ASYNCHRONOUS ONLINE LEARNING MOTIVATION EXPERIENCES FOR COMMUNITY COLLEGE DEGREE-SEEKING NON-TRADITIONAL ADULT LEARNERS: A QUALITATIVE STUDY

by

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Abstract

The purpose of this transcendental phenomenological study is to discover the asynchronous online learning experiences that support learning motivation for community college degree-seeking non-traditional adult learners in the United States. The theoretical framework guiding this study is Knowles' andragogy adult learning theory. The utilization of Moustakas' analysis of transcendental phenomenology utilized epoché, or the removal of personal bias, and the focus of Moustakas' bracketing of the central research question. The central research question is: How do community college degree-seeking non-traditional adult learners experience motivation in the asynchronous online learning environment? The study consisted of 10 degree-seeking non-traditional adult learners who completed an asynchronous online course for degree credit at a community college in the United States. Data collections utilized Moustakas' data analysis to discover the essence of the phenomena utilizing three data collections: feedback surveys, interviews, and letter-writing. The research data was synthesized using summarized composite descriptions and triangulation.

Keywords: andragogy, asynchronous learning, non-traditional adult learner, online learning, learner motivation

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Dedication

I dedicate this to my husband, Dwayne A. Gartland, who supported and encouraged me throughout this journey.

Acknowledgments

I would like to thank my committee chair, Dr. James Sigler, for his incredible passion, support, guidance, and knowledge. Dr. Nicole Baker, another contributor, also provided support and guidance throughout this project.

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List of Abbreviations

Community of Inquiry (CoI)

Learning Management System (LMS)

Massive Online Open Course (MOOC)

Non-traditional Adult Learner (NAL)

CHAPTER ONE: INTRODUCTION

Overview

Non-traditional adult learners have unique needs and characteristics that differ from the traditional learners in the higher education realm (Lanford, 2021; Mara, 2021; Rothes et al., 2022; Shi & Lin, 2021; Singh, 2019; Singh et al., 2021; Stephen et al., 2020). Chapter One covers the research topic background, research problem, study purpose, research significance, research questions, and definitions associated with NALs and the online learning environment. The background explains the relevant historical, social, and theoretical literature about the needs, characteristics, and behaviors of non-traditional adult learners who engage in online learning. The theoretical, empirical, and practical perspectives explain the research study's significance. The research questions are centered on understanding the community college degree-seeking NAL experiences that support motivation in asynchronous online learning. The definitions for this research study are listed and defined in the last section of Chapter One. Chapter One introduces and frames the phenomenological research study about community college degree-seeking non-traditional adult learners (NAL) in the asynchronous online learning environment.

Background

The background section explains the historical, social, and theoretical aspects of online learning for the non-traditional adult learner. The historical context section describes the evolution of the online learning environment. Next, the social context section explains the societal influence of non-traditional adult learners in the online learning environment and the impact on adult learners, academic institutions, and communities. Finally, the theoretical context section defines the theoretical, conceptual, and scholarly work associated with the non-traditional adult learner in the online learning environment.

Historical Context

The delivery of education has seen drastic changes due to internet access and the increased use of digital technologies across the globe (Ferrer et al., 2022; Jiang et al., 2021; Malysheva et al., 2022; Trivedi et al., 2022). From 2002 to 2012, there was a 350% increase in online enrollments in United States higher education academic institutions (Alqurashi, 2022), which continues to grow (Choi, 2022). Online learning uses the internet and online technology (Singh & Thurman, 2019). It can be in a synchronous or asynchronous setting. In the synchronous setting, instruction and learning occur online with real-time collaboration (Zeng & Luo, 2023). The asynchronous setting is where teaching and learning can occur at the convenience of the student without real-time interaction (Singh & Thurman, 2019; Zeng & Luo, 2023). There has been an increase in NAL enrollment in distance learning at academic institutions over the last decade (Biney, 2022; Jiang et al., 2021). The emergence of societal technology literacy demands, technology innovations, and changing workforce skills have forced adult learners back into the higher education setting (Biney, 2022; Singh, 2019). NALs often apply newly obtained knowledge immediately by solving problems in their lives and the workforce setting (Jiang et al., 2021). Many higher education institutions seek formal and informal ways to educate the adult learner population (Diep et al., 2019; Mews, 2020; Muir et al., 2019; Yun & Park, 2020). No universal approach fits all learners within education today (Francis et al., 2019; Lynch et al., 2021; Singh et al., 2022). However, with more research, understanding, and improvements, the online learning environment can meet the needs of traditional, non-traditional, and diverse learning groups (Singh et al., 2022). Research studies are contradictory regarding student academic achievement in online learning asynchronous and synchronous learning formats, which suggests the need for more research studies with these

online course formats (Zeng & Luo, 2023). Therefore, there is a need to address the knowledge gap in online learning technologies for knowledge attainment, skill development, and academic achievement in higher education (Alqurashi, 2022; Singh et al., 2022).

Social Context

NALs have struggles that should be considered within higher education (Francis et al., 2019; Mason & Atkin, 2021.) Research studies focus less on the adult learner (Brunton & Buckley, 2021). In the recent research literature, some NALs are perceived as deficient in the university setting (Bahr et al., 2023; Fensie, 2023; Lu et al., 2022; Siivonen & Filander, 2020). Non-traditional learners are often first-generation college students and face challenges with persistence in education (Blake et al., 2023; Deng & Yang, 2021; Fensie, 2023; Sagna & Vaccaro, 2022). Academic institutions must consider the relationship between psychological well-being and the technological proficiency of learners (Black et al., 2020). Furthermore, Black et al. (2020) assert that psychological well-being, such as hope, efficacy, resilience, and optimism for the generational cohorts of NALs, must be examined to ensure that effective online learning environments are provided to learners.

Therefore, to implement effective learning, humility, respect, listening, comprehension, and dedication must be involved (Goel & Kumar, 2018). With online learning, NALs have social roles and practical problem resolutions that drive continued education (Jiang et al., 2021). Continuous online learning improvement efforts are transforming the traditional face-to-face model into a solid, sustainable online model explicitly designed for NALs (Ngafeeson, 2022). However, these online learning advancement efforts are confronted with the online education market competition by enrollment decreases (Chan Ie Lyn & Muthuveloo, 2019; MacDonald, 2019; Ngafeeson, 2022; Specht-Boardman et al., 2021) and faculty motivation challenges

associated with perceived inefficient online education (Kara & Yildirim, 2022). The benefits can be shared with educators, academic institutions, and communities seeking to boost educator enthusiasm by further understanding the experiences that promote learning motivation and course completion (Collom et al., 2021) for community college degree-seeking NALs in the asynchronous online learning environment. Online course improvements may encourage student motivation in learning and improve academic achievement (Loock et al., 2022; Salikhova et al., 2021) for community college degree-seeking NALs.

Theoretical Context

The theoretical framework uses andragogy to focus on the adult learner's needs (Knowles, 1984). Andragogy focuses on the learner's desire to obtain knowledge, the need to control their learning experiences, and resolve problems with lifelong learning (Mara, 2021; Moore, 2020; Youde, 2020). Bullington et al. (2021) research study used the andragogy model to determine how NALs in the science, technology, engineering, and math (STEM) fields learn and develop a sense of belonging and value within the online community. According to Jiang et al. (2021), the Community of Inquiry (CoI) framework was used for the online learning structure since it has cognitive, teaching, and social presence that promotes self-regulation in NALs in the online learning environment. A keen sense of community has been shown to improve adult learners' self-efficacy, academic involvement, and socialization (Bullington et al., 2021; Carl, 2019; Lu et al., 2022; Moore & Shemberger, 2019). Learners who engage in building relationships show professional growth as well as personal growth (Anderson & Boutelier, 2021). Relationship building could be utilized with adult learners using service learning, a type of experiential learning tied to some community service or encounter that builds relationships within the community and with potential future employers (Abeni, 2020; Roe, 2022). Online

learning contexts can be based on andragogy, where the instruction needs to be learner-centric and presented to life experiences (Brieger et al., 2020; Moore, 2020; Tipton & Wideman, 2021; Youde, 2020). The principles of andragogy have been shown to impact non-traditional adult learning significantly (Jiang & Koo, 2020), along with the instructional components such as environment setting, learner and teacher co-planning, learning objectives development, and user experience design (Braxton, 2020). The learner's self-directed and self-reliance skills improve when course designs are based on andragogy frameworks, which provide customized content for the adult learner (Mann & Willans, 2020). There is a need further to research various aspects of online community engagement of NALs since andragogy focuses on learner independence (Abedini et al., 2021), and there is a lack of empirical evidence with phenomenological research (Agonács & Matos, 2019; Moore, 2020). By further exploring the asynchronous online learning education experience for community college degree-seeking non-traditional adult learners, educators can enhance the asynchronous online learning experience to improve non-traditional adult learner education motivation, which helps with course completion and academic persistence (Jiang & Koo, 2020).

Problem Statement

The problem is that non-traditional adult learners in community colleges have perceived challenges in online learning; therefore, they are more likely to struggle with academic course completion, persistence, and degree attainment (Bahr et al., 2022; Collom et al., 2021; Cummins et al., 2022; MacDonald, 2019; Miller & Weiss, 2022; Singh et al., 2021; Steinhauer & Lovell, 2021). Non-traditional adult learners are 25 years or older, work and support families, experience a break in education, and do not rely on their parents for social support (Kasworm, 2018; Singh, 2019; Singh et al., 2021). These adult learners pursuing technical degrees are

autonomous, self-directed, and learning decision-makers (Diep et al., 2019). With work and family responsibilities, non-traditional adult learners have limited time for education (Rothes et al., 2022; Shi & Lin, 2021). The online learning environment gives the adult learner access and flexibility to continuing education (Moore, 2020). Non-traditional adult learners comprise 38.2% of higher education students (Singh et al., 2021). This increased demand for knowledge and skill attainment forces educators to produce more effective instruction in the online learning platform for non-traditional adult learners (Allen et al., 2022; Marrhich et al., 2021). With asynchronous online learning, the overall user engagement experience must be considered in the instructional design with interactive features that require student-to-instructor, student-to-student, or student-to-content connections (Knowles et al., 2022). Online learning educators should consider the asynchronous online course instructional experiences that support learning motivation for course completion of NALs to design and implement more impactful instruction for improving motivation, academic achievement, and course completion for NALs (Bolliger & Martin, 2018; Gardner et al., 2021; Lin & Sun, 2022; Rothes et al., 2022).

Purpose Statement

The purpose of this transcendental phenomenological study is to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States. At this research stage, course experiences described by community college degree-seeking non-traditional adult learners in the asynchronous online learning environment will be generally defined as online course experiences that motivate learning community college degree-seeking non-traditional adult learner participants.

Significance of the Study

This theoretical significance focuses on understanding the unique asynchronous online learning course experiences that support learning motivation and academic performance for community college degree-seeking non-traditional adult learners and is based on the theoretical perspectives of Knowles' andragogy learning theory. Previous research on non-traditional adult learners focuses on the characteristics of the learner (Çakiroğlu & Atabay, 2022; Mara, 2021; Shi & Lin, 2021) along with internal and external factors (Abedini et al., 2021; Arghode et al., 2018; Blake et al., 2023; Bok, 2021; Lu et al., 2022; Stephens et al., 2022) that influence the online learner. The Knowles (1984) andragogy learning theory explains that adult learners have specific physical, social, and cognitive needs (Shi & Lin, 2021). Adult learners need various forms of academic support that take their backgrounds, experiences and needs into consideration to be successful in their pursuit of postsecondary education (Lanford, 2021). Andragogy is a tool to recognize learning gains for adults (Stanney et al., 2023).

The empirical significance of this study is described with references to similar studies for the non-traditional adult learner in the online learning setting (Singh et al., 2021; Steinhauer & Lovell, 2021). According to Rotar (2022), further research is needed to explore support strategies and interventions in the online learning higher education realm. Recent studies focus on adult learning (Abedini et al., 2021; Collom et al., 2021; MacDonald, 2019; Sagna & Vaccaro, 2022; Singh et al., 2021); however, there is a need for more research on effective design methods and techniques to support adult learners (Collom et al., 2021; Haddock et al., 2020; Lu et al., 2022). Adult learners are more receptive to online instruction when it applies to their work and life experiences (Moore & Shemberger, 2019). However, there is still a need to understand the requirements of the adult learner in the online setting (Kasworm, 2018; James, 2022; Jiang & Koo, 2020). According to the Akintolu and Letseka (2021) research study, there needs to be

more clarity between what facilitators view as the needs of adult learners and the reality of what adult learners require from the online learning environment. Furthermore, Akintolu and Letseka (2021) recommended involving adult learning systems experts to develop and implement adult education programs. Agonács and Matos (2019) searched journal databases to study self-directed learning, determining that self-directed learning approaches are used heavily in online and blended learning environments, and there is a need for more longitudinal studies.

The practical significance of this research study is to obtain knowledge that educators and academic institutions can use to improve asynchronous online course completion rates by cultivating internal motivation for community college degree-seeking non-traditional adult learners. NALs struggle to balance life and school (Bengo, 2020; Roofe et al., 2022). NALs prefer the flexibility of online learning since it allows them to manage professional, family, and work obligations (Gravani, 2019). NALs need to take control of academic performance improvements with methods designed with their needs in mind (Low et al., 2021). NALs are just as focused on goal achievement as traditional students (Bengo, 2020). Therefore, online learning should prioritize the learner's experience and encourage collaboration between student and teacher for a more effective and engaging experience (Owusu-Agyeman et al., 2018). By analyzing the community college degree-seeking non-traditional adult learners, using qualitative approaches, and involving student participants, educators can learn how to enhance the asynchronous online course designs for improved learner internal motivation, academic achievement, and course completion (Collom et al., 2021; Lanford, 2021; Miller & Weiss, 2022).

Research Questions

Questions for phenomenological research studies capture life experiences (Moustakas, 1994). Research questions must be open-ended, broad, and concentrated on the study

phenomenon (Creswell & Poth, 2016) so knowledge can be obtained through details of the experience (Moustakas, 1994). The questions guide the investigation process and must be carefully constructed to allow for phenomenological reflection (Moustakas, 1994). The research questions should have social value and individual importance (Moustakas, 1994). With phenomenological studies, the questions should originate from the researcher's significant interest in a subject (Moustakas, 1994). These questions will be used to obtain research data from study participants to understand further the asynchronous online learning experience for community college degree-seeking non-traditional adult learners.

Central Research Question

How do community college degree-seeking non-traditional adult learners experience motivation in the asynchronous online learning environment?

Sub-Question One

What asynchronous online learning forms of engagement motivate community college degree-seeking non-traditional adult learners?

Sub-Question Two

What asynchronous online learning behaviors motivate community college degree-seeking non-traditional adult learners?

Sub-Question Three

How do instructors perceivably impact the motivation of community college degree-seeking non-traditional adult learners?

Definitions

The following terms are important for this study and are listed and defined in this closing section of Chapter One for further clarification.

1. *Adult learners* – Considered autonomous and self-directed learners who want to be actively involved in learning decisions (Diep et al., 2019).
2. *Asynchronous online learning* – An online learning environment that does not require learners and instructors to meet and interact, which allows learners to work within their schedules and passively interact in the course (Zeng & Luo, 2023).
3. *Community of Inquiry (CoI)* – A process of developing online collaborative teaching and learning frameworks that contain cognitive, teaching, and social presence (Jiang et al., 2021).
4. *Non-traditional adult learners* - Adult learners who are 25 years of age or older, work and support families, experienced a break in education, and are independent of their parents for social support (Kasworm, 2018; Singh, 2019; Singh et al., 2021) These adult learners have different goals and priorities compared to traditional college students (Jiang et al., 2021).
5. *Online learning* – Computer-based learning environment (Schunk, 2019).
6. *Self-directed learning* – A learning process where people take the initiative to plan, execute, and evaluate their learning experiences (Merriam & Baumgartner, 2020).
7. *Synchronous online learning* – An online learning environment that requires learners and instructors to meet online and interact using technology for real-time interaction (Zeng & Luo, 2023).

Summary

Chapter One introduced the background for this phenomenological study of community college degree-seeking non-traditional adult learners in the asynchronous online learning environment. Since the early 2000s, there has been a steady increase in the use of digital

technologies for education offerings (Jiang et al., 2021). The social context of this study involves educational experience improvements for non-traditional adult learners and helping to build a more robust, sustainable digital offering for academic institutions (Ngafeeson, 2022). The theoretical context of this research study aligns with the andragogy learning theory approach. Adult learner needs are the focus of andragogy (Knowles, 1984). The problem is that non-traditional adult learners in community colleges have perceived challenges in online learning; therefore, they are more likely to struggle with academic course completion, persistence, and degree attainment (Bahr et al., 2022; Collom et al., 2021; Cummins et al., 2022; MacDonald, 2019; Miller & Weiss, 2022; Singh et al., 2021; Steinhauer & Lovell, 2021). Many non-traditional adult learners are faced with pursuing higher education knowledge and skills due to workforce demands and are met with numerous challenges (Lanford, 2021), such as work, family, and social responsibilities that compete with education time management (Shi & Lin, 2021). Online learning provides flexibility and access to education for non-traditional adult learners, which offers life enrichment opportunities (Moore, 2020). The purpose of this transcendental phenomenological study is to discover the asynchronous online learning experiences that support learning motivation for non-traditional adult learners in the United States. Learners' basic psychological needs are fulfilled by internal motivation and are supported by environmental factors (Salikhova et al., 2021; Yun & Park, 2020). This research will provide insight addressing the knowledge gap for community college degree-seeking non-traditional adult online learners' experiences in the asynchronous online learning environment. This research study could perceivably be used to improve asynchronous online course designs and implementations to reach the goal of increasing the learning motivation of community college

degree-seeking non-traditional adult learners for academic achievement with course completion in the United States.

CHAPTER TWO: LITERATURE REVIEW

Overview

A systematic literature review will be conducted to explore the non-traditional adult learner experiences and characteristics that support learning motivation in the online learning environment. Chapter Two presents a review of the current literature related to the topic of study. First, the guiding theory of andragogy is discussed, followed by a synthesis of recent literature about learning motivation for non-traditional adult learners in the online learning environment. Then, literature related to specific characteristics, internal and external factors, needs and behaviors of adult learners that contribute to motivation, and how instructional techniques cater to those learners' needs to enhance the learning experience. Finally, the need for the current study will be addressed by identifying a gap in the literature regarding how motivational techniques can be used within online course instructional designs to improve the learning motivation experiences for the NAL.

Theoretical Framework

This literature review will examine how the learning theory of andragogy relates to non-traditional online adult learners. The learning theory of andragogy focuses on adult learning and the life condition connection (Knowles, 1984). This learning theory impacts non-traditional adult learning and can be used to understand how to improve the adult learning experience (Abeni, 2020; Knowles, 1984; Merriam & Baumgartner, 2020).

Theory of Andragogy

Malcom Knowles introduced the framework for adult learning in the 1980s. Knowles introduced andragogy in his 1984 book *The adult learner: A neglected species*. Knowles (1984) states that andragogy roots came from Harry Overstreet, Edmund Brunner, J.R. Gibb, J.R. Kidd,

and Harry L. Miller from the late 1940s to the 1960s. These frameworks were just descriptive concepts instead of a comprehensive, integrated theory to define adult learning (Knowles, 1984). Knowles spent two decades formulating his theory based on adult learners' uniqueness and experiences. Knowles (1984) argued that pedagogy is the art of teaching children and is not an effective framework for adult education. Andragogy connects the adult learner and the life condition connection (Knowles, 1984; Mews, 2020; Tipton & Wideman, 2021). There are six assumptions of adult learners: 1) self-concept, 2) prior experience of the learner, 3) readiness to learn, 4) orientation to learning, 5) motivation to learn, and 6) the need to know why the learning is essential (Knowles, 1984; Merriam & Baumgartner, 2020; Roessger et al., 2022). The andragogy learning preference is high-ranking in thriving Western countries where the learner's basic and psychological needs are met (Roessger et al., 2022).

The Knowles (1984) andragogy theory focuses on adult learning, and this theory is the basis for understanding non-traditional adult learning. According to Knowles (1984), culture did not support the development of self-sufficiency and self-direction skills required for adult education. Learners must understand how a learning experience is important for their lives (Knowles, 1984). As humans grow from children into adults, they experience changes in how they see themselves. As adults move into the workforce, they take responsibility for their behaviors and actions by being self-directed (Knowles, 1984). After this growth period, the adolescent identity issues have been addressed, and they are now in adulthood (Knowles, 1984). Adult thinking and problem-solving change as adults go through life with programmed experiences, psychotherapy, adult education, and unprogrammed experiences such as marriage, parenting, and career movements (Knowles, 1984). Cognitive styles must be considered in education since each age level of adulthood has differences as life experiences broaden

(Knowles, 1984). Social role performance with careers, leisure, and other societal activities drives the adult learner's willingness and readiness to learn (Knowles, 1984). With the orientation to learning, adult learners need to address life problems and seek education to solve them (Knowles, 1984).

With andragogy, teaching principles must change to accommodate the adult learner, and the instructor helps accommodate this learner (Knowles, 1984). When learners experience the desire to learn, the instructor must offer self-fulfillment to them (Knowles, 1984). The instructor can assist with behavior modification to help the learner achieve learning goals (Knowles, 1984; Wang et al., 2021). Behavior modification involves assessments to eliminate the gap in performance and adult learner ambitions (Knowles, 1984). The teacher can help learners recognize issues in external factors (Knowles, 1984; Lu et al., 2022). The adult learner must be in a welcoming environment with individual value recognition, mutual trust, respect, and comfort (Knowles, 1984). Adult learners see learning objectives as goals and prefer to work with the instructor to formulate them (Lin et al., 2023; Knowles, 1984). Adult learners prefer to share in the learning responsibilities, which builds commitment to learning in the adult learner (Knowles, 1984; Note et al., 2021). Adult learners are active participants in learning, and the instructor must take this approach into account with group activities, collaborative teamwork, and independent learning activities (Knowles, 1984). Adult learning is tied to life experiences, and instructors must make learning experiences relatable with open dialog, role-playing, and real-world learning activities (Knowles, 1984). Adult learners want to track goal achievement progression (Knowles, 1984). The instructor facilitates new learning applications so the adult learner can integrate them with life experiences, giving meaning to the learning (Knowles, 1984). The instructor and adult learner develop goal attainment acceptance criteria measuring adult

learner progress and developing procedures to reflect on learner self-evaluation (Knowles, 1984; Stephen et al., 2020; Zhou et al., 2021).

Exploring and understanding andragogy can enhance the adult learning experience for optimal academic success (Galustyan et al., 2019; Machynska & Boiko, 2020). Adult learners want to control their learning experience and are independent and self-directed (Diep et al., 2019; Knowles, 1984). Andragogy emphasizes that teachers must focus on course objectives and delivery methods that promote self-determined learning (Martínez & Muñoz, 2021). Modern views of andragogy focus on unrestricted access to education (Galustyan et al., 2019). The online learning environment empowers learners by allowing knowledge construction using social media, online tools, and mobile devices (Baldwin & Krishnamurti, 2021; Trivedi et al., 2022). With informal and collaborative learning, the learner can interact with the environment, other people, and teams by exercising self-directedness (Glaister et al., 2023; Gronseth & Bauder, 2022). Adult learners prefer autonomy and self-direction more than online peer collaboration (Youde, 2020). Andragogy has evolved to align learning with life's needs, problems, and experiences (Galustyan et al., 2019).

Related Literature

Non-traditional adult learners in the online learning environment have unique experiences and characteristics that influence learning motivation and academic achievement results (Singh, 2019; Singh et al., 2021). Online course offerings allow non-traditional adult learners to obtain the knowledge and skills necessary for career development and personal enrichment (Blake et al., 2023; Loock et al., 2022). The literature review explains the characteristics of NALs, the online learning environment, effective online learning behaviors, engagement strategies, online course instructor role, online instructional design considerations, and motivational factors. By

examining existing research, educators can understand how the online learning experience impacts learning motivation, academic achievement, and course completion of NALs (Gardner et al., 2021; Lin & Sun, 2022).

Non-Traditional Adult Learner

Non-traditional adult learners are 25 years or older, have family and work responsibilities, have a break from formal schooling, and are socially independent of their parents (Kasworm, 2018; Singh, 2019; Singh et al., 2021). There is a need to understand the differences in learning needs for traditional adult students and non-traditional adult learners (Rothes et al., 2022). Traditional adult students attend college full-time after high school graduation (Carreira & Lopes, 2021; Xing & Gordon, 2023). Non-traditional adult learners have been referred to as adult learners, mature students, or adult students (Rothes et al., 2022). Regarding online learning, most NALs have family and job responsibilities that compete with learning (Collom et al., 2021; Rothes et al., 2022; Shi & Lin, 2021; Singh et al., 2021; Spencer et al., 2023). NALs have personal learning preferences, and educators must understand them to deliver quality learning experiences (Cherrstrom et al., 2019; Gardner et al., 2021). According to Singh et al. (2021), 38.2% of higher education students are NALs, and 10% of all undergraduate students are 40 or older. Even with this adult learner population consistently increasing, the graduation rates are lower than traditional 18- to 22-year-old students (MacDonald, 2019; Sagna & Vaccaro, 2022). Only 22% of NALs attending for-profit academic institutions graduate, and 65% of full-time NALs quit (MacDonald, 2019). Scholars suggest this discrepancy is due to the need for more support and retention strategies for NALs (Carreira & Lopes, 2021; MacDonald, 2019; Sagna & Vaccaro, 2022). These high attrition rates impact postsecondary academic institutions to the point where schools like ITT Technical Institute and Corinthian Colleges have

closed (MacDonald, 2019). In 2019, the University of Phoenix was forced to close campuses and cut employees due to high student attrition (MacDonald, 2019). This situation leaves students with debt, unfinished degrees, and non-transferable college credits (MacDonald, 2019).

Economic Influences

Economic influences drive NAL's need to return to college, such as career advancement, career changes, job loss, divorce, or to satisfy family obligation needs (Mara, 2021; Singh, 2019; Singh et al., 2021; Steinhauer & Lovell, 2021). Some NALs need more resources and experience challenges with hardships such as finances (Carreira & Lopes, 2021; Collom et al., 2021). Online NALs have different levels of academic preparedness and expectations for online courses (James, 2022). NALs must transition back into the educational environment with minimal challenges and disappointments that hinder academic perseverance (Specht-Boardman et al., 2021).

NALs help stimulate the economy with more skills that lead to more earnings (Bragg et al., 2021; James, 2022), which has impacted the nation to the point where policymakers are exploring options to provide free education and student transition support services to these NALs (Collom et al., 2021). Today, many graduate students are unprepared for the workforce needs based on employer claims (Roe, 2022; Specht-Boardman et al., 2021). The federal government invested more than $2 billion into community college federal grants nationwide to combat the Great Recession's effect with the increased demand to train unskilled workers (Bragg et al., 2021). With the decline of traditional students, higher learning institutions are expanding outreach efforts to NALs who need skill updates to meet the demands of employers' needs (Specht-Boardman et al., 2021). There is a need to further investigate the retention and

completion rates, especially for higher education institutions with many struggling student populations (Muir et al., 2019).

Adult Learner Characteristics

Adult learner characteristics must be considered for flexibility and accessibility in online learning (Shi & Lin, 2021). NALs are self-directed and take control of their education (Çakiroğlu & Atabay, 2022; Diep et al., 2019; Knowles, 1984; Shi & Lin, 2021). NAL's study habits are shaped by personal responsibility, professional responsibility, and social experiences (Çakiroğlu & Atabay, 2022). Successful NALs possess technical skills, communication skills, academic self-concept, collaborative learning skills, effective time management, self-direction skills, and cognitive learning techniques (Mara, 2021; Shi & Lin, 2021).

Situational Challenges. Situational challenges for NALs can hinder progress (Shi & Lin, 2021). The situational challenges include time restraints, financial stressors, and emotional support needs (Shi & Lin, 2021). NALs face identity changes (Brunton & Buckley, 2021; Knowles, 1984) and are more likely to struggle and withdraw from college due to life challenges (MacDonald, 2019; Sabri et al., 2022; Singh et al., 2021; Spencer et al., 2023). However, online learning can help NALs overcome time and work conflicts (Shi & Lin, 2021).

Dispositional Challenges. Dispositional challenges such as learner self-esteem, academic confidence level, and academic institution support impact adult learning (Shi & Lin, 2021). Some NALs experience hardships such as college life-relatedness and confidence issues (Collom et al., 2021). Some NALs experience negative thoughts about themselves due to past academic failures (Rothes et al., 2022). NAL disposition can discourage or encourage goal achievement (Rothes et al., 2022).

Institutional Challenges. Institutional challenges for NALs relate to class availability, NAL stigma, and faculty support concerns (Shi & Lin, 2021). The NALs have difficult college entrance experiences and other impediments that discourage continuing education (Collom et al., 2021). Academic institutions should consider improving NAL support services such as online tutoring, academic advising, and technical support for NALs (Blake et al., 2023; Ren, 2023). Increased institutional support promotes social and economic justice for NALs and other student populations that struggle with persistence (Rothes et al., 2022).

Online Tutoring. Online tutoring can help NALs with course navigation (Ren, 2023). Some NALs prefer the personal connection of a tutor to guide them through learning content (Lee, 2021). Tutoring helps NALs understand where they are struggling and help them overcome the struggles (Klauth & Garza Mitchell, 2023). Tutoring for NALs is an intervention that allows NALs to obtain desired outcomes and persist academically (Klauth & Garza Mitchell, 2023)

Academic Advising. Academic advising can help NAL's online learning success (Ren, 2023). Academic advisors must understand the characteristics and needs of NALs to advise NALs effectively (Borup et al., 2020). NAL advisors must understand the elements of online learning when advising for that modality (Borup et al., 2020). Adequate NAL support requires advisors to understand the necessary level of engagement for NAL online learning success and assess the NAL's abilities to engage in successful online learning (Borup et al., 2020).

Technical Support. Technical support can help NALs develop digital literacy (Diep et al., 2019). Technical assistance can reduce learner anxiety (Diep et al., 2019). Some NALs may require technical support for software issues (Lebens, 2022). Other considerations for NAL technical support include academic institutions providing access to loaner laptops and internet connections to reduce online course participation issues (Lebens, 2022).

Adult Learning Internal and External Factors

Adult learning internal and external factors influence the learning experience of NALs (Blake et al., 2023; Knowles, 1984; Lu et al., 2022). Influences of online adult learning are associated with age, efficacy, and motivation (Abedini et al., 2021; Lu et al., 2022). However, there are conflicting studies relating gender, age, race, and career experiences with participation and academic achievement for NALs (Das & Kumar, 2022; Lu et al., 2022; Novotný et al., 2019). There is a need for further research on NALs and how learning strategies can be improved by exploring internal and external factors influencing academic success (Lu et al., 2022).

Internal Factors. Internal factors present challenges for adult online education (Lu et al., 2022; Smythe, 2018). Internal factors and student needs influence NAL academic persistence (Stephen et al., 2020). Educators must understand the NAL internal factors to take measures to eliminate education roadblocks (Lu et al., 2022). Some NALs have internal issues with self-esteem and self-monitoring (Stephen et al., 2020). Internal factors influencing NALs are technology acceptance and skills, academic aptitude, and time management skills (Lu et al., 2022; Smythe, 2018).

Technology Acceptance and Skills. Technology acceptance and skills are required for online learning (Lin et al., 2023). NALs, especially older learners, may struggle with technology acceptance and technical skills (Lu et al., 2022). Technology usage behaviors and outlooks are tied to ease of use, overall technology performance, and the value of technology use for work or pleasure (Lin et al., 2023; Lu et al., 2022). Learners who cannot use the learning management system, online tools, or mobile applications will likely leave the online course (Lu et al., 2022). Self-efficacy, social norms, and system availability influence the learner's view of ease of

technology use (Barclay et al., 2018; Lu et al., 2022). Technology use is typically not an issue if the learner is well-versed in technology skills (Lu et al., 2022).

Academic Aptitude. The academic aptitude of NALs is not as strong as that of traditional college students, which impacts their GPA and may lead to NALs dropping out due to a low GPA (Lu et al., 2022). Teachers view NALs as lacking in learning activity monitoring compared to traditional learners (Lu et al., 2022). NALs may need specific training and support to improve their academic aptitude effectiveness (Lu et al., 2022).

Time Management Skills. Time management skills come into play for NALs since they require structured course content for maximum efficiency and scheduling (Lu et al., 2022); therefore, instructors must consider limited cognitive abilities and time constraints for NALs (Stephen et al., 2020). Time management is crucial for NALs with limited time due to family and job constraints (Zhou et al., 2021). To maximize time use for NALs, organized online courses must have the following viewable elements: 1) syllabus, 2) consistent modules, 3) clear learning objectives, 4) course materials, 5) assessments with rubrics, and 6) answer examples (Lu et al., 2022). Online learners must understand the time requirements to be academically successful in the online learning environment (Haddock et al., 2020; James, 2022; Jiang & Koo, 2020). Content should be presented so learners can browse the learning modules to plan their study schedules effectively (Lu et al., 2022; Singh, 2019). Many higher-achieving adult students effectively managed time by starting on assignments early instead of waiting until the last minute to do assignment activities (Hromalik & Koszalka, 2018).

External factors. External factors impact NALs' low productivity and online course absenteeism (Lu et al., 2022). NALs may require preparatory learning support to improve general skills for handling external factors influencing learning, such as time management,

digital assistance, and seeking assistance (Lu et al., 2022). External factors influencing adult learning are physical issues, family responsibilities, time constraints, and course content design (Arghode et al., 2018; Blake et al., 2023; Lu et al., 2022; Stephens et al., 2022).

Physical Constraints. Physical constraints such as the need to perform home chores, manage the family unit, and juggle daily life schedules impact NALs (Lu et al., 2022; Specht-Boardman et al., 2021; Steinhauer & Lovell, 2021). These physical constraints influence course dropout rates, impacting online course content experiences, learner satisfaction, and the learner's grade point average (Lu et al., 2022). NALs need support and motivation to overcome the physical constraints of online learning (Lu et al., 2022).

Family Responsibilities. Family responsibilities impact NAL learning (Gardner et al., 2021). The NAL can be a parent and may face childcare challenges due to the lack of parenting support (Gardner et al., 2021; MacDonald, 2019). Parenting takes priority over learning and can delay access to education for the NAL (MacDonald, 2019). Some NALs experience issues they do not have control over, such as being the caregiver for an aging parent or partner, which influences course retention rates (Gardner et al., 2021). When NALs have the financial ability to complete their education, they are more likely to achieve degree completion (Gardner et al., 2021). Other factors hindering the NAL are life situations such as marriage, divorce, job loss, and career advancement (Gardner et al., 2021).

Time Constraints. Time constraints influence the course preferences of NALs (Lu et al., 2022). The online courses must allow the learner to set the pace and timing within work schedules (McDonald, 2018; Muir et al., 2019). NALs appreciate the time and attendance flexibility of online learning (Bin Mubayrik, 2020). NALs typically work to pay for their education, unlike traditional students (Gardner et al., 2021). NALs struggle with work

responsibilities and family commitments that limit the time to seek an education (Gardner et al., 2021; Gravani, 2019; Shi & Lin, 2021).

Online Learning

A significant social need exists for global information attainment, transfer, storage, and use (Galustyan et al., 2019). The internet has given NALs access to flexible education, vast knowledge systems, and access to research data for enhanced self-enrichment and goal attainment (Ramirez & Inga, 2022; Riaz et al., 2023). Online learning has more enrollments of non-traditional and underrepresented student populations (Haddock et al., 2020). Asynchronous online learning is a remote, technology-dependent learning space where instruction and peer engagement happen at the learner's convenience without participants being present simultaneously (Singh & Thurman, 2019; Zeng & Luo, 2023). Some elements make up the asynchronous learning space, such as time, interactivity, physical distance, and educational context (Singh & Thurman, 2019). Asynchronous learning gives the learner time flexibility using discussion boards, videos, and assessment tools (Singh & Thurman, 2019). There are interactivity opportunities for instructor-to-student, student-to-student, and student-to-technology interactions with auto-graded quizzes and automatic predefined learner feedback (Singh & Thurman, 2019). Physical distance is no longer an issue with online learning since the participants can engage remotely using online functionality (Lin & Sun, 2022). Asynchronous learning provides flexible learning with emerging technologies and learning management systems such as BlackBoard and Canvas (Lin & Sun, 2022; Singh & Thurman, 2019).

NALs must have control over their learning experience and instruction in the learning environment to be effective (Fiedler & Väljataga, 2020; Knowles, 1984; Mara, 2021). The online learning environment must consist of self-functioning, self-coordinating, and self-controlling

activities to satisfy NAL needs (Fiedler & Väljataga, 2020; Kuo & Fitzpatrick, 2022; Shi & Lin, 2021). NALs want flexibility and accessibility in education, which influences the selection of online course modality (Cherrstrom et al., 2019; Gardner et al., 2021; Moore, 2020). Learner technology acceptance and internet self-efficacy impact human-technology interactions in the online learning environment (Lu et al., 2022; Smythe, 2018; Zhu & Zhang, 2023), allowing NALs to participate in creating, consuming, and demonstrating knowledge actively (Moore, 2020). According to Lu et al. (2022), many studies focus on NALs, but there is a need for more research on effective instructional design methods and techniques for NALs.

Self-Efficacy

Self-efficacy allows one to predict behavior to accomplish, develop, and adapt within our changing world, according to Bandura's (2001) social cognitive theory. Self-efficacy answers whether one believes one can or cannot accomplish something (Kundu, 2020). Self-efficacy is believing in oneself and giving learners the power to persist and achieve in challenging situations (Kim & Lee, 2019; Kundu, 2020; Rahim, 2022). Self-efficacy allows NALs to experience transformative learning, a shift in thoughts, actions, ideas, viewpoints, and emotions (Zaky, 2019). Self-efficacy controls learner actions and behaviors, improving self-regulation, mind growth, perseverance, and agency (Kundu, 2020; Stephen et al., 2020). Past experiences, model observation, positive feedback through verbal persuasion, and physical and psychological inputs and reactions develop self-efficacy (Blonder et al., 2022). Rahim (2022) concluded that online learning engagement helps build self-efficacy. Academic success online is associated with learner self-efficacy (Broadbent et al., 2020; Kundu, 2020; Rahim, 2022). A significant relationship exists between lifelong learning and information literacy self-efficacy in NALs seeking vocational skill upgrades (Mbagwu et al., 2020). NALs are better prepared for the

workplace when the learning is based on self-efficacy (Moore, 2020). According to the conceptual analysis study of past research articles and empirical organization records spanning 20 years by Kundu (2020), self-efficacy is vital among educators and students in the online learning environment.

Persistence. Persistence was associated with self-efficacy, self-regulation, and self-direction for first-year NALs (Stephen et al., 2020). NAL persistence correlates with course content difficulty levels and the perceived time commitment requirements (James, 2022). Online courses have a higher attrition rate than traditional face-to-face courses (Haddock et al., 2020; Walsh et al., 2020). Academic success with online course completion and degree attainment is associated with social interactions (Haddock et al., 2020; James, 2022; Jiang & Koo, 2020); therefore, academic institutions must communicate the benefits of being socially and academically active in online learning (James, 2022). Some educational institutions have developed strategies to enhance instructor and student partnerships to improve academic development (Haddock et al., 2020; James, 2022). The academic challenges relate to the learner being academically underprepared and hesitant to ask for assistance (Botha & Masenge, 2022; Haddock et al., 2020; James, 2022; Jiang & Koo, 2020). Instructors must help learners set goals and encourage learners to ask for assistance when necessary (Lin et al., 2023; Zhou et al., 2021). Blake et al. (2023) suggested that academic institutions further examine factors influencing persistence and academic achievement for challenged NALs.

Course Difficulty. Course difficulty and technical challenges surface when the learner lacks the technical knowledge required for online courses (James, 2022). Sometimes, the learner cannot recognize their difficulties (Botha & Masenge, 2022). Lack of learning content comprehension and the strategies for improvement need to be further explored for NALs (Botha

& Masenge, 2022; du Toit-Brits, 2020). Course difficulty levels are determined by social, academic, and technical challenges (James, 2022).

Social Challenges. Social challenges occur for NALs when there is a lack of instructor support, mistaken student grade expectations, and mentoring needs (James, 2022). Social interactions and connectedness improve NAL's academic success (du Toit-Brits, 2020; James, 2022). NALs want to be connected to lived experiences (Knowles, 1984). Online courses must be developed with educator-student partnerships to address the social needs of NALs (du Toit-Brits, 2020). NALs can seek mentoring opportunities to mitigate social challenges experienced with online learning (Collom et al., 2021; James, 2022).

Academic Challenges. Academic challenges hinder NAL online learning academic success (Collom et al., 2021; James, 2022). Higher education institutions must develop interventions to assess academic preparedness, develop pathways for NAL success, and improve the perception of NAL course difficulty (Collom et al., 2021; James, 2022). When NALs are academically challenged, they are less likely to seek help with course materials (James, 2022).

Technical Challenges. Technical challenges for NALs occur when they are not proficient with the computer skills necessary for online learning (James, 2022). Technical competence for NALs improved with online analytics, search, design, and creative learning component experiences (Galustyan et al., 2019). With online learning, the analytical component gives the learner the ability to use various websites for learning activities, the search component provides the learner with options for learning activity implementation, the design component gives the learner electronic content with practical use, and the creative component allows learners to share digitally created content and create sharable content (Galustyan et al., 2019). NALs

technological proficiency improves as they gain experience by taking online courses (Haddock et al., 2020; James, 2022; Jiang & Koo, 2020).

Support Methods. Support methods can strengthen self-efficacy in NALs (Kundu, 2020). As NALs progress toward their goals, instructors can be supportive by showing the NAL how the learning relates to their lives (Knowles, 1984). Academic institutions and faculty must recognize and reinforce NALs' holistic support needs (James, 2022). Instructors support NALs by guiding NALs through learning self-assessments (Stephen et al., 2020). Self-efficacy can be strengthened by support methods such as verbal persuasion, role modeling, and self-mastery activities (Kundu, 2020).

Verbal Persuasion. Verbal persuasion builds self-efficacy by providing learners with encouraging, supportive competence feedback for skill improvements (Kundu, 2020). Online verbal persuasion comes as instructor emails and other written communications with NALs (Kundu, 2020). Verbal persuasion must be followed up with reinforcement actions to build NAL self-efficacy (Kundu, 2020). Self-efficacy is communicated as family and teacher encouragement, confidence-building constructive feedback, and academic administration communication of online learning benefits with solutions to infrastructure challenges (Kundu, 2020).

Role Modeling. Role modeling is a self-efficacy supporter and can be accomplished by using vicarious learning (Kundu, 2020). Vicarious experiences can be simulated with computer life-like animations or come in the form of peer success stories (Kundu, 2020). Role modeling in online learning involves learner experiences such as peer learning, peer support, instructional videos with life-like animations, and options for learner self-regulation and autonomy (Kundu, 2020).

Self-Mastery. Self-mastery is when skills are acquired that demonstrate academic achievement (Kundu, 2020; Law, 2022). Self-mastery improves with systematic assessment of learning to demonstrate comprehension and new knowledge attainment, which can be accomplished through the learner's ability to continuously evaluate their strengths and weaknesses (Baldwin & Krishnamurti, 2021). Some examples of continuous evaluations include self-assessment before instructor feedback, progress monitoring, weakness area identification, peer review opportunities, failure learning, success inspiration, and learning reflection (Stephens et al., 2022). Learner self-mastery is supported by practice activities that allow learners to overcome weaknesses, democratic and cooperative learning opportunities, and sharing learning success stories (Law, 2022).

Technology Proficiency. Technology proficiency is connected to self-efficacy in NALs (Loock et al., 2022; Kundu, 2020; Ulfert-Blank & Schmidt, 2022). Experienced online learners know what they need to do to be successful in the online learning environment (Stephens et al., 2022). Technology gives online learning participants new ways of learning and teaching for lifelong, engaging learning experiences (Gravani, 2019). According to Ulfert-Blank and Schmidt (2022), self-efficacy is critical for digital system interaction, and digital competencies and adaptations are required skills for education, work, and social life participation. Technology advancements have transformed user interactions by incorporating adaptive learning functionality, which involves interaction with various methods such as online forums, social media, and mobile devices (Trivedi et al., 2022; Ulfert-Blank & Schmidt, 2022).

Self-Regulation

Self-regulation is the degree of learner participation using metacognitive and motivational strategies through learning behaviors such as setting goals, adaptation, analyzing

cause and effect, environment setup, and self-monitoring (Çakiroğlu & Atabay, 2022; Stephen et al., 2020). Self-regulation is essential since the learner must take more responsibility for learning in the online learning environment (Lin et al., 2023); therefore, the physical environment, social environment, and organizational skills of NALs must be further examined (Hromalik & Koszalka, 2018).

Physical Environments. Physical environments are assessed when NALs self-regulate learning (Aschenberger et al., 2023; Hromalik & Koszalka, 2018). For online learning, the NAL must handle physical learning environment considerations, such as eliminating distractions and studying in a quiet place (Aschenberger et al., 2023; Carl, 2019; Hromalik & Koszalka, 2018). However, there is a weak association between physical environment preparedness and academic success for the NAL (Hromalik & Koszalka, 2018).

Social Environments. Social environments are assessed by self-regulating NALs by recognizing when assistance is needed and communicating the need for support, which includes instructors helping learners identify when and how to get assistance (Hromalik & Koszalka, 2018; Zhou et al., 2021). Self-regulation in adults is associated with age and employment status and must be considered by instructors when providing support strategies for online learning (Lin et al., 2023). Self-regulation is a skill that can be taught to underprepared NALs using learning technology (Hromalik & Koszalka, 2018).

Organizational Skills. Organization skills are enhanced by fulfilling psychological needs in NALs with autonomy, competence, and life-relatedness (Knowles, 1984; Zhou et al., 2021). Self-regulation requires managing time effectively (Lu et al., 2022; Zhou et al., 2021). Organizational skills and self-regulation behaviors in NALs include goal setting, task strategies, and self-evaluation (Zhou et al., 2021).

Goals. Goals drive self-regulation strategies for NALs and ultimately align with academic performance (Lin & Wang, 2018); therefore, NAL's intrinsic and extrinsic goals must be considered (Vezne et al., 2023). Intrinsic goals encourage learners (Vezne et al., 2023). With intrinsic goals, the learner gets satisfaction or pleasure from performing an activity (Vezne et al., 2023). With extrinsic goals, the learner receives external incentives with high assessment scores, peer competition, verbal praise, or rewards (Vezne et al., 2023).

NALs want to obtain and apply the knowledge to master a task (Lin & Wang, 2018). NALs' self-regulated learning strategies are goal driven using the mastery approach of increasing knowledge and gaining competence (Lin & Wang, 2018). Traditional learners use performance-avoidance methods, which promote academic performance by avoiding being considered incompetent among peers (Lin & Wang, 2018). NALs can practice mindfulness and improve focus by monitoring performance using self-assessments, minimizing environmental distractions, planning learning activities, and implementing self-regulation (Randall et al., 2022).

Task Strategies. Task strategies such as taking notes occur when learners are more connected to peers and the instructor (Zhou et al., 2021). Studies show that high-performing students accessed all available learning resources online, whereas lower-performing students did not open all the available resources (Hromalik & Koszalka, 2018). When NALs complete tasks, they achieve more (Zhou et al., 2021). Successful NALs possess self-regulation and co-regulation by engaging in discussions and establishing course goals (Diep et al., 2019; Stephen et al., 2020). There are many levels of NAL self-regulation (Vanslambrouck et al., 2019); therefore, some NALs lack self-regulation and struggle in online learning settings (Wong et al., 2021).

Self-Evaluation. Self-evaluation allows NALs to practice behavior self-management daily (Knowles, 1984; Lin & Wang, 2018). NALs' behavior agility will enable them to

overcome challenges by readjusting goals, realigning task strategies, and performing continuous self-evaluation (Stephen et al., 2020). Results from behavior changes give NALs satisfaction and sustainability (Knowles, 1984) and improve persistence for the NAL (Stephen et al., 2020).

Self-Directedness

Self-directedness happens naturally as individuals mature into adults and need the mental capacity to solve problems in life (Knowles, 1984). Therefore, adults need to be seen as self-directing in the eyes of others (Knowles, 1984). As learners progress in jobs and careers, they move into the self-directing mode of learning, where experiences are geared toward this psychological need (Knowles, 1984). Learner experiences help define a learner, and self-direction helps learners relate new experiences to their past experiences (Knowles, 1984). Self-directedness can help academically underprepared since self-directed NALs are empowered, goal-driven, and motivated to learn (Stephen et al., 2020).

Autonomy. Autonomy allows NALs to control their actions (Knowles, 1984; Lin & Wang, 2018). Online learning is typically independently driven, and self-directedness is essential for learning success (Baldwin & Krishnamurti, 2021; Stephen et al., 2020; Zhu et al., 2022). Online learning allows NALs to make decisions about their learning experience (Baldwin & Krishnamurti, 2021; Stephen et al., 2020) with the freedom to set their own pace (Ren, 2023). Online learning gives the NAL the freedom to determine their learning needs, how to achieve those needs, and learning assessment through the evaluation of the learning outcomes (Abedini et al., 2021; Baldwin & Krishnamurti, 2021; Stephen et al., 2020); therefore, academic institutions must develop instruction that provides scaffolding, small learning units, reflection, and engagement opportunities (Baldwin & Krishnamurti, 2021). Self-directed learning can be implemented using modern technology that accommodates self-determined, non-linear course

designs and learning approaches for NALs (Agonács & Matos, 2019; Youde, 2020). Self-directed and self-management strategies can strengthen online learning course completion for NALs (Kasworm, 2018). However, the research literature on the independent impact of self-direction and online NAL persistence is limited and needs further exploration (Kasworm, 2018).

Guidance. Guidance and straightforward instruction accommodate self-directed adult learning (Ren, 2023). Educators must consider the culture and history of NALs for self-directed learning (Mara, 2021; Zaky, 2019) during course design to improve the learning experience (Lin & Wang, 2018). NALs bring their culture and social structure into learning with influences for adaptation and meaning (Roessger et al., 2022). Self-directed strategies give learners preferences that align with their learning styles (Ren, 2023; Sabri et al., 2022). Self-directed strategies can be applied to interactive activities like scenario-based problems, hands-on exercises, reflection assignments, question-and-answer sessions, and game-based learning (Ren, 2023; Sabri et al., 2022). Educators may consider providing regular checkpoints for monitoring learner progress and goal attainment and additional resources for further knowledge attainment and task mastery (Lin & Wang, 2018). The other area of exploration is for educators to use knowledge management systems that allow learners to create, share, use, and manage knowledge for self-directed learning (Silamut & Petsangsri, 2020).

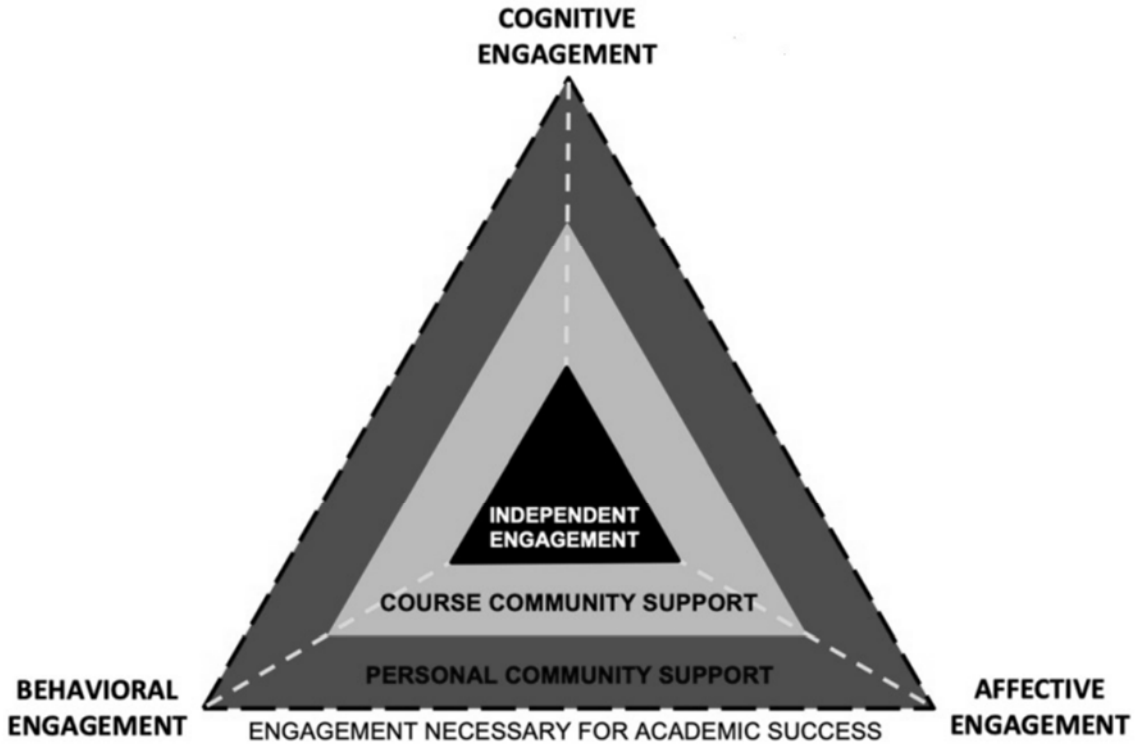
Engagement

Engagement is associated with interest and interaction with course content, the instructor, and classmates (Abedini et al., 2021; Arghode et al., 2018; Bolliger & Martin, 2018; Borup et al., 2020) and occurs with activities that happen inside and outside the learning experience (Arghode et al., 2018; Diep et al., 2019). NAL engagement level is influenced by age, life fatigue, technical knowledge, motivation, and competition (Abedini et al., 2021; Diep et al., 2019). For

online adult learning, the instructional design must be developed to emphasize learner engagement factors of behavioral, cognitive, affective, and psychological (Arghode et al., 2018; Arjomandi et al., 2018; Law, 2022; Yun & Park, 2020). Borup et al. (2020) illustrated that engagement is required for academic success, and NALs get engagement from support from others, the course community, and the personal community (see Figure 1). NALs with high affective engagement but low cognitive and behavioral engagement are motivated to succeed in online and in-person courses with community support.

Figure 1

Engagement Model



Note. Engagement model shows the support elements and types of engagement for blended and online learning. From "Academic Communities of Engagement: an expansive lens for examining support structures in blended and online learning," by Borup et al., 2020, *Educational Technology Research and Development, 68*(2), p. 818. Copyright 2020 by Springer Nature. Reprinted with permission.

Online NALs vary in abilities and engagement support (Baldwin & Krishnamurti, 2021). Personal conditions such as personality (Law, 2022), personal background, and work experience (Lanford, 2021) impact NAL's learning engagement. Institutional conditions can hinder or support NAL online engagement and must be accounted for in NAL teaching strategies (Bok, 2021; Law, 2022). However, external digital conditions influence NAL behaviors in online learning (Law, 2022), which may force the need for flexible course design structures (Baldwin & Krishnamurti, 2021; Law, 2022). Peer interaction fosters NAL online engagement and participation (Carolan et al., 2020; Law, 2022). Kim et al. (2023) showed that online learner behaviors do not correlate with learner engagement and suggested further research in online learning to gather more relevant data. Learner abilities and engagement factors must be addressed by educators who understand NALs' needs and the implementation of different online self-directed learning approaches (Baldwin & Krishnamurti, 2021; Jones et al., 2019).

Behavioral Engagement

Behavioral engagement activities include productive classroom behavior, adhering to classroom compliance rules and standards, and engaging learners with appropriate learning activities (Arghode et al., 2018; Yun & Park, 2020). Another consideration with behavioral engagement is individualism and learner motivation, which can increase learning opportunities (Kücherer et al., 2021; Regalado et al., 2021). Strategies for behavioral engagement involve self-managed gratification and the distribution of learning materials in small, manageable segments (Borup et al., 2020; Yun & Park, 2020).

Cognitive Engagement

Cognitive engagement is associated with learning objective achievement and high scores on coursework assessments (Arghode et al., 2018). Cognitive engagement is encouraged with

flexible problem-solving activities and goal achievement (Yun & Park, 2020), promoting NALs to explore, question, and confirm comprehension (Borup et al., 2020). Online learning must have strong cognitive engagement by providing NALs with content related to their professional and personal lives (Lu et al., 2022).

Affective Engagement

Affective engagement involves using positive body language, maintaining learner interest, and wanting learners to interact in the learning activities (Arghode et al., 2018; Yun & Park, 2020). According to Yun and Park (2020), stimulation positively impacts the learner's affective engagement. Online learners can get emotional support from social interactions (Borup et al., 2020; Liu et al., 2022). Academic emotions such as anger, fear, joy, and boredom experienced in the educational setting are essential and challenging to understand in the online learning environment (Jiang & Koo, 2020; Lee et al., 2021). When learners are strongminded with a primary goal of learning, emotional engagement has a positive impact (Rothes et al., 2022). Social isolation is a concern in the asynchronous online learning environment (Choi, 2022; Jiang & Koo, 2020; Lynch et al., 2021).

Psychological Engagement

Psychological engagement happens when the environment resonates with belonging and community and building relationships among classmates (Arghode et al., 2018; Mara, 2021). Relationship-building activities provide another form of learning that happens informally by teaching others (Moore, 2020). Learners who desire to exceed task requirements have a psychological investment in education (Yun & Park, 2020). Psychological engagement can be improved by positive online learning experiences and timely instructor feedback (Zhang et al., 2022).

Personal Conditions

Personal conditions impact online engagement (Law, 2022). Personality was the primary factor in online engagement, followed by full-time work status and digital literacy level (Law, 2022). The learner's personality determines online learning participation and active engagement with peers, tutors, and course behaviors (Law, 2022; Stephen et al., 2020). Introverted learners prefer minimal interaction in group discussions and passive learning experiences (Law, 2022). Extroverted learners prefer to interact and engage in online learning activities, which require self-efficacy (Law, 2022). Most NALs expressed work-life balance challenges that impacted concentration, time management, and self-learning responsibility (Law, 2022; Stephen et al., 2020).

Institutional Conditions

Institutional conditions that impact NAL online engagement are educator support, teaching strategy, peer interaction, course design structure, and the learning management system (Law, 2022). Online educators are now viewed as coaches or consultants (Baldwin & Krishnamurti, 2021). Educative support is the main factor influencing adult learning online engagement since it provides social and emotional support and sets academic expectations (Law, 2022). In addition, the teaching strategy of delivering creative and engaging online activities, such as assignment answer discussions and other forms of student collaboration and interaction, will promote learner engagement (Law, 2022).

External Digital Technology Conditions

External digital technology conditions that impact online NAL engagement are internet access and online learning applications (Law, 2022). Internet accessibility and stable connectivity are requirements for any online learning experience (Law, 2022). Furthermore, the

learner's location and connectivity can impact participation and engagement in an online class (Law, 2022; Ramirez & Inga, 2022); therefore, a need for teachers to assist learners who need help with connectivity along with providing flexible learning resources (Ramirez & Inga, 2022).

Peer Interaction

Peer interaction impacts NAL engagement since it can foster a connected atmosphere with an individual social presence (Carolan et al., 2020; Law, 2022). The Law (2022) research study showed that live session engagement is higher than asynchronous discussion forum student engagement. Students prefer a sense of belonging and community with online learning collaboration by using digital apps for study groups, social interaction, and emotional interaction (Law, 2022). NALs who strongly desire to connect with others appreciate the emotional experiences between students, peers, and instructors (Jiang & Koo, 2020). Learners with significant emotional presence in online learning have high course satisfaction rates (Bolliger & Martin, 2018; Jiang & Koo, 2020). As learners take online courses, they are faster at establishing a sense of community in the online environment and can serve as an engagement example for inexperienced online learners (Bolliger & Martin, 2018).

Course Design Structure

Course design structure can promote online NAL engagement by allowing learners to choose assignment topics based on personal interests, involve real-world application discussions, and have shorter lectures with more time for reading course materials and completing assignments (Baldwin & Krishnamurti, 2021; Law, 2022). With online content-based course designs, learners can set their own pace of progress and content mastery (Bolliger & Martin, 2018). Regarding highly rated learner content engagement strategies, instructors ranked content application with real-world scenarios as most important, followed by structured discussion board

activities that reinforce learning (Bolliger & Martin, 2018). However, there are online engagement strategies that instructors ranked high and learners did not, such as virtual lounges, peer reviews, and reflection activities (Bolliger & Martin, 2018).

Course content must be engaging, which requires improvements in instructional design with additional planning, design, and instructor presence (Muir et al., 2019). Course content must be planned and mapped logically for ease of use, and learning materials must be accessible to NALs for schedule considerations (Muir et al., 2019). The essential activities must have time restrictions to ensure the NAL can prioritize and plan for learning (Muir et al., 2019). Peer teaching can be an effective way for educators to facilitate knowledge interchange, giving learners peer knowledge-sharing experiences and allowing them to focus on problem-solving instead of knowledge duplication (Gronseth & Bauder, 2022). Online learning offers more discussion opportunities that are not available in the face-to-face environment (Berry, 2018).

Instructors

Instructors are vital for enhancing the online learning experience by successfully preparing and implementing technology (Ren, 2023). Educators can use technology as a teaching strategy tool to develop learner-centric transformative learning to introduce NALs to new ways of thinking and learning (Wang et al., 2021). Instructors are responsible for creating an environment for effective learning, which includes support with personalization and self-direction (Allen et al., 2022; Marrhich et al., 2021; Smith, 2022). Instructors are faced with support structure challenges (Botha & Masenge, 2022), professional development needs (Baser et al., 2021; Chaipidech et al., 2021; Kara & Yildirim, 2022; Mukherjee & Hasan, 2020; Ó Ceallaigh, 2021; Ramirez & Inga, 2022; Stephens et al., 2022), and instructional support strategies for NALs (Lin & Sun, 2022; Singh et al., 2021).

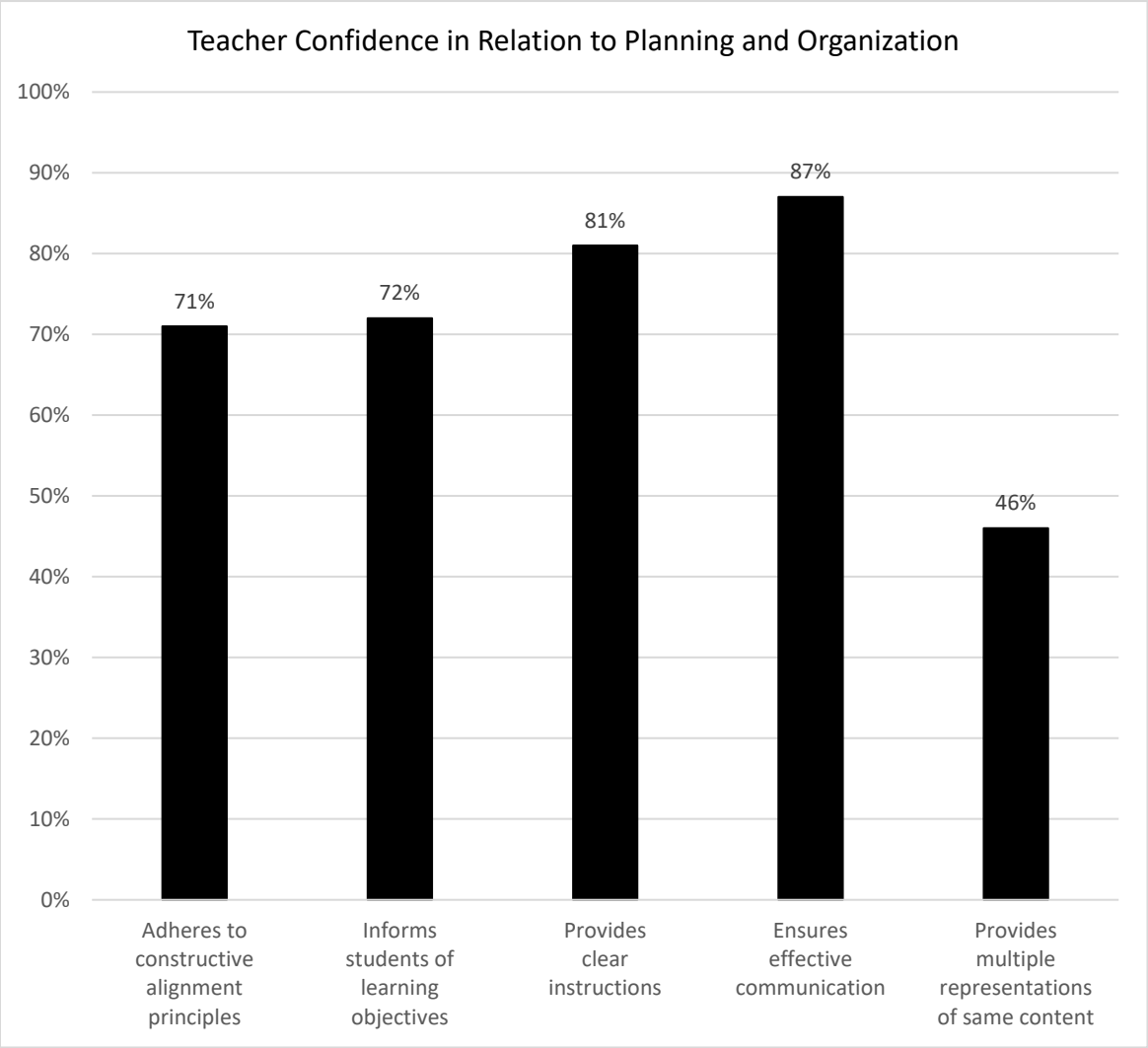
Support Structures

Support structures are lacking in the asynchronous online format (Botha & Masenge, 2022). Human interactions, facial expressions, and spontaneous conversation opportunities common to the face-to-face classroom are missing in the asynchronous online setting (Smith, 2022). Development of personalized content and learner-level adaptive content are some of the many struggles online course instructors face (Marrhich et al., 2021; Ó Ceallaigh, 2021; Ren, 2023). Online courses should be designed with deep cognitive engagement, and instructors should provide off-hours support with e-mail reminders and other forms of communication for NAL engagement (Lu et al., 2022).

Supportive Content Development. Supportive content development for social interaction is challenging for online instructors since social interaction online is not like the face-to-face setting (Adebisi & Oyeleke, 2018; Marrhich et al., 2021; Mukherjee & Hasan, 2020; Ó Ceallaigh, 2021; Zhang et al., 2022). Unlike the face-to-face setting, the online setting requires the instructor to create multimedia content, monitor discussion forums, and facilitate the use of technology (Lin & Sun, 2022; Marrhich et al., 2021; Soffer & Nachmias, 2018). However, the online setting is the same as face-to-face, with the need to deliver and design lessons, perform assessments, grade student work, and perform analysis and inquiries that encourage student participation (Marrhich et al., 2021). In the study by Ó Ceallaigh (2021), 123 various disciplined instructors across 15 higher education academic institutions in Ireland, only 46% (n = 66) of the educators were confident in content accessibility for their students (see Figure 2).

Figure 2

Teacher Confidence in Relation to Planning and Organization



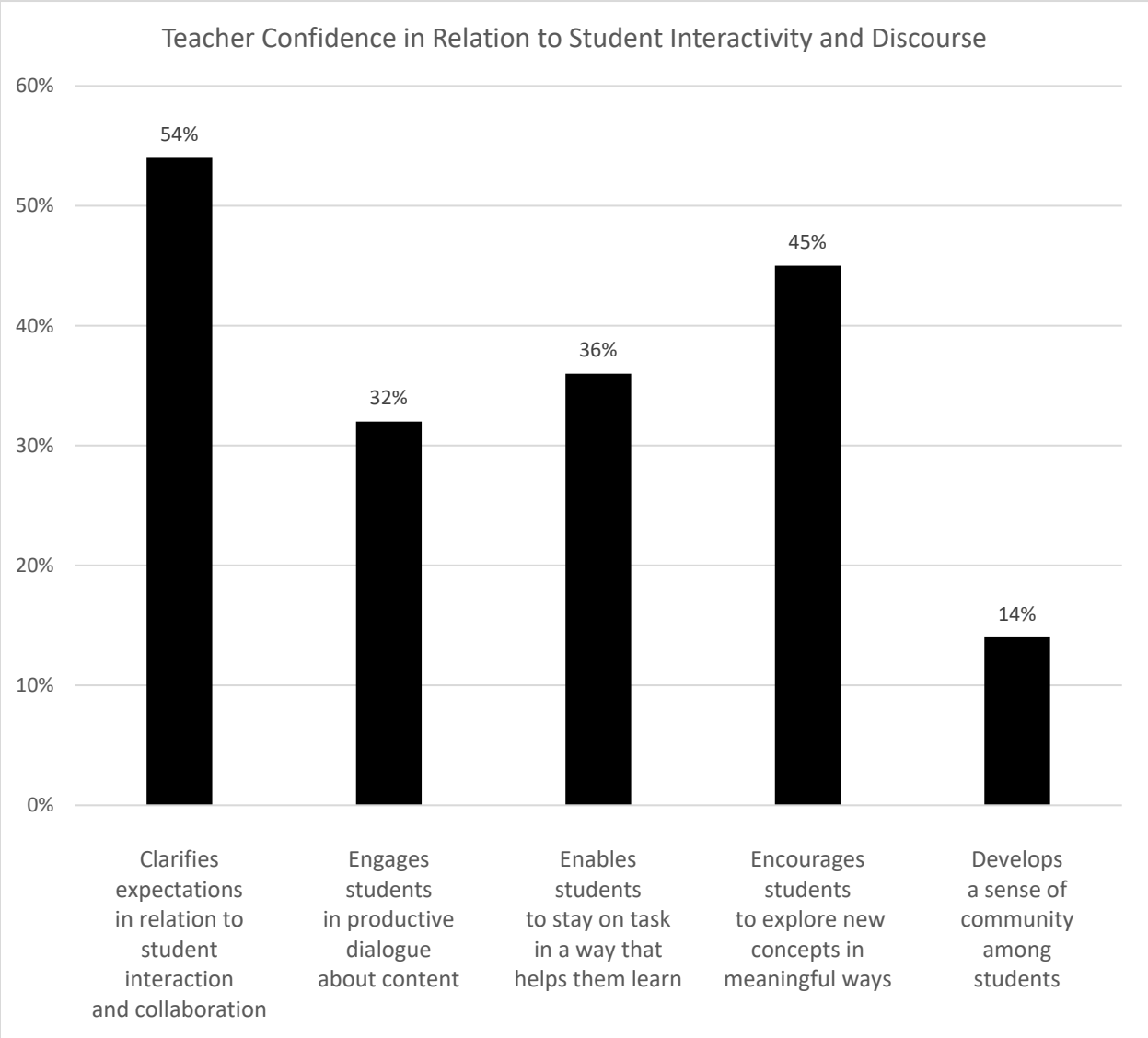
Note. Teacher confidence in relation to course planning and organization. Adapted from "Navigating the role of teacher educator in the asynchronous learning environment: Emerging questions and innovative responses," by T. J. Ó Ceallaigh, 2021, *Irish Educational Studies, 40*(2), p. 352. Copyright 2021 by Taylor & Francis. Adapted with permission.

Course Planning. Course planning for asynchronous online education is overwhelming, confusing, and lonely (Ó Ceallaigh, 2021). According to Ó Ceallaigh (2021), only 32% (n = 39) of educators were confident in their course-building technology skills (see Figure 3) and perceived course development as time-consuming and burdensome. Learning transformation can

be fostered with methods of technology integration that align with the epistemological views of the educator (Wang et al., 2021). For example, the post-positivist educator technology initiates new learning, concepts, and truth-challenging opportunities (Wang et al., 2021). The constructivist educator can use technology to see different views of meaning in negotiation interactions (Wang et al., 2021). The advocacy educator can use technology for learner empowerment (Wang et al., 2021). The pragmatist educator can use technology to relate to the learner's life and to address practical issues (Wang et al., 2021).

Figure 3

Teacher Confidence in Relation to Student Interactivity and Discourse



Note. Teacher confidence in relation to student interactivity and discourse. Adapted from "Navigating the role of teacher educator in the asynchronous learning environment: Emerging questions and innovative responses," by T. J. Ó Ceallaigh, 2021, *Irish Educational Studies, 40*(2), p. 354. Copyright 2021 by Taylor & Francis. Adapted with permission.

Instructor Presence. Instructor presence is essential for building class connectedness online (Houlden & Veletsianos, 2019; Jiang & Koo, 2020; Kuo & Fitzpatrick, 2022; Muir et al., 2019). Students learn well and embrace coursework challenges when they feel the instructor is

connected to them (Jiang & Koo, 2020); therefore, online instructors must be effective communicators (Adebisi & Oyeleke, 2018). Instructors must acknowledge learner interaction with feedback at least once weekly (Muir et al., 2019).

Instructors have faced engagement issues commonly tied to class sizes, time constraints, and technical knowledge (Page et al., 2020). The class size impacts the instructor's online presence (Muir et al., 2019). If a class is too large, with numbers exceeding 20 or more, the class is difficult for instructor management (Muir et al., 2019). If the class is too small, it may lack diversified views and can be negatively impacted by too much or too little learner participation (Muir et al., 2019). Instructor participation impacts smaller classes more than large ones (Muir et al., 2019). Even though online learners do not engage in traditional support activities, they still want connecting experiences with the instructors (Blake et al., 2023). Instructor interaction may help with NAL persistence (Blake et al., 2023; Stephen et al., 2020).

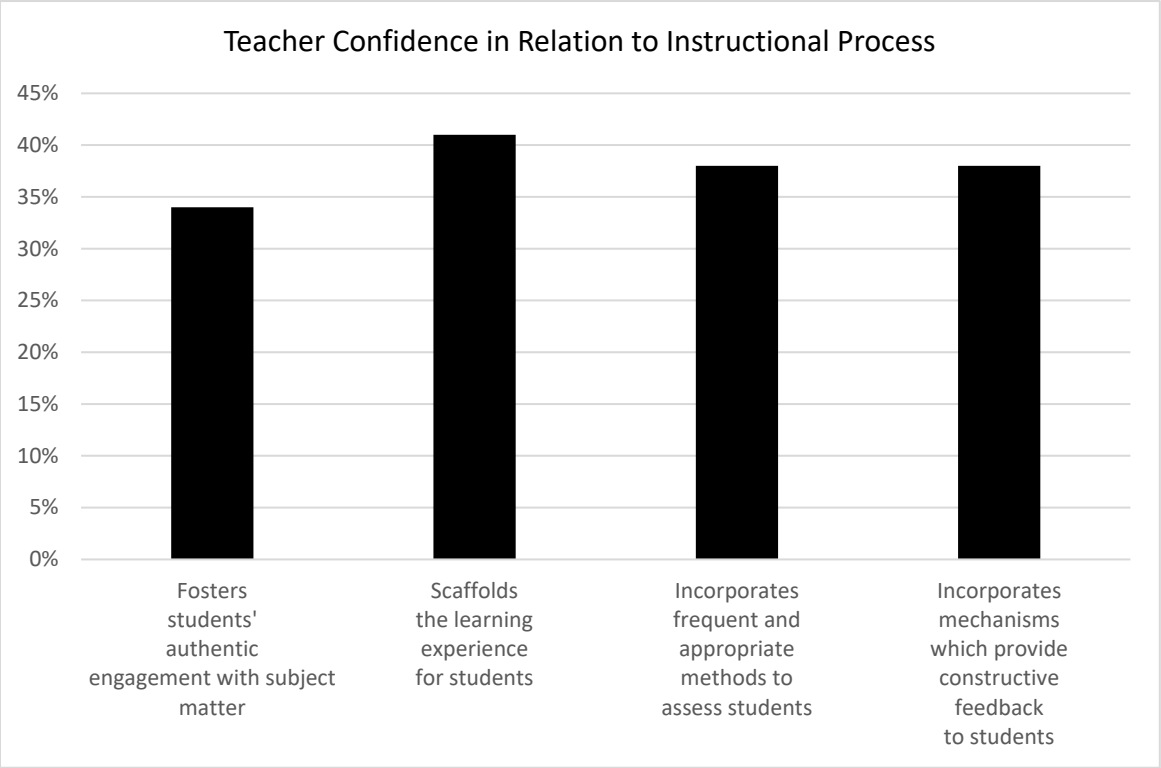
Online instructors favor the online method of instruction because they believe that students participate in more interactive communication with lecturers and peers since research literature shows higher online course learner satisfaction rates (Blonder et al., 2022). However, the lack of interaction is a significant area of online course dissatisfaction for learners (Blonder et al., 2022). Many traditional face-to-face instructors are viewed as lacking presence in online classrooms and dull from the NAL’s perspective (Page et al., 2020). The perceived lack of instructor presence is intensified by repetitive assignments, untimely responses to learner feedback, and instructor online presence absenteeism (Page et al., 2020). Not only are the NALs expected to participate in the online classroom setting, but the instructors are also expected to maintain the same level of online presence (Page et al., 2020). NALs appreciate instructor responsiveness and connectedness (Jiang & Koo, 2020).

Course Development. Course development for online content requires more design time and effort for virtual engagements compared to face-to-face settings (Page et al., 2020; Smith, 2022). There are time considerations for instructors regarding updating course materials and continuous course improvements, especially in online learning (Muir et al., 2019). Online course design, development, and maintenance are time-consuming, and learners expect online courses to be integrated with modern technologies (Muir et al., 2019).

Technology Integration. Technology integration is an area where many teachers need more development, which will save time in the design of engaging online course content (Marrhich et al., 2021). Instructors who are self-motivated are shown to harness the power of technology adoption for online learning improvements to expand learner participation (Page et al., 2020). The need for teacher professional development can be seen in the Ó Ceallaigh (2021) study results, with 34% (n = 44) of the educators having confidence in their ability to promote online course learning engagement (see Figure 4). Teachers with online teaching experience showed higher academic success results during the COVID-19 pandemic than teachers without online teaching experience (Orlov et al., 2021). However, educators are concerned about the increased workload of transitioning to the asynchronous online environment (Ó Ceallaigh, 2021). Many online novice instructors do not have the time to learn new tools (Page et al., 2020), and some are unaware that they lack online tool knowledge (Blonder et al., 2022).

Figure 4

Teacher Confidence in Relation to Instructional Process



Note. Teacher confidence in relation to the instructional process. Adapted from "Navigating the role of teacher educator in the asynchronous learning environment: Emerging questions and innovative responses," by T. J. Ó Ceallaigh, 2021, *Irish Educational Studies, 40*(2), p. 353. Copyright 2021 by Taylor & Francis. Adapted with permission.

Professional Development

Professional development opportunities geared explicitly toward online education to overcome instruction challenges should be offered to online instructors (Baser et al., 2021; Chaipidech et al., 2021; Kara & Yildirim, 2022; Mukherjee & Hasan, 2020; Ó Ceallaigh, 2021; Ramirez & Inga, 2022; Stephens et al., 2022). Faculty training opportunities can include technology-focused mentoring in comfortable, flexible settings where professional development is not forced upon the educator (Baser et al., 2021). Full-time and adjunct faculty should receive professional development opportunities (Cummins et al., 2022). With the increase in online

education demands and program offerings, instructor training is a significant concern in distance education (Kara & Yildirim, 2022). There are efforts underway in academia across the globe to provide massive online open course (MOOC) professional development that focuses on the proficiencies required for asynchronous course development (Ó Ceallaigh, 2021). Academic institutions are tasked with finding new ways to share best course design practices for online learning (Ren, 2023). New technology training considerations for educators include podcast creation, upgraded learning management system applications, and innovative autonomous learning tools (Ramirez & Inga, 2022). According to Kundu (2020), teacher self-efficacy plays a role in technology acceptance and increased technology use. Research suggests that there is a need for more studies that consider technology integration professional development opportunities with technology-focused mentors instead of educator-focused mentors (Baser et al., 2021).

Instructional Support Strategies

Instructional support strategies are influenced by instructors being facilitators (Singh et al., 2021). Facilitation is a necessary component of online learning that helps NALs develop, maintain, and apply knowledge (Adebisi & Oyeleke, 2018; Brieger et al., 2020; O'Hara & Naicker, 2022). According to the Singh et al. (2021) phenomenological study of 40 NALs in an academic institution in the United States, many participants described the instructors as facilitators in the online environment as opposed to the traditional face-to-face passive learning instructor lectured environment. This facilitator role involves guiding informal discussions, modeling preferred online netiquette, and providing patience to online learners (Berry, 2018; Lin & Sun, 2022; Singh et al., 2021). Instructors should promote peer interaction instead of leading discussions (Bolliger & Martin, 2018; Lin & Sun, 2022). This transition to facilitator may be

challenging for some educators since they may hesitate to relinquish control and management of learning experiences (Mohammad et al., 2019). It is common to see communication between students and educators as one-way or unidirectional, where students are told what to do (Goel & Kumar, 2018).

NAL learning experiences are enhanced when the instructor facilitates learning by recapping key points, defining significant learning outcomes, and summarizing the learning module (Lin & Sun, 2022). Faculty have been increasingly concerned with online learning issues with social interaction, monitoring of online work, student course access, and additional time spent on online courses (Kara & Yildirim, 2022). The online instructor is not only a facilitator and supporter but the online instructor is an assessment designer, course designer, and course differentiator (Marrhich et al., 2021).

With asynchronous online courses, a teaching presence aligns course content, expected behaviors, and learning goals with optimal learning experiences (Lin & Sun, 2022; Ó Ceallaigh, 2021). Instructors can connect with learners by implementing emerging technologies online (Page et al., 2020). Instructors should explore more ways of staying connected to learners online, such as posting pictures and welcome videos, offering virtual office hours, and presenting video assignment feedback (Jiang & Koo, 2020).

Instructor Communication

Instructor communication and self-efficacy have a relationship with learning and performance, according to Kim and Lee (2019). Instructors' constructive feedback improves the NAL's self-reflection process and gives the NAL a better understanding of their shortcomings (Kim & Lee, 2019; Zhu et al., 2022). Furthermore, learners experience positive feelings and higher self-efficacy from positive instructor feedback compared to constructive instructor

feedback (Kundu, 2020; Kim & Lee, 2019); therefore, instructor feedback must be balanced with learner emotional awareness to avoid confidence and motivation loss in NALs (Kim & Lee, 2019).

Instructional Designs

Instructional designs must be developed for self-sustainment and optimal learning opportunities (Exter & Ashby, 2022; Kuo & Fitzpatrick, 2022); therefore, online courses must be aligned with academic institutions, instructors, students, settings, technologies, and support (Kuo & Fitzpatrick, 2022). The impacts of teaching, learning, management, and maintenance must be well-defined for optimal course development (Kuo & Fitzpatrick, 2022). Instructional course designers should consider sharing design case experiences to strategically maintain courses to improve online course content (Exter & Ashby, 2022). Academic institutions may consider partnering with third-party providers for additional online student support, instructor education, and content integration assistance (Walsh et al., 2020).

Participation Behaviors

Participation behaviors in online learning differ from face-to-face learning (Francis et al., 2019; Harris et al., 2020). The online course instructional designs should be engaging and encourage collaboration, self-direction, and online participation for NALs (Diep et al., 2019; Shi & Lin, 2021). Course experience for adult learning is influenced by community and support with collaborative learning activities (Carl, 2019; Lu et al., 2022; Note et al., 2021). Gravani (2019) states that learner-focused andragogy can be incorporated into the learning environment using massive open online courses (MOOC) and social media. The Gravani (2019) phenomenological case study of 8 adult educators and 16 adult students unveiled that minimally structured and guided learning in the MOOC environment fosters open and creative inquiry for learners. With

andragogy, educators can create personalized learning environments that are not restricted by curriculum standards, encouraging learner exploration (Martínez & Muñoz, 2021). Accordingly, performance improvements may be made to increase NALs' academic success by understanding how to create personalized learning environments (Martínez & Muñoz, 2021). NAL online participation can increase by implementing graded activities as opposed to optional activities (Alvarez et al., 2022). Activities that use online learning tools and platforms have shown increased NAL participation (Vezne et al., 2023).

Unified Design of Learning

Unified Design of Learning standards require support for learning with multiple interactions of engagement, representation, action, and expression (Gronseth & Bauder, 2022). Online courses typically require discussion boards to fulfill the engagement learning need with multiple interactions for NAL expression, peer connection, thought sharing, and course topic knowledge demonstration (Gronseth & Bauder, 2022; Lin & Sun, 2022). Nevertheless, NALs still feel isolated due to the lack of immediate responses and the slower pace compared to the face-to-face setting (Berry, 2018). When a course is designed and implemented for meaningful learning experiences, learner participation, and academic performance tend to be high (Berry, 2018). With asynchronous online learning, educators should consider implementing multimedia tools such as videos, images, infographics, or discussion videos for visual stimulation and thought expression (Lin & Sun, 2022). Adult online learners view problem-based case discussions as effective and prefer them over video text discussions, self-developed meme discussions, and debate discussions (Lin & Sun, 2022).

Technology Tools

Technology tools can be used to improve online course interaction (Abedini et al., 2021; Trivedi et al., 2022) since online courses lack human emotion sensing, mood enlightening, and personal interaction that can be experienced in traditional face-to-face settings (Law, 2022). The learning management system must have organized content (Baldwin & Krishnamurti, 2021) and promote learner engagement by providing ease of use, practical search functionality, organized discussion threads, and instructor responsiveness in discussion forums (Law, 2022).

Some online course tools, such as podcasts, can be seen as outdated because they cannot engage in optional synchronous interaction (Conroy & Kidd, 2022). Online course instructional designs must provide two-way interaction for learning, communication, and instruction (Arghode et al., 2018; Page et al., 2020). Course activities should emphasize knowledge construction instead of duplication (Allen et al., 2022; Carl, 2019). Motivation is required for learner engagement, yet just because the learner is motivated does not mean the learner will be engaged (Arghode et al., 2018). NAL engagement in the online setting can be promoted with group discussions, online discussions, instant messages, and social groups, which encourage learner interaction (Abedini et al., 2021).

Online learning environments allow NALs to connect to others outside their communities and share learning experiences (Fiedler & Väljataga, 2020). The online learning environment will enable learners to continually create and improve their ideas and knowledge (Bailey et al., 2021). Social presence with emotional connection is critical for NALs (Jiang & Koo, 2020). Educators must put more focus and effort into building virtual emotional bonds since the physical element is missing in the online environment (Jiang & Koo, 2020).

Social Media. Social media and other types of support for NAL engagement can be leveraged to cater to learner abilities and promote learner engagement (Baldwin & Krishnamurti,

2021; Vezne et al., 2023). Trivedi et al. (2022) suggested integrating social media tools such as Facebook, Twitter, YouTube, and Instagram into regular higher education course curricula, improving learner communication with peers and instructors. Online NALs appreciate online synchronous learning applications such as Google Meet (Law, 2022) and WhatsApp (Blonder et al., 2022; Ramirez & Inga, 2022), allowing easy class collaboration outside the asynchronous course. Modern digital tools complement learning and provide students with personalized education, thus improving learning experiences (Ramirez & Inga, 2022; Sabri et al., 2022). NALs indicated that educators should consider using tools such as GroupMe, Microsoft Teams, and WhatsApp for text messaging collaboration and social media apps such as Twitter to promote learner engagement (Gronseth & Bauder, 2022). Some support services include using analytics to provide responsive student support, self-access resources, videos, online live chat capabilities, and an online orientation program to guide new online learners through the content layout (Rotar, 2022). Online courses are effective when developed to maximize flexibility for students to access all the learning content (Soffer & Nachmias, 2018). Some NALs find it challenging to learn from others unless the course contains supplemental online instruction content, which provides NALs with multiple perspectives (Arghode et al., 2018; Carl, 2019).

Massive Online Open Courses. Massive online open courses (MOOCs) are online open-access learning environments that offer many topics for learning (Zhu et al., 2022) where registration is low-cost or even free (Zhu et al., 2020). Today's Popular MOOCs are Coursera, edX, Udacity, and FutureLearn (Oh et al., 2022). Self-directedness is a requirement for learning in the MOOC environment (Trivedi et al., 2022; Zhu et al., 2022). Many NALs enroll in MOOCs due to their flexibility and job relevance (Luik et al., 2020), which coincides with the readiness to learn and the self-directedness of andragogy (Knowles, 1984).

Artificial Intelligence. Artificial intelligence (AI) tools can be used by educators to improve NAL engagement in online courses (Marrhich et al., 2021). With AI comes distrust and technology use apprehension (Delgado et al., 2022; Dwork & Minow, 2022; Le & Jia, 2022). This distrust stems from reliability concerns since AI is trained by data from history, which can include discrimination and exploitation of vulnerable populations (Delgado et al., 2022; Dwork & Minow, 2022). AI is associated with job automation and employee displacement in all industries, including manual labor and skilled professionals (Delgado et al., 2022; Dwork & Minow, 2022). Therefore, policymakers are exploring regulatory needs to address AI use concerns (Delgado et al., 2022; Dwork & Minow, 2022). AI learning support implementations, such as virtual tutors for practice learning activities, have been shown to provide learners with control over the learning experience (Le & Jia, 2022). There are types of learning analytics that allow for learner customization and personalization for NAL needs that improve the learning experience (Chaipidech et al., 2021). Learning analytic systems must consider the NAL's experience level to motivate, engage, and improve academic performance (Heretick & Tanguma, 2021). However, educators must understand that with the experience levels and age ranges of NALs, there are differences in attitudes and technology views that may impact course design (Heretick & Tanguma, 2021).

Motivation

Adult learning is influenced by motivation (Knowles, 1984), and this motivation is required for NALs to obtain knowledge in the asynchronous online learning environment (Abedini et al., 2021; Lu et al., 2022). Some NALs are perceived as inferior compared to traditional learners (Bahr et al., 2022; Fensie, 2023; Lu et al., 2022; Siivonen & Filander, 2020) and seen as lacking in digital skills and self-regulation (Lu et al., 2022). Lin et al. (2023)

suggested further research on online self-regulation efficacy and the strategies that impact NALs most. Social roles (Jiang et al., 2021), curriculum designs (Specht-Boardman et al., 2021), and instructors (Singh, 2019) influence motivation for NALs in asynchronous online learning. Motivation is a factor for NALs in pursuing education goals and is a topic that needs further research (Gardner et al., 2021).

Social Roles

Social roles drive the NAL's willingness and readiness to learn (Knowles, 1984). NAL learning is typically applied and connected to life (Jiang et al., 2021). Direct learning applications improve local economies and constantly motivate the NAL (Specht-Boardman et al., 2021). Early interventions and support strategies are essential for NAL motivation (Mara, 2021) since education re-entry can be challenging, thus causing disappointment and possible course dropout (Specht-Boardman et al., 2021).

Curriculum Designs

Curriculum designs that complement degree-specific courses with general education courses early in the education journey give NALs a range of activities that relate to their career goals and improve motivation and focus (Specht-Boardman et al., 2021). Course completion strongly motivates NALs in the asynchronous learning environment (Singh et al., 2021; Specht-Boardman et al., 2021). Future research is suggested in teacher professional development of the Knowles andragogy adult learning theory by learner motivation and instructor optimization of online personalized learning systems (Chaipidech et al., 2021).

Connectedness

Connectedness and guidance improve learner motivation for degree attainment in online asynchronous learning (Singh, 2019). Instructor response timeliness and positive support give

learners more confidence in their abilities to succeed (MacDonald, 2019). Learner engagement requires motivation; however, motivation does not mean learner engagement (Arghode et al., 2018). More research studies are recommended to understand instructor connection effort, focusing on learner engagement levels of engaged or disengaged learners to maximize learning outcomes for NALs (Arghode et al., 2018). Singh (2019) suggested further research on how lean principles can be applied to course development for NALs to streamline asynchronous online learning processes.

Community Support

Community support motivates NALs and has been shown to provide NALs with the reinforcement required to sustain academic goals (Biney, 2022; Lu et al., 2022; Note et al., 2021; Specht-Boardman et al., 2021; Steinhauer & Lovell, 2021). However, the learning will only persist based on the perceived value of the knowledge attainment experience for the NAL (Lu et al., 2022; Mara, 2021). When family, friends, and colleagues avoid or abandon the online learning platform, the NAL questions the value and possibly drops out of the course (Lu et al., 2022); therefore, social norm influences must be considered in online learning, and educators, policymakers, and communities should promote practices for advocating online education (Barclay et al., 2018; Biney, 2022). NALs who struggle must have solid support and encouragement to endure their academic journey (Biney, 2022; Lu et al., 2022; Steinhauer & Lovell, 2021). In addition, many local economies could benefit if academic institutions provided more support for the NAL (Collom et al., 2021).

Motivation Levels

Motivation levels vary among learners (Diep et al., 2019; Loock et al., 2022; Luik et al., 2020; Rothes et al., 2022). NALs are internally motivated to learn (Knowles, 1984; Machynska

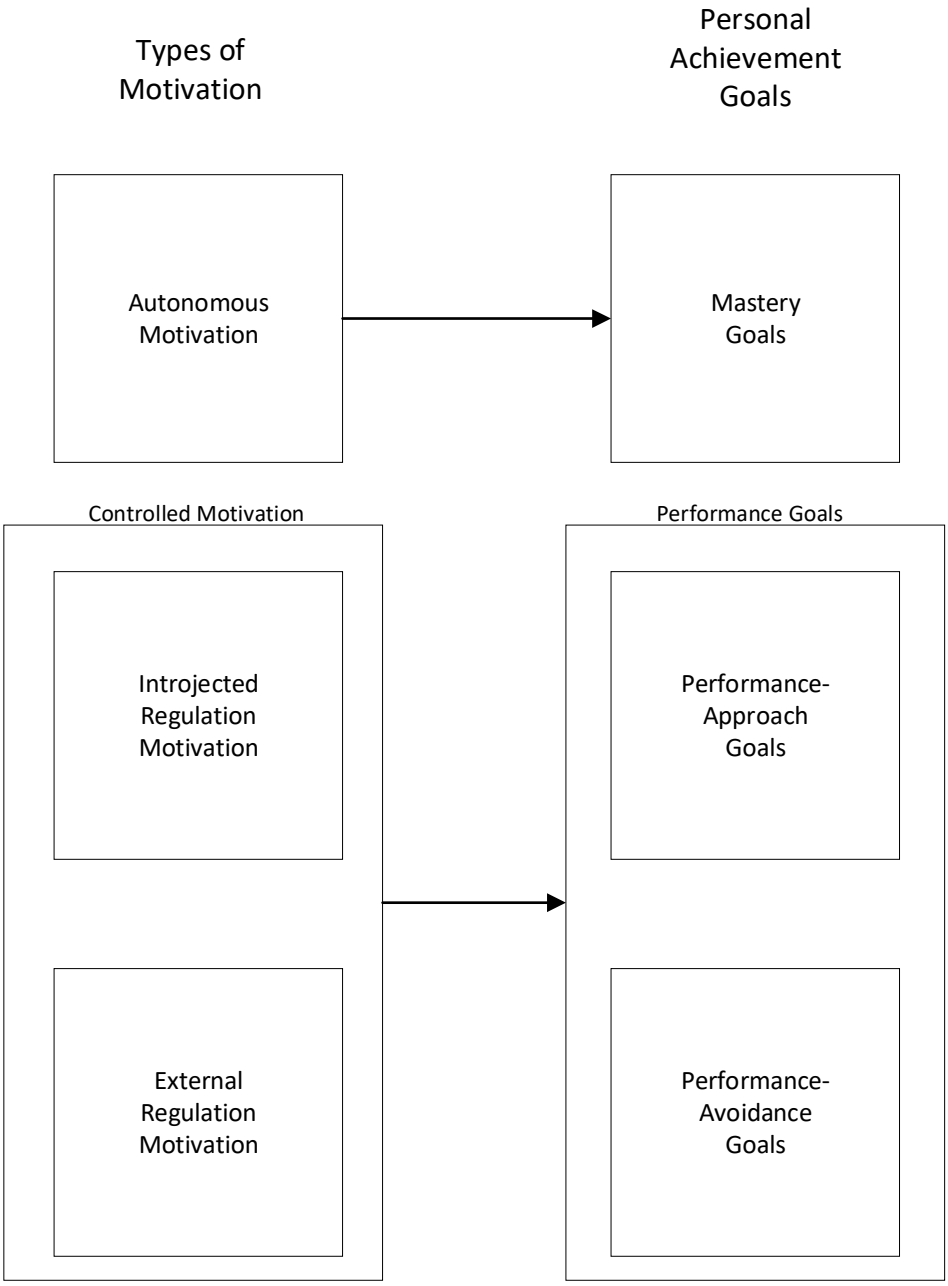
& Boiko, 2020; Mara, 2021). As NALs progress through learning, their motivation changes (Bahr et al., 2022; Diep et al., 2019). Online NAL motivation may start with an extrinsic goal of skill attainment (Diep et al., 2019; Lanford, 2021) and may change to intrinsic motivation once the NAL sees how the learning applies to their life (Diep et al., 2019; Knowles, 1984; Mara, 2021). However, a NAL may be intrinsically motivated to reach a goal of personal growth (Bahr et al., 2022; Diep et al., 2019; Knowles, 1984; Lanford, 2021) and may experience disappointment due to course difficulty perceptions (Botha & Masenge, 2022; Diep et al., 2019; du Toit-Brits, 2020; James, 2022). Intrinsic motivation may help the NAL persist in online learning (Diep et al., 2019) since this learning is relevant to the NAL's life and immediately applied (Diep et al., 2019; Knowles, 1984; Steinhauer & Lovell, 2021). NALs perform benefit analysis of learning and motivation by comparing task effort, opportunity costs, and emotional commitment to ensure the learning experience will benefit their lives and be worth their time investment (Loock et al., 2022; Luik et al., 2020). Educators must recognize different NAL motivation levels to implement effective support strategies (Borup et al., 2020).

Rothes et al. (2022) researched the engagement differences between NALs and traditional learners, showing the relationship between motivational levels, goal achievement, and learning strategies with learner self-assessments. The study showed motivational levels of autonomous motivation, extrinsic introjected motivation, and externally regulated motivation (Rothes et al., 2022). Autonomous motivation is when learners experience volition and connect to self-regulation of actions (Diep et al., 2019; Rothes et al., 2022). Controlled motivation can be in the form of introjected regulation, which is motivation by shame or guilt avoidance with criticism or punishment (Rothes et al., 2022). External regulation is another form of controlled motivation, which is motivation by behavioral values with external rewards such as higher grades,

recognition, or increased earnings (Rothes et al., 2022). Autonomous motivation was a significant positive predictor for master goal achievement for NALs (see Figure 5); therefore, interest, desire, or pleasure motivate knowledge attainment and task mastery for NALs (Novotný et al., 2019; Rothes et al., 2022; Rozvadská & Novotný, 2019; Tipton & Wideman, 2021). There is a strong pattern relationship between both introjected and external regulation self-determination and performance goal achievement (see Figure 5), which means external motivators such as guilt avoidance and behavior rewards are positive predictors for goal attainment with favorable judgments of competence and unfavorable avoidance judgments of competence (Roofe et al., 2022; Rothes et al., 2022).

Figure 5

Path Model for the NAL Motivation



Note. Adapted from "The influence of students' self-determination and personal achievement goals in learning and engagement: A mediation model for traditional and nontraditional students," by Rothes et al., 2022, *Education Sciences, 12*(6), 369, p. 10. CC BY 4.0.

Motivation is a factor for NAL education goals and is a topic that needs further research (Gardner et al., 2021; Roofe et al., 2022; Rozvadská & Novotný, 2019). Online course

engagement strategies and instruction perceptions should be further researched (Bolliger & Martin, 2018). Social roles and contextual values should be considered in future NAL motivation studies (Jiang et al., 2021; Rothes et al., 2022). NAL interactions and engagement in asynchronous online learning qualitative studies using interviews or focus groups should be considered to understand the experiences and perceptions of the NAL in asynchronous online learning (Collom et al., 2021; Lin & Sun, 2022).

Summary

Non-traditional adult learners are more likely to struggle with academic course completion, persistence, and degree attainment (Bahr et al., 2022; Collom et al., 2021; Cummins et al., 2022; MacDonald, 2019; Miller & Weiss, 2022; Singh et al., 2021; Steinhauer & Lovell, 2021) since they have perceived challenges that traditional college students do not experience in the online learning environment. Researchers have explained how adult learning can be enhanced in the online learning environment with Knowles' (1984) adult learning theory of andragogy. Current research limitations have been uncovered by reviewing current literature focused on characteristics and behaviors of non-traditional adult learners, online learning elements, instructor roles, instructional design considerations, and non-traditional adult learner academic achievement motivations. There is a gap in the literature to address the experiences that promote community college degree-seeking NAL internal motivation for asynchronous online learning.

Researchers have explored some of the characteristics of NALs that contribute to internal learner motivation and academic achievement in the asynchronous online learning environment. NALs have family and work commitments that compete with education (Rothes et al., 2022; Shi & Lin, 2021; Singh et al., 2021). Workforce demands force NALs to upgrade their knowledge

and skills (Specht-Boardman et al., 2021). NALs prefer to control their learning (Cherrstrom et al., 2019; Gardner et al., 2021) and are influenced by personal, professional, and social responsibilities (Bok, 2021; Çakiroğlu & Atabay, 2022). NALs experience situational, dispositional, and institutional challenges, including time restraints, financial stress, emotional needs, self-esteem, and academic support (Shi & Lin, 2021). NALs take online courses based on internal and external factors influencing academic success (Lu et al., 2022). NAL learning influences are associated with age, efficacy, and motivation (Abedini et al., 2021; Lu et al., 2022; Novotný et al., 2019). Internal factors impacting adult learning are technology acceptance, technology skills, academic aptitude, and time management skills (Lu et al., 2022; Smythe, 2018). External factors influencing adult learning are physical issues, family responsibilities, time constraints, and course content designs (Arghode et al., 2018; Lu et al., 2022; Stephens et al., 2022).

The literature covered the asynchronous online learning environment and how self-efficacy, self-regulation, and self-directedness significantly affect academic achievement for NALs (Stephen et al., 2020). Academic success in the online setting is associated with learner self-efficacy (Broadbent et al., 2020; Kundu, 2020; Rahim, 2022). NALs experience challenges with course difficulty (James, 2022), social interactions (Haddock et al., 2020; James, 2022; Jiang & Koo, 2020), technology skills (Galustyan et al., 2019; Lin et al., 2023) and support (Haddock et al., 2020; James, 2022). Self-regulation allows the user to take control of the learning, set goals, adapt, and self-assess (Çakiroğlu & Atabay, 2022; Stephen et al., 2020) in online learning. However, self-regulation is influenced by physical and social environments (Carl, 2019; Hromalik & Koszalka, 2018) and effective time management (Lu et al., 2022; Zhou et al., 2021). NALs must change behaviors to succeed in online learning, including the ability to

set goals, develop task strategies, self-assess, and request assistance (Stephen et al., 2020). Asynchronous online learning requires self-directed learning, and NALs want to control their actions (Baldwin & Krishnamurti, 2021; Knowles, 1984; Stephen et al., 2020). Learners need freedom in online learning (Ren, 2023) with flexible, non-linear course designs (Agonács & Matos, 2019; Sabri et al., 2022; Youde, 2020). NAL goals drive self-regulation strategies and align with academic performance (Lin & Wang, 2018; Vezne et al., 2023).

Engagement consists of psychological, cognitive, emotional, and behavioral reactions to learning achievement (Law, 2022) and happens inside and outside the learning experience (Arghode et al., 2018; Diep et al., 2019). Age, life fatigue, lack of technical knowledge, motivation, and competition influence NAL engagement levels (Abedini et al., 2021; Diep et al., 2019). However, personal, institutional, and external digital technology conditions impact online learning engagement (Stephen et al., 2020; Law, 2022). Peer interaction (Carolan et al., 2020; Law, 2022), course design structure (Baldwin & Krishnamurti, 2021; Law, 2022), and functionality features (Blonder et al., 2022; Bolliger & Martin, 2018; Ramirez & Inga, 2022) foster engagement in online learning.

Literature shows that instructors play a significant role in NAL learning by developing, implementing, and facilitating support structures for self-directed learning (Wang et al., 2021). However, instructors are challenged with technical skill development to support NALs in online learning and need more technology tools and professional development (Lin & Sun, 2022; Singh et al., 2021). NALs need connectedness (Houlden & Veletsianos, 2019; Jiang & Koo, 2020; Kuo & Fitzpatrick, 2022; Muir et al., 2019), requiring teacher presence (Page et al., 2020).

Researchers showed that online courses must be designed for self-sustainment and optimal learning opportunities (Exter & Ashby, 2022; Kuo & Fitzpatrick, 2022), which requires

instructional designs that are stimulating, engaging, expressive, collaborative, and self-directed for NAL academic performance (Diep et al., 2019; Shi & Lin, 2021). Emotional connections with social presence are critical for NAL motivation and engagement in online learning (Jiang & Koo, 2020). Social media tools, massive online open courses (Trivedi et al., 2022), and other modern technologies (Marrhich et al., 2021) should be considered for NAL asynchronous course instructional designs.

The literature covered how motivation impacts NAL asynchronous online learning (Abedini et al., 2021; Lu et al., 2022) and is influenced by social roles (Jiang et al., 2021), curriculum designs (Novotný et al., 2019; Specht-Boardman et al., 2021), and instructors (MacDonald, 2019; Singh, 2019). Education goal attainment aligns with motivation (Gardner et al., 2021). More research is needed to understand the motivation of non-traditional adult learners in the asynchronous online learning environment (Bolliger & Martin, 2018; Lin & Sun, 2022; Rothes et al., 2022).

A gap exists in the literature that addresses the experiences promoting community college degree-seeking NAL internal motivation for learning (Francis et al., 2019; Gardner et al., 2021; Lanford, 2021; Lin & Sun, 2022; Rothes et al., 2022). The need for the research would perceivably help academic achievement by completing courses in the asynchronous online learning environment (Collom et al., 2021; Lin & Sun, 2022; Singh et al., 2021). Community college degree-seeking NAL asynchronous online learning experiences that support internal motivation should be further explored to improve academic achievement (Blake et al., 2023; Bolliger & Martin, 2018; Collom et al., 2021; Francis et al., 2019; Lin & Sun, 2022; Steinhauer & Lovell, 2021; Xing & Gordon, 2023). More impactful instructional designs for NAL motivation may be developed with further research (Collom et al., 2021; Rothes et al., 2022;

Singh et al., 2021), which may lead to academic persistence (Bahr et al., 2022; Chaipidech et al., 2021; Lu et al., 2022) for community college degree-seeking NAL learners.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study is to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States. The qualitative transcendental phenomenological study involved ten community college degree-seeking NAL participants who completed an asynchronous online course. Chapter Three explains the research design, procedures, and data analysis so educators can better understand the asynchronous online experiences that support internal motivation for learning and academic achievement for community college degree-seeking NALs.

Research Design

The research design utilized a qualitative study to capture research data from study participants to understand the preferred course components that promote internal motivation for learning and academic achievement with course completion for community college degree-seeking NALs in the asynchronous online learning environment. Qualitative studies occur in the natural setting of participants and involve inductive and deductive reasoning by the researcher to find patterns or themes in the research data (Moustakas, 1994). With phenomenology, a philosophical background goes back to the mid-1800s with German mathematician Edmund Husserl (Moustakas, 1994). Throughout the years, Husserl's views were expanded by other philosophers such as Heidegger, Sartre, and Merleau-Ponty and incorporated into other areas like psychology, health sciences, and education (Creswell & Poth, 2016).

This research utilized the qualitative phenomenological research study using Moustakas' (1994) transcendental approach. This study used the transcendental phenomenology research

method since researchers interpret the participants' lived experiences and meanings with rich text descriptions (Moustakas, 1994; see also Peoples, 2021). The conscious appearance of experiences emphasizes awareness, ideas, and essence, making it objective in transcendental phenomenology (Moustakas, 1994).

Researchers must use reflectivity to analyze and synthesize data throughout phenomenological studies to understand the experience essence (Moustakas, 1994). Reflectivity allows for a logical, methodical, and transparent analysis of an experience to develop a complete construct textual description of the experience (Moustakas, 1994). Transcendental phenomenology uses subjectivity and objectivity to reflect and discover the meaning of experiences (Moustakas, 1994). According to Moustakas (1994), Husserl's intentionality is critical to transcendental phenomenology because it involves changing one's position in the world and the thinking that aligns with it, therefore changing how experiences are analyzed, limiting subjectivity and feelings associated with thoughts. Intentionality involves interpreting actions that are objectified and feelings that are unobjectified (Moustakas, 1994). For example, an objectified existence of landscape is perceived by an individual's consciousness; however, feelings that landscape brings to an individual through one's thoughts are unobjectified (Moustakas, 1994). Intentionality comprises noema, the appearance or perception of a phenomenon, and noesis, the interpretation of the phenomenon (Moustakas, 1994; see also Peoples, 2021); therefore, noesis is to think about something, and noema is the object that is being thought about (Peoples, 2021). Intentionality allows one to find the phenomenon meaning where noema distinguishes the important conscious elements of the object, noesis explains the beliefs or feelings associated with the object, and deliberate noema and noesis alignment finds the experience essence or meaning (Moustakas, 1994).

Intuition is another important concept for transcendental phenomenology since it gives one the foundation to originate human experience knowledge (Moustakas, 1994). Intuition allows for thinking, understanding, judging, sensing, and reflecting (Moustakas, 1994). Reflective intuition involves visual and mental transformations that help us describe the essence of the conscious experience (Moustakas, 1994).

The core methods of gaining knowledge in transcendental phenomenological studies are epoché, transcendental-phenomenological reduction, and imaginative variation (Moustakas, 1994). Epoché is to set aside biases to focus on the experience (Moustakas, 1994). With epoché, researchers can see a new perspective and view what is before them to see a phenomenon from an unbiased interpretation (Moustakas, 1994). The next step is transcendental-phenomenological reduction, where textual descriptions give the essence of the phenomenon or each experience a meaning (Moustakas, 1994). Openness is required for transcendental-phenomenological reduction and describes the conscious experience (Moustakas, 1994). The last method, imaginative variation, is where the experience essence structure uses imagination, sense, and memory to synthesize phenomenon meaning with structured textual descriptions (Moustakas, 1994).

Life stories are captured for individuals and groups and are shared with the world in phenomenology (Akay, 2022). This qualitative study used the phenomenological research design to focus on understanding individuals' common experiences of a phenomenon (Moustakas, 1994). This research focused on the human experience of community college degree-seeking NALs in the United States to discover the learning motivations in the asynchronous online learning environment.

Research Questions

These research questions were used as a guide for data collection to obtain research data from study participants. The questions are comprised of a central research question with three research sub-questions. The research questions are listed verbatim from the Chapter One section.

Central Research Question

How do community college degree-seeking non-traditional adult learners experience motivation in the asynchronous online learning environment?

Sub-Question One

What asynchronous online learning forms of engagement motivate degree-seeking community college non-traditional adult learners?

Sub-Question Two

What asynchronous online learning behaviors motivate community college degree-seeking non-traditional adult learners?

Sub-Question Three

How do instructors perceivably impact the motivation of community college degree-seeking non-traditional adult learners?

Setting and Participants

The study's research setting was performed and recorded on a secure computer using Microsoft Teams. The participants received a Microsoft Teams link to the meeting, which did not require any special computer software. According to Miller and Weiss (2022), community colleges nationwide provide 40% of the postsecondary education needs for middle-class and low-income households. The study participants were degree-seeking NALs who completed and obtained credit toward a degree for an asynchronous online course at a community college in the

United States. The Microsoft Teams online setting allowed for a more diverse participant pool since it eliminated the physical location restriction.

Setting

The research setting was an urban community college in Ohio that offered asynchronous online courses. The community college is led by a President and governed by a Board of Trustees appointed by the Governor of the State of Ohio to serve a six-year term. The community college specializes in providing over 130 degrees and certificates in information technology, engineering, business, culinary, horticulture, nursing, and aviation. The community college provides educational and cooperative learning opportunities for approximately 7,000 students annually. Community colleges usually have open admission, lower tuition rates than traditional colleges, and serve 40% of higher education students (Miller & Weiss, 2022). Community colleges attract non-traditional adult learners since they seek the knowledge and skills required for the workforce (Lanford, 2021). Community colleges' national graduation rate within three years for full-time students is 25%, which is low compared to traditional colleges (Miller & Weiss, 2022). This research provided insight into the asynchronous online course experiences that provide internal motivation to learn and promote academic achievement with course completion for the degree-seeking NAL student population. Criterion sampling and snowball sampling were used to recruit participants. The research was performed and recorded on a secure computer using Microsoft Teams. The participants were not required to download additional software on their computers since they were given a link to the Microsoft Teams meeting. The choice of using Microsoft Teams is based on the protocol and standards found as a result of COVID-19. The online interview setting also provides a safe space for students to share

their lived experiences free of distraction and interruption, allowing the researcher to bring perspective to the study.

Participants

The study participants were NALs who completed at least one asynchronous online course for degree credit at a community college in the United States. The NAL is defined as being 25 or older, having family and work responsibilities, experiencing a break in formal education, and being socially independent of parents (Singh, 2019; Singh et al., 2021). The participants must have completed an asynchronous online course, resulting in credits earned toward an academic degree program. Pseudonyms were used in the study to protect the privacy and confidentiality of study participants. The initial list of possible study participants was obtained from my network of community college colleagues in the United States. The study involved ten student participants to achieve theme data saturation (Creswell & Poth, 2016; Lincoln & Guba, 1985; Peoples, 2021).

Researcher Positionality

The inspiration for this research study was to learn more about NAL motivational experiences in the community college setting since I have spent over 20 years teaching in the community college setting. The social constructivism interpretive framework guided this qualitative phenomenological study. Social constructivism forms subjective meanings by interacting with others (Creswell & Poth, 2016). The ontological, epistemological, and axiological philosophical assumptions explain the position in which the researcher views the world.

Interpretive Framework

Social constructivism is where one wants to understand more about the world in which

one lives and works (Creswell & Poth, 2016). The constructivist researcher must consider the complexities of world views instead of just simplifying the meaning (Creswell & Poth, 2016). In phenomenology research, experience meaning is accomplished using broad, open-ended questions for study participants (Moustakas, 1994). With the social constructivism interpretive framework, the researcher's personal, cultural, and historical background forms the interpretation of research data obtained from discussions and interactions with study participants (Creswell & Poth, 2016).

Philosophical Assumptions

Phenomenological research philosophical assumptions are based on obtaining the essence of an experience with textual descriptions (Creswell & Poth, 2016). Three philosophical assumptions are covered in this research study: 1) ontological, 2) epistemological, and 3) axiological. This will explain the values and belief systems that guide the research, and disclosing these positions will provide insight into the research study approach.

Ontological Assumption

Reality is real when formed in the minds of those involved in the experience (Lincoln & Guba, 1985); therefore, the reality is in the minds of experience participants (Creswell & Poth, 2016). Ontological assumption covers the nature of reality and how it can be seen through many views (Creswell & Poth, 2016). This study is centered on God's truth as the one universal reality. Human understanding of this truth may be imperfect; some may mistakenly believe in multiple realities.

Epistemological Assumption

Epistemology supports the notion that people exist in a world with the awareness that others live in the same world (Vincini & Gallagher, 2021). The phenomenological study focuses

on the roots of the lived experience of the study participants (Moustakas, 1994). The researcher must look at the natural world and attitudes while consistently observing and questioning what is uncovered in the study (Englander & Morley, 2023). The epistemological philosophical assumption means that knowledge is obtained by understanding study participants (Creswell & Poth, 2016). Epistemology tries to bridge the gap between the researcher and study participants by getting subjective evidence from study participants (Creswell & Poth, 2016). With the epistemological, philosophical assumption, the reality is developed by both the researcher and the participant (Creswell & Poth, 2016). The researcher spends time with study participants in the field and must collaborate with participants to obtain evidence to construct study results and conclusions (Creswell & Poth, 2016). As a researcher, I can relate to non-traditional adult students since I am an instructor and program chair advisor for community college degree-seeking NALs.

Axiological Assumption

Axiology forces the researcher to consider the underlying values of research questions (Kelly et al., 2018). The axiological assumption uncovers the role of values in a research study and how biases may relate to the researcher's role in the study (Creswell & Poth, 2016). The researcher shares the values that form the narrative along with the interpretation of participant data (Creswell & Poth, 2016). I value this research study since I am an instructor at a community college with many NALs. The primary goal of a community college instructor is to motivate students, promote learning opportunities, and contribute to student academic achievement, which requires continuous improvement of courses. The study results may impact the development of future instructional designs for the community college.

Researcher's Role

As a study researcher, I was a human instrument to gather and interpret the participant study data (Lincoln & Guba, 1985). Knowledge was constructed during conversational social interactions (Moustakas, 1994). Researchers should not have authority over the study participants (Creswell & Poth, 2016). Researchers must be aware of their own opinions and presumptions to set them aside (Chan et al., 2013). My role in the research setting is one of an inquisitive learner with no authority over the participants. The study participants were students not associated with my online courses or my program chair advising responsibilities at my community college to eliminate any bias or assumptions that may influence the data analysis. The research study will involve epoché to ensure personal biases are set aside and bracketing to focus on the research and set everything else aside (Moustakas, 1994).

Procedures

This qualitative research study provided insight into the asynchronous online course experiences that provide internal motivation to learn and promote academic achievement with course completion for the community college degree-seeking NAL student population (Collom et al., 2021; Lin & Sun, 2022; Singh et al., 2021). Qualitative data collection procedures usually involve interviews with individuals who experienced the research phenomenon (Moustakas, 1994). However, feedback surveys (Denzin, 2017) and letter-writing prompts (Burtt, 2021; Ofe-Grant, 2022) were included in this research to ensure data saturation (Lincoln & Guba, 1985). Data collection interviews consisted of informal interactive conversations with open-ended comments and inquiries (Moustakas, 1994). The steps for conducting this study were based on Moustakas' (1994) methodology and are outlined in the section for study replication. The procedures section details the setting permissions, obtaining Institutional Review Board (IRB)

approval, participant solicitation, data collection, data analysis plans, and the study data triangulation explanation.

Moustakas (1994) provided a detailed methodology for data collection procedures, including data preparation, data collection, data organization, and summarization (see Figure 6). In the data preparation process, questions were formulated, literature reviews were conducted, participant criteria were established, and data collection guiding questions were developed (Moustakas, 1994). Data collection involved engaging in epoché, bracketing questions, and conducting data collection methods (Moustakas, 1994). As the data collection progressed, the data organization happened simultaneously, which involved the organization, analysis, and synthesis of participant data (Moustakas, 1994). This data organization included the data analysis process, which is explained further and illustrated in Figure 7 in the data collection plan section. After the data collection methods were complete and data had been synthesized, the study results were summarized, further implications defined, and outcomes disclosed (Moustakas, 1994).

Figure 6

Methodology

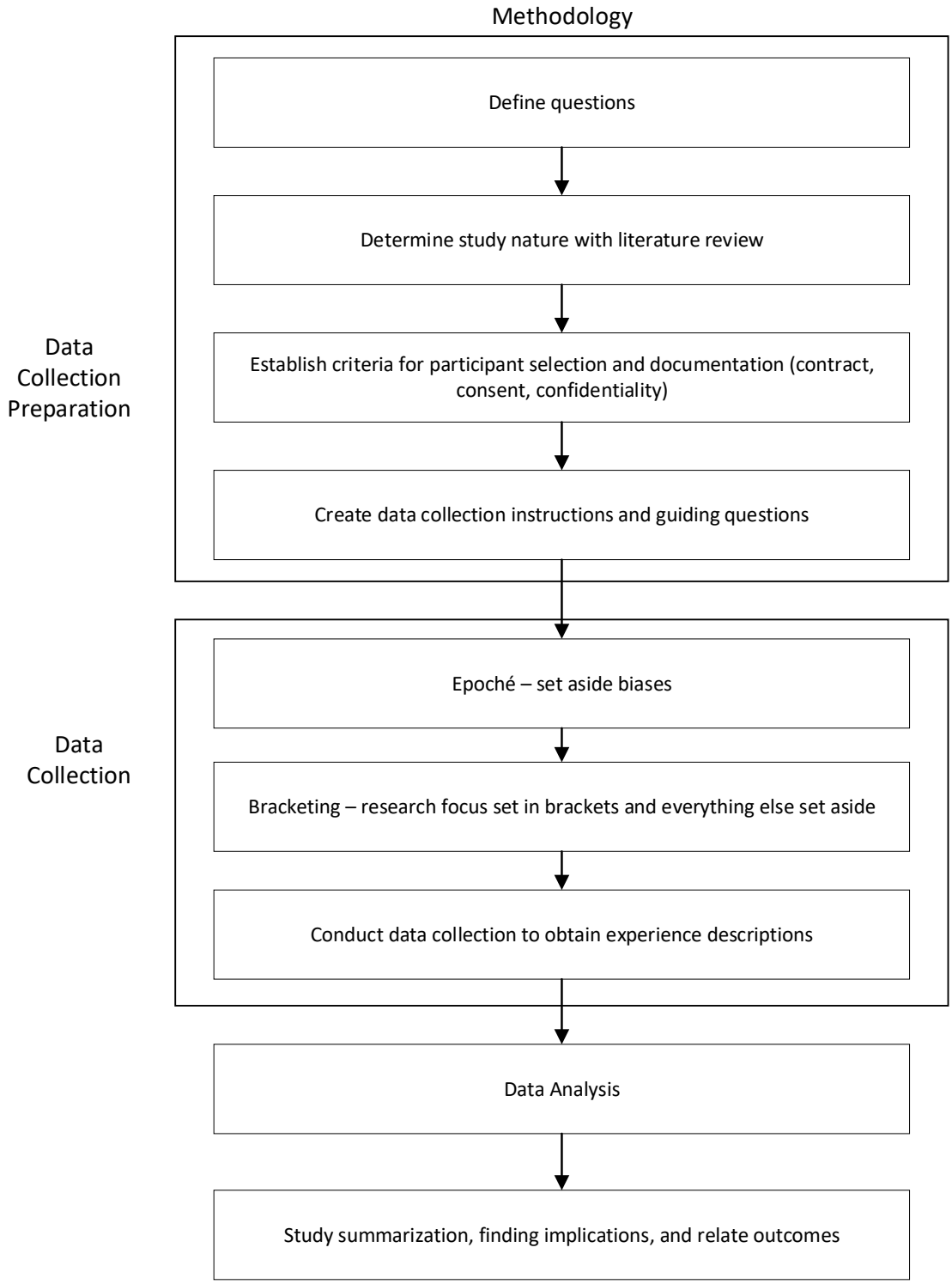


Image of methodology. Own work.

Permissions

The Appendix references the Institutional Review Board (IRB) approval letter and study participants' permission exemption for data collection using an individual interview, focus group, and a letter-writing prompt. See Appendix A for IRB approval request. See Appendix B for the IRB Exemption letter. See Appendix C for the study participant information sheet document.

Recruitment Plan

The research study involved 10 participants to ensure data saturation (Creswell & Poth, 2016; Lincoln & Guba, 1985; Peoples, 2021). Phenomenological studies use many types of sampling (Creswell & Poth, 2016; Miles et al., 2018), providing the study with boundaries and a conceptual frame for processing (Miles et al., 2018). Criterion sampling was used to find individuals who experienced the phenomenon to streamline participant selection (Creswell & Poth, 2016). And snowball sampling was used to recruit one study participant, which is when interested participants can recruit others from their social networks (Miles et al., 2018). Criterion sampling is beneficial for quality assurance (Creswell & Poth, 2016). Snowball sampling is when the first set of potential study participants are asked if they know others who would be interested in participating in the study (Dosek, 2021).

The need for research participants was communicated by email to colleagues at community colleges in the United States to share with potential degree-seeking NAL participants in the asynchronous online learning environment. The possible study participants were selected and received a survey link containing study details. Participants moved forward with a survey questionnaire once they chose to be in the study. The potential participants were screened to confirm eligibility by discussing the study participant requirements, confidentiality, and

informed consent requirements (Creswell & Poth, 2016; Peoples, 2021). Several researchers believe participants should be compensated for their valuable time and opinions (Fisher et al., 2021; Miles et al., 2018; Persad et al., 2019); therefore, the research participants will receive a $100 Amazon gift card. See Appendix C for the participant information sheet document. See Appendix H for the email letter to prospective study participants.

Data Collection Plan

This qualitative phenomenological research used data collection methods described by Clark Moustakas (1994). However, the Moustakas (1994) approach was used with the systematic steps of Lincoln and Guba's (1985) method to streamline the study by following their detailed data collection steps. Data collection involved interviews, focus groups, and letter-writing prompts for the individuals associated with the phenomenon (Lincoln & Guba, 1985; Moustakas, 1994). The data was presented by grouping codes to define the meaning and developing structured descriptions (Lincoln & Guba, 1985; Moustakas, 1994). This information was captured creating soft data and produced as ideas, words, sentences, pictures, and representations (Lincoln & Guba, 1985; Moustakas, 1994; see also Mulisa, 2022; Peoples, 2021).

This research study's data collection consisted of three data collection methods to ensure saturation: a) feedback survey, b) semi-structured interviews, and c) letter-writing. The data collection sequence was selected to ensure data saturation that ensures no new data was collected from participants (Creswell & Poth, 2016; Lincoln & Guba, 1985; Peoples, 2021); the sequence gave the study participants ample time to reflect further on their experiences with the use of a feedback survey, followed with an opportunity to share more details in the individual interview session, and a final opportunity to share their thoughts and feelings with the individual letter-writing experience. This research study's data collection began with a feedback survey with

open-ended questions to gain an understanding of the research phenomenon (Moustakas, 1994; see also Peoples, 2021). Following the feedback survey were semi-structured interviews to allow participants to consider and share their personal views (Moustakas, 1994). The semi-structured interviews introduced the participants to the research and allowed for interaction by asking open-ended questions for data collection (Moustakas, 1994). Individual interviews enabled the researcher to collect more data, address data gaps, and verify the data obtained from the feedback surveys (Peoples, 2021). The last data collection method was the letter-writing prompt to enable the participants to reflect and revise their thoughts about the phenomenon experience (Creswell & Poth, 2016; Peoples, 2021). The essence of the individual experiences of this collective group was described after data collection (Moustakas, 1994).

Data collection activities were captured with recorded video and memoing to ensure prominent levels of fidelity and organization (Lincoln & Guba, 1985). Online meeting video recordings provided high fidelity so the researcher could reproduce data as the study analysis progressed (Lincoln & Guba, 1985). Memoing keeps the researcher reactive and responsive, forcing the researcher to pay attention to key details communicated by the participant and used to track the researcher's thoughts about the data (Lincoln & Guba, 1985; Miles et al., 2018). Once the first data collection session concluded, data analysis began to ensure design progress and to build the foundation for future data collection (Lincoln & Guba, 1985). The cycle of continuous data analysis using triangulation occurred after all three data collection sessions (Lincoln & Guba, 1985).

Feedback Survey

Feedback surveys can be a powerful tool for studying natural experiences (Denzin, 2017). Nevertheless, it cannot capture human interaction unless designed with flexible questions to

capture forms of human interaction (Denzin, 2017). Feedback surveys encouraged participants to think about the phenomenon experience by asking open-ended questions (Miles et al., 2018). The feedback survey included questions to obtain demographic information. The feedback survey allowed the participants to think about their experiences as a community college degree-seeking NAL in the asynchronous online learning environment. The surveys involved participants receiving a link from the third-party survey provider SurveyMonkey to send the survey questions in an email link. The survey contained demographic information questions for the initial screening and open-ended questions to describe the experience and effect (Moustakas, 1994). The participant had ten days to respond to the link; if the participant did not respond within ten days, it is assumed that the participant withdrew from the study.

Table 1

Feedback Survey Questions

1. Name
2. Gender
3. Age
4. Race/Ethnicity
5. Where is your community college located?
6. What is your degree program?
7. When did you enroll in the degree program?
8. How many remote online courses did you take and receive degree credit for?
9. When did you last receive credit for an online course?

Please provide as much or as little detail as you feel is necessary to answer the following questions.

10. How was the online course experience for you? (CRQ)

11. Explain how the experience impacted you after you completed the course. (CRQ)

The feedback survey served as the precursor for individual interviews and allowed participants time to consider their experiences as a community college degree-seeking NAL in the asynchronous learning environment. Survey questions were used to obtain research data from study participants to uncover the asynchronous online learning experience that motivates learning and academic achievement by course completion for community college degree-seeking NALs. The questions were reviewed and approved by field experts (Creswell & Poth, 2016; Lincoln & Guba, 1985). The open-ended questions allowed the participants to share thoughts and experiences (Moustakas, 1994; see also Peoples, 2021) that motivated learning and contributed to academic achievement by course completion. The feedback survey questions were the first set of data for triangulation (Moustakas, 1994; see also Peoples, 2021), open conversation, and reflection opportunities that further explore the motivational experiences of degree-seeking NALs in an asynchronous online environment at a community college.

Feedback Survey Data Analysis Plan

The feedback survey data analysis plan followed the processes for phenomenological data analysis described by Moustakas (1994) and Lincoln and Guba (1985). The participant survey responses to questions 10 and 11 were highlighted for significant statements to understand and describe the phenomenon (Denzin, 2017). A methodical process was followed for data analysis, adhering to a systematic, disciplined way of investigating the data (Lincoln & Guba, 1985; Moustakas, 1994). Before reviewing the survey responses, the researcher engaged in epoché to set aside biases to analyze the phenomenon experience (Moustakas, 1994; see also Peoples, 2021).

Data analysis is a form of data reconstruction (Moustakas, 1994; Lincoln & Guba, 1985). The steps for analyzing data (see Figure 7) include a) epoché, b) phenomenological reduction with bracketing, horizonalization, and unitization, c) imaginative variation with categorization and pattern recognition, and d) member checking (Moustakas, 1994; Lincoln & Guba, 1985; Peoples, 2021). The researcher attempted to set aside biases by engaging in epoché to focus on the phenomenon experience analysis (Moustakas, 1994). Engaging in epoché helped to suspend researcher preconceptions, beliefs, and prior experiences related to the research phenomenon (Moustakas, 1994). Bracketing is when the researcher sets everything else aside so the research topic and questions can be the sole focus for a conscious awareness of how the world exists (Moustakas, 1994). Horizonalization considers every statement and is treated equally throughout the analysis process, which gets interpreted into meaning units (Moustakas, 1994). Participant data was horizonalized, which involved clustering and coding the data into structured description meaning units (Moustakas, 1994).

Information units are transformed into categories of data associated with understanding action and are small, separate information elements (Lincoln & Guba, 1985). The researcher provided as many units as possible in this coding process since they can be disregarded later (Lincoln & Guba, 1985; Moustakas, 1994). Unitization included the data collection source, respondent type, setting, and episode (Lincoln & Guba, 1985).

Categorization emerged from the meaning units (Lincoln & Guba, 1985). Once the units were categorized, the categories were reviewed for duplication (Lincoln & Guba, 1985). Pattern analysis was performed over the data, which was condensed by eliminating theme duplication (Lincoln & Guba, 1985; Moustakas, 1994). Categories that may be used in further data collection were those with extension, bridging, and surfacing (Lincoln & Guba, 1985). Extension categories

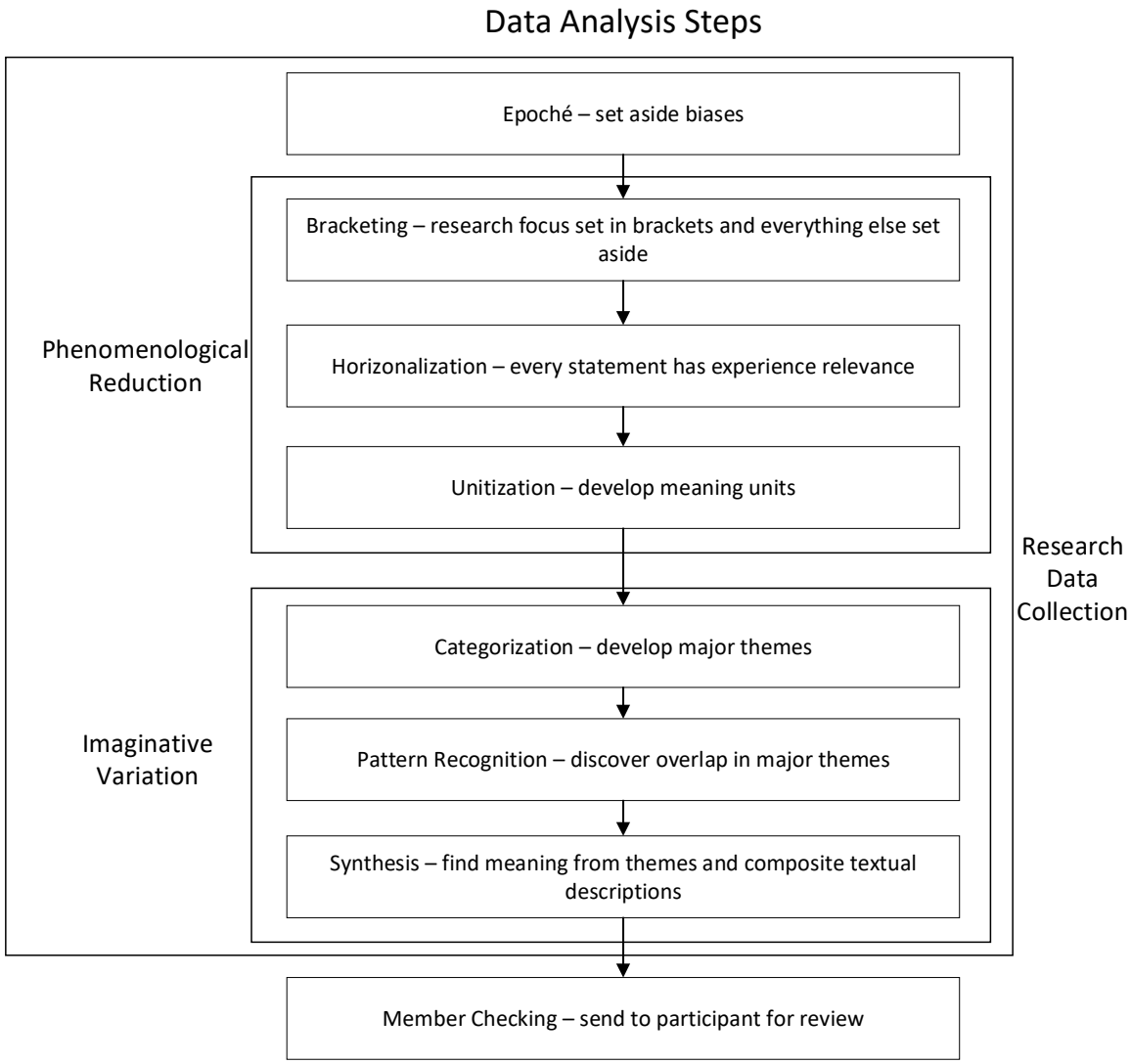
branched into further questions (Lincoln & Guba, 1985). Bridging categories had a disconnection and were not fully comprehended, therefore requiring further research (Lincoln & Guba, 1985). Surfacing categories uncovered new information that turned into new categories (Lincoln & Guba, 1985).

The rules that prompted data collection completion were source exhaustion, category saturation, category consistency, and overextension, meaning no new information emerged from the data (Lincoln & Guba, 1985). Once the researcher halted data collection, an entire category review took place to ensure all data categories were captured (Lincoln & Guba, 1985). Composite descriptions were extracted, describing the phenomenon's essence (Lincoln & Guba, 1985; Moustakas, 1994; Peoples, 2021). Categorization concluded with the trustworthiness member check for participant review and feedback (Lincoln & Guba, 1985). The member checks occurred after all the participant data had been categorized from all the data collection methods.

Data obtained from the data collection activities were processed using Delve, a qualitative software program that assists with data analysis and theme illumination (Creswell & Poth, 2016; Peoples, 2021). Delve will be used to store research data categories throughout the data collection process and assist with research data organization, code, and theme development.

Figure 7

Data Analysis Steps



Note. Image of data analysis steps. Own work.

Individual Interviews

Individual interviews provide detailed descriptions captured as a collective essence of the personal experiences of the phenomenon at the end of the phenomenological study (Moustakas, 1994; see also Peoples, 2021). During the individual interview process, the researcher attempts to set aside biases by engaging in epoché to focus on the phenomenon experience analysis

(Moustakas, 1994; see also Peoples, 2021). At the beginning of the Microsoft Teams individual semi-structured interviews, the purpose of the study will be disclosed along with ensuring participant confidentiality (Moustakas, 1994; see also Peoples, 2021). The individual interview will take 45 to 60 minutes to complete. The process will begin with a social conversation to create a relaxed, trusting atmosphere to ensure participant comfort by asking the participant to focus on the phenomenon and its impact on them before asking questions (Moustakas, 1994). The interviews will involve asking the participants general questions about the phenomenon experience and the contexts that impacted the experience with the phenomenon (Moustakas, 1994). Then, the participant will be asked a few open-ended questions to focus on describing the experience and effect (Moustakas, 1994). These questions will be flexible and allow for open conversation to understand what contributes to the phenomenon (Moustakas, 1994) of experiences of motivation for learning and academic success by course completion for the community college degree-seeking NALs in the asynchronous online learning environment. The interview questions focus on the study purpose and describe the phenomenon's what and how (Moustakas, 1994). These open-ended questions in semi-structured, conversational interviews allow the study participants to explain the experience thoroughly (Moustakas, 1994).

Table 2

Individual Interview Questions

1. Please describe your background and community college educational goals. (CRQ)
2. Why did you decide to take online courses? (CRQ)
3. Please describe your experience with online courses. (CRQ)
4. What made the experience significant? (CRQ)
5. What experiences come to mind when you think of instruction methods you experienced during an online course? (SQ1)

6. What made that instruction method experience significant? (SQ1)
7. What experiences come to mind when you think of peer interaction during your online courses? (SQ2)
8. What made that peer experience significant? (SQ2)
9. How did you feel working with peers in the online course? (SQ2)
10. How have your experiences with instructor communication influenced your view of online courses? (SQ3)
11. What made that instructor communication experience significant? (SQ3)
12. How have your instructor interaction experiences influenced your view of online courses? (SQ3)
13. What made that instructor interaction experience significant? (SQ3)
14. I appreciate your time and how much we covered in our conversation today. The final question is, what is essential for me to know about your online course experiences? (CRQ)

The individual interview questions will be used to obtain research data from study participants to understand further the phenomenon (Moustakas, 1994) of motivational experiences that supported academic achievement by course completion for community college degree-seeking NALs in the asynchronous online learning environment. The questions will be reviewed and approved by field experts. The questions allow the participants to describe their thoughts that cannot be captured in other research approaches (Moustakas, 1994). The interview questions seek to understand the meaning of human experience, find qualitative behavior factors, involve total immersion of research participants, refrain from causal relationship prediction, and illuminate comprehensive experience descriptions (Moustakas, 1994). The participants will be

able to describe their experiences as NALs that can be used to improve the learning experience. Questioning for human science research provides a) value through qualitative designs and methodologies which cannot be uncovered with quantitative research, b) focuses on the entire experience, c) uncovers meaning instead of measures, d) explains experiences in first-person, e) defines the human experience in data analysis, f) the researcher is dedicated, and g) experience, actions, and the subject encompasses the representation of the phenomenon (Moustakas, 1994).

Individual Interview Data Analysis Plan

The individual interview data analysis plan followed the same procedures for phenomenological data analysis described by Moustakas (1994) and Lincoln and Guba (1985) outlined in Figure 7. The individual interviews were highlighted for significant statements to understand and describe the phenomenon (Denzin, 2017). The data was reviewed using the imaginative variation process (Moustakas, 1994), as shown in Figure 7. The data was organized in the qualitative software program Delve to assist with code and theme development (Creswell & Poth, 2016; Peoples, 2021).

Letter-Writing

The letter-writing data collection approach supplemented the interviews, allowing the participants to expand on their lived experiences (Burtt, 2021; Ofe-Grant, 2022) as the third step of data collection for the participants to reflect on and reconstruct their lived experiences (Moustakas, 1994). Letter-writing gave participants time to reflect and change their thoughts, unlike time-restricted interviews with fixed questions (Burtt, 2021; Ofe-Grant, 2022). The letter-writing took 15 to 30 minutes to complete. The data collected in this approach was used to triangulate the feedback surveys and individual interviews study data (Moustakas, 1994; see also Peoples, 2021). The participants were asked to provide a letter explaining what motivated them

to learn and supported their academic achievement with degree credit course completion in the asynchronous online environment. The question asked the participants to explain the most impactful motivations experienced in asynchronous online instruction at the community college (CRQ). This letter was emailed using SurveyMonkey returned to the researcher within seven days of receipt.

Letter-Writing Questions

1. Please explain the driving force that influenced your academic progress and successful course completion in online courses. (CRQ)
2. Share any other thoughts about your experience with online courses that can help with this study. (CRQ)

Letter-Writing Data Analysis Plan

The letter-writing data analysis plan followed the same procedures for phenomenological data analysis described by Moustakas (1994) and Lincoln and Guba (1985) (see Figure 7). The letter-writing was used to understand the motivational experiences of community college degree-seeking NALs in the asynchronous learning environment. This data was used for triangulation to ensure validity (Denzin, 2017; Lincoln & Guba, 1985). The qualitative software program Delve assisted with data organization and code and theme development (Creswell & Poth, 2016; Peoples, 2021).

Data Synthesis

Once the feedback survey data, individual interview data, and letter-writing data collection methods were analyzed and summarized into composite descriptions, the results were triangulated against each other (Denzin, 2017; Moustakas, 1994). Triangulation is when empirical reality must be observed from different aspects (Denzin, 2017), which helps ensure the

research data's validity (Denzin, 2017; Lincoln & Guba, 1985). Triangulation is the process of pattern analysis and removal of overlapping structured textual descriptions to generate a final description list (Denzin, 2017; Moustakas, 1994). The final list of composite structural descriptions synthesized the data collection (Moustakas, 1994). Composite textual descriptions answered the research questions and described the essence of the phenomenon (Moustakas, 1994; see also Peoples, 2021) experiences of learning motivation for community college degree-seeking NALs in the asynchronous online learning environment. To ensure credibility, the data analysis results were reviewed by a qualified researcher who was not a participant in the data collection (Denzin, 2017; Peoples, 2021). The data analysis documents have been retained for audit purposes (Lincoln & Guba, 1985). The qualitative software program Delve was used to perform data analysis (Creswell & Poth, 2016; Peoples, 2021).

Trustworthiness

With qualitative analysis studies, researchers must ensure trustworthiness with credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). In this section, the procedures explained by Lincoln and Guba (1985) were used as a guide for ensuring the trustworthiness of this study. This section describes the steps to ensure credibility, transferability, dependability, confirmability, and ethical considerations.

Credibility

To establish trustworthiness, the researcher must demonstrate credibility (Lincoln & Guba, 1985). Researchers must ensure the study meets its intentions based on the positivist view of internal validity (Shenton, 2004). To ensure internal validity, this study was based on well-established qualitative research methods of feedback surveys, individual interviews, and letter-writing. To increase the study's credibility, prolonged engagement, persistent observation,

triangulation of multiple data sets, peer debriefing by field experts, and member checks (Lincoln & Guba, 1985) were required by the Liberty University Institutional Review Board (IRB) for participant consent.

Prolonged engagement and persistent observation allow researchers to become familiar with the study site and build relationships with study participants while revealing the culture and context of the participants, allowing the researcher to uncover misconceptions developed in the study (Lincoln & Guba, 1985). The study took place using Microsoft Teams on a secure computer. The study involved prolonged engagement with persistent observation by utilizing feedback surveys, followed by interview sessions, and ending with a letter-writing prompt.

Triangulation

Triangulation of multiple data sets allows the researcher to validate the study results; therefore, data must be justified against numerous data sources (Denzin, 2017; Lincoln & Guba, 1985). Research results must be dependable (Denzin, 2017; Lincoln & Guba, 1985). To build validation of study results, the researcher used multiple data sources and methods to find existing meanings instead of theories (Denzin, 2017; Lincoln & Guba, 1985). Information should only be seriously considered with triangulation (Lincoln & Guba, 1985). The data obtained from the feedback surveys, individual interviews, and letter-writing was used to triangulate the study results (Peoples, 2021), assisting with validation and dependability (Lincoln & Guba, 1985).

Peer Debriefing

Peer debriefing keeps the researcher honest (Lincoln & Guba, 1985). This is where an outside person familiar with the study phenomenon or familiar with the research checks the work and asks questions about methods and interpretations used in the study (Lincoln & Guba, 1985; Peoples, 2021). Peer debriefers can be neutral colleagues questioning study methods, results, and

conclusions for research study accountability and integrity (Peoples, 2021). The study's peer debriefer was my colleague since this person is familiar with the study phenomenon topic and has been a supportive force throughout this journey. The peer debriefing sessions were performed in person and recorded for auditing purposes.

Member Checks

Member checking is critical for study credibility (Lincoln & Guba, 1985; Peoples, 2021). Member checking is when a researcher asks for participant feedback on the study's interpretations (Lincoln & Guba, 1985; Peoples, 2021). Member checking was performed by sharing the themes and descriptions obtained from the analysis with study participants, allowing the researcher to find missing components in the data analysis (Lincoln & Guba, 1985; Peoples, 2021). Member checking was performed using the transcripts after the semi-structured individual interviews (Peoples, 2021). Once the interviews were transcribed, they were sent to each study participant to review the findings and obtain their input to ensure accuracy and credibility (Peoples, 2021).

Transferability

Study transferability means that study findings can be used in other contexts (Lincoln & Guba, 1985) and may be relatable to other populations (Peoples, 2021). The participant setting and experiences must be considered before finding generalizations (Peoples, 2021). Thick descriptions of the phenomenon being studied must give the reader enough information to relate to their situations (Shenton, 2004). This study included conditions for transferability with thick, rich descriptives of the phenomenon for transferability (Lincoln & Guba, 1985; Moustakas, 1994; Peoples, 2021), which tells the research reader everything they need to know about

research results (Lincoln & Guba, 1985). However, there are no guarantees of transferability since this is determined by the research reader (Lincoln & Guba, 1985).

Dependability

Study credibility can only exist with study dependability (Lincoln & Guba, 1985). When a study has dependability, it can be replicated with similar results (Lincoln & Guba, 1985; Peoples, 2021; Shenton, 2004). Dependability is described in the research design and implementation section. Detailed activities and actions performed in the field were explained to allow for study replication (Lincoln & Guba, 1985). The process included a reflection to evaluate the effectiveness of the study process (Lincoln & Guba, 1985). The Liberty University dissertation committee and the Qualitative Research Director performed an inquiry audit to ensure the effectiveness of the steps and procedures used in the research study.

Confirmability

For study confirmability, researchers must ensure objectivity in research studies (Lincoln & Guba, 1985) by recognizing when to eliminate any researcher bias to ensure the study results reflect the experiences and views of the study participants (Shenton, 2004). Confirmability is handled with audits, audit trails, triangulation, and reflexivity (Lincoln & Guba, 1985). Audits describe how the data was constructed, and the audit trails provide detailed steps (Lincoln & Guba, 1985). Triangulation was performed over the research data (Lincoln & Guba, 1985) obtained in feedback surveys (Miles et al., 2018), individual semi-structured interviews (Moustakas, 1994), and letter-writing (Burtt, 2021; Ofe-Grant, 2022). Triangulation corroborated research data evidence from multiple sources, exposed the themes, and validated the research findings (Lincoln & Guba, 1985; see also Peoples, 2021). The researcher demonstrated

reflexivity by being conscious of and disclosing personal biases, values, and experiences related to the phenomenon (Lincoln & Guba, 1985).

Ethical Considerations

The study adhered to Liberty University's Institutional Review Board (IRB) ethical standards by obtaining participant consent, IRB consent, confidentiality assurance, and following research data security procedures (Moustakas, 1994). The consent form exemption was completed before the research study. Once IRB approval was obtained, the participant information sheet document informed participants of the voluntary study participation and withdrawal rights (Moustakas, 1994). All participants received a $100 Amazon gift card after the study. The information sheet document explained the study's purpose, procedures, advantages, disadvantages, and benefits (Moustakas, 1994). The information sheet document described how the participant data will be stored in a password-protected computer where only the researcher can access the files. To protect the identity and privacy of study participants, pseudonyms were used. This data will be destroyed three years after the study.

Summary

Chapter Three explained the research design, procedures, and data analysis plans for this study to understand better how educators and academic institutions can improve internal motivation to learn and academic achievement with course completion for community college degree-seeking NALs in the asynchronous online learning environment. The phenomenological research design will be used for this qualitative study to find the common experience of a phenomenon (Moustakas, 1994).

The study was based on well-established qualitative research methods: feedback surveys, individual interviews, and letter-writing (Creswell & Poth, 2016). The research questions are

open-ended and broad to encourage participant experience reflection (Moustakas, 1994; see also Peoples, 2021). The research setting was online and recorded via Microsoft Teams using a secure personal computer. The study consisted of 10 community college degree-seeking non-traditional adult students who completed an asynchronous online course for degree credit.

The research study was based on the social constructivism interpretive framework. The researcher's positionality was disclosed in ontological, epistemological, and axiological philosophical assumptions. The researcher served as a human instrument for gathering and interpreting study data (Lincoln & Guba, 1985). The details of this qualitative research, such as data collection procedures, permission requirements, and the recruitment plan utilizing criterion sampling, were disclosed to allow for research study replication.

Data collection for this study consisted of feedback surveys, individual semi-structured interviews, and letter-writing, allowing for saturation and data triangulation, ensuring research data validity (Lincoln & Guba, 1985; Peoples, 2021). The researcher set aside biases by engaging in epoché to focus on the phenomenon experience analysis throughout the data collection process (Moustakas, 1994; see also Peoples, 2021). A qualitative software program, Delve, will assist with data organization and code and theme development (Creswell & Poth, 2016; Peoples, 2021).

The trustworthiness of this research study was described by disclosing the steps to be taken for credibility, transferability, dependability, confirmability, and ethical considerations. Triangulation, peer debriefing, and member checking took place to ensure study credibility. This study adhered to the ethical standards of the Liberty University Institutional Review Board.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study is to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States. Chapter Four presents the results of the data analysis for this transcendental phenomenological 10-participant study. The experiences of the 10 non-traditional adult student participants were captured using a feedback reflection survey, individual interviews, and a letter-writing prompt. Three themes were found using Moustakas' (1994) phenomenological reduction method, followed by outlier data from participants, then an account of the central research questions and sub-questions. Chapter Four concludes with the summary.

Participants

The participant selection started with an email to colleagues using criterion sampling to find individuals who experienced the phenomenon. The criterion sampling resulted in emailing 25 potential study participants, of which nine did not respond, one declined to participate, two were ineligible, and 13 were interested in participating in the study. Of the 13 interested study participants, two abandoned the study after completing the feedback survey, one dropped out after completing the individual interview, and 10 completed the study. The study participants were 60% male and 40% female, averaging 3.7 asynchronous online classes per participant. Table 3 describes the research participants with pseudonyms.

Allen

Due to his busy work and life schedule, he prefers the self-paced, flexible online learning setting. He excels in online learning but misses the in-person networking opportunities. He feels proactive communication in online courses is necessary to stay engaged and motivated to learn.

Charles

He feels that the technical issues of the course learning management system were an area of course frustration and decreased learning motivation. He prefers in-person learning to online but opted to enroll in online courses for schedule flexibility.

Dennis

He was motivated by the organized curriculum structure, layout of the learning management system, and prompt grading feedback. The online course accessibility encouraged him to submit assignments early and set his learning pace within the confines of his family, social, and work schedule.

Jenni

She considered online learning to be less critical than in-person courses. She selected online courses for scheduling flexibility. She felt her engagement and motivation would have been better with in-person classes. She thinks that optional online meetings would improve the motivation to learn in online courses.

Kelly

She prefers in-person courses, but life restrictions forced her into online classes. She wants more authentic collaboration with the instructor and her peers to improve engagement and motivation in online courses. Her first experience with online courses was very challenging for her busy life. It was so demanding that she took a semester off to give herself a much-needed break.

Mary

She needed help staying motivated to learn. She felt like online learning was self-teaching and only enrolled in online courses due to limited course offerings. She wants more instructor and peer collaboration opportunities to improve learning motivation in the online learning experience. She plans to avoid online courses in the future.

Nora

She is shy and found that online learning gave her confidence by improving her communication skills. She appreciated the support offered by instructors with optional virtual meetings. She enjoyed the online learning experience so much that she plans to obtain her master's degree through online programs.

Richard

His motivation to come back to school started with his family's support. The online course experience motivated him since he gained confidence in his abilities to succeed in college this time. He enjoyed the collaboration opportunities of online learning since it allowed him to learn more about his peers and their diverse backgrounds.

Sonny

He experienced connectivity problems that negatively impacted his view of online learning. He felt like online learning was isolating and may contribute to psychological effects on learning motivation. His instructor interaction could have been more extensive, and he would like to see optional virtual meetings offered in online courses.

Warren

He feels online learning accessibility and flexibility allowed him to achieve his education goals. His peer support and organized curriculum delivery motivated him to succeed in online

learning. He appreciated the instructor interaction experiences, which involved instructor compassion, patience, and understanding for him as a non-traditional adult learner.

Table 3

Research Participants

Research Participant	***Gender***	***Online Course Completion Total***	***Degree Focus Area***	***Most Recent Year of Online Course Credit***
Allen	Male	6	Computer Science	2023
Charles	Male	2	Cyber Security	2023
Dennis	Male	2	Electromechanical Engineering	2022
Jenni	Female	1	Computer Science	2023
Kelly	Female	5	Computer Science	2023
Mary	Female	2	Computer Science	2022
Nora	Female	10	Accounting	2023
Richard	Male	1	Computer Science	2023
Sonny	Male	1	Environmental Engineering	2023
Warren	Male	7	Medical Coding Specialist	2010

All participants met the standards to participate in the study. The participation qualifications were completing an asynchronous online course, being 25 years or older, having family and work responsibilities, experiencing a break in formal education, and being socially independent of parents. Participant consent was provided with an email reply response. SurveyMonkey was used to administer the feedback reflection survey (see Appendix E). All individual interviews were performed virtually using Microsoft Teams. SurveyMonkey was used to distribute the letter-writing prompt (see Appendix G).

The ten participants shared their experiences of learning motivation in the online learning environment. The participants completed 37 online courses collectively over 13 years. Only one participant experienced online learning before 2022. All participants had motivational experiences ranging from positive to negative. The data analysis was performed using the Moustakas transcendental phenomenological research methodology (1994), which describes the essence of the study participant phenomena. Throughout the data analysis, Knowles' andragogy learning theory (1984) resonated through text descriptions that were developed into phenomenon essence, describing the life condition connection for the NAL motivation in community college asynchronous online courses. NAL learning motivations align with the andragogy six assumptions of adult learners: 1) self-concept, 2) prior experience of the learner, 3) readiness to learn, 4) orientation to learning, 5) motivation to learn, and 6) the need to know why the learning is essential (Knowles, 1984; Merriam & Baumgartner, 2020; Roessger et al., 2022).

Results

The data collection results and themes were obtained from a feedback reflection survey, individual interviews, and a letter-writing prompt. All participants were asked the same 14 open-ended interview questions. Member checking was achieved by giving all the participants their interview transcriptions to examine, confirm, and adjust as necessary. Data collections were reviewed to define words, phrases, sentences, and paragraphs describing the participants' phenomenon experiences. Meaning units provided the foundation of the themes that aligned with Knowles' andragogy learning theory (1984).

The preliminary data analysis yielded 32 codes (see Appendix I) from the first five participants. No new codes were found in the last five participant interviews. The themes in the previous five interviews aligned with the themes found in the first five interviews. Data theme

units came from engaging in epoché, phenomenological reduction, and imaginative variation (Moustakas, 1994) for coding, clustering, and removal of any unrelated data.

The data collection started with engaging in epoché (Moustakas, 1994) by suspending my personal biases and eliminating my emotions, teaching experiences, and student experiences from the data collection by viewing the participants' perspective of the phenomenon. The essence of each experience was given a meaning using text descriptions with phenomenological reduction (Moustakas, 1994), which involved bracketing or setting everything else aside except the research topic and questions to focus solely on the research to gain awareness of how the world exists, followed by horizonalization or coding and clustering data into descriptions that are unitized or developed into structured meaning units. Experience descriptions were captured from participants using a feedback reflection survey, individual interviews, and a letter-writing prompt where every statement was treated equally throughout the analysis process and interpreted into meaning units using horizontalization (Moustakas, 1994).

Imaginative variation involved categorizing meaning units, pattern recognition, and theme duplication removal (Moustakas, 1994) to synthesize the phenomenon's essence into structured text descriptions. The methodical process involved reviewing the facts shared by participants and using intuition, imagination, and reflection (Moustakas, 1994) to find the possibilities that described the phenomenon's essence. Member checking ensured study trustworthiness by sending the transcribed data collection results to each participant for review feedback. The data obtained from the data collection activities was organized within Delve, a qualitative software program that assists with data organization and code and theme development. The code and themes were downloaded from Delve into Microsoft Excel for further data organization and viewing.

To ensure research data validity, the feedback reflection survey data, individual interviews, and letter-writing prompt data went through triangulation (Denzin, 2017; Lincoln & Guba, 1985), which is pattern analysis and removal of overlapping themes to observe reality from different aspects. A final description list was developed with triangulation involving intuitive and reflective integration of composite text and structural descriptions (Moustakas, 1994). Intuitive integration was performed over the text and structured descriptions to develop integrated description statements defining the essence of the human experience (Moustakas, 1994). The final list of themes synthesized the data collection (Moustakas, 1994) to capture knowledge about the motivational experiences of community college non-traditional adult learners in asynchronous online learning.

Three themes emerged from the data collection using Moustakas' transcendental phenomenological research process (1994) of organizing, analyzing, and synthesizing data. The three themes were (a) instructor support, (b) adaptive communication, and (c) curriculum structure. Sub-themes emerged from each main theme. With the theme of instructor support, the sub-themes were (a) ubiquitous accessibility and (b) personal connection. With the theme of adaptive communication, the sub-themes were (a) timing element and (b) peer engagement. With the theme curriculum structure, the sub-themes were (a) material organization and (b) content delivery. Table 2 illustrates the number of participants and their data collection comment alignment with the main themes and sub-themes, as noted with an X in the appropriate box.

Table 4

Main Themes and Sub-Themes to Data Collection

Main Theme *Sub-theme*	***Allen***	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***
Instructor Support	X	X	X	X	X	X	X	X	X	X

Ubiquitous Accessibility	X	X	X	X	X	X	X	X	X	X
Personal Connection	X	X	X	X	X	X	X	X	X	X
Adaptive Communication	X	X	X	X	X	X	X	X	X	X
Timing Element	X	X	X	X	X	X	X	X	X	X
Peer Engagement	X	X	X	X	X	X	X	X	X	X
Curriculum Structure	X	X	X	X	X	X	X	X	X	X
Material Organization	X	X	X	X	X	X	X	X		X
Content Delivery	X		X	X	X	X	X	X	X	X

Instructor Support

The main theme of instructor support refers to the facilitator and support role to guide participants in online learning. All participants expressed the need for instructor support by discussing the specific experiences or the lack of support experiences in online education. The andragogy learning theory (Knowles, 1984) focuses on the instructor's role as a facilitator who adjusts and accommodates adult learning by understanding their support needs. Elements of instructor support were found in all three data collection methods for all participants.

Three participants, Charles, Nora, and Allen, expressed satisfaction with the instructor's support. Charles confirmed the "instructor quality" and thought the instructors did a "fine job." Instructor support positively impacted Nora's online experience by sharing how she "loved" her professors and felt they were "experienced in the remote learning aspect," "taught the classes well," and were readily "available for questions or concerns." Allen explained his instructor interactions in online learning by sharing one of his memorable experiences with instructor support where one professor took "time out of his schedule on a Friday night at 10 o'clock" for "30 to 45 minutes to walk through and explain how to do the work."

Five participants expressed satisfaction with the instructor's communication and

interaction experiences. In the interview, Warren felt the online experience had “some amazing instructors that made up for the effect of not having face-to-face interaction” and further expressed his appreciation for the instructors in his letter-writing prompt. Richard explained how the instructor was always “helpful,” and Dennis “felt heard” by his instructor concerning assignment posting issues. Jenni shared the promptness of instructor responses by explaining how her instructors “always got my questions answered.” Kelly felt she “wasn’t alone” in online learning and shared how the instructor's support provided motivation and encouragement to persist. Kelly “wouldn’t have signed up for another semester” without those professor interactions.

Two participants experienced a lack of instructor support in asynchronous online courses. Mary felt the lack of instructor support in online courses with “a lot of Googling and self-teaching” and expressed the need for solid instructor support. Sonny stressed the need for instructor support within all three data collection methods. Sonny described his experience of the absence of instructor support in online learning by admitting “it was not the most positive experience” and feeling isolated by the lack of instructor help, which feels like “you’re just on your own, and you just have to teach yourself at that point, which is a little frustrating.” This lack of instructor support has turned Sonny away from online courses to the point of impacting his goal attainment, “Instead of doing a full course load now, I've decided to just take less classes instead of opting for that online portion to make the work and education mix with each other.” Mary disclosed in the feedback reflection survey, interview, and letter-writing prompt that she views online courses as a last option for goal attainment. In the feedback reflection survey, Mary expressed that she prefers live classes and only takes online courses “if a live class is not available.” Instructor support comes in various forms for participants, with ubiquitous

accessibility and personal connection being the two predominant sub-themes found in data collection. The sub-themes were seen 143 times within participant feedback surveys, interviews, and letter-writing prompts. The codes accessible instructor, in-person instructor meetings, video meetings with the instructor, and phone calls appeared 73 times across all data collections and were clustered to form the sub-theme ubiquitous accessibility. The codes attentive instructor, engaged instructor, absent instructor, patient instructor, familiar instructor, and compassionate instructor appeared 70 times across all data collections and were clustered to form the sub-theme personal connection.

Ubiquitous Accessibility

Ubiquitous accessibility refers to the need for instructors to be versatile and readily accessible for the participants in online learning (see Table 3). Adult learners have different needs and accommodations based on their roles, responsibilities, and life demands (Knowles, 1984). All participants expressed within all three data collections that instructors must provide methods for accommodative instructor access with optional in-person meetings, phone calls, and virtual meetings.

Table 5

Ubiquitous Accessibility Sub-Theme

Ubiquitous Accessibility – refers to the need for instructors to be versatile and readily accessible.									
Allen	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***
X	X	X	X	X	X	X	X	X	X

Instructors must be versatile and readily accessible to NALs in asynchronous online learning, as shown within all three data collections. Kelly described the importance of ubiquitous accessibility with meeting instructors for help “even in person, even though it was an online class,” which provided her with reinforcement and encouragement since she “panics a lot” with

the uncertainty and confusion of unanswered questions. Kelly struggled with instructor accessibility since she wanted to "get a quick answer" to questions. However, she recognized this may seem "unrealistic" since instructors teach many classes, "have families," and "have lives," but feels instructor accessibility in online learning must be flexible for NALs.

Another participant, Dennis, described his experiences with instructor accessibility and how instructors "have been very gracious to answer emails and set up meetings or calls" even though he has "never once physically met" any online instructors. Nora shared the same sentiments regarding instructor accessibility, with instructors being "available to jump on Zoom meetings." Warren, Allen, Charles, Richard, and Mary were satisfied with the instructor's accessibility.

Two participants pointed out that instructor support requires the student to communicate the need for help. Jenni expressed that online courses lack visual cues that prompt instructor support since the online instructor cannot see her looking "confused," which turns into a feeling of "panic." Jenni stressed the importance of communication in the feedback reflection survey, being "proactive with questions," and contacting the instructor for clarification. One participant, Mary, suggested that instructors should proactively check each student's learning progress since it would "be nice if the professor reached out to you."

The lack of instructor accessibility can lead to discouragement and online course avoidance for NALs. Sonny described the lack of instructor access in all three data collections and experienced discouragement from his only attempt at instructor communication to obtain "unique clarification" about the material. He still ended up "confused." Sonny expressed his reluctance to asynchronous online courses in the future: "It has made me a lot more wary of online courses in the future."

Personal Connection

Personal connection refers to the need for instructor involvement that connects with the student (see Table 4). The data collection showed that learners like to feel that they are not alone in the online learning journey. All the participants expressed the need for instructor connectedness in online learning.

Table 6

Personal Connection Sub-Theme

Personal Connection - refers to the need for instructor involvement and student connection.									
Allen	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***
X	X	X	X	X	X	X	X	X	X

All of the participants described their instructor connection experiences in online learning. Charles mentioned how the instructors "did a fine job" and connected well with him. Nora had "good and bad" instructor connections, but the "majority of them were good." Dennis explained how different types of instructor connections, "whether in videos or weekly emails," made him feel like "someone is available to talk to" for assistance and support. Allen explained how a late-night impromptu meeting with an instructor impacted his online learning by saying, "If you're just there for a job, you're not going to go out of your way to help somebody like that" and "professors really care" about student success "even though it's online." Warren described the instructors as compassionate and understanding of the adult learner's time constraints by providing grace and "giving a little more time to complete assignments."

Two participants explained how the instructor's connectedness encouraged persistence. Kelly's connections gave her confidence "to register for another semester and continue the online process" to achieve her education goals. Kelly expressed further appreciation for instructor connectedness by crediting her course progress to the instructor connection. Richard was inspired to persist after his connection experience in his first online course; he was "excited

to learn more and confident that as a beginning first-time student with many years out of school," he "could make it" in his degree field.

Three participants expressed a need for instructors' personal connections due to the lack of human interaction in online learning. Sonny experienced instructor detachment because he "never called her," he "never did a Zoom meeting," and "could pass her in the hallway" and "would never know" since it was "a faceless kind of interaction." Mary expressed the need for the instructor's personal connection within all three data collections. Mary shared the disappointment of being unfamiliar with the online instructor by not knowing "what they look like" and, many times, "the person that's doing the video isn't the person that's teaching the class," which she found to be very "weird." Jenni was missing the "meaningful" connection element in online learning by stating, "I wish that I had" the human connection like in-person courses since "there is just more in an in-person class."

Adaptive Communication

Adaptive communication is a main theme for the participants in community college asynchronous online learning. Elements of adaptive communication appeared within all three data collections for most participants. With Knowles' andragogy learning theory (1984), adult learners bring life experiences to learning through adaptive communication for social competence, independence, behaviors, and life connection. Communication that is versatile and robust is essential to all the participants. Kelly admitted the lack of authentic communication exchanges online makes learning "very difficult" and would like the same collaboration online, like the impromptu in-person discussions where everyone is "throwing ideas out in class." Sonny shared the same feelings of limited online communication with the inability to "overhear" the "private communication" in online courses.

Five participants were comfortable with online communication in asynchronous online learning. Nora shared she was "lucky" since she had professors who were "always ready to jump on Zoom and answer questions." Allen was comfortable with the instructor and classmate communication; he would just "reach out" to the instructor or classmates if he had questions. However, Allen expressed the need for more interaction in the letter-writing prompt. Warren recognized that peer communication contributed to his online success by stating he "made it" with the help of "online and face-to-face" classmates. Richard found comfort through online connections with peers since he was "not the only one starting new." Dennis explained how his communication and analysis skills improved through the assignment interactions as it was "definitely" the online component he "enjoyed the most."

Two participants wanted improvements in asynchronous online learning communication. Charles did not share any communication issues but thought it could "always use some tinkering or improvement," and Jenni felt "communication was good" but wanted more engagement since she "would be more engaged if it were in person." One participant expressed that immediate feedback is a concern in asynchronous online learning. Mary shared, "I feel I learn better in an environment where I can ask questions and receive immediate feedback." Sub-themes of timing element and peer engagement emerged from the data collection. The codes of timeliness communication, prompt feedback, grading feedback, and human interaction exchanges appeared 46 times across all data collections and were clustered to form the sub-theme timing element. The codes peers for learning gauge, positive discussions online, negative discussions online, lack of interaction, positive peer interaction, unauthentic peer interaction, and peer interaction barriers appeared 50 times across all data collections and were clustered to form the sub-theme peer engagement.

Timing Element

The timing element refers to the need for 24-hour response time in instructor communication with the participants (see Table 5). Communication occurs with assignment feedback, grading, emails, calls, and videos, as discovered within all the data collections. All participants expressed the need for timely instructor communication. The importance of instructor communication was captured with Richard and his recollection of his instructor's timely email response that eliminated his fears of being lost and alone, which he "worried about a lot" before his online course enrollment. Richard also explained that his instructor's communication experience "was always on point," with quick email replies.

Table 7

Timing Element Sub-Theme

Timing Element – refers to the need for a 24-hour response time with instructor communication.									
Allen	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***
X	X	X	X	X	X	X	X	X	X

Responsiveness is vital for instructor communication in receiving feedback within 24 hours, which "really helped" Nora progress and made her "feel more secure" with online learning. Mary and Allen had "positive experiences" with instructor communication, with Allen feeling that instructors are compassionate and "care." Dennis shared the same positive experience of timely communication by sharing how he "could email [the instructor], and she would just respond very quickly – it was just a nice experience." Warren described instructor communication as having a time lag where sometimes he "had to wait a little time to get questions answered" but appreciated that he still received responses. Both Dennis and Warren expressed the importance of timely grading communication.

Kelly expressed her frustration with the lack of instructor interaction while watching

course videos and the need for question-and-answer communication, which she did by emailing questions to the instructor that may get a response "24 or 48 hours later", therefore requiring additional time to go back and "start synching your mind to the work" that was performed when the email was sent. Jenni stated her instructor always answered her questions, but in-person classes may offer "more elaborate answers" than online courses. Two participants described the lack of instructor responsiveness in asynchronous online learning. Charles felt online course communication and interaction were less effective than in-person learning since "in-person interaction has much more than the online interaction," and his "first choice would be actual in-person instruction." Online learning communication was "one-way direction communication" and was "a really negative experience" for Sonny.

Peer Engagement

Peer engagement refers to the need for peer communication and interaction for online learning support (see Table 6). All data collection methods showed that peer communication played a role in learning motivation for all participants. All participants mentioned their experiences with peer communication. Warren expressed his experience with peer communication and the motivational aspect of working with one of his online class peers: "That was beneficial because I at least had someone to bounce ideas off of. If I wasn't understanding correctly, maybe she (peer) was, and vice versa."

Table 8

Peer Engagement Sub-Theme

Peer Engagement – refers to the need for peer collaboration and interaction for online learning support.									
Allen	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***
X	X	X	X	X	X	X	X	X	X

Richard, Kelly, and Dennis described practical peer collaborative experiences with

discussion board posts. Discussion board posts allowed the participants to experience peer interaction online, similar to in-person communication exchanges. Kelly explained how the discussion board posts allowed for "real-life experience" outside actual friendships, but "you get to see different ideas" from your peers, which is "very important."

Two participants described how team project work impacted their peer collaboration experiences. Charles connected and established peer relationships with "team members and other people from the class" through discussion boards and team projects. Nora "worked together" with peer groups and "didn't have very many issues."

Five study participants emphasized the need for more peer engagement in online learning. Allen reluctantly admitted in his letter-writing prompt that "peer-to-peer Facetime would be extremely beneficial – maybe [with] Zoom meetings or collaborative projects." Kelly wanted the opportunity to "brainstorm" and collaborate with others while learning. One participant, Mary, saw peer engagement as "generic at best," Jenni wanted more peer interaction since it "was lacking the most" in online learning. Some considerations with peer collaboration may transform into ineffective peer-to-peer teaching, hindering effective student learning progress. One participant, Sonny, explained how "students learning from the other students" should be discouraged since the peer discussion board posts had the "incorrect way" to solve assignment problems and were confusing.

Curriculum Structure

All the participants viewed curriculum as one of the key elements for self-directed learning in asynchronous online courses. The online course curriculum structure elements appeared for most participants within all three data sources. The curriculum must be designed clearly and concisely for the needs and experiences of adult learners to apply learning quickly for

social and occupational roles according to Knowles' andragogy learning theory (1984).

Mary shared that the curriculum should be "clear, concise, up-to-date instruction with opportunities for interactions where possible" to contribute to student success. Jenni recalled her online course curriculum experience with "understanding the objective of that week" structured in weekly folders with content coming "together with the PowerPoints or PDFs" or "websites," which "made it very clear." Nora shared how the online curriculum fits her needs since she is not a "hands-on learner" and can "read and comprehend" course materials. Participants like working at their own pace with a flexible online curriculum structure. Allen expressed appreciation for flexible, self-paced content in his feedback reflection survey. Allen described in his interview how the curriculum allowed him to "do coursework on his own time, at the school's pace" if they were only offered in person, he "would fail out of classes due to attendance" requirements. Dennis took the opportunity to "get ahead in an online class" since curriculums offer "all the information for everything" at the beginning of the course, which gives more flexibility than in-person classes. Richard described how the online curriculum content would "build on each other very well" and gave him "confidence" in his online learning abilities.

Concise, structured, and relevant curriculums are critical in the planning and success of the online learner. Kelly shared her experiences of unclear curriculum materials and other times where curriculum materials are "straight to the point." Warren expressed his reluctance to online learning since he was not "technologically savvy" and feels that, in the end, it "seemed easy" for him. Sonny described his struggles with the online curriculum of limited videos and online examples for math labs where he would go "through step by step," and it was "significantly harder" and "not the easiest experience." Some of the online labs were "riddled with technical errors" and incorrect instructions, which made learning difficult for Dennis. The curriculum

structure theme has sub-themes of material organization and content delivery. The codes 24x7 accessible content, connectivity issues with LMS, privacy concerns with LMS, flexible content materials, relevant content, and technology reluctance concerns with LMS appeared 59 times across all data collections and were clustered to form the sub-theme material organization. The codes LMS links, supporting materials, videos, books, and labs appeared 34 times across all data collections and were clustered to form the sub-theme content delivery.

Material Organization

Material organization refers to the need for an organized curriculum for online self-directed learning (see Table 7). Curriculum material organization cultivates effective online learning. Nine out of ten participants mentioned the significance of material organization within all three data collections and felt that curriculum "layout is important." Kelly, Richard, and Warren appreciated the Learning Management System (LMS) platform and the ease of access. Richard mentioned that "the 24/7 availability of BlackBoard" and the LMS online calendar made the classes "struggle-free." Charles, Nora, and Jenni expressed the exact sentiment of curriculum materials being "very organized." Dennis shared his self-paced learning experience in his feedback survey and further explained in his interview how all materials necessary for the course learning objectives are well organized with details of "exactly what you need to do and exactly how the course will go for the entire time that you are in the course from the first day, which is incredible." The online material organization made Allen feel he would gain the "same benefits" as in-person learning.

Table 9

Material Organization Sub-Theme

Material Organization – refers to the need for an organized curriculum for online self-directed learning.									
Allen	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***

X	X	X	X	X	X	X	X	X

The online curriculum utilizes links within the LMS, making it easy for students to set their own learning pace, according to Warren, Richard, and Dennis. Warren noted that "instructors were very good at posting different links to help out in BlackBoard." However, Mary expressed concerns with an unorganized and outdated curriculum in all three data collections by explaining how LMS links did not "work anymore" or how the use of outdated online content makes "you feel like you're getting an education from 2005 because you are using PowerPoints from 2005."

Content Delivery

Content delivery refers to diversifying curriculum delivery methods to support various types of learners (see Table 8). Variations in curriculum delivery gave the participants many ways to comprehend the learning materials. Nine of the ten participants mentioned the importance of content delivery methods for the curriculum, and was found within all three data collections. Content delivery methods include reading, reviewing, and assessing, which supports learning motivation, as shared by Nora, where she explained that various options improved learning and assessment preparedness by learning "it in three different ways," and when she took the exam, she "felt a little bit more prepared for it." Warren shared how the "instructors were very good at posting different links" in the LMS to support learning activities. Richard described how the organized LMS helped with his learning success by containing all relevant information, nothing unnecessary, and was not "overwhelming" for him with a "no holes" curriculum structure. Mary suggested optional live virtual meetings for online courses since she did not want to waste time crafting email questions "because it takes a long time to formulate a written question."

Table 10

Content Delivery Sub Theme

Content delivery – refers to the need to diversify curriculum delivery to support various types of learners.									
Allen	***Charles***	***Dennis***	***Jenni***	***Kelly***	***Mary***	***Nora***	***Richard***	***Sonny***	***Warren***
X		X	X	X	X	X	X	X	X

Kelly liked the functionality of the LMS and how you can easily log on, read, and watch videos with the ability to rewind since this is "something you cannot do in an in-person class." Allen expressed a similar experience: "Being able to rewind videos helps with online courses, unlike the face-to-face environment." Dennis shared how he believes "a clearly outlined course" with "very clear instructions" makes better teachers with better grading opportunities. Dennis and Richard shared how the LMS calendar was valuable for self-paced learning. Richard and Jenni explained how the course materials were thoroughly integrated and applied through the assignments. Sonny preferred online labs to his instructor videos by explaining how online labs go "step by step through the examples of how to do the problems," he found the online labs "more useful than the instructor's videos." The length of videos was mentioned by Mary and Sonny, with Mary preferring short videos of "a snippet of 15 minutes" to "digest in chunks," and Sonny saw limitations with short videos since they only contain "one or two examples…that didn't seem like enough to really help" him learn.

Outlier Data and Findings

Two outliers in the data collection could be the subject of future research studies.

Hearing Impaired Communication

One participant was hearing-impaired, and online courses offered a more effective way of learning than in-person learning. Nora shared her hearing-impaired experience in the letter-writing prompt by expressing the challenges of "navigating through college with hearing aids and not being able to obtain information the same" as other students. Nora believes "online

learning was the best thing that happened" for her.

Video Online Proctoring

One participant had concerns with privacy and online proctoring, which uses cameras to record students' actions while taking tests. Dennis expressed privacy concerns with his online math class, where "there would always be a camera watching you" while taking tests. Dennis explained how he disliked the "idea of being recorded" and his curiosity about the "instructor ever looking at those videos."

Research Question Responses

The central research question and the three sub-questions directed the research and were developed to discover the lived experiences of community college non-traditional adult learners in the online learning environment. The goal was to find motivational experiences that promote academic achievement by course completion for the NAL. Three main themes emerged from the data collection. The research questions responses section describes the alignment of developing themes to research questions.

Central Research Question

How do community college degree-seeking non-traditional adult learners experience motivation in the asynchronous online learning environment? The participants described motivation from instructor support with accessibility, authentic engagement, learning communities, and a diverse curriculum that supports self-paced learning. The participants described rich, detailed accounts of living through the asynchronous online learning experience.

Instructor support is critical for NALs in asynchronous online courses since it assists with NAL engagement and academic achievement. Support should be open with convenient accessibility to accommodate the lives of NALs. Instructor personal connections provide

comfort, confidence, and motivation for NALs to seek additional assistance when necessary.

NALs want a learning community with adaptive communication, flexible interactions, timely discussions, and genuine peer engagement. Warren expressed that his online learning experience has given him a "more profound respect" for instructors due to their approachability, interactions, and compassion for online learners. Timely communication for NALs in asynchronous online learning allows learners to sustain their self-learning pace. Peer networks within asynchronous online learning help motivate NALs by establishing a communal connection with a sense of belonging. Online course instructors encourage learners with prompt grading, feedback, and assistance, as expressed by Jeff after he felt "stuck," asked for instructor help, quickly received support, and realized instructors "genuinely care" about student success. Learners need peer interactions to gauge learning levels, foster relationships, and develop peer learning communities. Kelly described the need for peer engagement to improve learning since it is difficult when you are "listening to the teacher all day" and cannot interact with someone "your age" or in "your position."

Curriculum materials must be organized and presented in various ways for efficient and effective self-paced learning. Charles "found certain instructors and certain layouts of formats of the classes to be easier or just more accommodating than others." Dennis described how the various methods of content delivery, such as assignments, videos, and discussion boards, allowed him to "focus more" on the learning.

Sub-Question One

What asynchronous online learning forms of engagement motivate degree-seeking community college non-traditional adult learners? The study participants found that instructor and peer engagement was a learning motivator in online learning. Learners can experience this

engagement through instructor communication, peer collaboration, and the feeling of authentic human interactions in asynchronous online learning.

Warren explained how instructor email exchanges made him appreciate his instructors since they "were very lenient" and gave him more time to complete the assignment since he had a question and "didn't have the face-to-face interaction." Peer collaboration motivated study participants as described by Dennis, "you would find who you like to respond to, you found their discussion board posts very either entertaining, or they related to you in a sort of way," which motivated engagement since it was "going to be an enjoyable read." Allen shared that he "established a support network" and developed an educational experience community by interacting with peers. Allen gained online collaboration skills since the "online course made it a little easier to reach out," eliminating the uneasiness of just "walking up to someone" in face-to-face learning.

Sub-Question Two

What asynchronous online learning behaviors motivate community college degree-seeking non-traditional adult learners? The study participants found that interaction with instructors and peers is a fundamental source of online learning motivation. This interaction comes from genuine and sincere learner-to-instructor, instructor-to-learner, and peer-to-peer communication. Jenni explained that she had to "take the initiative" and be "proactive with questions" to the instructor since online learning lacks in-person interaction experiences. Richard described the diversity of his peer interaction experiences as "lots of different people coming in for lots of different reasons, from lots of backgrounds." Mary mentioned the need for peer interaction and the lack of genuine interaction with peers in discussion board posts where "you introduce yourself in the beginning, and then you say something nice about them," which seems

"very fake." Kelly described the need for peer-to-peer interaction since "you're not able to relate to people because you can't see people's perspectives," relating to those in similar situations helps with online learning. Kelly described that without the peer-to-peer connection, online learning is "more difficult" than in-person learning.

Sub-Question Three

How do instructors perceivably impact the motivation of community college degree-seeking non-traditional adult learners? The study participants described how instructors impacted motivation with ubiquitous accessibility, persistent feedback, and structured curriculum delivery. Participants perceived the online course instructor role shifting from the in-person collective teaching experience to focusing on providing support for the asynchronous online learner's individual needs. The facilitation shift involves accessibility outside the typical in-person teaching setting, which may require more off-hours learner support, as described by Charles with his appreciation for meeting his instructor "in person a couple of times for some different things that I was struggling with." NALs need instructors to communicate persistent assessment feedback for encouragement and motivation. Dennis described how online instructors provided timely, sincere grading feedback and how "they (instructors) were precise, and they (instructors) graded early, and provided feedback which was phenomenal." The learning curriculum must be delivered in an organized, easy-to-access platform for effective, self-paced adult learning. Nora described the importance of effective online instruction and how "they (instructors) had explained it several different ways; you could grasp it from any angle," which was "really helpful."

Two participants were apprehensive toward online instructor communication and described discouragement and isolation in the online learning experience. Mary prefers in-person

instruction to online instruction and expressed her reluctance to craft an email for fear of "asking something stupid or that I'm not explaining it well" and "I feel better when I know the instructor ahead of time in the class," she felt "more comfortable" asking questions to an instructor that she was familiar with. Sonny described his loss of motivation in the absence of effective instructor communication when he emailed an instructor "for clarification" and received the instructor's response of "just go back and watch the YouTube videos." Sonny continued to explain how he ceased further instructor communication attempts: "I didn't even bother emailing her from that point on" since she "would probably tell me to go and watch the YouTube videos."

Summary

Chapter Four explained a comprehensive account of the non-traditional adult learner participants and the findings in three sections. The ten student participants completed 37 online courses ranging from one course to ten courses per participant, with a median value of two courses. Major themes and sub-themes were identified in the results section. The data collection uncovered themes and sub-themes that described participants' lived experiences. The three main themes were instructor support, adaptive communication, and curriculum structure. The sub-themes for instructor support were ubiquitous accessibility and personal connection, with all participants expressing the need for open instructor access with a genuine relationship. The sub-themes for adaptive communication were timing element and peer engagement, where learners need 24-hour communication exchanges and a sense of community within online learning. The sub-themes for curriculum structure were material organization and content delivery; both create the foundation for a robust and diverse online curriculum that caters to many learners. All participants expressed the importance of the curriculum structure and most recognized the need for an organized, easily accessible LMS with various forms of learning content.

The central research question and the sub-questions were reviewed and analyzed in the research question responses section. Participants' motivational asynchronous online learning experiences were examined and associated with the appropriate sub-question. Instructor support, adaptive communication, and curriculum structure play a significant role in the learning motivation of NALs. Two outliers were found that relate to hearing impairment and online video proctoring. Learner hearing impairment and online video proctoring were not a study focus and are outliers for future studies.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study is to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States. Chapter Five consists of a discussion of the findings by summarizing the themes developed from data analysis, followed by a critical discussion of the details of the findings. Then, the practice, theoretical, and empirical implications are discussed. Lastly, Chapter Five explains the research limitations and delimitations and concludes with recommendations for future research.

Discussion

The research in all the chapters and data collections aligned with the literature associated with asynchronous online learning motivation for NALs. Adult learning motivation is impacted by engagement, instructor connection, and efficient instructional designs. Yet, there was a gap in the literature to address the experiences that promote community college degree-seeking NAL internal motivation within asynchronous online learning. The research disclosed how NAL motivation is supported by learning reinforcement systems, efficient communication, and explicit curriculum.

The themes and sub-themes uncovered the importance of NAL instructor support system accessibility. Effective communication is essential for NAL asynchronous online learning success, requiring timely instructor feedback and an environment of peer solidarity. A streamlined, organized curriculum structure that offers various content delivery methods is essential for NAL autonomy and continuous learning progress. Three data collections of a feedback survey, individual interviews, and a letter-writing prompt were used in thematic

analysis, resulting in three main themes aligned with the Knowles andragogy learning theory (1984). The summary of thematic findings describes the justification for using the Knowles andragogy learning theory (1984) for theming and sub-theming guidance.

Critical discussion findings address prior research corroboration, extension, and divergence of NAL asynchronous online learning experiences. Then, the practice implications are described, followed by an examination of theoretical and empirical implications. The section ends with limitations and delimitations, along with future research recommendations.

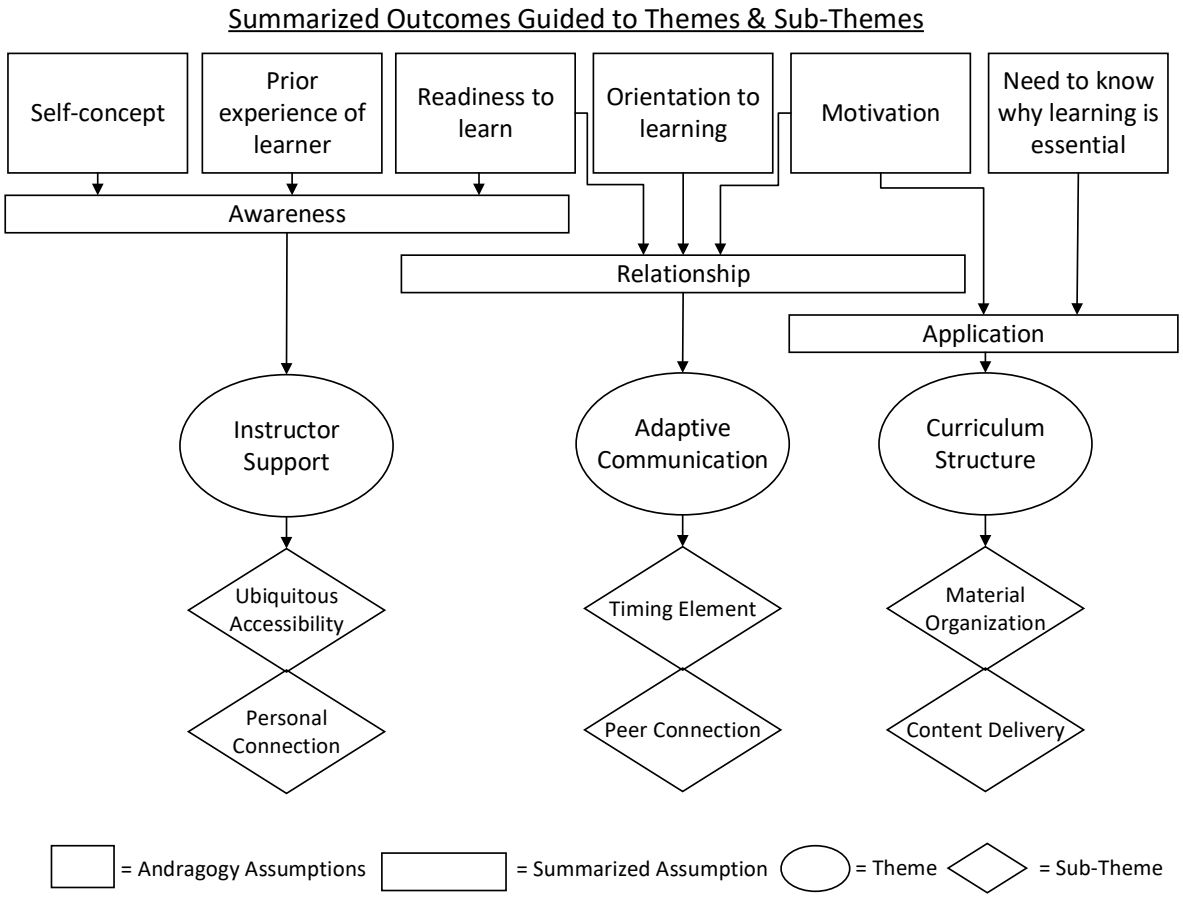
Summary of Thematic Findings

Knowles andragogy learning theory (1984) aligned with the main themes and sub-themes by understanding the six assumptions of adult learners. Therefore, the Knowles andragogy learning theory was the guiding theoretical framework used in this study.

The three conclusions are based on the six assumptions of adult learners: 1) self-concept, 2) prior experience of the learner, 3) readiness to learn, 4) orientation to learning, 5) motivation to learn, and 6) the need to know why the learning is essential (Knowles, 1984; Merriam & Baumgartner, 2020; Roessger et al., 2022). I summarized Knowles' andragogy (1984) six assumptions of adult learners as three primary outcomes for this study: (a) awareness, (b) relationship, and (c) application (see Figure 8).

Figure 8

Summarized Outcomes to Themes and Sub-Themes



Note. Image of summarized outcomes to guided themes and sub-themes aligned with Knowles' (1984) andragogy learning theory's six assumptions of the adult learner. Own work.

Knowles Andragogy Alignment

Learner awareness levels are associated with three of the six learner assumptions of Knowles andragogy (1984): self-concept, prior experience of the learner, and readiness to learn. With self-concept, the NAL engages in autonomy, a psychological need for NALs to be perceived by others as self-directed (Knowles, 1984). Autonomy is critical for online learning course completion, allowing the NAL to take control of their learning experience to achieve their learning goals. NALs navigate their daily lives while balancing the online learning materials,

requirements, and deadlines. The prior experience of the learner is one of the Knowles andragogy (1984) assumptions that allows NALs to have an extensive knowledge bank that is utilized as a learning resource for asynchronous online learning. The NAL gravitates toward experiential learning that relates to their lives instead of traditional knowledge exchanges. The NAL's existing knowledge and experiences can be integrated into learning experiences for fast and efficient transfer of knowledge opportunities. NALs identify with their experiences, so instructors should not disregard or minimize the NAL experiences in asynchronous online learning, as this will push NALs away from the learning experience. For NALs, the readiness to learn is associated with societal roles, which are ever-changing with work, family, and social life. The readiness to learn builds as NALs engage in realistic problem-solving activities, which can boost the learning experience. With asynchronous online learning, NALs prefer involvement with instructors and familiarity, making learning a personal experience. Personal connection increases learner comfort levels to raise NAL's confidence to ask questions when solving problems in asynchronous online learning. Awareness is the understanding of how a learner's self-concept, prior experience of the learner, and readiness to learn can be reinforced in NALs with robust instructor support systems. The instructor and NAL must know how self-direction is utilized in asynchronous online learning. The instructor must be mindful of the experiences that impact NAL learning effectiveness. Profound instructor awareness for learner accessibility fosters the NAL readiness to learn. The awareness that encompasses the Knowles andragogy assumptions of self-concept, prior experience of the learner, and readiness to learn for adult learners (1984) was the guiding presence of the main theme of instructor support.

Relationship needs align with three of the six learner assumptions of Knowles andragogy (1984): readiness to learn, orientation to learning, and motivation. Readiness to learn for NALs

in asynchronous online learning is stimulated through relevant problem confrontation and the ability to ask questions, explore options, and resolve problems. Collective problem-solving is part of online learning, mirrored by NAL's daily life problem-resolution techniques. Readiness to learn can be stimulated with progress communication built within self-diagnostic tools, automated performance assessments, and learning interactions within asynchronous online learning. Orientation to learning for NALs is problem-centered since the NAL uses education to solve life problems. Problem-centered learning provides learning aspiration for NALs through immediate application. NALs can apply knowledge and problem resolutions immediately in their daily lives. NAL readiness to learn involves timely communication with the instructor and peer collaboration to reinforce real-world application. Motivation for NAL learning is associated with the NAL's life needs and interests. Instruction must relate to the NAL experiences and be a democratic learning process involving instructor and peer collaboration experiences. The NAL engages in mutual inquiry exchanges with the instructor, requiring timeliness within asynchronous online learning. Peer collaboration is an NAL motivator to build a sense of community for learners. Relationship encompasses the Knowles andragogy assumptions of readiness to learn, orientation to learning, and motivation for adult learners (1984) and was the guiding presence of the main theme of adaptive communication.

Application makes up two of the six learner assumptions of Knowles andragogy (1984): motivation and the need to know why the learning is essential. NAL motivation increases as they acquire knowledge to apply to their daily lives. Educators must develop curriculums that relate to the NAL and allow for self-direction. However, educators must consider differences in NAL individuality and create flexible curriculums for time, place, pace, and learning styles. The need to know why learning is important is when the NAL recognizes life relevance and the application

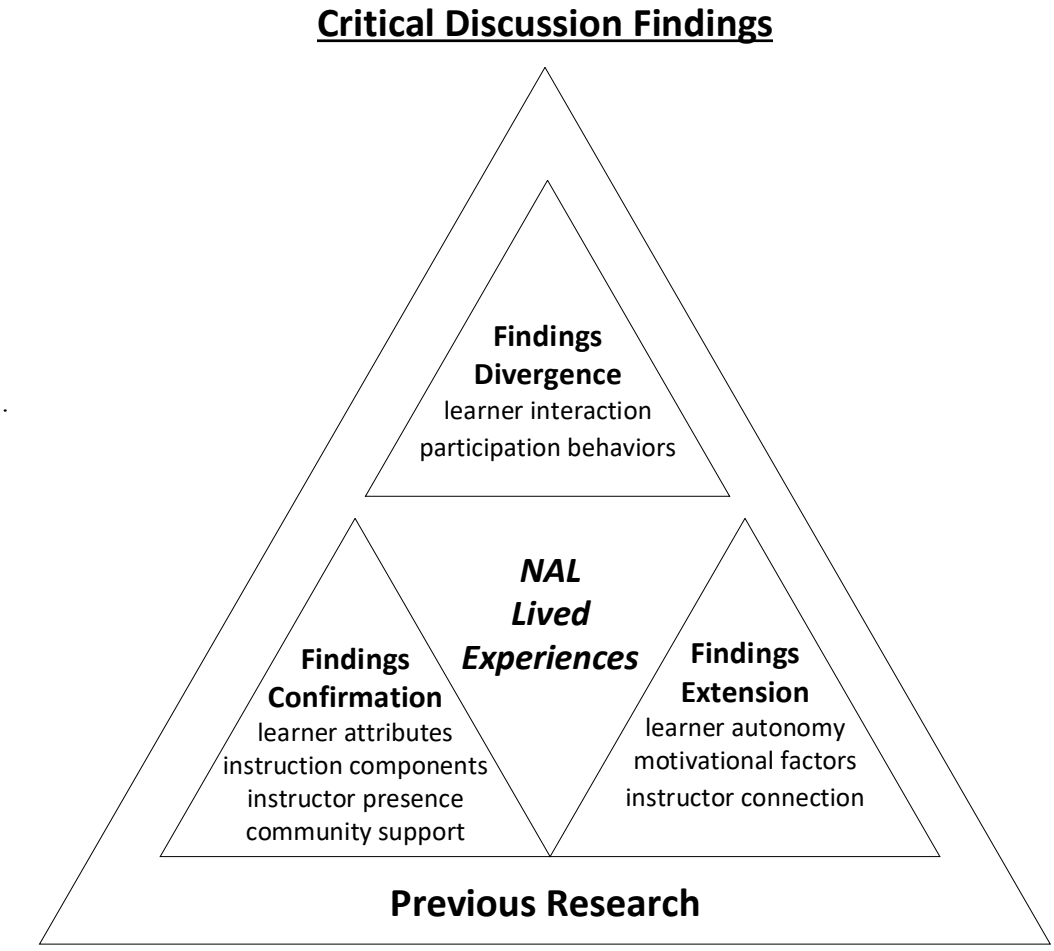
of education, which is used as a model for achievement, performance, and desired competencies. With asynchronous online learning, the NAL interacts with knowledge transfer primarily from the curriculum structure. Curriculum structure must be relatable and organized with various content delivery methods for practical application. Figure 8 depicts the summarized outcomes aligning with the main themes and sub-themes derived from the study's participant data collections. The themes and sub-themes are aligned with three summarized outcomes of adult learner assumptions of the Knowles andragogy learning theory (1984).

Critical Discussion of Findings

The critical discussion findings of the research data are summarized in the sections below. First, I will explain how this research aligned with prior research on the NAL motivational lived experiences in asynchronous online learning. Next, I will explain how this research extended previous research for NAL asynchronous online learning motivational experiences. Lastly, I will describe how this research diverts from the prior research of the NAL lived experiences within asynchronous online learning. All discussion components were rooted in the lived experience of study participants and are essential for understanding the motivators in asynchronous online learning for community college NALs (see Figure 9).

Figure 9

Critical Discussion Findings for NAL Lived Experiences



Note. Image of critical discussion findings for NAL lived experiences. Own work.

Findings Aligned with Previous Research

The findings aligned with past research on learner attributes, instructional components, instructor presence, and community support. NALs possess attributes of autonomy for academic success in online learning. Critical NAL asynchronous online support structures are instructional components to monitor learning progress and promote engagement. Instructor presence brings the human element into asynchronous online learning required for NAL support. Community support motivates and encourages NALs to persist in their academic goals.

Learner Attributes

Previous research shows that asynchronous online learners possess autonomy with attributes of self-regulation and self-directedness (Agonács & Matos, 2019; Kasworm, 2018; Lin et al., 2023; Youde, 2020). Therefore, online courses must allow for NAL self-management (Borup et al., 2020; Yun & Park, 2020). This study supports previous research findings that NAL participants engaged in self-regulation and self-direction in asynchronous online learning, acknowledging and accepting their ownership role in education and knowledge attainment. Many NALs understood the importance of self-guidance with effective time management, learning focus efforts, and proactive communication with instructors and peers to complete tasks. These study participants expressed their need for autonomy and appreciated the accessibility of instructor and peer support if necessary.

Instructional Components

Prior research shows there is a need for regular learning progress monitoring as learners engage in autonomy which leads to goal attainment (Lin & Wang, 2018; Ren, 2023). Many study participants explained how their learning was monitored with diverse LMS instructional components such as videos, collaborative assignments, and assessments. As covered in previous research, instructional variation offered self-direction and supported various learning styles.

Past research shows that instructional components should support learning with many levels of engagement, representation, action, and expression to allow for connections that result in academic success (Berry, 2018; Gronseth & Bauder, 2022; Lin & Sun, 2022). All NAL study participants described how their experiences, interactions, and connections helped them succeed academically in asynchronous online learning. NALs preferred learning options and autonomy

with access to various types of content delivery in videos, emails, links, and discussions, which supported the previous research findings detailed in Chapter Two.

Instructor Presence

Prior research shows online learning has many instructor challenges (Botha & Masenge, 2022) and must have supportive instruction (Ren, 2023; Wang et al., 2021) with personalization and self-direction (Allen et al., 2022; Marrhich et al., 2021; Smith, 2022). Study participants expressed the need for learning freedom with unlimited instructor support access. All study participants acknowledged how the online instructor role differs from the in-person setting, recognizing instructor connection and rapport challenges.

Previous research covered how human interaction and support are critical elements for online learning (Botha & Masenge, 2022; Lu et al., 2022; Smith, 2022). This study reinforced past research by confirming that instructors need to engage with NALs through emails, texts, online meetings, in-person meetings, and other forms of communication. NALs need this instructor's presence since it replaces the missing human interaction element in asynchronous online learning. The study participants who experienced sufficient instructor presence expressed a more positive experience with asynchronous online learning than those who felt the lack of instructor presence.

Past research recognizes how the online instructor support role is one of a facilitator to assist with NAL knowledge development, maintenance, and application (Adebisi & Oyeleke, 2018; Brieger et al., 2020; O'Hara & Naicker, 2022; Singh et al., 2021). Facilitation tasks include discussion guiding, modeling online behaviors, and providing patience to online learners (Berry, 2018; Lin & Sun, 2022; Singh et al., 2021). Most of the NAL study participants viewed the relationship between the online instructor and student as a learning support partnership by

expressing the need for instructor patience, empathy, and understanding with 24-hour or less communication responses, assignment deadline extensions, and off-hour meetings.

Community Support

Prior research shows that community support has been shown to motivate NALs for academic goal sustainability (Biney, 2022; Lu et al., 2022; Note et al., 2021; Specht-Boardman et al., 2021; Steinhauer & Lovell, 2021), but learning will only persist with the knowledge attainment experience perceived value for the NAL (Lu et al., 2022; Mara, 2021). All the NAL study participants voiced the need for education persistence to improve their life conditions. Many participants reflected on how instructor, peer, colleague, and family support motivated them throughout their online education journey. Prior research suggested that struggling NALs needed solid support and encouragement to persist in online learning (Biney, 2022; Lu et al., 2022; Steinhauer & Lovell, 2021), and this was supported in the research with a few struggling NAL study participants describing the need for supportive experiences in online learning. NAL study participants who shared encouraging communal support experiences did not express severe struggles with asynchronous online learning.

Findings Extension of Previous Research

This research extends the current research literature in the following areas: learner autonomy, motivational factors, and instructor connection. Learner autonomy can transition into isolated online learning. Motivational factors such as instructor support, technology use, and emotional bonds impact NALs in asynchronous online learning. Instructor connection is an asynchronous online learning support structure necessary for the learning motivation of the NAL.

Learner Autonomy

According to Kasworm (2018), NAL self-direction and persistence in online learning need further exploration. My research uncovered that some NAL participants felt their autonomy was a self-learning experience and expressed feelings of frustration, disappointment, and loneliness. The isolation of asynchronous online learning made some study participants view the asynchronous online learning modality as a last resort for education attainment. There must be a balance of course development strategies that promote learner autonomy with clear, accessible communal support structures to avoid transforming the asynchronous learning experience into one of unaccompanied self-learning.

Motivational Factors

Prior research recognizes that a supportive instructor is a fundamental motivator for asynchronous online learning (Baser et al., 2021). My research supported the need for effective communication between NALs and instructors. Prior research mentioned the need for emerging technology implementations to connect with learners to develop emotional bonds (Jiang & Koo, 2020; Page et al., 2020). As technology evolves, instructors must adopt new technology communication methods to better connect with learners and recognize the need for increased support communication to strengthen emotional bonds. NAL study participants voiced the need for flexible communication methods to accommodate their busy schedules and to minimize time-constrained pressures that impact learning. Flexible communication allows the NAL to experience prompt issue resolution and possibly stress avoidance.

Instructor Connection

Past research suggested the need to understand the experiences and perceptions of the NAL in asynchronous online learning (Collom et al., 2021; Lin & Sun, 2022) with a focus on understanding the instructor connection to learner engagement for maximizing NAL learning

outcomes (Arghode et al., 2018). My research study showed that participants wanted the instructor connection on various levels. All asynchronous online NALs wanted assurance of a readily available instructor for learner assistance. Some NALs expressed the need for immediate instructor access in asynchronous online learning to ensure learning continuity and avoid stressful instruction response wait times.

Findings Diversion from Previous Research

The findings in this study diverge from previous research in instructional design with learner interaction and participation behaviors. Instructional designs for asynchronous online learning must encourage participation and learning interactions for knowledge attainment, demonstration, and reinforcement. Some NALs view learner interaction activities in asynchronous online learning as inferior to in-person interaction experiences. Course materials impact NAL participation behaviors, and NALs have different preferences based on their personal needs. Instructional designs should contain many options for attaining knowledge to allow the self-directed NAL to choose the learning activity that best suits their needs.

Learner Interaction

Previous research explained that online participation differs from face-to-face participation (Francis et al., 2019; Harris et al., 2020) and online interaction can be improved by utilizing technology tools (Arghode et al., 2018; Gravani, 2019; Vezne et al., 2023). Examples of technology used to improve interaction described in prior research involve social group activities, online discussions, and instant messages to increase learner interaction (Abedini et al., 2021). Many NAL study participants expressed the need for social interaction to gauge learning progress. Most study participants favored learning activities with social interaction but were concerned about online communication privacy since it does not have the same type of in-person

communication intimacy. A few study participants found online social interaction learning activities to be unauthentic human interaction, which does not align with prior research findings.

Participation Behaviors

Previous research found that learner participation improved by implementing graded rather than optional activities (Alvarez et al., 2022). Some study participants expressed the need to understand the course materials and strengthen their knowledge with graded assessments and optional activities. However, time-constrained NALs mentioned they only want exposure to relevant course materials contributing to their learning progress and learning objective realization. NALs in asynchronous online learning participate based on the course requirement task deadlines and prefer to have access to optional activities. Most NAL study participants only used optional activities for additional learning reinforcement when necessary. NAL study participants described consistent course participation by having learning options with various streamlined course content and prompt access to instructor support. Technology tools can enhance course content delivery and communication methods to achieve learning success, yet having access to human instruction support when required was essential to promote NAL asynchronous course participation. Some NALs described how their motivation and participation declined when they experienced a lack of human instruction support, which was not mentioned in prior research on NAL course participation levels. This finding supports Singh's (2019) suggestion for further research on instructional design lean principles application within NAL asynchronous online learning since NAL participation levels compete with time-constrained life responsibilities. Therefore, lean, streamlined instructional designs may improve motivation and academic success for NAL learning.

Implications for Policy or Practice

This section will review the implications for policy and practice in teaching NALs within asynchronous online learning at community colleges. Academic institutions require a better understanding of NAL's needs. The curriculum development and instruction support systems may require customization for NALs. Curriculum development and instructional design should consider the unique accommodations necessary to meet the needs of the NAL.

Implications for Policy

Community college educators nationwide need to understand the evolving needs of NALs to serve communities better. The research uncovered the growing need for NAL connectedness to reinforce learning success, resulting in strong, thriving, and prosperous communities. A sense of community and belonging is necessary for NAL motivation within the online learning environment.

Implications for Practice

Community college educators may need to explore further and deeply understand how the Knowles andragogy (1984) six assumptions of the learner impact the asynchronous online learning experiences for NALs. Using Knowles andragogy (1984) as a guide for course development may result in more effective learning experiences for the NAL. The instructor support methods may require more flexibility and variation for the NALs in asynchronous online learning. This may result in educators allocating significantly more off-hours time to support and encourage the asynchronous online NAL.

Empirical and Theoretical Implications

The empirical and theoretical implications of the findings are discussed in this section. The empirical implications were observed with the information derived from the lived

experiences of community college NALs in asynchronous online learning in the United States. The theoretical implications were established by summarizing using Knowles andragogy learning theory (1984) six assumptions of the learner. The interrogation of the three summarized outcomes resulted in findings that made up three foundational elements to describe the phenomenon's essence.

Empirical Implications

The research aimed to describe the experiences of motivation for community college non-traditional adult learners within asynchronous online learning in the United States. This research confirmed the understanding and use of the Knowles andragogy (1984) learning theory as an essential component in this research of learning motivations for NALs (Bahr et al., 2022; Diep et al., 2019; Knowles, 1984; Lanford, 2021; Lu et al., 2022; Machynska & Boiko, 2020; Mara, 2021; Rothes et al., 2022). The research aligned with existing literature on the need for support within online learning (Borup et al., 2020; Kuo & Fitzpatrick, 2022; Loock et al., 2022; Luik et al., 2020). The connection between communication timing and peer collaboration experiences supported the current research findings (Carl, 2019; Gravani, 2019; Knowles, 1984; Lu et al., 2022; Martínez & Muñoz, 2021; Note et al., 2021). The research outcomes found in the analysis of participants' lived experiences were confirmed and supported by previously studied literature.

Theoretical Implications

This research was guided by the Knowles andragogy learning theory (1984). The study analyzed the asynchronous online learning lived experiences that support learning motivation for community college non-traditional adult learners in the United States and was based on the Knowles andragogy (1984) six assumptions of the learner. The summarized outcomes are based on the themes that originated from the codes found in the participants' data collection activities.

The three summarized outcomes were awareness, relationship, and application. Awareness refers to the support systems that involve instructor accessibility and the need for a personal connection for more substantial support. Relationship means the asynchronous online NAL needs interaction with instructors and peers to develop a sense of community, which can serve as a learning gauge in asynchronous online courses. Finally, the term application describes the life relevance to the NAL that needs a structured curriculum with content delivery variety for optimal learning focus.

The themes that emerged from the participants with asynchronous online learning experiences that supported learning motivation were instructor support (awareness), adaptive communication (relationship), and curriculum structure (application). The investigator's understanding of Knowles andragogy learning theory was an appropriate learning theory for this study. The summarized outcomes of the Knowles andragogy (1984) six assumptions of the learner align with the NALs' shared experiences within community college asynchronous online learning.

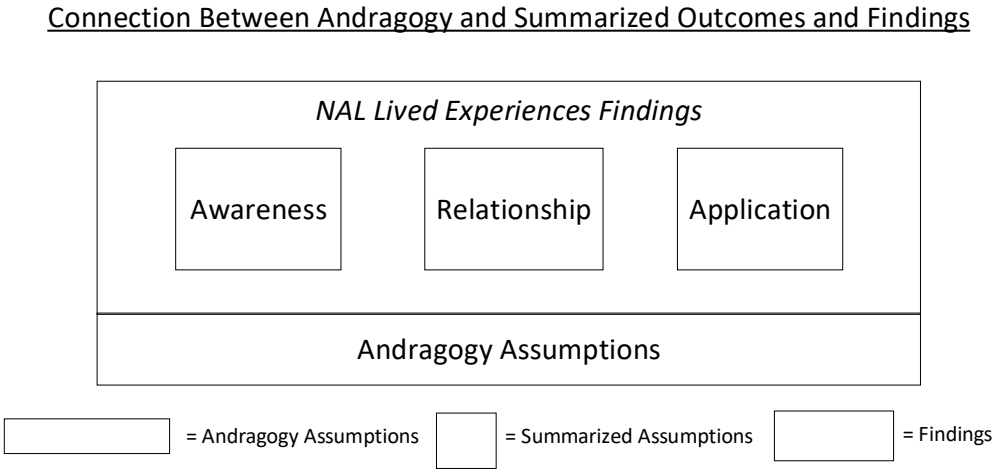
The NALs were intrinsically and extrinsically motivated, reinforced with course elements and support structures that accommodated the adult learners' needs throughout the learning experience. The NALs desired to learn, preferred self-direction and sought to fulfill a social or professional goal with their educational experience (Knowles, 1984). NAL course experiences can be improved using the Knowles andragogy learning theory (1984) within asynchronous online learning course instructional designs to ensure learning aligns with NAL's needs.

The research found the summarized outcomes from the Knowles andragogy learning theory (1984) were relevant within the lived experiences of NAL in asynchronous online learning. The summarized outcomes of the Knowles andragogy six assumptions of the learner (1984) were beneficial in clarifying the learning motivation needs for NALs. Figure 10 illustrates

the connection between the summarized outcomes and critical discussion findings for learning motivation experiences for NALs.

Figure 10

Summarized Outcomes and Critical Discussion Findings



Note. Image of connection between andragogy and summarized outcomes and findings. Own work.

Limitations and Delimitations

This study's most significant limitation was that most participants were STEM degree-seeking students. Ethnicity was limited since seven of the study participants were white, two of the study participants were African American, and one study participant was Asian. It would be interesting for future studies to address this limitation by focusing more on minority groups and seeing if the outcomes are similar. Two delimitations were identified for this study's recruitment: participant recruitment and transcendental phenomenological approach.

Participant Recruitment

The participants were recruited from one community college with non-traditional adult learners in asynchronous online learning in the United States. Participant recruitment was performed using convenience sampling followed by the snowball method. All participants except

one study participant were obtained from convenience sampling, and one study participant was obtained using the snowball method.

Transcendental Phenomenology

The transcendental phenomenology qualitative method was used for this study. This method was selected to understand the lived experiences of the participants who directly experienced the phenomena. I had personal experiences and biases with asynchronous online learning since I am a developer and instructor of online courses for a community college. I opted to use transcendental phenomenology since the hermeneutic method incorporates my interpretation of experience, which was not the goal of this study.

Data collection was driven by the Moustakas (1994) approach and the systematic steps of Lincoln and Guba's (1985) method to streamline the study by following the detailed data collection steps. I used Moustakas' (1994) data analysis methods by engaging in epoché that allowed for removing personal experiences and biases and bracketing to set the central research question as the focal point during data collection and analysis. The Moustakas (1994) process guided the discovery of only the participants' lived experiences by removing the researcher's experience of prejudice and influence.

Recommendations for Future Research

The recommendations for further research described in this section are instructor views of NAL motivations, removal of community college limitations, and focus on the synchronous online learning modality. In future studies, exploring the instructor's view of NAL learning motivations may uncover the gap between NAL needs and the perceived NAL needs as defined by the instructor. The data research suggests a gap in the needs and expectations of instructor support between the NAL and the instructor. By understanding both the instructor's perceived

NAL needs and the actual NAL needs, future courses can be developed with realistic expectations and optimal results for NAL learning success.

Next, the research study focused on the needs of community college students, and future studies should consider expanding this NAL asynchronous online learning study to education at the university level to determine if the outcomes are the same across higher education. Removing the community college limitation may allow all NAL higher education providers to unite to better serve the growing NAL population for advancing academic success and prosperity.

Lastly, future research should consider the synchronous online learning modality as research data suggests the need for human interaction that simulates in-person learning. Educators will be able to understand the differences between asynchronous and synchronous online learning modalities to serve the NAL better. The synchronous online learning study outcomes may uncover methods that can be used to enhance asynchronous online learning to accommodate more of the NAL needs.

Conclusion

The purpose of this transcendental phenomenological study was to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States. Knowles andragogy learning theory was the guiding theoretical framework for the study, resulting in three main themes of instructor support, adaptive communication, and curriculum to summarize outcomes of awareness, relationship, and application. Community college NALs in asynchronous online learning have unique needs that impact learning motivation, requiring profound instructor support, robust instructional designs, and a sense of belonging. This study's findings were confirmed with results aligning with the Knowles andragogy learning theory. Study implications suggest educators

should develop asynchronous online courses based on the Knowles andragogy learning theory's six assumptions of adult learners to improve learning motivation and academic success for the increasing NAL student population.

The critical discussion findings aligned with previous research, extended previous research, and diverted from previous research. The research concludes with future recommendations for instructor perceptions of NAL motivations, expansion across higher education, and synchronous online learning modality focus imposed on NAL researchers and higher education instructors, which will address the gap in the literature and provide vital information for the future of NAL motivational learning experiences. I hope the recommendations result in outcomes that improve the learning experience in the NAL asynchronous online education platform since the online learning evolution demands increased agility for NAL knowledge attainment and academic success, resulting in the sustained relevance and viability for educational institutions as the preferred provider of NAL education.

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APPENDIX A: IRB APPROVAL FORM

Date: 12-5-2023

IRB #: IRB-FY23-24-94
Title: Asynchronous Online Learning Motivation Experiences for Community College Degree-Seeking Non-Traditional Adult Learners: A Qualitative Study
Creation Date: 7-21-2023
End Date:
Status: Approved
Principal Investigator: Tomie Gartland
Review Board: Research Ethics Office
Sponsor:

Study History

Submission Type Initial	**Review Type** Exempt	**Decision** Exempt

Key Study Contacts

Member James Sigler	**Role** Co-Principal Investigator	**Contact** [redacted]
Member Tomie Gartland	**Role** Principal Investigator	**Contact** [redacted]
Member Tomie Gartland	**Role** Primary Contact	**Contact** [redacted]

APPENDIX B: IRB EXEMPTION LETTER

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

August 25, 2023

Tomie Gartland
James Sigler

Re: IRB Exemption - IRB-FY23-24-94 Asynchronous Online Learning Motivation Experiences for Community College Degree-Seeking Non-Traditional Adult Learners: A Qualitative Study

Dear Tomie Gartland, James Sigler,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or

For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your information sheet and final versions of your study documents can also be found on the same page under the Attachments tab.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

APPENDIX C: INFORMATION SHEET

Title of the Project: Asynchronous Online Learning Motivation Experiences for Community College Degree-Seeking Non-Traditional Adult Learners: A Qualitative Study

Principal Investigator: Tomie L. Gartland, Doctoral Candidate, School of Education, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a non-traditional adult learner enrolled in a degree program and completed at least one asynchronous online course for degree credit at a community college in the United States. A non-traditional adult learner is defined as being 25 years of age or older, having family and work responsibilities, experiencing a break in formal education, and being socially independent of parents. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Answer the feedback survey. This should take approximately 15-30 minutes.
2. Participate in a one-on-one interview, which will be conducted using Microsoft Teams videoconferencing. The interview with take approximately 45-60 minutes. If you choose to participate, it will be video recorded using Microsoft Teams.
3. Write a letter describing your most motivational experience in the asynchronous online learning environment. This should take approximately 15-30 minutes.
4. If necessary, participants will be contacted for a video-recorded follow-up interview. If necessary, this should take approximately 15-30 minutes.
5. Verify your data (member checking). After each data collection, you will be asked to review the transcript to confirm your intended meaning. This should take about 15-30 minutes in total.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include providing non-traditional adult learners with the opportunity to voice their learning motivation experiences in the asynchronous online learning environment at a community college. The finding of this study can also provide community college educators with valuable information about these experiences, which can be used to improve asynchronous online learning for non-traditional adult learners.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Letter-writing will occur via email, and all files will be stored on a password-protected secure computer. Only the researcher will have access to these files.
- All digital data will be stored on a password-locked computer. After three years, all electronic records will be deleted.
- Video recordings will be stored on a password-locked computer for three years and then deleted. Only the researcher will have access to these recordings.

How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. At the conclusion of the study, participants will receive a $100 Amazon gift card.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Tomie Gartland. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted] t[redacted]. You may also contact the researcher's faculty sponsor, Dr. James Sigler, at[redacted]

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

APPENDIX D: SCREENING QUESTIONS

Screening Question

Are you a non-traditional adult learner that is 25 years or older, work and support a family, experienced a break in education, do not rely on your parents for social support, and completed an online course at a community college for degree credit?

APPENDIX E: SURVEY FEEDBACK QUESTIONS

Demographic Questions

1. Name
2. Gender
3. Age
4. Race/Ethnicity
5. Where is your community college located?
6. What is your degree program?
7. When did you enroll in the degree program?
8. How many remote online courses did you take and receive degree credit for?
9. When did you last receive credit for an online course?

Feedback Questions

Please provide as much or as little detail as you feel is necessary to answer the following questions.

10. How was the online course experience for you?
11. Explain how the experience impacted you after you completed the course.

APPENDIX F: INDIVIDUAL INTERVIEW QUESTIONS

1. Please describe your background and community college educational goals. (CRQ)
2. Why did you decide to take online courses? (CRQ)
3. Please describe your experience with online courses. (CRQ)
4. What made the experience significant? (CRQ)
5. What experiences come to mind when you think of instruction methods you experienced during an online course? (SQ1)
6. What made that instruction method experience significant? (SQ1)
7. What experiences come to mind when you think of peer interaction during your online courses? (SQ2)
8. What made that peer experience significant? (SQ2)
9. How did you feel working with peers in the online course? (SQ2)
10. How have your experiences with instructor communication influenced your view of online courses? (SQ3)
11. What made that instructor communication experience significant? (SQ3)
12. How have your instructor interaction experiences influenced your view of online courses? (SQ3)
13. What made that instructor interaction experience significant? (SQ3)

APPENDIX G: LETTER-WRITING PROMPT

1. Please explain the driving force that influenced your academic progress and successful course completion in online courses. (CRQ)
2. Share any other thoughts about your experience with online courses that can help with this study. (CRQ)

APPENDIX H: RECRUITMENT EMAIL

Dear Recipient,

As a graduate student in the School of Education at Liberty University, I am conducting qualitative research as part of the requirements for a Ph.D. degree. The purpose of my research is to discover the asynchronous online learning experiences that support learning motivation for community college non-traditional adult learners in the United States, and I am writing to invite you to join my study.

Participants must be non-traditional adult learners enrolled in a degree program with the completion of at least one asynchronous online course for degree credit at a community college in the United States. A non-traditional adult learner is defined as being 25 or older, having family and work responsibilities, experiencing a break in formal education, and being socially independent of parents. Participants will be asked to participate in a feedback survey (15-30 mins), online interview (45-60 mins), letter-writing (15-30 mins), and member checking/data verification (30 mins), *excluding* screening and reviewing the information sheet, which should take about 3 to 3.5 hours to complete. Names and other identifying information will be requested as part of this study, but participant identities will not be disclosed.

To participate, please reply to this email at [redacted] to schedule an interview. If you meet my participant criteria, I will work with you to schedule a time for an interview.

An information sheet document is attached to this email. The information sheet document contains additional information about my research.

Participants will receive a $100 Amazon gift card upon study completion.

Please let me know if you have any questions. Thank you for considering participation in my study.

Sincerely,

Tomie L. Gartland
Ph.D. Candidate
[redacted]

APPENDIX I: CODES

This shows the 32 codes from the preliminary data analysis.

#	Code
1	accessible instructor
2	in-person instructor meeting
3	video meetings with instructor
4	phone calls with instructor
5	attentive instructor
6	engaged instructor
7	absent instructor
8	patient instructor
9	familiar instructor
10	compassionate instructor
11	timeliness communication
12	prompt feedback
13	grading feedback
14	human interaction exchanges
15	peers for learning gauge
16	positive discussions online
17	negative discussions online
18	lack of interaction
19	positive peer interaction
20	unauthentic peer interaction
21	peer interaction barriers
22	24x7 accessible content
23	connectivity issues with LMS
24	privacy concerns with LMS
25	flexible content materials
26	relevant content
27	technology reluctance concerns with LMS
28	LMS links
29	supporting materials
30	videos
31	books
32	labs

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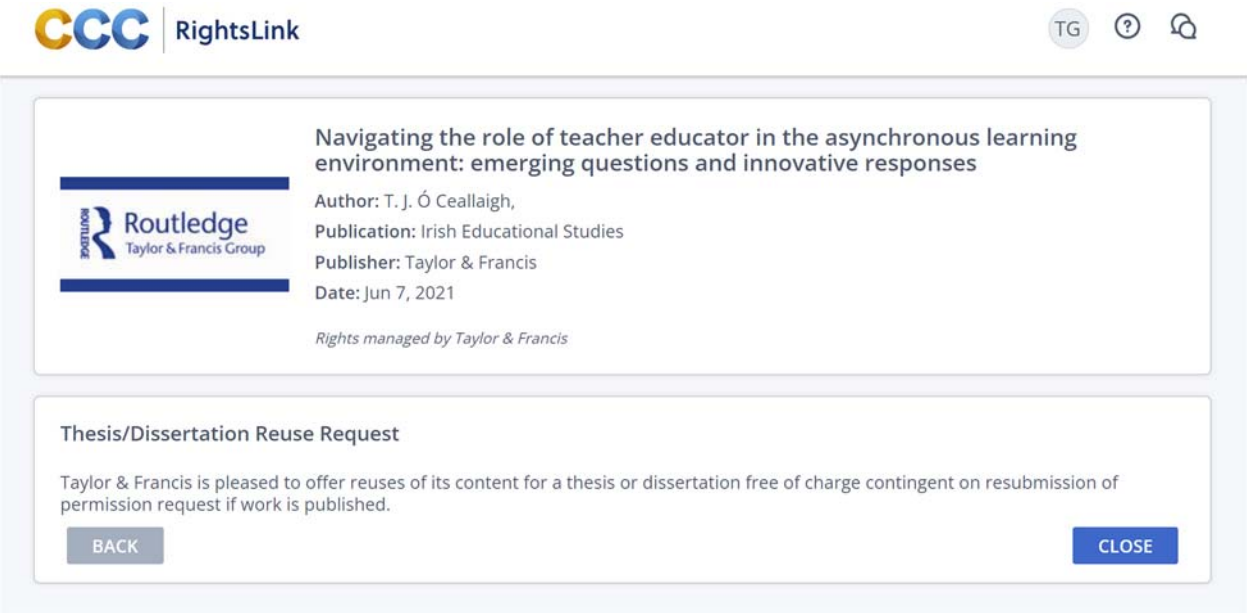

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