching/learning processes and help diverse learners

pursue lifelong learning (Warschauer & Liaw, 2010). However, there is a fine line between not

being able to express ideas in written messages and proving that one has mastered the content of

the second language course (Vonderwell, Liang, & Alderman, 2007). Students' perceptions of

their ability to learn in online discussion forums can influence the extent to which their learning

is articulated and how instructors assess student responses (Andresen, 2009; Vonderwell et al.,

2007). Accordingly, understanding students' perceptions of their ability to learn in discussion

forums and what factors in discussion forums improve their learning could lead instructors in

educational technology to differentiate between students' learning in the online discussions and

mastery of the content (Vonderwell et al., 2007). Moreover, the current study will help

researchers and instructors in the educational technology and second language fields to gain

insight into how to improve Saudi female students' learning skills in fully online courses.

Purpose of the Study

The purpose of the current study was to explore undergraduate Saudi female students' perceptions of using asynchronous online discussion forums as a learning tool and to try to determine what factors emerged that helped their learning. The current study sought to add to knowledge about how asynchronous online discussion forums can benefit undergraduate Saudi female students' development of learning.

Research Questions

In regard to this topic, the following questions emerged:

1. What are undergraduate Saudi female students' perceptions regarding the use of asynchronous online discussion forums as a learning tool in their educational environment?

2. What factors offered by asynchronous online discussion boards hindered or helped undergraduate Saudi female students' learning?

Theoretical Framework and Constructs

The current study explored the experience of students through their perceptions of participation in a course-based online discussion board as a learning (technology) tool to help improve their learning, particularly their second language learning. In the current study, distance education referred only to the asynchronous, web-based, online format. Asynchronous online is a mode in which communication and interaction occur at different times and in different places

using videos, computers, or other communicative means and materials that can be retrieved later at the user's convenience (Aboda, 1993; Garrison & Anderson, 2003; Johnson, 2006).

Shaff et al. (2005) explain that discussion boards are also known as a discussion group, discussion forum, message board, and/or online forum (p. 413). Discussion board is a general term for any online "bulletin board" in which users can post discussions as well as read and respond to posts by other forum members (Spiliotopoulos & Carey, 2005, p. 93). An online discussion forum can revolve around any subject in an online community. However, an online discussion forum is a kind of CMC that can provide a way for individuals to expand the classroom and interact with other students and the instructor by posting written messages to exchange ideas and information (Balaji & Chakrabarti, 2010).

Sociocultural constructivism is applicable for learning in asynchronous online discussion forums because learning a second language emerges from individuals' interactions with other peers and materials in a social context (Black, 2005). In other words, constructivism is the tenet in which learners actively construct their own knowledge and meaning from their own personal experiences, beliefs, and curiosities within a social setting (Gee, 1999, 2003; Richards, 2008). Since the 1990s, constructivism has had a strong influence on education, particularly in the field of instructional technology (Woo & Reeves, 2007). Accordingly, the indication is that asynchronous online discussion boards are supported by a sociocultural constructivist theoretical framework, such as Vygotsky's (1978), and cognitive aspects of Garrison, Anderson, and Archer's (2000) Community of Inquiry. In terms of the sociocultural constructivist theory (Garrison et al., 2000; Vygotsky, 1978), learning occurs through participation practices as people work together to construct their knowledge through ongoing activities using the tools and means of their culture's community (Vygotsky, 1978). This is where the social component of social

constructivism becomes evident. The interaction between learners in an online learning environment, especially in the online discussion boards, is expected to provide meaningful learning that leads to cognitive development.

There are two major themes for Vygotsky's (1978) theoretical framework. The first is that social interaction has a crucial rule in individuals' cognitive development. Vygotsky (1978) described knowledge as constructed on two levels: first, through meaningful interaction with others by discussing thoughts and opinions, and second, through incorporation into the individual's intellectual structure or cognitive schema. A second aspect of Vygotsky's theory is the notion that the potential for cognitive development depends on the zone of proximal development (ZPD; Driscoll, 1994). Regarding the ZPD, Vygotsky (1978) explains that learners extend their knowledge of the task at hand from a lower level of understanding to a higher level with the assistance of more experienced social partners. This is where collaborative learning occurs as an effective way of developing skills and strategies (Vygotsky, 1978). Written text can be considered a social activity from the point of view of Vygotsky's (1962) sociocultural constructivist theory. Written text on the online discussion forums is conceptualized as a tool for mediated actions that produce what Vygotsky (1962) called meaningful interaction.

In the current study, Vygotsky's (1978) sociocultural constructivist theory was used as a theoretical framework to guide investigation of the learning experiences of Saudi female students in asynchronous online discussion as they interacted with others' cultures and more knowledgeable peers through written text and collaborative discussion. In online learning environments, studies (Bassett, 2011; Kesseler, Bikowski, & Boggs, 2012) have emphasized that collaborative learning among students is valuable for assisting each student in advancing through

his/her own zone of proximal development and for improving his/her learning accuracy through asynchronous online discussions (Warschauer, 1997).

Previous studies that applied Vygotsky's (1978) sociocultural perspective showed that an individual learner's deeper thinking and understanding of course content could be advanced through the meaningful social interactions between peers or novice learners and more skilled social partners (Fernandez, 2007; Lin & Yang, 2011). Fernandez (2007) found that communication with other students through written online discussion facilitated the students' understanding of each other's messages and internalization of socially constructed knowledge (Vygotsky, 1978). In this regard, the absence of mediated communication and timely feedback possibly led to an increase in the students' frustration and a decrease in their motivation to collaborate with others (Fernandez, 2007). Lin and Yang (2011) argued that peer feedback can be conceptualized as a meaningful social interaction, which includes responding to others, debating ideas, and adding to others' opinions that help students improve their learning abilities to reach their potential ZPD (Vygotsky, 1978). Thus, Lin and Yang (2011) stated that illustrating the effectiveness of peer feedback activities and training students to use it sufficiently might contribute to learners' improvement of essential attitudes and skills.

Vygotsky's (1978) theory is generally used in fields of education involving the application of technology using online environments to teach and learn. This interest could be because of the ability of online learning to offer collaborative and interactive settings that build "an effective means for implementing constructivist strategies that would be difficult to accomplish in other media" (Driscoll, 1994, p. 376). The use of online discussion as a type of CMC initiates the social construction of knowledge and facilitates this interactive process.

The second sociocultural constructivist framework is the cognitive aspect of the Community of Inquiry (Garrison et al., 2000). This framework guided the use of asynchronous online discussions in constructing and supporting meaningful learning through interaction with other community members (Garrison & Akyol, 2009). Garrison et al. (2000) stated that successful online learning, especially higher order learning, demands the growth of community and notes that such improvement is not a marginal challenge in the online environment. The Community of Inquiry framework is social in nature and is based on Dewey's (1959) ideas of practical inquiry and learning community, which focused on student interest, practical learning, and building a sense of community where equality is a vital key (Fallace, 2009). Community of Inquiry is a dynamic theoretical model of online learning, including three main components that are important for any educational experience: cognitive presence, social presence, and teaching presence (Garrison et al., 2000) (see Figure 1). The first element is cognitive presence, which defines "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication" (Garrison et al., 2000, p. 89). The second element, social presence, is "the ability of participants to identify with the community, communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities" (Garrison, 2009, p. 352). The third element is teaching presence, which is "the design, facilitation and direction of cognitive and social presence processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson, Rourke, Garrison, & Archer, 2001, p. 5). The three elements of the Community of Inquiry model all overlap (Garrison et al., 2000). Accordingly, cognitive presence appears to be a vital component in critical thinking, which is a goal of success in higher education; social presence plays an important role in the success of

cognitive presence by facilitating higher order thinking processes; and teaching presence affects how teachers design the educational experience and facilitate learning.
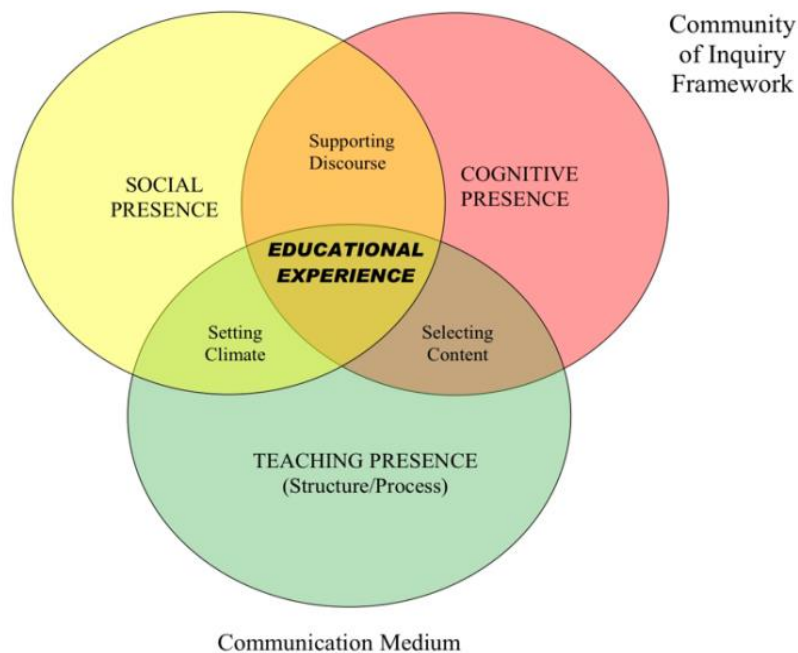
Figure 1 : Community of Inquiry framework (Garrison, Anderson & Archer, 2000).

The Community of Inquiry framework is a valid measure of cognitive, social, and teaching presence in online learning (Arbaugh et al., 2008). Previous studies found that two of the dimensions of Community of Inquiry, cognitive presence and social presence, are a more valid, reliable, and efficient measure than teaching presence is for constructing effective online learning environments (Arbaugh et al., 2008; Diaz, Swan, Ice, & Kupczynski, 2010). In contrast, another study (Diaz et al., 2010) identified the high validity of the teaching presence component in enhancing students' learning in online discussion boards. It could be argued that the construct validity is highly dependent on the context in which the measurement occurs (Arbaugh et al.,

2008). Furthermore, some students might rate the teaching presence item above cognitive and social presence because they accurately view teaching presence as a necessary condition for the increase of cognitive and social presence (Gunawardena & Zittle, 1997).

However, because the main purpose of the current study was to investigate students' educational experiences, learning processes and outcomes regarding the use of an asynchronous online discussion forum, the focus was on the cognitive aspects as it facilitated higher order learning (Garrison et al., 2000). Cognitive presence has been identified as one of the essential elements in critical thinking and higher order learning for effective online learning (Garrison et al., 2001). Garrison (2007) defined cognitive presence as "the exploration, construction, resolution and confirmation of understanding through collaboration and reflection in a community of inquiry" (p. 65). This element is focused on improving notions of critical reflection and discourse among online learners to achieve higher order learning (Akyol et al., 2009; Garrison & Cleveland-Innes, 2005). According to Kanuka and Garrison (2004), "Cognitive presence is the key element in critical thinking, a necessary element for higher levels of thinking and learning" (p. 4). This element is based on Dewey's (1933) model of practical inquiry and reflective thought. To conceptualize cognitive presence in regard to the practical inquiry model, a student is required to proceed through four main phases: a triggering event, exploration, integration, and resolution (Garrison et al., 2001) (see Figure 2). The practical inquiry model, including the four phases, describes the potential learning activities that lead students to deep and meaningful learning (Akyol et al., 2009). In addition, these phases describe cognitive presence generally in an educational field and particularly in the online environment (Garrison & Anderson, 2003).
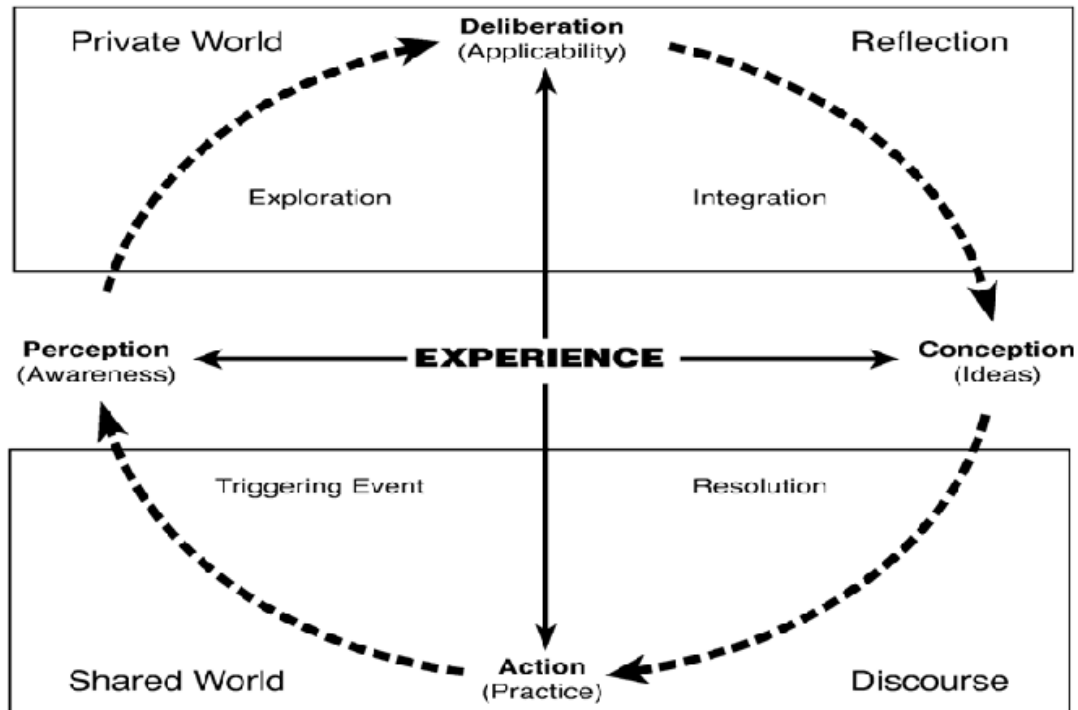
Figure 2: Practical inquiry model (Garrison, Anderson & Archer, 2001).

The first phase is a triggering event in which an issue or dilemma is specified for further inquiry in the learner-shared environment. Learners try to restate and illustrate the information to understand the issue. For learners to engage in this phase, the issue needs to be related to their previous experiences. The second phase is exploration in which learners explore the issue, both individually and collectively, through critical reflection and discourse. Learners questioning and exchanging information are parts of this phase. The third phase is integration; learners construct meaning from the ideas and gain some understanding of how to use the acquired knowledge and information. The final phase is resolution, in which learners create solutions and apply the newly gained knowledge to the educational contexts or workplace settings (Akyol & Garrison, 2011; Garrison et al., 2000; Garrison & Arbaugh, 2007).

Garrison and Anderson (2003) debated that asynchronicity and the connectivity of asynchronous online learning could lead to high cognitive presence, which in turn provides better chances to improve higher order thinking and deeper learning. In other words, they stated that the asynchronous property supports "reflection on and monitor knowledge (re)construction and connectivity provides unique opportunities for collaboration and discourse" (Garrison & Anderson, 2003, p. 52). Schrire's (2004) study indicated that the practical inquiry model is "the most relevant to the analysis of the cognitive dimension and represents a clear picture of the knowledge-building processes occurring in online discussion" (p. 491). On one hand, a number of studies have found students' online discussion only occurred in the lower levels of the practical inquiry model, triggering and exploration phases, and that students' online discussions rarely achieved the higher levels of the model: integration and resolution (Garrison, 2007; Garrison et al., 2001; Kanuka, Rourke, & Laflamme, 2007; Rourke & Kanuka, 2007; Wanstreet & Stein, 2011). In contrast, research by Gunawardena (1995) and Tu (2000) found that higher order thinking and learning accrued in the integration and resolution phases and that cognitive presence was increased and continued when social presence appeared. This finding is similar to the results from Akyol and Garrison's (2011) study that examined the significant relationships between cognitive presence and satisfaction and between cognitive presence and perceived learning as well as confirmed that social presence in online learning supported integration and higher levels of cognitive presence. Moreover, several studies (Akyol & Garrison, 2011; Garrison et al., 2001; Kanuka & Anderson, 1998; Schrire, 2006; Shea & Bidjerano, 2009) found that teaching presence was imperative for reaching higher levels of cognitive processing. Research has also found that highly structured activities in online discussion forums, such as well-designed learning activities, facilitation, and direction, move students into the later phases

of cognitive presence (Akyol et al., 2009; Akyol & Garrison, 2011; Akyol & Garrison, 2011; Richardson & Ice, 2010).

In summary, the current study focused on students' perceptions of their learning in an online second language course using an asynchronous discussion forum as a learning platform. Vygotsky's (1978) sociocultural constructivist theory was used as the foundational theory to understand the students' communication using written text in the online discussion forum to achieve their learning. The Community of Inquiry model (Garrison et al., 2000) was also used to understand how cognitive presence in computer-mediated communication can impact students' perceptions of their learning.

Definition of Terms

The following terms are defined for the purpose of the current study:

Asynchronous Online Discussion Board: Written text that takes place on a threaded discussion at any time using an electronic tool to improve teaching and learning experiences (Cheung & Hew, 2005; Johnson, 2006; Levine, 2007). It is an educational environment in which communication and interaction happen between students and instructors anytime and anywhere to help create a sense of community among learners (Bailey et al., 2000; Lave & Wegner, 1991).

Bracketing: State of suspended judgment in which previous experiences and perceptions are set aside to allow the researcher to see with new eyes (Creswell, 2007). Same as the term "epoche" (Moustakas, 1994).

Girls' Schools: In Saudi Arabia there are schools dedicated to educate girls only, in which men are not allowed to enter and girls must be taught by female instructors. These schools are called girls' schools.

Interaction: For purposes of the current study, interaction will refer to students' written communication with the instructor and other students.

Lived Experiences: "A term used in phenomenological studies to emphasize the importance of individual experiences of people as conscious human beings" (Creswell, 2007, p. 236). According to Van Manen (1997), the lived experience involves our immediate, pre-reflective consciousness of life; a reflexive or self-given awareness, which is, like awareness, unaware of itself (p. 35).

Online Learning Environment: Place in which students interact and communicate with instructors and other students synchronously and/or asynchronously through electronic technologies (Moore & Anderson, 2003).

Assumptions

It was assumed that sociocultural constructivist theory (Garrison, Anderson, & Archer, 2000; Vygotsky, 1978) is an accurate predictor of the incorporation of online discussion forums for instruction in Saudi higher education. Moreover, it was assumed that the constructs in the current study are measurable. It was assumed that the information derived from the open-ended questions used in the interviews for the current study will be reliable and valid. Also it was assumed that the gender of the instructor would not affect the students' learning experiences because the female students had prior instructional experiences with male instructors as they only have had male instructors for their online courses, specifically ESL online courses. In addition, it was assumed that the participants in the study were undergraduate female Saudi students who were studying English language learning skills in an online environment and are

participated willingly. It was also assumed that the participants answered the questions and wrote

their reflections of the course honestly and without bias.

Delimitations

Participation in the current study was delimited to the undergraduate female Saudi

students in a university that offers English language learning skills courses and that recently

began using online discussion forums for course discussion. In addition, female students were

asked to answer questions in relation to the course in which they were enrolled. The study

focused on the students' perceptions of their learning English language skills as connected to

their majors, which was business management, because it was the only online major that

provided English as a second language courses. Perceptions of using asynchronous online

discussion forums for instruction were measured through the interview questions using an

instrument based on items adapted from a prior research study (Bokhari, 2013). The results of

the study may be generalizable only to other Saudi universities due to the use of a probability

sampling method to enhance generalizability.

Limitations

This research was limited to studying undergraduate female Saudi students' perceptions

of using online discussion forums in a second language course. The use of online discussion

forums in higher education in Saudi Arabia is not available in most of the Saudi universities.

Furthermore, there is very little empirical literature covering the use of online discussion forums

in the Saudi educational system, and those that do exist are not peer-reviewed articles. In

addition, the lack of generalizability is one of the limitations of qualitative research (Hycner, 1985). Thus, this qualitative inquiry is limited because of the small number of participants, which therefore cannot be generalized to all Saudi female students. The study is also limited if the participants' responses were not provided honestly or contained bias due in part to the fear of the researcher's relationship with the university administration.

Chapter Summary

This chapter provided an introduction to the general research problem as well as the research questions. It defined the phenomenon of interest theoretically, conceptually, and operationally as well as the external factors that can shape or are shaped by the phenomenon of interest. Furthermore, this chapter briefly argued the purpose and the significance of the study. In addition, this chapter provided definitions for the concepts and key terms used to understand and make sense of the proposed study as well as identified the assumptions, delimitations, and limitations.

Organization of the Dissertation

Chapter 1 has given an overview of this research, including the rationale of the study, problem statement, research questions, and a discussion of the theoretical framework for the study. Chapter 2 provides a review of the literature on Saudi Arabia (education system and females) and second language learning, including details about online discussion forums, their use in teaching second language, and taking courses in a second language utilizing online discussion forums involving learners' perceptions and benefits of online discussion forums. Chapter 3 presents the methodology and design of the study and the rationale for their selection.

Chapter 4 presents the research findings. Chapter 5 presents a discussion of the findings,

implications for the use of AODB, recommendations for instructors and students when using

AODB, and recommendations for future study.

CHAPTER 2

LITERATURE REVIEW

Introduction

Since the current study was focused on understanding undergraduate Saudi female

students' perceptions toward using asynchronous online discussion boards as a learning tool and

how that could improve their second language learning skills, the literature review provides

background information about Saudi Arabia (i.e., education system and females); second

language learning, including details about online discussion forums and their use in teaching

second language; and taking courses in a second language utilizing online discussion forums

from the perspective of learners' perceptions of online discussion forums. These topics served as

the foundation of the current study; hence, a review of the related literature provided context and

identified gaps in the research.

To find information related to this review, a variety of strategies was employed. First,

several keywords like Saudi education, Saudi female education, online discussion forums,

asynchronous online discussion, collaboration, and second language learning were used to search

databases, including ERIC, ProQuest, and Google Scholar. The online catalog of the Northern

Illinois University Libraries was also explored to find books on these topics. Next, the researcher

reviewed the references in the books and articles from the initial searches, which revealed further

relevant sources. Finally, searching the databases using author names from key articles provided

additional material and keywords.

Education System in Saudi Arabia and Female Students

Culture and Education System

The education system in Saudi Arabia has gone through a spectacular transition. In 1932, education in Saudi Arabia was established, but it was not available for everyone, particularly for females (AlMunajjed, 1997; Royal Embassy of Saudi Arabia, 2014). Generally, it was limited to the sons of wealthy families living in major cities (Alsalloom, 1995; Royal Embassy of Saudi Arabia, 2014). According to the Royal Embassy of Saudi Arabia (2014), in the 1930s formal primary education was initiated in Saudi Arabia, and by 1945, King Abdulaziz Al-Saoud, the country's founder, started an extensive program to build schools throughout the Kingdom. Years later, in 1951, the number of general schools was 226, all of them for males only, with 29,887 students (AlMunajjed, 1997). In 1954, the Ministry of Education was established and was headed by Prince Fahd Ben Abdul-Aziz, who was the first Minister of Education (Mirza, 2008). In 1964, the first public school for females was built, and in the 1990s, girls' schools had been founded in every part of the Kingdom (Royal Embassy of Saudi Arabia, 2014).

The oil discoveries led to a major economic boom in the 1970s. This boom contributed to the construction of houses, schools, and universities and increased the number of female students in schools at all levels. By the middle of the 1970s, 50% of Saudi girls attended schools (Hamdan, 2005). In the 1980s, education was available to all females in Saudi Arabia, and "young women were already enrolled in and graduating from the universities" (AlMunajjed, 1997, p. 6). Currently, the education system in Saudi Arabia is comprised of 25 public and 27

private universities, "with more than 30000 planned schools; and a great number of colleges and other institutions" (Royal Embassy of Saudi Arabia, 2014, para. 2).

Saudi Arabia has adopted the Islamic religion as the Basic Law of Government, which is based on equality (Alsalloom, 1995). Based on Islamic law, education is required for every Muslim, both male and female. In this regard, the Saudi government encourages both males and females to attend school (Royal Embassy of Saudi Arabia, 2014). The education system in Saudi Arabia is free of cost and open to all citizens. Thus, the Ministry of Education is responsible for providing students with all education needs, such as books, laboratories, computers, health services, and related equipment (AlMunajjed, 1997; Hamdan, 2005; Royal Embassy of Saudi Arabia, 2014). Moreover, in addition to free tuition, the government offers students in higher education monthly stipends slightly above the equivalent of US $200 to help them remain in education and foster their interest in learning (Ministry of Higher Education, 2014).

The general goals of the education system in Saudi Arabia include the efficiency of education to meet the religious, economic, and social needs of the country and to eliminate illiteracy among adults (Ministry of Higher Education, 2014). Generally, the education system in Saudi Arabia is divided into four essential levels in which boys and girls are educated separately (Alsallom, 1995). First, the pre-school level (Kindergarten) is offered to 4- and 5-year-old children, but it is not required as a perquisite to enrolling in the first grade. As a result, most families do not send their children to a pre-school because of the high cost of private pre-schools and/or the limited availability of public pre-schools. The first level of the Saudi education system includes six years of primary school. The second and third levels are three years for each— intermediate and secondary schools. The fourth level is the higher education program. It is worth

noting that the government provides a scholarship to students who have been outstanding in their

studies and wish to study abroad (Ministry of Higher Education, 2014).

Female Education

In the Saudi culture and society, the main purpose of female education is to help them to

be good wives and mothers and to prepare them to work in certain jobs, such as teaching and

nursing, that were assumed to suit their nature, which is considered different from men's nature

(AlMunajjed, 1997; Mirza, 2008). As a result, when the private schools for girls were founded in

Makkah in 1943 (Hamdan, 2005), people were divided into three groups regarding female

education. The first group was unwilling to allow women to go to study at formal schools but

would permit them to go to the Katatib schools (ungraded Qur'anic schools attached to a

mosque) where females were taught by religious women and learned and studied the Holy

Qur'an and religious sciences (AlMunajjed, 1997; Hamdan, 2005). The second group wanted to

educate their girls at private schools, studying religion and other subjects such as home

economics. They believed education would help girls become good wives and benefit the family,

the children, and the harmony of the marriage. However, they "drew the line at higher education

for girls" (Al-Rawaf & Simmons, 1991, p. 289). The last group wanted to send girls to the

government schools to study through the level of higher education (Al-Rawaf & Simmons,

1991).

The Islamic religion strongly believes in the importance of education for both men and

women (AlMunajjed, 1997) in that a woman needs to be educated to achieve perfection.

Furthermore, the Islamic religion states that women have the right to work and that they might

work in business, manufacturing, and agriculture as long as their work is not detrimental to them or their family (AlMunajjed, 1997). Hence, the government of Saudi Arabia made great efforts to improve the human resources of the country (Royal Embassy of Saudi Arabia, 2014). Even though more effort has been made in regard to transformation of the Saudi Arabian society into an information society (CITC, 2007), the old traditions remain the same. The society, culture, and religion require the segregation of genders in the Saudi Arabian education system from the first grade of primary school to the doctoral level (AlMunajjed, 1997; Alsalloom, 1995; Mirza, 2008) because a woman could be seen without her veil by males she cannot get married to, such as her father, children, brothers, husband, uncles, nephews, etc. (Mirza, 2008). Interaction between unrelated men and women can only happen under certain protocols, including decent dress, which may require women to cover their face; polite speech from both unrelated men and women; and non-exclusive interaction in a private, closed place without the presence of a close male relative. Examples of these protocols include women being allowed to interact with men in the shopping center where a man is selling products or in a hospital where male physicians may treat female patients and vice versa and where both gendered staff work together. On the other hand, the education system in Saudi Arabia is based on the regulation of Islamic teachings. Thus, female and male students study separately while receiving the same curriculum. Education for girls has its own institutions, administrations, and supervisors. Male students are taught by male instructors, and female students are taught by female instructors, with the exception of the college of medicine or by male instructors via closed circuit-television (CCTV). Female instructors cannot teach male students under any circumstances.

The Saudi government is continually striving to foster gender equality and empower women in all areas. Thus, the goal of the education system in Saudi Arabia has been to eliminate gender disparity in primary and secondary education as well as higher education no later than 2015 (AlMunajjed, 2009). The Royal Embassy of Saudi Arabia (2014) stated, "Female students make up over half of the more than 6 million students currently enrolled in Saudi schools and universities" (para. 9). The number of males graduating annually from universities rose from 21,229 in 1999 to 248,343 in 2013, while the number of female graduates rose from 21,721 to a total of 420,928, which exceeded the number of male graduates (Ministry of Higher Education, 2014). Today, the number of Saudi females graduating from colleges and universities has grown at an average rate 2.5 times that of male graduates during the last decade (Cordesman, 2003). The number of female teachers in the primary, middle and the secondary levels are in abundance, but the shortage of female instructors appears clearly when it comes to the higher education level (AlMunajjed, 2010). This generally occurred because of old Saudi societal and cultural norms and values, where the woman's role is considered to be the housewife and men are the main "breadwinners" (Mirza, 2008, p. 1). The woman's job was taking care of the home and raising children properly, and the man's job was to work outside the home and provide the life supplements for the family. In this regard, men were expected to seek higher education and get scholarships from the government to continue their master's and doctoral degrees overseas. This situation causes a great availability of male instructors in higher education but not enough female instructors to meet the expanding number of female college students in higher education (AlMunajjed, 2010). In this case, since Saudi women cannot have direct contact (face-to-face interaction) with unrelated men, male instructors have been using CCTV to teach their courses at

the female colleges. However, colleges and universities in Saudi Arabia have tried to find

appropriate resolutions for this problem, and computer-mediated communication, in particular

asynchronous online discussion forums, might be a suitable choice.

<div align="center">Second Language Learning</div>

Second language is a common term used to refer to "any language learned after the first

language(s) and may include second-, third-, or fourth-languages" (Bardovi-Harlig, 1992).

Studies (Bardovi-Harlig, 1992; Krashen, 1982, 1988) on second language learning regularly

emphasize adult learners and may involve adolescents and children. Bardovi-Harlig (1992) stated

that second language learning could happen with or without instruction. This proposed study

focused only on instructed second language learning. As indicated in several studies, second

language learning historically took place when students were physically in the classroom with

their teachers and other peers (Barrs, 2012; Hussin, 2008; Krashen, 1982, 1988; Ritchie & Black,

2012; Savignon, 1991; Vinther, 2011; Warschauer & Kern, 2000). However, more current

researchers have proposed that communication in online discussion forums varies linguistically

from both traditional written and spoken discourse (Black, 2005; Chun, 1994; Kearsley, 2000;

Kern, 1995; Warschauer, 1995-1996), and educators can take advantage of these differences

pedagogically. For example, Chun (1994) revealed that asynchronous online discussion is similar

to written texts because language is lexically and syntactically complex, like face-to-face

discussions in terms of communication and discourse functions, and thus can serve as an

important bridge for transferring communication skills from the written to the spoken domain.

Teaching a Second Language

Second language pedagogical theorists recommend that instructors provide their students with meaningful and communicative environments to learn the target language (Krashen, 1988; Savignon, 1991; Warschauer, 1997; Warschauer & Kern, 2000). Early studies focused on the differences between learning language in traditional classrooms and online forums and found that students' language in online discussion forums tended to be more formal and complex than in face-to-face discussion (Kearsley, 2000; Kern, 1995; Warschauer, 1995-1996). So for many years language educators and researchers have used computer-mediated communication (e.g., discussion forums, e-mail, and chat rooms) to assist language learners' growth (Barrs, 2012; Chin, Sum, & Foon, 2008; Du & Xu, 2010; Kol & Schcolnik; 2008; Moore, 2006; Payne, 2004; Ritchie & Black, 2012; Warschauer 1995-1996; Warschauer & Kern, 2000), and most computer-mediated communication research focuses on online discussion forums as significant applications for language learning (Barrs, 2012; Kearsley, 2000; Kern, 1995; Ritchie & Black, 2012; Shana, 2009; Vinther, 2011; Warschauer, 1997; Zhang, Gao, Ring, & Zhang, 2007).

Based on this point, language teachers can use online discussion forums as a practical method to help students engage in discussion and debate to enhance their writing, reading, listening, and speaking skills (Kern, 1995). In other words, teachers can let their students discuss the topic in an online discussion forum and then share their ideas and thoughts in the classroom. This is because learners have more processing time to think and to reflect on the content under study than in face-to face classrooms.

Moreover, researchers have explored the use of written messages via online discussion forums in developing students' abilities to learn the target language. Zhang et al. (2007) found

that using online discussion forums for traditional English classes did not influence students'

performance in reading, grammar, and vocabulary, but it did improve their writing and critical

thinking. In contrast, Chin, Sum, and Foon (2008) indicated that the use of asynchronous online

discussion forums in learning the Chinese language did help improve the reading and writing

skills of the majority of their participants.

Research by Black (2005) showed that writing practice in online discussion forums can

allow students to be more expressive and can help students respond more meaningfully to others'

contributions rather than talking with peers in a face-to-face classroom. Moreover, it could be

argued that reading-based writing tasks in online discussion forums can reinforce students'

language ability when reading texts in a second language (Moore, 2006). A study by Liaw

(2007) focused on developing the English language and intercultural competence of two groups

of higher education English foreign language learners in Taiwan using an online discussion

forum to interact with their peers at Sam Houston State University in Texas. Findings from

analysis of both groups of students' posts in the online discussion forum showed increases in the

length of the posts and sentence complexity of their intercultural written conversations as well as

decreases in grammatical errors as more units were completed.

<center>Use of Discussion Forums</center>

Using online discussion forums to teach learners is different from lecturing because this

type of teaching encourages students to be more active learners (Kol & Schcolnik, 2008) as well

as communicate more thoughtfully in the target language and to facilitate interactive competence

(Elola & Oskoz, 2010; Vinther, 2011). Focusing on a blended learning course for learners of

French, Kern (1995) found that some participants said nothing in the discussion during the in-person class meeting, producing 37% and 60% of the total number of sentences, while most of them participated in the online discussion forum and produced 85% and 88%. Warschauer (1995-1996) compared the discussion of a small group of English as second language students in an online forum to their discussion in face-to-face classes. He found that the participation of the online groups was more balanced than face-to-face meetings. A study by Yildiz and Bichelmeyer (2003) explored graduate students' participation in two separate classes and revealed that online discussion forums gave non-native English speakers equal opportunities to express their ideas and share their thoughts. The students participated without restrictions to the grammar use, listening ability, and accurate sentence structure as well as anxiety of taking too much time while trying to articulate their thoughts in a foreign language.

On one hand, it could be argued that in face-to-face classrooms second language students' lack of confidence in both their listening and speaking skills leads them to not participate in discussions as much as the native language students (Black, 2005). On the other hand, Potts (2005) indicated that online discussion forums help non-native English students improve their academic standards by encouraging them to consciously and carefully construct their postings. Also she found that the postings of non-native students contributed to the learning of all the students in the course, including the native English speakers. However, Zhang et al. (2007) found that although online discussion forums increased second language learners' opportunities to interact and positively participate with others in the target language practice, the lack of training on how to use technology and ill-structured or poorly planned courses could hinder the students' language learning abilities.

Taking Class in a Second Language Using an Online Discussion Forum

In the 21st century, numerous studies have shown that students' engagement in online discussion forums gives them an opportunity to authentically communicate with others, which helps them to recognize their linguistic knowledge rather than just interact with the instructors (Bassett, 2011; Lin & Yang, 2011; Ritchie & Black, 2012; Vinther, 2011). A study by Ritchie and Black (2012) focused on understanding students' perceptions of learning the target language via online discussion forums and revealed that students had positive attitudes toward online discussion forums, and their ability to read and write improved in the target language. Online discussion forums are seen as socially dynamic environments where shy and silent students can participate equally and voice their opinions without concern about the challenges in listening and speaking they often experience in face-to-face discussions due to linguistic and cultural differences (Barrs, 2012; Black, 2005; Kern, 1995; Vinther, 2011; Warschauer, 1995-1996; Yildiz & Bichelmeyer, 2003).

Discussion Forums from Students' Perspectives

Asynchronous online discussion has become a common application in most management system classrooms to extend teaching and learning language beyond the traditional learning strategies (Barrs, 2012; Hanna & de Nooy, 2003, Ritchie & Black, 2012; Warschauer, 1997). In a traditional classroom, learning language relies on face-to-face interaction between the students and teacher and the students and their peers. The fundamental problem in this type of language learning instruction is the disconnection between students inside and outside of the class (Warschauer, 1997). This disconnect occurs every day after the students finish their school day

and every week over the weekend as well as within each semester through annual holidays and institutional events and celebrations that interrupt the educational periods. To address this issue, Hanna and de Nooy (2003) found that online discussion forums provided students with opportunities, unrestricted by time and place, to connect and interact with the native speakers outside the classroom and improved the non-native students' language learning. Additionally, the natural interaction via online discussion boards using written text could influence students' cultural competence and facilitate their language learning (Zhao & McDougall, 2008). Students learn the target languages and cultures of the academic and professional communities they are part of by interacting with more experienced and proficient peers (Lave & Wegner, 1991).

While only a few studies regarding the use of online discussion forums have been conducted in Saudi Arabia, studies in other countries have focused on how students learn a second language while living in their first language environment. Hussin (2008) and Barrs (2012) indicated that the primary goal of using online discussion forums in a blended learning environment is to maximize students' interaction and communication with non-native and native speakers in the target language both inside and outside the classroom. The study in Malaysia by Hussin (2008) found that the Malaysian students perceived online discussion forums as a beneficial tool to learn the English language through interacting and communicating with others. Further, he contended that the interaction and communication features in online discussion forums offered opportunities for students to construct, observe, and advance their language input and output. Recently, Barrs (2012) discovered that online discussion forums offer university students in Japan a convenient and useful platform to continue communicating and interacting in the target language beyond the classroom, particularly during holiday breaks, and that students

presented a high level of participation and that the number of students' postings was large. In addition, the results showed that to get benefit from the use of online discussion forums, students and teachers needed to be willing to participate in and construct the language input and output.

<u>Benefits of Online Discussion Forums</u>

The collaboration feature of online discussion forums facilitates cooperative learning that can help students construct their knowledge, leading to successful learning (Garrison & Anderson, 2003), particularly language learning (Warschuer, 1997). A number of researchers have argued that collaborative learning in online discussion communities engages students and improves language learning academic performance in both face-to-face and online settings (Elola & Oskoz, 2010; Kessler, Bikowski, & Boggs, 2012; Lin & Yang, 2011; Zhang et al., 2007). Zhang et al.'s (2007) study demonstrated that students appreciated the collaborative work in online discussion environments instead of individual work because it provided an excellent learning environment in which to interact with more capable peers. More recent studies have found that group work in online discussion forums is an extra benefit because it allows groups of people to construct knowledge together by facilitating the combination of two language functions, reflection and interaction, which cannot be ignored when examining online discussion group work (Bassett, 2011; Elola & Oskoz, 2010; Kessler et al., 2012). For example, participation in online discussion forums influences students' language accuracy in that the online discussion forces students to choose a topic, read about it, interact with their peers, obtain different points of view, and acquaint themselves with each other and each other's cultures, which can help motivate students to learn the target language (Kessler et al., 2012). In this

regard, online discussion forums as a collaborative platform need to be well structured and prepare students to participate in the discussion activities to improve their language learning and higher order thinking (Bassett, 2011; Lim, Cheung, & Hew, 2011).

Other studies have described the use of asynchronous online discussions as a collaborative learning environment that facilitates higher order thinking in the target language and helps students to achieve language learning beyond the traditional classroom through interaction with others (Lim et al., 2011; Lin & Yang, 2011; Vinther, 2011). For instance, in online discussion forums, teachers post questions and ask students to think about them and discuss and share their ideas, feelings, and thoughts with their peers. Then students can post messages, read others' messages, and respond to other peers' posts to share and exchange thoughts and opinions, which could improve their language learning. Researchers have argued that higher order learning processes may not take place if the students do not feel confident about their ability to learn the instructional material of the target language (Lin & Yang, 2011; Vinther, 2011). Developing a sense of community early within the course time frame, using online discussion forums, and having students respond to some authentic issues in such collaborative environments might help relieve some of their worries and allow students to be more creative and immersed in diverse communities of practice to access the target language (Lin & Yang, 2011; Ritchie & Black, 2012).

Chapter Summary

This chapter reviewed studies addressing information about the Saudi culture and education as well as details about female education in Saudi Arabia (Al-Munajjed, 1997; Al-

Rawaf & Simmons, 1991; Alsalloom, 1995; Cordesman, 2003; Hamdan, 2005; Ministry of

Higher Education, 2014; Mirza, 2008; Royal Embassy of Saudi Arabia, 2014). Additionally, the

chapter included studies focused on online discussion forums in blended learning environments

to improve students' second language learning skills as well as studies focused on English as an

academic course (Bardovi-Harlig, 1992; Chin, Sum, & Foon, 2008; Elola & Oskoz, 2010;

Kessler et al., 2012; Krashen, 1982, 1988; Lin & Yang, 2011; Ritchie & Black, 2012;

Warschauer, 1997; Zhang et al., 2007). The researchers (Kessler et al., 2012; Lin & Yang, 2011;

Ritchie & Black, 2012; Zhang et al., 2007) investigated how students perceive online discussion

as a learning strategy in learning second language courses in addition to what factors impacted

the quality of learning language in those online discussions, such as teacher scaffolding and peer

feedback.

      While those findings are valuable, the literature review also identified research gaps that

can be addressed by future studies. The gaps identified, which the current study explored, are the

limited attention given to how students perceive their learning a second language using online

discussion forums as a learning tool in fully online courses (Elola & Oskoz, 2010; Kessler et al.,

2012). Moreover, research has not focused on the important factors that impact female students'

second language learning in online discussion forums (Chin, Sum, & Foon, 2008; Elola &

Oskoz, 2010; Kessler et al., 2012; Lin & Yang, 2011; Ritchie & Black, 2012; Zhang et al.,

2007). Most importantly, none of the previous studies focused on higher education in Saudi

Arabia. Thus, more research is needed, and this proposed study sought to focus on these

concerns and fill some of the gaps in previous studies.

CHAPTER 3

METHODOLOGY

Introduction

The current study focused on exploring undergraduate Saudi female students' perceptions of asynchronous online discussion forums as a learning tool. For this purpose, this chapter outlines the overall methodology used for the current study. The first section discusses the theoretical lens and framework. Next, the research design and the rationale for choosing a qualitative case study approach are presented. The following section provides information on the protection of the privacy of the participants, the study population, and the type of sampling. The subsequent sections describe the instruments and materials, validity and credibility, and the researcher's role as well as the description of the data sources, data collection, and analysis procedures.

Theoretical Lens and Framework

Phenomenology is the theoretical lens that informed the current study (Creswell, 2009). The phenomenological approach is the study of the nature and essence (or meanings) of phenomena (Creswell, 2009; Patton, 2002; Van Manen, 1990). Phenomenology attempts to explain the meaning of phenomena as people live them in their everyday lives (Van Manen, 1990). Lichtman (2006) stated that phenomenology is a suitable way to explore research questions in various areas, particularly in education, and leads to constructing knowledge in a

diverse way. The phenomenological approach in the current study provided a way to explore the main research question by following Moustaka's (1994) recommendations for phenomenological studies.

Phenomenology is a philosophical perspective of the German mathematician Edmund Husserl, considered the father of phenomenology. Schutz articulated that phenomenology is a social science that studies the social acts and aims at gaining deeper understanding of how people make meaning of their everyday lived experiences (as cited in Patton, 2002; see also Van Manen, 1990). The root of the term "phenomenon" is related to "the Greek word '*phaenesthai*', which means to flare up, to show itself, to appear, to show itself in itself" (Oberg & Bell, 2012, p. 2). Regarding this meaning, "phenomena are building blocks of human science" and "experiences of 'things' are the basis for all knowledge" (Oberg & Bell, 2012, p. 2).

Researchers emphasize that phenomenology is a way to understand the "essential, invariant structure (or essence) or the central underlying meaning of the experiences" for one or more individuals (Creswell, 1998, p. 52). The researcher portrays the central underlying meaning of the experience based on reflection and description of the research participants' stories (Van Manen, 1990). Thus, a phenomenological approach was used to describe the participants' conscious experiences of using asynchronous online discussion boards (Johnson & Christensen, 2000). In the current study, the research participants' written narratives about their experiences with asynchronous online discussion boards helped them recall and reflect on their experiences thoughtfully and then describe them in rich detail (Johnson & Christensen, 2000). Creswell (2007) suggested that using a phenomenological approach is to describe the meaning of the lived experiences from the viewpoint of several individuals. For this purpose, the researcher

solicited data from the individuals' own experiences through asking them to write about and/or reflect on their experiences with asynchronous online discussion boards. In addition, the researcher used in-depth interviews, including open-ended questions such as, "Would you please carefully describe your experience with…" or "What comes into your mind?" (Johnson & Christensen, 2000, p. 317). The researcher described the commonalities between the participants' reflections and interviews to get an accurate picture of using asynchronous online discussion boards in the Saudi female higher educational system.

Phenomenology is an approach that helps the researcher be unbiased in qualitative research and when collaborating with the participants (Creswell, 2009). In this regard, phenomenology required the researcher to set aside her personal experiences with the phenomenon under study by "bracketing" her ideas and judgments before immersion in the literature about the phenomenon and to focus on understanding it from the participants' point of view (Creswell, 1998, p. 52; Johnson & Christensen, 2000; Lichtman, 2006; Patton, 2002). The idea of "bracketing" originated from the philosophers Husserl and Moustakas (Creswell, 1998; Patton, 2002), who noted that the process of bracketing is useful to search for all possible meanings and to fully understand the phenomenon without prior thoughts and experiences about the phenomenon (Creswell, 1998; Lichtman, 2006; Patton, 2002).

The use of the phenomenological approach was essential to the current study. It was focused on gaining a deeper understanding of the lived experiences of Saudi female students regarding asynchronous online discussion forums (phenomenon) in their learning environment from their own perceptions and through their own senses (Johnson & Christensen, 2000). The

current study asked what this kind of experience was like and described the phenomenon rather than explaining or analyzing how and why the phenomenon was happening.

Design of the Study

For the purpose of the current study, utilizing a qualitative design was an appropriate methodology. According to Patton (2002), "Qualitative methods permit inquiry into selected issues in great depth with careful attention to detail, context, and nuance; that data collection need not be constrained by predetermined analytical categories contributes to the potential breadth of qualitative inquiry" (p. 227). Specifically, a phenomenological case study methodology was used to frame the design (Creswell, 2007; Johnson & Christensen, 2000). According to Creswell (1998), case study is defined as "a qualitative approach in which the investigator explores a 'bounded system' or a case (or multiple cases) over time, through detailed, in-depth data collection involving multiple sources of information rich in context…. Includ[ing] observations, interviews, audio-visual materials, documents and reports" (p. 61). Based on the previous definition, the current phenomenological case study used a focus group, one-on-one interviews, and student documents (students' narrative reflections) as the main data sources (Berg, 2001). For purposes of interpretation, the current phenomenological case study gathered in-depth information from one group of undergraduate Saudi female students who had experience with asynchronous online discussion boards in an English as a second language course to capture the participants' perspectives of lived experience (Moustakas, 1994; Van Manen, 1990). This phenomenological case study did not focus on how these students perceived

online discussion in courses other than the English as a second language course. In addition, the data that emerged were treated collectively rather than individually (Berg, 2001).

Rationale Behind the Design

According to Savenye and Robinson (2004), "Researchers often conduct a case study to learn more unobtrusively about students, teachers, and trainers who use a new technology. Case studies present detailed data that create a picture of perceptions, use, attitudes, reactions, and learner/teacher environments" (p. 1047). Thus, the qualitative phenomenological case study method was an appropriate methodology for the current study because the research focused on undergraduate Saudi female students' perceptions toward using online discussion forums as a learning tool in their learning environment. Phenomenology was used as the theoretical lens to guide the research questions, data collection, and analysis (Creswell, 2007). Creswell (1998) indicated that qualitative researchers study subject matter in its natural settings, attempting to make sense of or understand phenomena from the participants' views. In the current study, the researcher explored in depth students' experiences with online discussion forums in their learning settings and attempted to understand how they constructed their learning and what meaning they attributed to their experiences (Gay & Airasian, 2000). Moreover, using a case study was beneficial for examining various educational problems and was concerned with the evaluation of their attitudes, opinions, perceptions, and preferences to provide a representation of the data that described the results of the research (Gay & Airasian, 2000). Qualitative research, with its emphasis on people's lived experiences and their cultural contexts, was fundamentally well suited for the current study because its purpose was to understand the participants'

experiences. Moreover, the qualitative case study shed light on the participants' perceptions and attitudes regarding the use of asynchronous online discussion boards in their learning setting.

Institutional Review Board

As the current study involved human subjects, considering the ethical issues and providing protection for the study participants were important before data collection commenced (Creswell, 2012; Johnson & Christensen, 2000). In this qualitative study, access to the setting and participants was obtained in appropriate order. First, permission from the Institutional Review Board (IRB) for the use of human subjects in research was obtained from NIU. Next, permission from the research site (the Saudi university) was sought and the individual participants were identified. The documents were sent to the gatekeeper and the participants. These included written information briefly and simply describing what the research was about and the purpose of the study (see Appendices C & D). The gatekeeper is the person who plays "an official or unofficial role" inside the site or setting where the study is conducted and helps the researcher gain access to the site and find the participants (Creswell, 2012, p. 211). In the current study, the gatekeeper was the dean of the Department of E-Learning and Distance Education at the Saudi university. Additionally, the consent form letter (see Appendices C & D) was sent to describe what the participants were going to be asked and how long it would take them to take part in the interviews and focus group (Creswell, 2012; Johnson & Christensen, 2000). In addition, the letter explained what the study hoped to examine as well as the rationale and if there were any benefits the participants might expect from the study (Bogdan & Biklen, 2011). Each individual was asked to sign a consent form (see Appendices C & D) that explained

participation was voluntary and that the participant could refuse to answer any question or withdraw from the study at any point without penalty (Johnson & Christensen, 2000). They were also informed that this research was confidential and that no information would be used to identify their involvement in the current study (Creswell, 2012; Johnson & Christensen, 2000). Thus, all names were replaced with pseudonyms to ensure confidentiality. Also, the gatekeeper did not know who the participants were. Because the participants in the focus group interview may have known each other as classmates, the researcher asked the students to choose numbers to introduce themselves for the purpose of confidentiality. The participants were given the name, address, telephone number, and e-mail address of the researcher to ask any questions about or indicate interest in the study.

Research Questions

The research questions for the current study were:

1. What are undergraduate Saudi female students' perceptions regarding the use of asynchronous online discussion forums as a learning tool in their educational environment?

2. What factors offered by asynchronous online discussion boards helped or hindered undergraduate Saudi female students' learning?

Setting

The Kingdom of Saudi Arabia was chosen as the site for the current study because Saudi Arabia is one of the fastest growing countries in the world in terms of online learning (CITC,

2007). Additionally, it has unique educational opportunities based on its cultural environment.

Moreover, the number of internet users in Saudi Arabia rapidly has increased from 50% in 2007

to 96% in 2009. The number of students enrolled in institutions of higher education has also

increased significantly in recent years (CITC, 2007). As a result, many of these institutions have

turned to online learning systems as a means to broaden and enhance student access to their

courses and subjects (National Centre for E-Learning and Distance Learning, 2013). The current

study was conducted in one of these institutions in the eastern region, a girls' educational college

in Saudi Arabia, where online learning was recently established. The instructors for online

learning at this university are male because of the shortage of female instructors. Those

instructors teach and connect with their female students via a closed-circuit video system. Also

because of the cultural and religious norms in Saudi Arabia, not all female instructors prefer to

teach online courses because of the need to record their voices or to meet synchronously with

students.

Course Description

The course selected for the current study was a prerequisite course that students in all

majors needed to enroll in. It was a 3-credit-hour English as a second language course intended

for students interested in pursuing careers in business. The course was fully online, but a few

sessions were taken synchronously. The goal of the course was to educate learners about various

terms and the most important words and sentences for business. The course covered topics about

business, management, writing for the purpose of business, grammar, and business terminology.

This aspect of the course made it a good match for the current case study because it exposed

learners to different learning concepts and second language learning, including the use of

discussion board in instructional technology as a platform for online collaborative learning

activities. By learning via the asynchronous online discussion board, the participants were

exposed to different learning methods of collaborating with others using an online learning

instructional approach. The assignments were available to the students via the forum, and the

students were required to answer questions by creating a thread and replying to their peers using

English.

<center>Participants</center>

For the current study, purposeful sampling was used to choose undergraduate Saudi female

students who used asynchronous online discussion forums in their second levels of English as a

second language course. According to Patton (2002), "Random probability samples cannot

accomplish what in-depth, purposeful samples accomplish" (p. 245). In the current study, the

researcher's goal was to carefully choose participants who could provide in-depth descriptions of

the experiences of undergraduate Saudi female students while learning English as a second

language as a prerequisite course in their major using online discussion boards as a learning

mode (Creswell, 1998). "There are no rules for sample size in qualitative inquiry" (Patton, 2002,

p. 244). The specific criteria for the participants in the current study were undergraduate Saudi

female students at the junior academic year level who were studying English as a second

language as a core degree requirement for their business management major. Their ages ranged

from 19 to 42 years old, and all were proficient technology users. The participants' native

language was Arabic, and they were full-time students. The sample included ten participants.

The researcher conducted one focus group and five individual interviews. The focus group

consisted of six participants. One individual who participated in the focus group had in-depth

knowledge about the topic and wanted to expand on her responses in an individual interview.

Four students did not participate in the focus group, but only in an individual interview. The

students' participation was voluntary, and they were asked to sign another consent form for the

individual interviews.

Methods and Procedures

Instrumentation

In qualitative research, a researcher is "the primary instrument," and he or she has a great

influence on the study (Gay & Airasian, 2000, p.145; Patton, 2002, p.14). Interviewing is the

most common technique for collecting data in qualitative research (Lichtman, 2006). Moreover,

personal journals, students' online documents including their reflections, and audio recordings of

the focus group and of the individual interviews were used as instruments to collect an in-depth

and clear description of the data for the current study (Johnson & Christensen, 2000). The

interview questions included a list of 12 open-ended questions designed and used in a previous

study conducted by the researcher (Bokhari, 2013; see Appendix A). These questions were

modified and developed from the previous literature review and research questions to fit the

current study. To do so, the interview questions were submitted to the three committee members

who are experts in the field of curriculum and instructional technology and research and

evaluation. They evaluated the questions for their suitability to accomplish the objective of the

study. Based on the committee's review, four questions were rewritten and two were deleted. To

pilot the interview procedure, the researcher interviewed three Saudi undergraduate female students who were not participants in the actual study. Requests for clarification and pilot participants' inquiries raised during these interviews helped the researcher refine the purpose of the study and the wording of the questions. In addition, the results of the Arabic version of the pilot indicated that some of the Arabic vocabulary was interpreted differently. However, there were no additions or deletions to the research questions as a result of the pilot process. Some items were combined that shared similar ideas to use the interview time efficiently. This piloting procedure was beneficial for enhancing confidence that the interview questions were easy to understand and would produce data consistent with the goal of the study. The questions were presented and reviewed in Arabic. The translation was made by the researcher and reviewed by two Saudi instructors in the English as a Second Language program at a university in Saudi Arabia.

Validity and Credibility (Trustworthiness)

In qualitative research, the validity and credibility of the study depend largely on the researcher's skills and competence. According to Patton (2002), "The credibility of qualitative methods hinges to a great extent on the skills, competence, and rigor of the person doing the fieldwork" (p. 14). To enssure the validity and credibility of the research, the reflexivity technique was considered during data collection and data analysis. Reflexivity in qualitative research is a way of emphasizing the importance of self-awareness, self-analysis, cultural consciousness, and ownership of one's perspective (Patton, 2002). Being reflexive involves self-questioning and self-understanding as well as an ongoing examination of what the researcher

knows and how she knows it. During the study, the researcher examined and reviewed her personal actions and reactions as they related to the study through self-reflection journals. To ensure the validity and trustworthiness, the researcher used the participants' exact words for expressing their experiences in addition to sharing descriptions or themes of her final interpretation and report of the students' perceptions to ensure accuracy (Creswell, 2009, 2012; Johnson & Christensen, 2000).

Researcher Role (Bias)

The researcher has been studying abroad as an international student since 2008 and recently began working as a teaching assistant in the Educational Technology, Research and Assessment Department at NIU. Thus, the researcher has had limited personal experiences with online learning in Saudi Arabia. Also, the researcher used to be a teacher in multiple elementary schools in Saudi Arabia, So the researcher has limited experiences as an instructor in Saudi Arabia's higher education environment. However, as a Saudi woman, the current study can increase the knowledge of online discussion forums and strongly influence the researcher's belief about online learning and its positive implementation with Saudi female students. This strong belief toward the positive effect of online discussion forums might affect the researcher's interpretation of the findings.

Data Sources

This qualitative study used five sources for collecting data: a demographic survey, a focus group, individual interviews, and field notes as well as the participants' reflection

narratives that are required at the conclusion of each semester. Researchers (Bogdan & Biklen, 2011; Creswell, 1998, 2012; Johnson & Christensen, 2000; Lichtman, 2006; Patton, 2002) have asserted that the use of multiple sources of data in qualitative research can lead to a deeper understanding of the phenomena under study. The current study used multiple sources of data that served as a means of triangulation to increase the credibility of the findings and to allow the researcher to make valid and conclusive statements.

<u>Focus Group</u>

The second source for collecting data for this exploratory case study was the focus group, which was used in addition to individual interviews because of its flexibility with sampling. It helped the researcher gather a large amount of in-depth information on the specific topic of interest in a short period of time (Creswell, 2012). It also helped the participants generate important insights that were not previously well understood (Johnson & Christensen, 2000). Moreover, the members in the focus group could hear each other and build from each other's thoughts, ideas, and suggestions (Johnson & Christensen, 2000; Patton, 2002). According to Creswell (2012), "A focus group is a process of collecting data through interviews with a group of people typically four to six" (p. 218). Thus, the focus group for the current study consisted of six individuals. Participants who were willing to share their thoughts and experiences for a duration of 90 minutes were interviewed in the focus group. Although the participants were at the proper level of speaking English, the focus group was conducted in Arabic, the participants' native language, to facilitate the conversation and get in-depth information about the topic. The audio of the focus group interview was recorded, and transcribed in Arabic, and then translated

to English. The researcher was the moderator and discussion facilitator in the focus group and guided the discussion with the group members to explore in depth what the group members thought about the phenomena under study (Creswell, 2012; Johnson & Christensen, 2000). The researcher asked 12 open-ended questions designed and used in a previous study conducted by the researcher (Bokhari, 2013; see Appendix A). The interview script format was adapted from a previous study (York, 2010) and modified for the current study. Thus, the researcher helped the participants with setting ground rules, such as only one person talking at a time, taking turns, and giving each member a chance to participate (Creswell, 1998). Also the researcher was their guide in dealing with confidentiality issues (Johnson & Christensen, 2000), such as ensuring the ground rules were followed and that no individual would be identified to the instructor. Group members were given a chance to introduce themselves as numbers prior to the interview process.

Individual Interviews

To obtain data for this inquiry, the final source of data collection was individual interviews using a semi-structured interview protocol with the same open-ended questions from the focus group that had been designed and used in the previous study conducted by the researcher (Bokhari, 2013; see Appendix A). This method and protocol were chosen as the best way to acquire more detailed information about the participants' considerations, opinions, perspectives, reasoning, and reactions toward the topic and allow new ideas to be brought up during the interviews (Creswell, 2012; Johnson & Christensen, 2000; Patton, 2002). Moreover, through the interviews, the researcher entered into the participants' inner world to gain an understanding of their perceptions (Patton, 2002). Semi-structured interviews also enabled the

researcher to have some flexibility in the process and some control over the type of information (Creswell, 2012). The individual interviews consisted of five participants, four of whom were not in the focus group but were willing to share their knowledge and experiences about the topic. Additionally, one participant, who was in the focus group and wanted to expand on her responses, was interviewed individually. The essential open-ended questions were asked of all study participants in the same order (Creswell, 2012; Johnson & Christensen, 2000). The purpose of the semi-structured interview protocol was to understand the students' perceptions of the value of online discussion boards and factors that they felt improved their academic learning, in particular in English as a second language, as a result of taking the online course. Each semi-structured interview was conducted face-to-face for 45 to 60 minutes and was followed up with a meeting to validate information and the member checking process (Creswell, 2012). The individual interviews were conducted in Arabic, the participants' first language, to ease the progress of the dialogue and gain more information about the topic. After that, the individual interviews were transcribed verbatim in Arabic and then translated into English. The open-ended questions were structured to encourage a full, meaningful answer using the participants' own knowledge and/or feelings to investigate their perceptions of the value of online discussion boards as a learning tool (Creswell, 2012).

<div align="center">Field Notes</div>

In the current study, field notes were employed to collect an in-depth and clear description of the data (Creswell, 2009; Patton, 2002). The field notes contained "descriptive notes" of what have been observed and "reflective notes" of the researcher's personal thoughts,

interpretations, and importance of what had been observed (Creswell, 2009, p. 182). During the interviews, the researcher took field notes to record behavioral observations that would not be revealed by the audiotape. The researcher's field notes and personal interpretations during the individual and focus group interviews provided the researcher with a clearer understanding of the participants' actions, interactions, and body language (Bogdan & Biklen, 2011; Creswell, 2009, 2012; Johnson & Christensen, 2000). In respect for the cultural and religious traditions, the researcher used audiotape only (no video). The interview notes were completed immediately after each interview. The interview notes were used to record reflective thoughts about what was learned from the interviews and the progress of the research (Bogdan & Biklen, 2011; Creswell, 2012). Additionally, the researcher's notes and reflections were used throughout the interview process to explore how the participants' stories related to each other. After each interview, the researcher listened to the audiotape and took additional notes. Finally, while reading through the transcript, the researcher took a third set of field notes to prevent missing anything about the participants' actions and interactions at the main time when the interviews were going on. Through the field notes, the researcher examined and reviewed her personal actions and reactions as they related to the study. The researcher's field notes and reflections were coded using open coding. The coding process is discussed in the data analysis section.

<u>Students' Reflections</u>

Creswell (2012) stated that "documents consist of public and private records" or files that the researcher obtains from the setting or individuals of the research study (p. 223). Qualitative documents can include public records such as "newspapers, minutes of meetings, official

reports," or individuals' records such as "personal journals and diaries, letters, e-mails" (p. 223).

The current study included the participants' records (students' narrative reflection) and the

researcher field notes, which were considered as private documents.

The participants' documents (students' reflections) were a rich source of information

(Patton, 2002) and were the first types of data collected. The participants were required to submit

their reflections to evaluate the courses, based on a prompt provided by their instructor at the end

of the course via email, to the instructor and the researcher. The purpose of submitting their

reflections to the researcher was to have students' own words and language, which was used to

confirm the information from the students' interviews (Creswell, 2012). Students' reflections

were written in Arabic and translated to English. Students' reflections were coded using open

coding. The coding process is discussed in the data analysis section.

Data Collection and Analysis Procedures

Triangulation Procedures

Data were collected in the current study via several sources: demographic survey, a focus

group, individual interviews, researcher field notes, and participants' reflections. Triangulation

was used in the current study to ensure validity and consistency (Bogdan & Biklen, 2011;

Johnson & Christensen, 2000; Lichtman, 2006). It is a strategy that is used in qualitative research

to strengthen a study by combining more than one method of gathering data (Creswell, 2009;

Patton, 2002). According to Creswell (2012), "Triangulation is the process of corroborating

evidence from different individuals (e.g., a principal and a student), type of data (e.g.,

observational field notes and interviews), or methods of data collection (e.g., documents and

interviews) in descriptions and themes in qualitative research" (p. 259). There are typically four types of triangulation: data triangulation, investigator triangulation, theory triangulation, and methodological triangulation (Patton, 2002). In the current study, two forms of triangulation were considered for validity and consistency purposes: data triangulation that included gathering information from different students, at different times, at different places and methodological triangulation that used multiple methods of research such as a demographic survey, a focus groups, individual interviews, student reflections, and researcher's field notes to study a single phenomenon case (Johnson & Christensen, 2000; Patton, 2002). The data for the current study were collected from audio recordings, note taking, students' reflections, and transcriptions of focus group and individual interviews. To ensure that the interpretations were reasonable, the researcher asked two of her colleagues to check and comment on the themes that emerged to see if they were logical. Additionally, a member-checking approach was used as another strategy to ensure the validity and trustworthiness of the qualitative research findings. Member checking has been defined as a process that "involves taking the findings back to the participants in the study" to check the validity and accuracy of the findings (Creswell, 2012, p. 259). A Microsoft Word document was sent to the participants, including the transcripts and certain descriptions and themes, to determine accuracy and consistency. The participants were asked about various aspects of the research findings, such as the inclusiveness and credibility of the reports, the accuracy of the themes, and the objectivity of the interpretations (Creswell, 2009). The themes that emerged were confirmed by the participants and colleagues. Thus, the credibility of the current study was strengthened by using two forms of triangulation: peer review and member checking.

Data Analysis

Patton (2002) described the process of analysis and interpretation of qualitative data as a "complex and multi-faceted analytical integration of disciplined science, creative artistry, and personal reflexivity, [in which] we mold interviews, observations, documents, and field notes into findings" (p. 432). The purpose of data analysis is to transfer and depict the data and to organize it into meaningful information (Creswell, 2009). For qualitative inquiry, data analysis does not have a definite beginning. The data analysis procedure can start early in a qualitative study while the data collection procedure is still being conducted (Patton, 2002). In an early analytical procedure, the researcher in the current study alternated between the data collection (individual interviews, a focus group, students' reflections, and the researcher's field notes) and data analysis (creating meaningful information) to develop deeper understanding of the phenomenon under study, which led to a more relevant and profound study (Johnson & Christensen, 2000).

Through open coding, a thematic analysis approach was used to analyze the focus group interview, individual interviews, participants' reflections, and researcher's field notes data to understand the participants' learning experiences using asynchronous online discussion boards in their online English as a second language course. Creswell (2009) described coding as a way of classifying the data into segments of text before providing meaningful information. The data were read "line by line" to pinpoint and frame any and all ideas, themes, or issues no matter how different or disparate (Bogdan & Biklen, 2011; Johnson & Christensen, 2000, p. 426; Taylor & Bogdan, 1984). Next, during the rereading and rechecking, the codes were refined and emerging themes were added.

The data were categorized according to shared themes and relationships to the research questions and to Garrison et al.'s (2000) Community of Inquiry framework. During the coding process, the researcher's field notes were re-coded (Bogdan & Biklen, 2011; Creswell, 2012; Johnson & Christensen, 2000).

The students' reflections were analyzed along with their interview answers and were used as supporting evidence to verify what they said. Ultimately, the research questions were used as a guide to combine the themes into common categories. Ongoing analysis allowed continued reflection on the data generated from each individual interview and focus group as well as ongoing consideration of how the interviews and participants' reflections related to each other. The results of the study were presented after multiple readings of individual transcripts and ongoing review of the initial and subsequent codes.

Chapter Summary

This chapter outlined the methodology used for the study. It provided a rationale for the selection of an exploratory qualitative design. Additionally, information about the study's setting, participants, data collection, and analysis procedures were described. Also, the data sources used in the current study were explained in detail. This chapter also addressed issues of validity and credibility of the data that are important for qualitative research.

CHAPTER 4

FINDINGS

Overview

The current study explored undergraduate Saudi female students' perceptions of asynchronous online discussion forums as a learning tool based on the research questions. In this chapter, the participants' demographic descriptions are provided. Additionally, themes that emerged from the current study are reported along with unanticipated factors that hindered or helped student learning from the participants' perceptions. Data were collected from Saudi female students during the spring 2016 semester. Focus group and individual interviews, participants' narrative reflections, and researcher notes and reflections were used to explore each participant's attitude toward the use of asynchronous online discussion board (AODB) at their university in Saudi Arabia. The elements and indicators of cognitive presence of the Community of Inquiry framework were used for coding, analyzing, and interpreting data gained from all data collections (see Table 1). Open coding was also used to code data that could not be addressed or analyzed by the cognitive presence of Community of Inquiry framework. Using thematic analysis (Bogdan & Biklen, 2011; Taylor & Bogdan, 1984), theme statements were then created to understand participants' learning experiences in AODB.

Table 1

Cognitive Presence Element Categories and Indicators

ELEMENTS	CATEGORIES	INDICATORS (Examples only)
Cognitive Presence	Triggering Event	Sense of puzzlement
	Exploration	Information exchange
	Integration	Connecting ideas
	Resolution	Application

(Garrison, Anderson, & Archer 2000)

Demographic Details

This section synthesizes respondent participants' demographics and their experience in

and with technology, specifically asynchronous online discussion boards. The respondent

demographic section synthesizes general information about these Saudi female students from the

questionnaire (see Appendix B). It includes descriptions of the respondents' age, occupation,

status, participation in online courses, years of using technology, experiences with AODB,

technology level, and their English language level. All of the participants responded to all of the

questions on the questionnaire, so the number of respondents in each table is equal (see Tables 2

and 3).

Table 2

Focus Group Demographic Details

Tag number and name	Age	Occupation	Status	English language level	Technology experiences level	Number of years in using technologies	Number of courses you have taken that used asynchronous online discussion boards inside the university	Number of courses you have taken that used asynchronous online discussion boards outside university	Number of years of experience in using asynchronous online discussion board outside school. In what course(s) Or context(s)
1)Hana	42	Student	Married	Very good	High	21	36	2	3 years in learning ESL
2)Umnia	20	Student	Married	Poor	Low	10	36	0	0
3)Noora	30	Employee	Single	Good	Middle	12	36	3	1 year for job training, and half year for ESL
4)Maria	37	Business women	Married	Good	Middle	20	36	0	0
5)Faiza	28	Student	Married	Poor	Low	13	36	0	0
6)Omima	19	Student	Married	Poor	Middle	6	36	0	0

Table 3

Individual Interviews Demographic Details

Tag number	Age	Occupation	Status	English language level	Technology experiences level	Number of years in using technologies	Number of courses you have taken that used asynchronous online discussion boards inside the university	Number of courses you have taken that used asynchronous online discussion boards outside university	Number of years of experience in using asynchronous online discussion board outside school. In what course(s) or context(s)
1)Samah	28	Employee	Single	Good	High	15	36	11	1 years for job training, 1 ESL, 2 in human development and self-improvement, leadership development, and trainer development
2)Hiba	23	Student	Single	Good	High	12	36	3	2 years in English
3)Rabab	29	Student	Married	Poor	Low	10	36	0	0
4)Hana	42	Student	Married	Very good	High	21	36	0	0
5)Nedaa	30	Employee	Single	Poor	Middle	11	36	0	0

Ten Saudi female in all, who fit the selection criteria, participated in the current study. Participants identified themselves as the first group of students who will graduate with an online bachelor degree in business management at their university. One focus group of six participants and five individual interviews were conducted to complete the current study. Of the ten participants, six were married and four were single. The participants ranged in age from 19 to 42 years. The age range stated by the participants indicated a huge disparity in their ages. Three of the 10 participants identified themselves as employed. One presented herself as a business woman. The occupation results clarified that the married participants had both housewife and student responsibilities. Additionally, the married participants who were employed had more responsibilities in regard to family, education, and work. On the other hand, the single participants who were only students had just their education responsibility. In contrast, single participants who were employed had work and education responsibilities.

The 10 participants were pursuing undergraduate degrees in a business management major. All of the participants were learning English as a second language and their English language levels ranged from very good to poor. All students were technology users, but their level of experiences with technology was different and the range was between high and low levels of experience. Additionally, the years of using technology varied among the participants, ranging from 6-21 years. All of the participants had taken the same number of courses (36 courses) that used AODB as a learning tool inside the university, but they were unequal in taking courses that used AODB outside the university, ranging between 0 to 11 courses. The participants also had differing experiences using AODB in different courses and context; some

of them had experiences with using AODB for their jobs, training, and learning English in public forums.

Students' Perceptions of Asynchronous Online Discussion Boards

Analysis of the focus group and individual interviews along with students' reflections led to determining four categories of students' perceptions toward their experiences of using asynchronous online discussion boards for their learning. The four categories included a) the value of using AODB, b) engagement, c) collaboration, and d) convenient communication.

Value of Using AODB

All 10 participants valued the effectiveness of using AODB to foster their learning. They perceived it as a positive platform that helped them actively pursue their education, construct their knowledge, and raise their confidence. According to the interview responses and narrative reflections, the participants found that contributing to these boards helped them carry on their education without conflicting with their culture in terms of communication between Saudi females and their male instructors and their home and/or work responsibilities. Typical responses of participants in the focus group and individual interviews were revealed in this finding. For example, Hana is a married female with a very traditional husband (focus group interview). She is also a mother. Because of her husband's resistance to her continuing her education by going to school, she found that asynchronous online discussion as a learning tool helped her pursue her education. Umnia agreed with Hana's statement. Hana pointed out:

> In general, for sure I found advantages from the online discussion board as an online learning tool. It helped me a lot because if it is not there, I would not be able to interact

with my instructors and continue my education with my responsibilities, the kids and home. My husband does not want me to continue my education, especially in a traditional classroom where as it requires attendance on the university campus and he cannot drive me because of his workload. So this mode of education gives me a chance to continue my education. (focus group interview)

Similarly, Rabab (individual interview) and Omima and Fiza (focus group), who are all married and mothers who live in remote areas, described the same experiences. Omima said:

> Living far away from the city, it is hard to get to university even if there is someone who can escort me to campus. Thus, the fact that you can be educated and you are not supposed to go to the school to continue your studies is great. You do not need to leave every day in the morning; you have a lot of responsibilities at your home and toward your family.

Rabab also said:

> The most important issue that the university is too far from my village. I live in a remote area so it [AODB] is very convenient to us to continue our education without traveling every day.

Maria, who has her own business as a shopkeeper and dealer in Instagram, shared her perspective; she said:

> I could not complete my education because I am married and have kids in addition to my own business, which required me to be available most of the time, I have many obligations, and AODB gave me the chance to be educated. Each one of us has her own reasons.

Noora, a single female, works as a sales representative for a cosmetics company and has a similar view:

> I agree that each of us has different reasons; some of us have a work and the nice [thing] about AODB is that there is no need for attendance. So we don't need to attend the lectures on the university campus, and online meetings are too comfortable for me to pursue my education, as I have to work and have other obligations and the lectures are always recorded.

> Hiba is a single student born and raised in a strict and conservative family, who does not

allow their single girl to leave the home alone and return home late or sometimes even leave

home at all. During the face-to-face interview, Hiba appreciated the use of AODB as a resolution

to continuing her education. She stated:

> As a Saudi student, this online discussion board helped me a lot. I do not need to come to
> the university to see the instructor and ask him about things. It helped me to continue my
> learning easily. You know how it is in our culture; as a woman, we cannot drive and need
> someone to escort and drive us to university campus back and forth.

Nedaa and Samah are single students who have work responsibilities. Nedaa is an events

coordinator for a company and Samah is a courses coordinator and director of a professional

institution. They found that the use of asynchronous online discussion boards as a learning tool

gave them a chance to enroll and get the university grade. In her face-to-face interview, Nedaa

made declarations similar to Samah:

> I am a courses coordinator and director of [noted company]. My work depends on
> managing some projects and arranging some training while using technology. So I do not
> need someone to escort or drive me to my work. I do arrange some courses as well as I
> have to attend some online training. So I am too busy with my work in the morning and
> sometimes the whole day. No time to go to university campus and sit in the classroom,
> and you know we cannot drive here in Saudi Arabia. So I still need someone to drive me
> when I have no one. With asynchronous online discussion boards I have a chance to stay
> in contact with my instructors and classmates to enhance my learning. I can continue my
> education easily without any conflict with my work responsibilities.

The participants' positive perceptions of the value of using AODB to increase the efficiency and

quality of their learning showed that AOBD helped them learn the course material better as well

as understand the complex topics and retain more information. Based on their different

experiences, the participants highlighted evidence of the AODB that helped them reflect on and

learn the course content. For example, all of the students felt that online discussion gave them

extended time to prepare their responses and structure their ideas. Through the focus group and

her individual interview, Hana indicated:

Actually, I liked the online learning; with online discussions we have more time. It is too comfortable. The instructor initiated the thread on the asynchronous discussions and extended it over a week, which allows us some time to read the assigned reading, search about the topic, prepare our comments, check others' responses, understand the course materials, and build our thoughts before we respond to the online discussions.

Rabab, in her individual interview, said:

Sometimes it modifies my understanding of the course content I knew or provides me with new input. When I read others' discussions, I saw that I had some incorrect ideas about the subject matter, and then I correct them through others' discussion – like in this course I could understand the meaning of some English words and how it would be used in sentences through other messages, especially from those whose ESL is better than mine.

Nedaa appreciated the in-depth discussions of the topics offered by the asynchronous online discussion boards to enhance her understanding of the difficult topics. She stated:

As a female Saudi student, this online discussion board helped me a lot. I cannot get to the university campus, but still have time to contact my classmates and understand something that maybe I could not understand from the instructor. I can see the answers for questions that my classmates have posted to ask instructor about the subject or through other peers' posts.

Fiza and Umnia, from the focus group interview, also valued the opportunity to learn from different sources, which helped them to develop their knowledge and retain more information,

Fiza indicated:

The positive of using AODB is that we sometimes have a subject in the online discussion that is really strong. It required us to review our books, instructor's notes, our notes, look through our notes and read other classmates' responses to post a good answer. We have different sources that helped us shaped our thoughts and remember what we have learned.

Like Fiza and Umnia, Samah, in her face-to-face interview, shared her opinion:

I benefit from my friends and classmates when we discuss things and ask each other to understand words or maybe how to answer some questions or write them. Some of my friends helped me translate some words and helped me to improve my writing. I enter online discussions and look at the instructor-recorded lecture or links provided by him or in other classmates' responses and learn how to form or write some answers in English and the meaning of some questions. So the instructor, students and the course materials helped us more in learning English because I would see the students' discussions and

responses and learn new words and sentences from it. It is a beneficial tool to learn through it.

Finally, some participants valued the use of AODB as a learning tool to improve their confidence and to help them overcome their reluctance to write their thoughts and participate in the discussions. They also felt that AODB motivated them to express their opinion spontaneously to others. Noora said:

> The online discussion board encouraged me to write my responses. At the beginning, I always hesitated to be the first one to respond. After a while I felt comfort because when I want to respond to the discussion, I read those students who are very good in English; they were writing in English and the instructor returns to them in English and that was helping me a lot and made me enjoy the discussion. Sometimes I may use some of my classmates' words after I translate them and learn about them and how to use them properly. We also discuss what we have learned together and translate to each other or correct each other responses.

Omima indicated:
> Sometimes, the question is really hard and I can't do it and feel like I'm not confident enough to post. I wait for a little bit until other students post their questions or comments then I try to look at their answers and learn it, so then I could answer it in a simple way. The online discussion helped me to overcome my reluctance when the instructor posts the question. I discuss it with other peers and try to see others' responses.

Samah stated:

> In the English course we always read each other's responses to understand the meaning of the question and discuss it together, which alleviates the anxiety of being the first one to post the answer. It helped me a lot in my learning and the instructor was always there to enhance our discussions and English learning and encourage us to participate.

<u>Engagement</u>

The participants perceived the flexibility and the interactive nature of online discussions as a way to keep them engaged. Evidence from the participants' narrative reflections, focus group, and individual interviews showed that all of the participants felt comfortable using the

AODB as a learning platform because they had more time to think and express their ideas as well

as engage in discussions outside of the classroom boundaries. They appreciated that they did not

need to be on campus to use the desktop computers and language learning labs in their

university. For instance, in the focus group interview, the participants shared their thoughts about

the nature of AODBs. Maria stated:

> AODB is more flexible than face-to-face learning [and] is accessible any time and from anywhere. So you do not go to the university to learn and you are not committed to a specific time to go to school. You can stay home take care of your children and have time to learn from the instructor's recorded lectures and be engaged with others.

Faiza confirmed Maria's thoughts:

> Exactly, we learned a lot through the online discussion board. We engaged in the class a lot and participated with each other and with the instructor more. The AODB's functions helped instructor to teach us effectively.

Umnia and Hana followed Fiza's and Maria's ideas, Umnia said:

> For example, he provides us with links or videos and sometimes presentations that may explained the meaning of some words or English grammar. Also, the instructor could ask us to find the meaning of some words and their synonyms and put them in sentences. So we use our computers at home and have time to search and find the answer.

In a one-on-one interview, Hiba indicated that AODB helps a lot.

> It saves my time. When I'm home, I could listen to those lectures that instructor posts in the forum to help us understand the subject matter. When I have difficulty understanding something I can look at what other classmates post in the forum and their responses to the questions that the instructor provided. So that helped me collect my thoughts and ideas, and I would have time to respond and engaged in the discussions with other classmates successfully.

All 10 of the participants confirmed that they were confident participating in the discussions

posted with those peers they are friends with or they knew well, in addition to those whose

messages were more interesting to them. Moreover, they tended to be more likely to respond to

messages that carried opinions different than their own or disagreed with them more than those

posts that agreed with their own opinion. Also they would be more likely to respond to their

friends' messages, while they sometimes hesitated to respond to those they do not know well

because they did not want their classmates feel offended or be upset with them. During the focus

group interview, the participants agreed with Omima's statement:

> Although the instructor was asking us to interact with each other, we did not engage in discussion or comment on other classmates' threads and responses unless they were friends. We do not want to disappoint others.

Noora said:

> Just if we [are] impressed with their thought or sentences or what they have done, may be some of us will comment, such as 'thanks that was nice idea or great work,' but that is rare to happen.

Faiza continued:

> Commenting on and thanking other classmates we do not know would happen once during the semester.

Hana, in her face-to-face interview, described how the interactive nature with AODB inspired

her to engage more in the discussion:

> Actually, I was understanding that the idea of online discussion boards is to discuss our thoughts, so I was encouraged to discuss and argue with some classmates' thoughts. For example; I discuss and argue with my friends' thoughts. I mean I engaged in discussion with my friends, only those I knew, and they did not upset. But when I engaged in discussion with other peers who are just a classmate, they did not accept that and feel upset from me and respond to me in a rough way by thinking that I'm insulting them.

<u>Collaboration</u>

All of the participants appreciated the collaborative aspect of the discussions and

assignments. They felt that this collaborative method provided a multifaceted opportunity to

construct meaningful knowledge and increase learning as opposed to performing it individually.

For example, from the individual and focus group interviews, Hana, Maria, Omima, and Fiza

indicated their feelings about collaboration in AODBs; Hana stated:

> In my opinion, I felt it was more beneficial to work with a group and to try something
> new, when you work in groups, you involved more in the work and produce more
> precious output instead of working individually and not having any communication with
> others.

Maria jumped in:

> I think we got benefited from discussing some topics as a group rather than alone.
> Sometimes the instructor asked us to work on writing assignments – such as writing a
> small paragraph about the new topic regarding our major and asked us to use the new
> words or the synonym of those new words as well as using the grammar we just learned.

Hana continued:

> Sometimes the instructor divided us into groups to discuss the topic and asked us to
> discuss it in English, and then each group initiated a thread and shared its answers on the
> online discussions boards. This group discussion helped all members to communicate
> effectively, be involved in the discussions more, and present more ideas and different
> results. I think it is very useful in this learning mode, as it helps learners get vital
> information and learn the language.

Fiza indicated:

> I like the collaborative idea of the AODB because working as a group helped me be
> involved in the discussion more. Working as a group is an effective way to garner
> information and learn language from those students whose level of language [is] higher
> than yours. I feel more comfortable discussing my idea and correcting my language
> mistakes with my group.

Omima commented:

> Definitely, I feel that group discussion and assignments always brought the feeling of
> comfort and enriched our learning.

However, three students (Umnia, Fiza, and Rabab) considered the lack of social cues and

communicating only via AODBs as an issue during the collaborative work and discussions. They

felt that they need more time and training to become acquainted with how to deal with AODBs.

In her one-on-one interview, Rabab declared:

> The first time of the group working, it was difficult to communicate with the group members successfully. We communicated with each other only online. Thus, we cannot see each other's faces or hear others' voices, which made it difficult for us to get work at the same speed and approved the content. We need to be familiar with AODB.

<u>Convenient Communication</u>

Eight participants indicated that they perceived the AODB as a convenient communication tool. Since the form of communication in online discussion forums happened through written text, these participants perceived it as a useful way for participating and learning. They indicated that AODB enabled them foster their learning. They communicated with the instructor and other peers and gained ideas from other learners with diverse experiences. They could think about it and have time to reflect on it and exchange more information with others without being worried about wasting class time or the fact that the class and the subject matter had already ended. Evidence from the students' narrative reflections and individual and focus group interviews revealed their points of view toward this finding. Umnia stated:

> I was able to communicate with my instructor and classmates efficiently. I like writing my response on the online discussion board more than speaking in front of others. Also I could write my answer at any time with any speed I wanted. I do not need to be fast on writing because of the fear of wasting class time.

Rabab indicated:

> In addition to the easy communication with other peers and the professor via AODB, this tool provided us [a] good strategy to enhance our learning skills. We read others' thoughts and have time to analyze, understand, form our writing, [and] correct ourselves while writing our responses. This benefit would be hard to achieve in speaking time.

Nedda perceived AODB as convenient communication that helped her to participate and fostered her learning. She declared:

Also the online discussion board encourages me to express myself in a brave way through the writing. I would be too shy to interpret my thoughts and ideas in [a] face-to-face course. But with AODB, I'm not. I'm able to access massive information that helps me to think deeply before writing my answer. I think it is good environment. I mean it's more convenient for us as female Saudi students, with our own culture and religions where we can't [have] contact with unrelated male instructors.

Maria said:

AODB is a convenient communication tool that helps us in our learning a lot. I really appreciated the idea of receiving more explanation about the topic whenever you need it. When I found something hard and I need[ed] to understand it more, I could post my questions in the forum. My classmates or the instructor return to me later with more explanation.

Noora added:

Using AODB helped us search and investigate ideas that did not receive enough consideration or were not mentioned during the synchronous online learning. We had more time to learn and absorb everything.

Summary of the Findings of the Participants' Perceptions of AODB

The participants' perceptions of AODB that emerged from the current study shed light on their experiences. The four categories that appeared included: a) the value of using AODB, b) engagement, c) collaboration, and d) convenient communication. The current study found that the participants valued the effectiveness of AODB to enhance their learning. They found it positively helped them pursue their education, build their knowledge, and increase their confidence. The current study found that the participants thought AODB was flexible and interactive. They also appreciated the collaborative aspects of the AODB and the multidimensional opportunities to build significant knowledge and increase learning as opposed to performing it individually. Additionally, the participants had common concerns regarding the use of AODB due to the lack of facial expressions and voice tone and felt they needed more time

to get acquainted with how to use the AODB. The findings also highlighted that the participants

perceived the convenient communication of using AODB as a useful way for participation and

learning.

Learning Opportunities Offered by Asynchronous Online Discussion Boards

Analysis of the participants' narrative reflections and focus group and individual

interviews showed the participants had positive perceptions toward the learning opportunities

and activities offered by AODBs. Two categories emerged from the participants' positive views

of the opportunities offered by AODB: empowerment and cognitive learning skills.

<u>Empowerment</u>

All of the participants agreed that the AODBs were very interesting and helpful in

supporting their individual learning, helping them earn an academic degree, finding a suitable

career, and improving their economic situation. They recognized they are the first group of

students who will graduate with the online degree and that this is their first experience with

AODBs fully in English in the education system. In the focus group interview, Noora expressed

the opportunity to continue her education and get a degree for promotion in her job. She said:

> First I work in a company in a position [that] requires me to deal with different types of
> people. Sometimes I return their emails or chat with them to answer their questions.
> Thus, I am too busy and do not have time to go to school and get the academic degree.
> This degree would help upgrading my work position. Using AODBs to communicate
> with the instructor and classmates helped me pursue my degree while taking care of my
> work.

Umnia talked about her first experience with AODBs and how she felt:

The instructor provided us guidelines, material, and assignments to do. Thus, I had to educate myself, and I [was] encouraged to search and find information by myself. I felt more confident and not afraid of expressing my opinion.

Like Umnia, Fiza and Hana were pleased with this learning tool. They seemed happy when they were speaking about their instructor as a facilitator and how they enjoyed being central to the learning process. Fiza stated:

With [the] AODB, I was able to improve my learning in this course. The instructor organized the course environment and motivated us to search about the topic, offered us his notes and some links related to the topic, and always tried to answer our inquiries about any issue that we might face as a beginner.

Hana indicated that the AODB developed her to be an independent learner:

I appreciate that [the] AODB offered us a chance to be able to search and discover information. The instructor creates [a] good environment that influences me and my classmates to learn. He gave us recorded lectures and PowerPoint presentations and asked us to review [them] and understand [them] well. He also asked us to look at different sources that can help and encourage us to learn. I am glad to learn via AODBs.

The participants felt that using AODB as a learning tool empowered them to be self-directed learners, taking full responsibility for their learning, which fostered their independent learning skills. They believed that they will have the power to set their own goals and measure their own accomplishments. In the individual interview, Samah responded:

[The] AODB encouraged me to be more responsible about my learning. The individual learning style was a new type of learning. I really liked it because I was able to collect massive information from different sources, which helped me understand things more deeply and clearly, then share them with others, [as] opposed to the traditional learning where the instructor does everything.

Rabab and Nedaa, in their individual interviews and narrative reflections, said they felt more independent. They found that the AODB helped them to be more responsible about their learning, setting their own goals, and measuring their achievement. They referred to the AODB as a great tool that increased their knowledge and gave them full power and control over their

discussion. Since they can read the previous postings of their peers and connect them to the

recent discussion, find other databases related to the topic under study, and see the instructor's

lectures, they felt comfortable sharing their ideas without being attacked on the discussion board

or feeling that their comments were dull compared to their classmates. Rabab and Nedaa shared

their experiences, saying how they started to become more independent and had power over their

own discussions. In her reflection, Rabab wrote, "With this AODB, I felt that I have full

responsibility about my learning and power to share my thoughts with others as they could read

all of my opinions on their computer than when I speak." Nedaa wrote, "At the beginning of the

course I was nervous to share my ideas with my classmates via [the] AODB and be criticized

from others, but with [the] AODB I had a chance to search and get more knowledge from

different databases, which helped me to control my discussion."

<u>Cognitive Learning Skills</u>

All of the participants perceived online discussion boards as a meaningful tool that

supported their cognitive and critical learning skills. They found that the AODB provided them a

long time to reflect on and structure their ideas and to learn the course content. In the focus

group interview, the participants referred to the options offered by discussion boards. Maria

indicated:

> As a Saudi student, the AODB is a new type of learning, but I believe it was very helpful
> in improving our ability to think critically; in some activities we have to summarize the
> assigned readings and evaluate them. We have two weeks to read and analyze the article
> and then share our opinions and discuss them together with other peers.

Hana continued:

> The extended time of the discussions over two weeks enabled us to prepare our comments, check the assigned reading, reflect on others' responses, and form our thoughts and opinions before answering and communicating our ideas with others.

All 10 participants also felt that the AODB permitted more in-depth discussions of the class topics than in a traditional course. It improved their ability to respond to each other and gave them more time to analyze their peers' information, understand others' opinions, ask for clarification if they had difficulty understanding some points, and explain changes made on their previous views. Fiza stated:

> With [the] AODB we have more time to understand the concept. I read the article and then discuss and argue others ideas. When I could not understand something, I [could] seek clarification from the instructor or other peers. We help each other and contribute significantly to the discussion.

Umnia continued:

> Sometimes you need to answer others' questions, clarifying your specific positions about the topics to help your classmates understand your points. Also if we made changes on our previous response after going through the readings and other responses, we provided clear description about the viewpoints we changed so everyone can be updated with the accurate information.

> They also commented that in face-to-face class they had limited time to participate and

discuss their opinions about the subject matter and most of the time students who are more vocal dominated the discussion; with an AODB, all of the participants have an equal opportunity to express their thoughts. Rabab in her one-to-one interview stated:

> I'm a very quiet student, in [a] face-to-face classroom I always have trouble participating and voicing my opinion because with most active students, I would not have a chance to express my thoughts. In AODBs, I have an equal chance to participate and communicate my ideas.

Fiza, Noora, and Omima mentioned that the AODB gave the students opportunities to support their argument with acceptable references. Fiza and Noora found that when other peers supported

their ideas with understandable and adequate references, it assisted them in understanding others'

opinions clearly. They thought it was important to use this criterion in the discussions to

logically link their ideas to others' responses while applying the knowledge learned, which

showed that they understood others' concepts. Omima said:

> Providing information in [the] AODB required us to justify our thoughts. Thus, when writing my response, I cite my concept using an accessible reference to all of my classmates to support my argument. Also, I were using a references to validate the information when either I agree or disagree with others.

> Some participants considered the activities offered by the AODB enjoyable, motivating,

and useful. They said they enjoyed using technology to access and develop meaningful learning.

Linking their personal expertise to the discussions was a new learning skill that the Saudi female

students gained from AODB. They said it was very fun and helpful for them to develop

knowledge they already had. This AODB motivated them to be more active in the discussions

and to learn from others' personal experiences. In some case they were not hesitant about

bringing in real-world examples. In focus group interview, Noora stated:

> It was fun and useful to read other personal experiences. They brought in their personal experiences to relate current issues to the assigned readings. Most of my classmates used their personal experiences in life or work to depict or argue what is mentioned in the topics provided by the instructor. Sharing experiences outside the university life was a new skill that I learned from the AODB that is not offered in the traditional course.

In an example from a face-to-face interview, Hiba indicated:

> I enjoyed using technology [AODB] in my learning. Even [though] I have more experiences with computers, I think during these activities, we learn more from each other[s'] work and life experiences, such as how to use some online discussions board functions, which I may forget especially as a learning tool.

The participants felt that the AODB allowed them to extend the discussions and cover more

areas around the topic under discussion. Connecting their thoughts and carrying on discussion

from others' messages was another skill from the AODB that helped the participants raise issues

from their classmates' messages. In her face-to-face interview, Hana stated:

> Using personal experiences to validate your thoughts and arguments motivated me to interact with my classmates. It was interesting to return to the discussions a few hours after I had posted my response on [the] AODB and found that my classmates had replied to me with comments on my experiences or asking me to provide more explanation about these experiences, which is sometimes take[s] the discussion to a new level.

Some participants found that having access to read others' viewpoints gave them the opportunity

to learn from different positions instead of just learning from the instructor's perspective.

During the focus group interview, the participants appreciated the opportunity provided by the

AODB to read different views about the subject matter and to access different information that

allowed them to analyze perspective other than just their own. Noora declared:

> In [a] traditional course, we always concentrate on and learn through our instructor's viewpoint. In [an] AODB we gain diverse perspectives and ideas from our classmates. This way helped us see things more clearly and understand issues related to the discussion deeply.

Samah, in her one-to-one interview, stated:

> Asynchronous online discussion board is a very useful tool. It increased my interest in this course [ESL]. I enjoyed the learning by sharing and reading other's experiences and thoughts. In addition to using technology to learn and construct new knowledge by surfing and linking to diverse readings and websites offered by the instructors and classmates.

Five participants who believed their English language level was poor felt that the

activities offered by AODB were helpful and valuable for improving their ability to learn the

target language. The participants' narrative reflections and focus group and individual interviews

showed that the participants loved the idea of getting access to the discussion and staying in

contact with their more knowledgeable peers outside of the university campus. They praised the

use of the AODB for increasing their opportunities to positively engage in the discussions as

well as learn and practice their English language. During the focus group interview, Umnia said:

> I really enjoyed the opportunity offered by [the] AODB to learn English language. We
> practice our English language with our classmates. In this course we were writing our
> responses mostly in English. So I read others' response[s] and learn[ed] from those who
> are in a level higher than me.

Fiza mentioned, "Actually, for me I get much benefit, more information and things, terms in

English, in the language skills, I learned new words, terms, sentences, [a] little grammar."

Omima followed up:

> The online discussion was open to all of us, and our responses were in English. I may see
> some new words that I never knew in one of my classmate's response[s], so I would take
> it and try to translate it and find its definition. The professor was telling us to write even
> if we are not right so we will learn from our mistakes.

In her one-on-one interview, Nedda affirmed:

> I really got much benefit from the online discussion board in learning English. I learned
> new words and I enjoyed using them with my classmates through our discussions. I get
> advantages as I learned new words for my major and new terms that helped me to create
> new sentences that benefit me in my work. When I communicate with my classmates via
> online discussions I read carefully through their sentences and see how they used some
> words, sentences, and grammar and then applied them to my work.

In contrast, participants whose English language level was middle or high had different

perceptions toward the opportunities offered by the activities for learning English in AODB.

They felt that they did not get that much benefit from learning the target language via AODB and

that it was like a review that helped them preserve the previous information. For example, Maria,

Noora, and Hiba found that the AODB did not help them a lot in learning the language skills.

They believe that they improved in some areas of learning the language a little, such as learning

new words, terms, and how to form them in sentences. However, in a face-to-face interview Hiba

stated:

It did not change my language that much. Actually, I did study English courses before I started my college learning. So it was like a repetition for me in terms of my grammar and in term[s] of my understanding to some words and sentences, and I did not improve in my speaking or listening. I consider this development as a small improvement.

Summary of Learning Opportunities Offered by AODBs

In summary, these Saudi female participants expressed positive views toward the different opportunities offered by online discussion for educational advancement. This finding revealed two categories that emerged from analysis of the participants' reflections and focus group and individual interviews: empowerment and cognitive learning skills. Regarding these two categories, the first category underlined that students perceived the AODB as a learning tool to help them continue their education, take full responsibility for their learning, find good careers, and improve their financial status. This empowered the female students to be independent learners, which enabled them to have control over their lives. This finding also shows that the participants appreciated the meaningful learning of online discussion boards as a means for supporting their cognitive and critical learning skills. They were pleased to have time to reflect on and construct their responses, involving in-depth discussion, learning from other experiences and different sources and perspectives, learning through technology, connecting with others outside of the university campus, and practicing their English language.

Factors That Helped or Hindered Participants' Learning

Although the participants' perceptions toward using the AODB were positive, findings from the data analysis showed several categories as key factors that affected their learning via

this online environment. These factors included a) challenges of using AODB, b) teacher presence, and c) course structure.

<p align="center">Challenges of Using Online Discussion Boards</p>

The notion of using the AODB was still ambiguous for some of the participants. Some of the participants indicated that while this was not their first time using technology for their learning, they still had some issues using this medium for the purpose of their education. More specifically, they reported some concerns regarding the challenges they encountered while utilizing the AODB. Respectively, these challenges as viewed by the participants were technical issues, time requirements, and lack of peer feedback.

The major challenge that disturbed the participants' learning via the AODB was the lack of appropriate technology. During the individual and focus group interviews, almost all of the participants indicated that they encountered technical problems while using the AODB such as the system freezing, slow networks, and shutdown. For instance, Hana said:

> It is true that [the] AODB [was] easy to use, but the system [was] bad. There is some difficulty in accessing to the system or the network access is too bad. It gets us out of the system. When we enter the system for group discussion, it became too bad. There is a lot of pressure on the system, which cause[d] interference or completely block[ed] the connection. It would not let us enter our discussion or may by it let us enter for a while and then kick[ed] us out and we can't [get] back again.

Noora continued that she experienced the system freezing and how the instructors justified this issue:

> We always complained that we can't enter our discussions; even our course instructor can't. We can't attend all our online classes or discussions. The system freezes up and drops us out. The instructor told us that the system would freeze up especially because the number of the students in different classes is too large and they all use AODBs.

Omima jumped in:

Maybe the system lets you in the class for a while and [throws] you out; it's not because of the internet connection. It is because of the system itself. Even the instructor said there is a lot of pressure on the system.

Umnia revealed the problem she faced during some of her online discussions and her thoughts

about the reason for it:

When the system freeze[s], it took away a lot of time to get back and we can't keep on track with our discussion in contrast to traditional course. Actually, I do not know how to stop this issue. There is always a technical problem. What I think as a reason is that one class has a round 120 or 100 students. So maybe even though we might not enter the discussion at the same time, there is a huge number of students who [are] enrolled in online courses using AODBs. This may be, the number of students who get [in] to the system is too large and that what cause[s] the problem.

Similarly, Hiba, in her face-to-face interview, expressed the technical problem (freezing) she

encountered in the AODB:

The online system is not good. Actually the instructor himself talk[s] about the same trouble. Sometimes he can't read all of our discussions and can't enter it again or he may be late to respond to our inquiries and then said the system was broken or out of service. And apologize[d].

When asked about the challenges she faced, Rabab, in her individual interview, also described

her troubles related to slow network and system crashes:

I live in a remote area where the internet connection is not always good. So sometimes I had [a] problem logging into the online discussions, and the ones I logged into had my screen stuck on. And it took time to load the page or sometimes stop[ped] working at all.

Nedaa and Samah found that these technical difficulties frustrated them and prevented them from

learning well and taking full advantage of the AODB. In this regard, Samah said:

AODB is a useful learning tool, but the slowdown of the network can affect the learning development supported by this learning environment, as it impact[ed] my engagement in the discussions.

Another challenge the participants faced was the time burden. Although the participants

viewed the time offered by the AODB as an advantage to reflect on and construct their thoughts,

in some ways it was also a challenge. The participants indicated that sharing their ideas and

responding to other peers via online discussions required time, effort, and preparation. The lack

of adequate time was a challenge that prevented their learning, especially learning the target

language. In the focus group interview, Maria described how time was a great challenge:

> In the first and second level [terms] we were able to discuss things with each other a little bit. After a while we were not able to collaborate because we had no time for that. Reading the numerous posts and connecting with others and responding to their ideas require[d] plenty of time. We stop[ped] communicating with each other.

Hana, in her reflection, reported the problem as follows:

> We had time to discuss our ideas together, learn from each other, and practice our English language with more knowledgeable peers. There was a time in the terms. The term was starting earlier, and we had enough time to do all discussions, work together, and help each other, but now the term is too short and it started late. We just have around two or less months to complete everything, and we are in rush.

Rabab and Hiba, in their face-to-face interviews, explained why they considered time as a big

challenge for them. They stated that sometimes instructors asked them to construct posts that

made connections to prior messages provided by their peers and they had not had enough time to

read all of the previous posts and notes. They thought that responding to the opinions and ideas

that were related to their own would be more helpful as well as seeking more explanation from

their peers. Rabab noted:

> I really enjoyed learning via [the] AODB, especially in the first and second terms where we had enough time to read and contribute to others ideas and thoughts. In this last term we had no time and the instructors want us to read previous notes and messages, which is hard to do as some of these ideas [were] not related and we do not have time.

Finally, the lack of immediate feedback and interpretations from their peers were other

challenges and disadvantages of the AODB that hindered their learning. Most of the participants

perceived the extended time of online discussion boards as a benefit for building their knowledge

and forming their responses. On the other hand, some of the participants found extended time

was a barrier to improving their learning because they needed to wait for their classmates to

comment on and reply to their messages and questions about specific points of their peers' posts.

Umnia indicated, "We need immediate feedback and discussion with other peers to be able to

recognize and correct our thoughts and be accurate that we understand other peers' ideas."

On the same note, Samah described her thoughts about this challenge and suggested a solution:

> One challenge that impeded our learning was that we have to wait for long time to hear
> from our classmates. Sometimes we asked our peers some questions and sought
> clarification about their opinions, but they replied to us after a while. We need to
> understand their opinions to be sure that we respond to them correctly. I think instructors
> should [have] arranged an applicable time for the online discussion to improve our
> learning.

<u>Teacher Presence</u>

Teacher presence, including mediated feedback and advice from the instructors to

students during the discussion boards in online courses, was described as an important factor that

increased or impeded the students' learning. Some students appreciated the instructors'

constructive comments to enhance the students' learning skills in the online discussion forum.

Rabab indicated that the positive feedback from the instructors helped her to construct her

learning and writing. In her face-to-face interview Hiba declared, "I would love to say I

improved in my learning because of my instructor's helpful feedback." During the focus group

interview, Maria described how the instructor's presence during the online discussions developed

the participants' learning skills:

At the beginning of this course, the instructor was always look[ing] at our answers and shar[ing with] us. For example; he said that this student's answer is correct or this is wrong. We feel excited [about the] interaction the instructor had with us and we will become more active learner. This forced us to look through our books and study hard to find the answers and understand it.

In contrast, the participants viewed the absence of the instructor as a key factor that hindered the students from interacting with each other and getting meaningful learning in the AODB. During the focus group interview, Omima declared:

When the instructor [is] not there [in AODB], we did not communicate with each other a lot and each of the students will post her discussions without reading other opinions or discussion. It is like homework; a question provided by the instructor and you have to answer it and that is it.

Fiza continued:

It was very nice at the beginning, but through the semester it transferred to be homework and that is it. Actually, each of us feels those discussions [are] like homework, and each one of us just gets to the forum to answer the questions and leaves, and that is it.

Hana affirmed:

The story of the online discussion boards did not happen; we did not communicate and discuss things. The instructor posted the questions in [the] AODB and left us alone and was not involved with us. So there is no way for us to improve the discussions.

Nedaa mentioned another issue related to mediated feedback in second language learning, namely that it often had a lack of grammatical comments. In a face-to-face interview, Samah declared, "Actually the instructor did not give us comments on our grammar; he just focused on our ideas and content." However, she highlighted the instructor's grammatical feedback as an important issue for enhancing her language learning skills as a Saudi student.

Course Structure

Findings showed that all ten participants remarked about the course structure, including the guidance, feedback, and assessment experiences, as an encouragement to enhance their learning and language skills. Maria and Fiza had positive feelings about the structure of the course they were enrolled in. They believed that the good course structure helped them to put in more effort and encouraged them to develop their learning and language skills. In the focus group interview, Fiza said:

> Our instructor provide[d] us with very clear instruction and guidance to write the answers. The instructor gave a clear instruction and offered us different website links to look at and find the answer. He also assigned the writing style and how many words we need[ed] to include in our response. We had weekly assignments, and our instructor gave us questions starting from an easy to a difficult level. This course instruction encouraged us to express our ideas in a clearer way.

Well-structured courses with clear guidelines from the instructors were cited as an important element in an online discussion forum to develop students' learning skills. Omima confirmed that the clear instructions from the instructor increased her awareness of her responses. She stated:

> Regularly, when the instructor posted the questions, he asked us to post a summary for the article in formal language and read other peers' responses, then keep going in our discussion from there. He requested us to check the rubric and see the requirement[s] before posting our messages. I felt that I needed to be careful with my language, like I had to have the right punctuation and chose the right words. I actually paid attention to my grammar and wording choices. I asked my classmates whose language level higher than me to help me.

The students enjoyed the way their professor constructed the course and assigned the requirements, which motivated them to work more on their posts and seek help from other more knowledgeable classmates to make their messages more understandable to their peers.

The participants reflected on the assessment or grade of the AODB; it was part of the structure

and noticeably motivated students to improve their learning skills. Hiba indicated in the face-to-

face interview that the grade in the AODB increased her interest in developing her language

learning:

> To be honest, if the online discussion is not graded, I do not put more effort on it. Some
> of our instructors did not really look at our messages or sometimes they do not care about
> the word choice or how the answers were constructed. So they just see if you had a
> posting and responded to other peers, and that is it. So, I won't care much about it.

Nedda referred to the assessment of online discussion boards as an imperative fact that

encouraged her to increase her learning skills, and in her personal interview, Nedaa stated:

> With the online discussion, I do have a priority, and if the grade on the discussion is
> small and the grammar is not the main thing and the major thing will be your idea, I will
> not go seek information regarding the grammar I may just ask my classmates to help me.
> Otherwise, I will put more effort.

Fiza concluded from her previous experience that she believed well-structured courses and the

instructor's positive feedback and assessment were crucial factors for increasing students'

motivation to learn and write better responses. On her narrative reflection, Fiza concluded:

> Our instructors provided us with meaningful sources and helpful evaluations and
> immediate useful comments as well. Actually, the instructor corrected [the] students'
> messages grammatically by adding helpful feedback. We had sufficient time to review
> and learn more about the target language. We put more effort to improve our learning.

Summary of the Factors That Helped or Hindered Participants' Learning

In summary, there were several factors that influenced the participants' perceptions of the

AODB: a) challenges of using AODB, b) teacher presence, and c) course structure. These

findings show that the participants thought the technical issues, time requirements, and lack of

peer feedback were common challenges that disturbed their learning via the AODB.

Furthermore, teacher presence, including mediated feedback and guidance provided by instructors to students during the use of AODB, was an important factor that developed or impeded students' learning. In the absence of the instructor, the students did not communicate with each other and learn. Additionally, the course structure, including the guidance, feedback, and assessment experiences, was considered another key factor that encouraged or prevented the students' learning, especially their language learning.

Summary of Chapter 4

This chapter highlighted themes that emerged from the data analysis. One focus group of six participants and five individual interviews with Saudi female students, along with their narrative reflections and the researcher's reflections and notes, were utilized in the current study. The participants provided rich information about their experiences with asynchronous online discussion boards. In this chapter, analysis of the data collection was provided and highlighted the identified themes. Tables 2 and 3 provided demographic details and descriptions of the respondents' age, occupation, status, participation in online courses, years of using technology, experiences with AODB, technology level, and their English language level. Three main themes that emerged from the current study included a) students' perceptions of asynchronous online discussion boards, b) learning opportunities offered by AODBs, and c) factors that helped or hindered participants' learning. Each theme covered some category of students' perceptions regarding their experiences of using asynchronous online discussion boards. The first theme of students' perceptions had four categories: a) the value of using AODB, b) engagement, c) collaboration, and d) convenient communication. The second theme, learning opportunities

offered by the AODB, involved two categories: a) empowerment and b) cognitive learning skills.

The third theme regarding participants' perceptions of the factors hindered or helped their

learning displayed categories related to a) challenges of using AODB, b) teacher presence, and c)

course structure.

The next chapter presents a discussion of the themes and categories resulting from the

current study. It also includes a discussion on themes regarding the participants' perceptions of

the factors that hindered or helped their learning, the implications of the findings and research

recommendations, and suggestions for future research.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

Introduction

This qualitative study explored the Saudi female participants' perceptions of using

asynchronous online discussion boards (AODBs) as a learning tool along with the key factors

they perceived influenced their learning using it. In this chapter, findings of this

phenomenological case study are discussed in line with the research questions and are linked to

the research. The discussion of the findings revealed the implications of using the AODB in the

Saudi female learning environment. In addition, the study explored participants' perceptions

regarding the use of asynchronous online discussion boards (AODB) at their university in Saudi

Arabia in relation to the cognitive presence element of the Community of Inquiry and social

constructivist frameworks. In addition to the discussion of findings, this chapter presents

recommendations for further research, followed by concluding statements.

Points of View Toward Using Asynchronous Online Discussion Boards

Value of Using AODBs

The Saudi female students' primary views about using the AODB were mainly positive

but varied, ranging from feeling interested to anxious. They valued the learning processes though

the AODB. The participants felt that the AODB was appropriate and a very effective tool for them as female students in Saudi Arabia. The Saudi culture and society are very conservative (AlMunajjed, 1997), and the common notion in the Saudi culture is that women are the primary basis for family construction and that they are the entity of the society (Mirza, 2008). Thus, Saudi female participants found that AODB helped them to pursue their education without any conflict with their religion and/or culture. It was a tool that facilitated communication and interaction between female students and their male instructors. This finding is in agreement with previous studies (Aljabre, 2012; O'Lawrence, 2007). Aljabre (2012) investigated the benefit of using online learning in the women's education environments in Saudi Arabia. The current study found that the AODB enabled members of this academic community to interact with others and pursue their education without any conflict with their personal lives. Specifically, the students could either stay at their homes taking care of their families or at their workplaces to accomplish their work while participating in learning activities. They could interact with their male instructors and most of their classmates to exchange information and start relationships with the other students. Another study by O'Lawrence (2007) indicated that AODBs gave students the ability to fulfill their family responsibilities while working and learning through interacting with a culturally diverse group at their education setting. Furthermore, the current participants mentioned that the AOBD fostered their learning processes. They valued the effectiveness of the AODB to enhance their overall understanding of the course material and subject matter; it helped them preserve information and develop the quality of their learning, especially their language learning. These data support Barrs's (2012) findings that AODBs give students more time to participate in more in-depth discussion to understand the complex topics, learn from various

sources, and overcome their hesitancy to write and communicate their ideas and thoughts in the target language.

<div align="center">Engagement</div>

The participants indicated that the unrestricted time and place and the interactivity feature of the AODB raised their confidence to engage actively in the learning process and recognize their language knowledge. This finding showes that the AODB fostered the engagement and motivation among the students as they interacted and worked on the target language. With this type of technology (AODB) the participants could use their internet access from any place to engage in the class discussion outside of the traditional classroom. Thus, AODBs may encourage students to continue interacting with their classmates in the target language. Several studies (Bassett, 2011; Lin & Yang, 2011; Ritchie & Black, 2012; Vinther, 2011) discovered that students' engagement in online discussion forums provided them with an opportunity to be involved in authentic communication with their peers, which improved their understanding of their own linguistic knowledge rather than just interacting with the instructor. For instance, Ritchie and Black (2012) focused on understanding the students' perceptions of learning the target language via online discussion forums. Their study showed that students had positive feelings toward using online discussion forums and felt their ability to read and write were improved in the target language. Similar to previous research (Shaff, Altman, & Stephenson, 2005), the current study's finding indicated that participants in the AODB tended to be more motivated to engage in discussions and to reply to those posts, including interesting opinions, addressing their previous messages, and disagreeing with their own messages and postings by peers with whom they are friends or they knew well. On the other hand, the participants tended

to be more reluctant to reply to those they did not know because they did not want their classmates to feel attacked or be upset with them. This seems to have been the case in some courses, including the English as a second language course, in which the students did not know what was expected of them. Thus, paralleling Vinther's (2011) research, the participants needed more training and guidance to recognize the benefits of the AODB and to learn how to interact and respond to other peers without resistance and anxiety for improving the learning process.

<u>Collaboration</u>

The participants valued learning from each other and focused on their collaborative and social practices in an online discussion forum. Some students felt that their learning experience and language skills improved in the online discussion forums when they worked as a group, especially when they interacted with more knowledgeable members. The results of a study by Lin and Yang (2011) supported the finding that students had a positive attitude toward collaborative work, which included peer feedback, and appreciated other group members' comments. Similar to a previous study by Kessler et al. (2012), the current study showed that students helped each other in editing, revising, and developing ideas through collaboration in AODBs.

According to Du et al. (2008), interaction between novice learners and more skilled social partners helped individuals construct and share their knowledge with their learning peers. In the AODBs, the students were required to interpret, clarify, and prove their understanding of others' ideas in a written way. Thus, reading and looking carefully at the other learners' writing, especially the more knowledgeable peers, helped them to construct their learning and develop

language skills. In agreement with a prior study (Zhang et al., 2007), the current study confirmed that the students appreciated the collaborative work in the online discussion environments instead of individual work because it gave them a learning setting for interacting with more capable peers. In this way, AODBs are considered fairly useful as a collaborative social practice and constructive platform. In some cases, an online discussion forum improved some students' knowledge in terms of their learning and language skills as a whole. It might help some of the students to interact and assist each other's writing in terms of the content and spelling of their writing. However, consistent with a previous study (Du et al., 2008), the participants felt concern in the asynchronous online discussion board as it was limited to written text. It was a main issue for a few of the participants because they were not able to read the emotion that is visible in face-to-face settings, which made them feel isolated. They also felt it was difficult to work at the same speed and ensure the validity of the content. Like other studies (Vinther, 2011; Yeh & Lahman, 2007; Zhao & McDougall, 2008), the current study found that the problem regarding the lack of verbal cues and facial expressions appeared with written text because of a failure to appropriately use clear writing.

<u>Convenient Communication</u>

The participants perceived the AODB as a convenient communication tool that helped them interact with their instructors and peers more efficiently. They had more time to read, think, understand, and respond to their peers' ideas and thoughts. O'Lawrence (2007) stated, "It allows people to learn at their own pace, in their preferred medium, or in a more comfortable environment" (p. 6). The participants valued the effective communication via written text in the

AODB for enhancing their learning skills in particular language skills. The findings showed that the participants felt that written text helped them be braver in expressing themselves and their thoughts to their classmates. This finding is supported by previous studies (Barrs, 2012; Ritchie & Black, 2012; Vinther, 2011; Yildiz & Bichelmeyer, 2003) that claimed online discussion boards are convenient and active environments in which shy and silent students can communicate and interact equally and voice their opinions without concern about the challenges in listening and speaking they often experience in face-to-face discussions due to linguistics. The AODB creates a sense of equality. Likewise, Barrs (2012) stated that online discussion forums offer all university students a convenient and useful platform to continue communicating and interacting in the target language beyond the classroom, particularly during holiday breaks, and that students presented a high level of participation and the number of students' postings was large. In this regard, to benefit from the use of an AODB, students and instructors need to be prepared to contribute and construct the language input and output.

Learning Opportunity Perceived by Saudi Female Participants

Empowerment

The AODB was a beneficial and useful setting for the participants not only in terms of learning the content but as a tool that helped them be more active learners. It improved their ability to make decisions about what they wanted to learn and how, collect information and build new knowledge and skills, and understand expectations. In relation to a study by O'Lawrence (2007), the present study supported the notion that the AODB offered students the power to be self-directed learners, setting their own goals and measuring their own accomplishments. They

were encouraged to use self-assessment measures, monitor their own learning to develop

strategies for learning, and work in collaboration with other learners. The participants in the

present study favored learning via AODB because it helped them balance their responsibilities in

regard to their work and family and to complete their education degree. The participants enjoyed

the freedom and independence provided by the AODB. Similar to previous studies (Aljabre,

2012; O'Lawrence, 2007), the current study revealed that the AODB was an applicable tool for

Saudi female students. It offered them flexible time and a convenient setting in which to

communicate with their classmates, complete university assignments at home or office, take care

of their family, and/or keep their position at their jobs and be promoted. It could be argued that

use of AODBs for the women's education will increase as learners recognize the significance of

education and how convenient it has become to have access to asynchronous online learning at

universities that permit educational experiences tailored to the needs of individuals or groups

(Ajayi, 2010).

Cognitive Learning Skills

The interaction between the learners in an online learning environment, especially in the

asynchronous online discussion board, is expected to provide meaningful learning, which leads

to cognitive development. Learners could extend their knowledge of the task at hand from a

lower level of understanding to a higher level with the assistance of more experienced peers.

This finding is supported by previous studies (Lim et al., 2011; Lin & Yang, 2011; Vinther,

2011) that described asynchronous online discussion boards as a learning environment that

facilitates higher order thinking in the target language and helps students achieve language

learning beyond the traditional classroom through interaction with others. For example, instructors post questions in the AODB and ask students to think, reflect, and share their ideas and thoughts with their peers. Then students can answer with their own ideas, read others' posts, and reply to peers' messages to discuss and exchange knowledge, which can develop their cognitive learning skills, especially their language learning. This is similar to the study by Lim et al. (2011), which indicated that with AODBs students have an equal chance to participate in in-depth online discussion about the topics without wasting the time assigned for in-class online discussion, which enriched their ability to analyze their peers' messages, understand others' opinions, and seek more clarification from their classmates. Several studies on online learning (Ajayi, 2010; Lin & Yang, 2011; Shaff et al., 2005; Vinther, 2011) highlighted that AODBs offer students time to justify their knowledge with accessible references related to their own experiences.

Similarly, Ajayi (2010) claimed that students responding to others, clarifying information provided in the discussion, and explaining any changes made on their previous views were considered new skills learned from using an AODB. Researchers (Lim et al., 2011; Lin & Yang, 2011; Vinther, 2011) have argued that higher order learning processes may not take place if the students do not feel confident about their ability to learn the instructional material of the target language. Developing a sense of community early in the course time frame, using online discussion forums, and having students respond to some authentic issues in such collaborative environments might help relieve some of their worries and allow students to be more creative and immersed in diverse communities of practice to access the target language (Lin &Yang, 2011; Ritchie & Black, 2012). Like previous studies (Ajayi, 2010; Black, 2005; Shaff et al.,

2005), in the current study the participants held differing views about their language learning related to their levels of cognitive maturity. Thus students who had middle or high levels of proficiency for the English language felt they did not get that much benefit from learning the target language via that AODB and that it was like a review that helped them to preserve previous knowledge. On the other hand, students who had low levels of proficiency for the English language felt that they had more advantages for language learning through the AODB.

Key Factors Improved or Impeded Students' Learning via AODBs

Challenges

Although it is evident that the use of AODBs is increasing in the Saudi Arabian educational system, there are still enormous challenges that students face, which could hinder their learning: technical issues, time burdens, and lack of peer feedback. Technical problems were the primary challenge the participants encountered in this learning environment (AODBs). The most frequent technical problems students faced were the system freezing, slowing down, and/or completely shutting down. This led to unnecessary suspensions in online discussions, frustrated students, and prevented them from learning well and taking full advantage of the AODB. This finding is supported by Ajayi (2010), who indicated that students do not always have good internet access at their home or workplace and suggested that these issues should be taken into consideration to improve students' learning via AODBs. Aljabre (2012) suggested that the university administration needed to deliver a training program for instructors and learners as well as offering technology specialists to guide and troubleshoot technical issues. In addition, the

instructors should be proficient in course management software, provide a more flexible schedule for students, and give them more time to respond in the AODB.

Lack of adequate time was a challenge that also prevented learning, especially learning the target language. Although the participants viewed the time offered by the AODB as beneficial for thinking and constructing their thoughts, it was a challenge too. In agreement with Shaff et al. (2005), the participants in the current study indicated that sharing their ideas and responding to peers via online discussions required time, effort, and preparation. The students needed to construct posts that made connections to prior messages provided by their peers and sometimes they did not have enough time to read all of the previous posts and notes and seek clarification from others. Furthermore, the lack of peer feedback was another challenge that affected the students learning through the AODB. Researchers (Ritchie & Black, 2012) found that public online discussion boards positively influenced the students' learning skills and impacted the students' intercultural competence when using their second language, interacting with more knowledgeable peers, and providing feedback. Similar to the finding from Ritchie and Black (2012), the participants in the current study recognized the benefit of receiving peer feedback and reported that they learned vocabulary, spelling, appropriate word choice, and sentence structure when working in groups with their peers or by reading other students' individual writing. In contrast, the negative impact of online discussions were the lack of interactivity and feedback from other peers, which could lead to difficulty learning the target language, finding topics, clarifying their own thoughts, and understanding other peers' opinions and ideas.

Teacher Presence

The role of instructors in facilitating a discussion forum and providing students with feedback had a great impact on the students' interactions and learning during the process of the AODB. This result is supported by Zhang et al. (2007), who demonstrated that the role of instructors in an online discussion forum influenced the students' attitudes and promoted critical thinking in the AODB. AODBs have been seen as an alternative way to provide a space for students to express their thoughts, which might be limited in a face-to-face discussion. Another study (Du et al., 2008) found that by using AODBs, students can further debate content and topics covered in the classroom with other students and instructors on their own time. More significantly, the potential of AODBs for recording and saving students' conversation transcripts makes it possible for the students to retrieve and review the subject content later and address the comments provided by their instructors. Similar to the results from Balaji and Chakrabarti (2010), students in the existing study stated that the professor's constructive comments were an effective factor that encouraged them to improve their language learning skills, in particular their writing in the target language. Thus, instructors in AODBs need to inform students about their progress and clarify serious mistakes in students' writing assignments/posts such as their grammatical mistakes.

Course Structure

Four participants commented on the structure of the online learning, including the guidance and feedback and assessment experience, as encouragement to enhance their learning and writing skills. Well-structured courses with clear guidance from the instructor were cited as

an important element in an online discussion forum to develop students' learning and writing skills. In addition, the existing study showed that students were satisfied with the AODB as compared to the traditional classroom. They felt that the AODB was a more inclusive learning environment as it was flexible, convenient, motivating, timely, well structured and safe, and prepared them to work together. It is a significant strategy that gives students access to complete their learning at any time and place. It provides online learners the opportunity to expand their learning through the process of discussion and enhances their understanding of the subject under study. Similar to Bassett (2011), the current study highlighted that good structure and clear guidance are obvious factors that influence students' learning and collaboration. In the current study, these two factors facilitated the students' learning and motivated them to develop their language learning and writing skills. This supports Zhang et al.'s (2007) finding that students need to understand the requirements before using AODBs to help them improve their learning skills.

Implications and Recommendations

The increased use of technology has definitely encouraged the growth of online learning and provided people who could not continue to postgraduate degrees and receive higher education the opportunity to do so. In countries such as Saudi Arabia, the government is continually striving to foster gender equality and empower women in all areas; thus, online learning opens up opportunities to women that have long been closed. The current study presented a qualitative look at online learning by exploring Saudi female students' perceptions regarding the use of asynchronous online discussion boards (AODB) as a learning tool. The

present study's findings identified several implications for the use of AODB in the women's learning setting. The current study found that female students have positive views toward using AODBs, but their perceptions varied, ranging from feeling interest to anxiety. The participants valued the learning processes though the AODB as an appropriate and effective tool for them as female students in Saudi Arabia. The important benefits found regarding AODB included helping female students pursue their education without any conflict with their religion and culture and raising their confidence to engage actively in the learning process and recognize their language knowledge. It also facilitated the interaction between female students and their male instructors, even if the students were reluctant to reply to posts by students they did not know because they did not want their classmates to feel attacked or be upset with them, or sometimes they did not know what was expected from them. The Saudi government should implement AODB as a tool for learning in the education system, especially for female institutions. Additionally, institutions' administrators should encourage their instructors to utilize AODB as a vital part of their teaching, providing suitable training and guidance for the instructors and students to improve the learning process.

The current study also found that students appreciated the flexibility and collaborative nature of the AODB that helped them to communicate and interact in the target language beyond the traditional classroom. On the other hand, students felt concern in the asynchronous online discussion board as it was limited to written text. Thus, the instructors should train their students and help improve their writing in the target language. In addition, the instructors should inform students about the value of creating work collaboratively while using clear writing.

The current study also identified that the AODB improved the students' perceptions of their individual learning, getting a degree, finding a good career, and their learning and financial status, which led them to have power and control over their lives. Also, it was shown that participants felt that the AODB was a meaningful tool that supported their cognitive and critical thinking skills. By implementing the technology, the participants had time to read, think and construct their response; get involved in in-depth discussions; learn from other experiences and perspectives; connect with others outside the university campus; and practice their English language. In this regard, the Saudi Arabian society and the education system should realize that online learning could be a resolution for female students and should expand the availability of online courses, in particular AODBs, to provide students with the best educational practices. In addition, instructional designers should make online learning meaningful and attractive for female learners. Administrators should evaluate online courses concerning ease of access, the role of the private sectors, and the main reason for increased use by both education and business, in addition to the efficiency of online learning activities.

Findings from the current study indicate that female students confirmed three factors that influenced their learning through AODB: a) challenges of using AODB, b) teacher presence, and c) course structure. University administrators should offer applicable technologies and technical infrastructure. The AODB improved the learning process to become more interactive and allow Saudi female students opportunities to interact with their peers and male instructors and have control over their learning. This advantage could be achieved when the students have accessibility with an appropriate technology that helps active learning. Moreover, instructors should be experts in course management software and provide students with a flexible schedule

and an adequate time to respond in the AODB. Lack of adequate time was a challenge that prevented participants from learning, especially learning the target language. Also, the lack of peer feedback was presented as a challenge for student learning. In this regard, instructors should prepare students to be effective learners by training them in how to implement online activities such as commenting to each other, providing them with a clear guide to follow.

The role of instructors in facilitating a discussion board and providing students with valuable feedback had a great impact on the students' interactions and learning and promoted critical thinking during the process of using the AODB. Thus, instructors in AODBs should inform students of their progress and clarify serious mistakes in students' assignments/posts, such as their language mistakes. Conclusively, findings from the current study found that well-structured courses with clear guidance from the instructors are an important element in an online discussion forum to develop students' learning, especially language learning skills. Thus, instructors should have proficiency in managing the course content.

Because AODBs are a vital part of interaction in fully online courses, the current study provided some suggestions to instructors who plan to use them. Instructors should consider time factors, flexibility, students' previous experiences, and relevant instructional content before using AODBs. Instructors should know how to promote group dynamics and student initiative to motivate learners to participate in and develop their learning and writing activities.

Suggestions for Further Research

For future research, more participants from different online courses with a larger sampling size are needed to gain multiple perspectives and capture the general experience

confronting Saudi female students in an online environment. A larger population would generalize the trend of Saudi students' perspectives on the asynchronous online discussion board and then generalize the study about the online learning experiences of Saudi female students in different majors, courses, and universities. Further, qualitative methods, as used in this research, are needed to analyze the content of the participants' postings. In addition, it is recommended that the level of learning, language skills, and sense of community among the forum members needs to be examined. Broader perspectives are needed as well as future research using AODBs in blended learning.

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APPENDIX A

FOCUS GROUP/INDIVIDUAL INTERVIEWS SCRIPT AND QUESTIONS

Prior to Interview

1. Identify each participant as a number (this is the same number they attach to their reflections)

3. Arrange date and time of focus group/interview and communication type (f2f)

4. Set up digital audio recorder

5. Explain the purpose of the study.

6. Get permission to record interview

7. Check audio recorder, batteries

8. Bring bottled water for participant(s), number tags and blank paper/pens

9. Bring business cards

During Interview/focus group)

1. Intro: Approach and greet the participant's and introduce yourself. "I'm a graduate student at Northern Illinois University working on a study…"

2. Thank participant(s) for agreeing to take the time to participate

3. Hand out consent form and demographic survey

4. Consent form: Ask participant(s) to read and sign the consent form

5. Remind participant(s) that her name will be confidential and will not be used in any publications/presentations

6. Briefly provide background info about the study

7. Goal: "As mentioned in my email to you, the study aims to understand undergraduate Saudi female students' perceptions regarding the use of asynchronous online discussion forums as a learning tool in their educational environment"

8. Re-confirm permission to audio record session

9. Check audio recorder and conduct test

[Begin Interview]

1. Throughout interview take notes, impressions, feelings

2. Identify any follow-up action

3. Request permission to follow up on issues by telephone/f2f/email.

4. De-brief the interviewee about what I plan to do with their interview. Let them know they

    can contact me at any time if they want to learn more or choose to have their interview

    withdrawn from the study. Leave them my business card and thank them for their time.

Interview General Tips

1. Interviews should not be more than 90 minutes

2. Questioning should be done in an interactive, conversational manner

3. Try not to interrupt the participants

After Interview

1. Label the recording with the participant's number and the date. Write the same number on the

    consent form, interview notes, etc. For example, Participant 1interviewed on August 1, 2015

2. Write-up interview notes - After the interview write down my thoughts about the

    interview:

• Summaries of memorable things the participant said at different moments.

• Methodological difficulties or successes

• Personal emotional experience and any emotions I noticed in the participant.

3. Transcribe recordings

4. Check and edit transcript

Interview Questions:

First, let's discuss your general educational experiences.

1. Would you please tell me about your experiences in using technology in your Education?

    a. What types of technology you are using for your learning?

    b. For what purpose you using technology?

Second, regarding any of your online courses that have used asynchronous online discussion boards ...let's discuss the following questions:

1. How do you define the term online asynchronous discussion board (in your own words)?

2. Tell me about your experience with online discussion boards in any of your classes?

    a. How you would describe your experiences with online discussion board in those classes?

    b. What are your thoughts about it?

    c. regarding the use of AODB in these courses, NOT SUREDo you feel it help with your learning? In what ways?

3. Describe or what type the activities that were used during the online discussion board in any online courses that you took? (Please provide specific examples).

4. Explain one or more strategies you liked, which were used in the discussion board in any course that you took?

5. What is your thought about the way that your instructor used online discussion boards in your class? (That you liked or did not like)?

6. As a Saudi student(s) what are the effective points that you found during the process of using online discussion boards? What are the challenges points?

Now, let's discuss this ESL class in particular.

1. As an English as a second language student(s):

    a. Describe the opportunities that online discussion board offered that prompted you to be good ESL learner?

    b. What activities on the online discussion board helped your learning?

2. As a Saudi student(s), what are the effective points that you found during the process of using online discussion boards in this particular course (ESL)? What are the challenges points?

3. What resources (people, technology, facilities, etc…) did you have at hand to support your efforts in learning English as a second language during the online discussion board?

4. Describe your thoughts about how using online discussion boards in this class changed your English learning skills as Saudi student(s)?

5. Tell me about your English skills today. How have they changed since you started the course?

6. Do you have any additional items you would like to share with me?

At the end of this interview I would like to thank you (all) again and ask if you have any questions for me?

APPENDIX B

DEMOGRAPHIC SURVEY QUESTIONS

Student's number tag _____

1. **Age range**   **19-22   23-25   26-30 31+**

2. **Occupation**

    ❏ **Employee**

    ❏ **Student**

    ❏ **Other** _____

3. **Status**

    ❏ **Single**

    ❏ **Married**

    ❏ **Other** _____

4. **Number of years having used technology** _____

5. **English language level**   _____

6. **Technology experiences level**   _____

7. **Number of courses you have taken that used asynchronous online discussion boards**_____

8. **Number of years of experience in using asynchronous online discussion board?**
    _____ **In what course(s) Or context(s)**

9. **Delete it Are you still taking courses other than this course using asynchronous online discussion boards:**

    ❏ **Yes**

    ❏ **No**

    ❏ **Other**_____

APPENDIX C

STUDENT CONSENT FORM (INDIVIDUAL INTERVIEW)

Appendix C

Consent to Participate in Research
(Individual Interview)

I agree to participate in the research project titled A Case Study Examining Perceptions of Female Saudi University Students Regarding the Use of Asynchronous Online Discussion Boards being conducted by Hanadi Bokhari a doctoral student in the department of Educational Technology, Research & Assessment at Northern Illinois University. As a participant, I have been informed that the purpose of the study is to explore undergraduate Saudi female students' perceptions of asynchronous online discussion forums as a learning tool and try to determine what factors help students' English as a second language learning.

I understand that if I agree to participate in this study, I will be asked to do the following:
- I will complete a demographic survey.
- I will email the researcher my reflection(s) about using online discussion boards during the English as a second language course.
- Prior to the start of the focus group interview, I will be provided with the online discussion board transcripts, a numbered sticky tag, and directions for labeling my responses to the transcripts which include the definitions and examples of the terms I'll use to label the transcript. I understand that the transcript will be highlighted to indicate my responses. I will read my responses in relation to the other contributions on the transcript and identify the two categories (integration and resolution) of cognitive presence elements and attach the given number tag on the document I label
- I will answer the interview questions that will take approximately 45-60 minutes of my time and will be audio recorded.
- The interview will take place in **November** and during the school week at the University and will work within my schedule. In addition, interview will include questions about my past and/or current experiences as an online learner, particularly experiences with asynchronous online discussion boards, and my perceptions of using the asynchronous online discussion boards.
- I may participate in a follow-up interview that will be audio recorded.

I understand that:
- A possible benefit includes better understanding the ways in which asynchronous online discussion forums can benefit undergraduate Saudi female students' development of learning English as a second language individually while interacting with others in an online learning environment.
- A benefit could be to help researcher and instructors in the educational technology and second language field gain insight into how to improve Saudi female students' learning skills in fully online course regarding the benefit of using asynchronous online discussion forums.

I am aware that my participation is voluntary and may be withdrawn at any time without penalty or prejudice, and my decision to participate will have no impact on my status/standing as a student. If I have any additional questions concerning this study, I may contact Hanadi Bokhari, 815-909-5743. I understand that if I wish further information regarding my rights as a research subject, I may contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588.

In regard to handling of data:

- All information gathered during this experiment will be kept confidential by carefully storing on a password protected directory not accessible via the network. Hard copy data will be stored in locked file cabinet in the researcher's personal office. Once the study is completed, all data will be destroyed.

- Participant identity will not be shared in that participants' name will not be divulged in a verbal or written manner and the participants will be given a number in place of name. The same is true of any other individuals and institutions or organizations will be mention in the interview by the participant. Once the study is completed the audio files will destroyed. I understand that my consent to participate in this project does not constitute a waiver of any legal rights or redress I might have as a result of my participation, and I acknowledge that I have received a copy of this consent form.

_____

Signature of Subject   Date
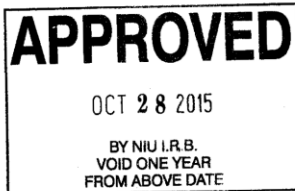
I understand that interviews will be audio-recorded and I agree to be audio-recorded.

_____

Signature of Subject   Date

APPROVED

OCT **2 8** 2015

BY NIU I.R.B.
VOID ONE YEAR
FROM ABOVE DATE

2

Appendix C

الموافقة على المشاركة في بحث

(مقابلة فردية)

أوافق على المشاركة في مشروع بحثي بعنوان دراسة حالة دراسية تختبر تصورات طالبات الجامعة العربية السعودية فيما يتعلق باستخدام لوحات المناقشة الغير متزامنة عبر الانترنت والتي تجريها هنادي بخاري طالبة الدكتوراه في قسم تكنولوجيا التعليم والبحوث والتقييم في جامعة إلينوي الشمالية. كمشاركه، فقد بلغني أن الغرض من هذه الدراسة هو استكشاف تصورات طالبات الجامعة السعوديات حول منتديات النقاش الغير متزامن على الإنترنت كأداة للتعلم ومحاولة لتحديد ما هي العوامل المساعدة للطالبات السعوديات لتعلم اللغة الإنجليزية كلغة ثانية.

وأنا أفهم أنه إذا وافقت على المشاركة في هذه الدراسة، سيتم طلب مني القيام بما يلي:

١- سوف أقوم بالاجابة على الاسئلة الاستقصائية واتمامها.

٢- ساقوم بكتابة انطباعاتي حول لوحات المناقشة الغير متزامنة عبر الانترنت أثناء تعلم اللغة الانجليزية كلغة ثانية وارسالها عبر البريد الالكتروني للباحثة.

٣- قبل بداية المقابلة الفردية، سيتم توفير نسخة من محاضر لوحات المناقشة عبر الانترنت، بطاقات لاصقة مرقمة، تعليمات لكيفية تحديد وتصنيف ردوري في المحاضر. حيث تتضمن هذة التعليمات تعاريف وأمثلة للمصطلحات التي ستم تحديدها على المحاضر. وانا أفهم أنه ستم تسليط الضوء على النصوص التي قمت بكتابتها كردود. سوف أقوم بقراءة ردودي على الطلبة الاخرين وأقوم بتحديد فئتي الوجود المعرفي (التكامل والدقة) وساقوم بوضع رقم البطاقة المعطاة لي.

٤- سأجيب على أسئلة المقابلة التي سوف تستغرق حوالي 45-60 دقيقة من وقتي وسوف يتم تسجيل الصوت.

٥- ستجرى المقابلة في نوفمبر نشرين الثاني، خلال أيام الاسبوع الدراسي وفقا لجدولي. بالاضافة الى ذلك، المقابلة ستضمن اسئلة حول تجاربي الماضية والحاضرة كمتعلمة عبر الانترنت، وبالاخص تجاربي مع لوحات المناقشة غير المتزامنة عبر الانترنت، ورأيي في استخدامها.

٦- من الممكن أن أشارك في مقابلات لاحقة حيث سيتم تسجيل الصوت.

أفهم أن:

- الفائدة الممكنة تشمل فهم أفضل للطرق التي يمكن أن تفيد بها منتديات النقاش الغير متزامنة على الإنترنت طالبات الجامعة السعوديات في تعلم اللغة الإنجليزية كلغة ثانية بشكل فردي و أثناء التفاعل مع الآخرين في بيئة التعلم عبر الإنترنت.

- الفائدة الأخرى قد تكون مساعدة الباحثين والمدربين في تكنولوجيا التعليم وتعليم اللغات في الحصول على نظرة حول كيفية تحسين مهارات تعلم الطالبات السعوديات عبر شبكة الإنترنت بشأن الاستفادة من استخدام منتديات النقاش الغير متزامنه على الإنترنت.

وأنا أدرك أن مشاركتي طوعية ويمكن سحبها في أي وقت دون عقوبة او تحمل مسؤولية، كما أن قراري في المشاركة لن يكون له تأثير على وضعي كطالبة. إذا كان لدي أي أسئلة إضافية بشأن هذه الدراسة، أنا قد اتصل بهنادي بخاري،٨١٥٩٠٩٥٧٤٣. وأنا أفهم أنه إذا كنت أرغب بمزيد من المعلومات بشأن حقوقي في المشاركة بالبحث، قد اتصل بمكتب البحوث في جامعة شمال إلينوي على الرقم ٨١٥٨٥٨٨٧٥٣ .

وفيما يتعلق بمعالجة البيانات:

وستبقى جميع المعلومات التي تم جمعها خلال هذه التجربة سرية عن طريق تخزينها بعناية على كمبيوتر يحتوي على كلمة سرية ولا يمكنالوصول اليه عبر الشبكة. سيتم تخزين البيانات المطبوعة في خزانة مغلقة في مكتب الباحثه الشخصية. بمجرد الانتهاء من الدراسة، سيتم تدمير جميع البيانات.

لن يتم الفصح عن هوية المشاركين في أنه لن يكشف اسم المشاركين بطريقة شفهية أو مكتوبة وستعطى المشاركات أسماء وهميه او ارقام بدلا من الاسم الحقيقي. وينطبق الشيء نفسه على أي من الأفراد والمؤسسات أو المنظمات الأخرى التي سيتم ذكرها في المقابلة من قبل المشاركات. بمجرد الانتهاء من الدراسة سوف تدمر الملفات الصوتية. وأنا أفهم أن موافقتي على المشاركة في هذا المشروع لا يشكل تنازلا عن أية حقوق قانونية قد تكون نتيجة لمشاركتي، وأعترف بأنني تلقيت نسخة من نموذج الموافقة.
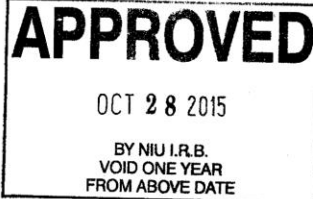
_____   _____

التاريخ   توقيع المشاركة

أنا أفهم أن المقابلات ستكون مسجلة صوتيا وأنا أوافق على أن يكون صوتي مسجل.

_____   _____

التاريخ   توقيع المشاركة

APPENDIX D

STUDENT CONSENT FORM (FOCUS GROUP INTERVIEW)

Appendix D

Consent to Participate in Research
(Focus Group Interview)

I agree to participate in the research project titled A Case Study Examining Perceptions of Female Saudi University Students Regarding the Use of Asynchronous Online Discussion Boards being conducted by Hanadi Bokhari a doctoral student in the department of Educational Technology, Research & Assessment at Northern Illinois University. As a participant, I have been informed that the purpose of the study is to explore undergraduate Saudi female students' perceptions of asynchronous online discussion boards as a learning tool and try to determine what factors help students' English as a second language learning.

I understand that if I agree to participate in this study, I will be asked to do the following:
- I will complete a demographic survey.
- I will email the researcher my reflection(s) about using online discussion boards during the English as a second language course.
- Prior to the start of the focus group interview, I will be provided with the online discussion board transcripts, a numbered sticky tag, and directions for labeling my responses to the transcripts. I understand that the transcript will be highlighted to indicate my responses. I will read my responses in relation to the other contributions on the transcript and identify the indicators (connecting ideas and application of ideas) of cognitive presence elements and attach the given number tag on the document I label.
- I will answer the focus group interview questions that will take approximately 60-90 minutes of my time and will be audio recorded.
- The focus group interview will take place in **November** and during the school week at the University and will work within my schedule. In addition, the focus group interview will include questions about my past and/or current experiences as online learner, particularly experiences with asynchronous online discussion boards, and my perceptions of using the asynchronous online discussion board.
- I may participate in a follow-up interview that will be audio recorded.

I understand that:
- A possible benefit includes better understanding the ways in which asynchronous online discussion boards can benefit undergraduate Saudi female students' development of learning English as a second language individually while interacting with others in an online learning environment.
- A benefit could be to help researcher and instructors in the educational technology and second language field gain insight into how to improve Saudi female students' learning skills in fully online course regarding the benefit of using asynchronous online discussion boards.

I understand that:
- A potential risks include a breach of confidentiality because of the focus group. Participants in the focus group might be able to identify each other, but will be asked to keep the information confidential. Audio recorded and the transcriptions of the focus group interview will be stored in a locked file cabinet in the researcher's personal office. Once the study is completed, all data will be destroyed.

I am aware that my participation is voluntary and may be withdrawn at any time without penalty or prejudice, and my decision to participate will have no impact on my status/standing as a student. that If I have any additional questions concerning this study, I may contact Hanadi Bokhari, 815-909-5743. I understand that if I wish further information regarding my rights as a research subject, I may contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588.

In regard to handling of data:
- All information gathered during this experiment will be kept confidential by carefully storing any hard copy and/or electronic data on a password protected directory not accessible via the network. Hard copy data will be stored in locked file cabinet in the researcher's personal office. Once the study is completed, all data will be destroyed.

- Participant identity will not be shared in that participants' name will not be divulged in a verbal or written manner and the participants will be given a number in place of name. The same is true of any other individuals and institutions or organizations that are mentioned in the interview by the participant. Once the study is completed the audio files will be destroyed. I understand that my consent to participate in this project does not constitute a waiver of any legal rights or redress I might have as a result of my participation, and I acknowledge that I have received a copy of this consent form.

_____

Signature of Subject   Date
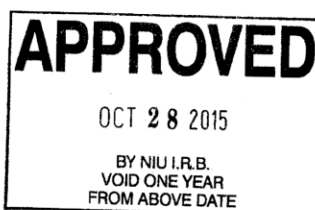
I understand that focus group interview will be audio-recorded and I agree to be audio-recorded.

_____

Signature of Subject   Date

APPROVED

OCT 2 8 2015

BY NIU I.R.B.
VOID ONE YEAR
FROM ABOVE DATE

Appendix D

الموافقة على المشاركة في بحث

(مقابلة المجموعة)

أوافق على المشاركة في مشروع بحثي بعنوان دراسة حالة دراسية تختبر تصورات طالبات الجامعة العربية السعودية فيما يتعلق باستخدام لوحات المناقشة الغير متزامنة عبر الانترنت والتي تجريها هنادي بخاري طالبة الدكتوراه في قسم تكنولوجيا التعليم والبحوث والتقييم في جامعة إلينوي الشمالية. كمشاركه، فقد بلغني أن الغرض من هذه الدراسة هو استكشاف تصورات طالبات الجامعة السعوديات حول منتديات النقاش الغير متزامن على الإنترنت كأداة للتعلم ومحاولة لتحديد ما هي العوامل المساعدة للطالبات السعوديات لتعلم اللغة الإنجليزية كلغة ثانية.

وأنا أفهم أنه إذا وافقت على المشاركة في هذه الدراسة، سيتم طلب مني القيام بما يلي:

١- سوف أقوم بالاجابة على الاسئلة الاستقصائية واتمامها.

٢- ساقوم بكتابة انطباعاتي حول لوحات المناقشة الغير متزامنة عبر الانترنت أثناء تعلم اللغة الانجليزية كلغة ثانية وارسالها عبر البريد الالكتروني للباحثة.

٣- قبل بداية المقابلة مع المجموعة، سيتم توفير نسخة من محاضر لوحات المناقشة عبر الانترنت، بطاقات لاصقة مرقمة، تعليمات لكيفية تحديد وتصنيف ردودي في المحاضر. حيث تتضمن هذه التعليمات تعاريف وأمثلة للمصطلحات التي ستم تحديدها على المحاضر. وانا أفهم أنه ستم تسليط الضوء على النصوص التي قمت بكتابتها كردود. سوف أقوم بقراءة ردودي على الطلبة الاخرين وأقوم بتحديد فئتي الوجود المعرفي (التكامل والدقة) وساقوم بوضع رقم البطاقة المعطاة لي.

٤- سأجيب على أسئلة المقابلة التي سوف تستغرق حوالي ٤٥-٦٠ دقيقة من وقتي وسوف يتم تسجيل الصوت.

٥-ستجرى المقابلة في نوفمبر نشرين الثاني، خلال أيام الاسبوع الدراسي وفقا لجدولي. بالاضافة الى ذلك، المقابلة ستضمن اسئلة حول تجاربي الماضية والحاضرة كمتعلمة عبر الانترنت، وبالاخص تجاربي مع لوحات المناقشة غير المتزامنة عبر الانترنت، ورأيي في استخدامها.

٦- من الممكن أن أشارك في مقابلات لاحقة حيث سيتم تسجيل الصوت.

أفهم أن:

• الفائدة الممكنة تشمل فهم أفضل للطرق التي يمكن أن تفيد بها منتديات النقاش الغير متزامنة على الإنترنت طالبات الجامعة السعوديات في تعلم اللغة الإنجليزية كلغة ثانية بشكل فردي و أثناء التفاعل مع الآخرين في بيئة التعلم عبر الإنترنت.

• الفائدة الأخرى قد تكون مساعدة الباحثين والمدربين في تكنولوجيا التعليم وتعليم اللغات في الحصول على نظرة حول كيفية تحسين مهارات تعلم الطالبات السعوديات عبر شبكة الإنترنت بشأن الاستفادة من استخدام منتديات النقاش الغير متزامنه على الإنترنت.

أفهم أن:

- المخاطر المحتملة قد تشمل خرق السرية بسبب مجموعة التركيز. المشاركات في المجموعة قد يكن قادرين على التعرف على بعضهم البعض، ولكن سيطلب الحفاظ على سرية المعلومات. وسيتم حفظ التسجيل الصوتي و محاضر مقابلة مجموعة التركيز في خزانة مغلقة في مكتب الباحث الشخصية. بمجرد الانتهاء من الدراسة، وسيتم تدمير جميع البيانات.

وأنا أدرك أن مشاركتي طوعية ويمكن سحبها في أي وقت دون عقوبة او تحمل مسؤولية، كما أن قراري في المشاركة لن يكون له تأثير على وضعي كطالبة. إذا كان لدي أي أسئلة إضافية بشأن هذه الدراسة، أنا قد اتصل بهنادي بخاري،٨١٥٩٠٩٥٧٤٣. وأنا أفهم أنه إذا كنت أرغب بمزيد من المعلومات بشأن حقوقي في المشاركة بالبحث، قد اتصل بمكتب البحوث في جامعة شمال إلينوي على الرقم ٨١٥٨٥٨٨٧٥٣.

وفيما يتعلق بمعالجة البيانات:
وستبقى جميع المعلومات التي تم جمعها خلال هذه التجربة سرية عن طريق تخزينها بعناية على كمبيوتر يحتوي على كلمة سرية ولا يمكنالوصول اليه عبر الشبكة. سيتم تخزين البيانات المطبوعة في خزانة مغلقة في مكتب الباحثه الشخصية. بمجرد الانتهاء من الدراسة، سيتم تدمير جميع البيانات.

لن يتم الفصح عن هوية المشاركين في أنه لن يكشف اسم المشاركين بطريقة شفهية أو مكتوبة وستعطى المشاركات أسماء وهميه او ارقام بدلا من الاسم الحقيقي. وينطبق الشيء نفسه على أي من الأفراد والمؤسسات أو المنظمات الأخرى التي سيتم ذكرها في المقابلة من قبل المشاركات. بمجرد الانتهاء من الدراسة سوف تدمر الملفات الصوتية. وأنا أفهم أن موافقتي على المشاركة في هذا المشروع لا يشكل تنازلا عن أية حقوق قانونية قد تكون نتيجة لمشاركتي، وأعترف بأنني تلقيت نسخة من نموذج الموافقة.
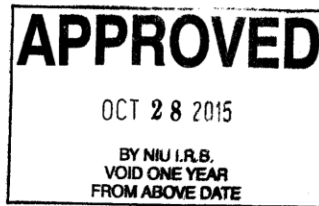
_____

التاريخ   توقيع المشاركة

أنا أفهم أن المقابلات ستكون مسجلة صوتيا وأنا أوافق على أن يكون صوتي مسجل.

_____

التاريخ   توقيع المشاركة

APPROVED
OCT 28 2015
BY NIU I.R.B.
VOID ONE YEAR
FROM ABOVE DATE

APPENDIX E

PERMISSION LETTER FOR COMMUNITY OF INQUIRY MATERIALS

08/26/2016

D. RANDY GARRISON

21 Edgebrook Green N. W.

Calgary, Alberta T3A 4N2

Dear Dr.Garrison:

I am in the process of creating my dissertation. I would like your permission to include the following material in this project: The figure shows the three essential elements: cognitive presence, social presence, and teaching presence named communication medium., the table shows Community of Inquiry categories and indicators that divided to three columns and four rows, and the figure for the practical inquiry model.

The project (A case study examining perceptions of female Saudi university students regarding the use of asynchronous online discussion boards) will be used to explore undergraduate Saudi female students' perceptions of using asynchronous online discussion boards as a learning tool and try to determine what factors emerge that helped their learning. This study sought to add to knowledge about how asynchronous online discussion forums can benefit undergraduate Saudi female students' development of learning. It will be available to all people such as teachers, students, instructional designers who are focusing on online or distance learning, and any one care about teaching and learning via technology. This project might be published through my university (Northern Illinois University), ProQuest, or other journals.

If you do not control the copyright on all of the above mentioned material, I would appreciate any contact information you can give me regarding the proper rights holder(s), including current address(es). Otherwise, your permission confirms that you hold the right to grant the permission requested here. Permission includes non-exclusive world rights in all languages to use the material and will not limit any future publications-including future editions and revisions-by you or others authorized by you.

I would greatly appreciate your consent to my request. If you require any additional information, please do not hesitate to contact me. I can be reached at:

Email address: hanadi.mmm@gmail.com

Phone number: (815)909-5743

A duplicate copy of this request has been provided for your records. If you agree with the terms as described above, please sign the release form below and send one copy to the email address I provided above.

Sincerely,

Hanadi Bokhari

Permission granted for the use of the material as described above:

Agreed to: _____   Name & Title: _Prof. Emeritus_

Company/Affiliation: _U of Calgary_   Date: _9/3/2016_

1