Barriers and Persistence Strategies of Online Master's Students

By

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Abstract

The purpose of this study was to examine the experiences of students who enrolled in one of several, newly established online masters and online graduate certificate programs in the School of Education at the University of Kansas. Ten students who finished their online-graduated degrees (Completers) and three students who started but discontinued their programs (Non-completers) were asked to describe the barriers they faced and the strategies they utilized while striving for completion in their academic program. Consistent with online-persistence literature, Completers and Non-Completers reported technology skills, competing work commitments, or personal/health circumstances were barriers to persistence reported with frequency. Program pace, a barrier that describes the intensity of program expectations, emerged as a barrier unique to the experiences of Completers at KU. Non-completers reported unexpected circumstances and program dissatisfaction contributed to their withdrawal. Completers and Non-Completers reported the use of persistence strategies that helped them a) manage time, b) maintain relationships, and c) monitor their own progress.

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Chapter

Introduction

The master's student, the graduate learning environment, and the importance of earning a master's degree, has experienced significant shifts in the last 50 years (Markle, 2015; Nevill, Chen, & Carroll, 2007; Wendler, et al., 2010). The knowledge economy has increased the demand for advanced graduate study and digital technologies now afford students the ability to access degree programs entirely online, on a traditional campus, or through programs that blend online and physical classroom learning (Mattern & Radunzel, 2015; Meyer, Bruwelheide, & Poulin, 2009). Although institutions have responded to the demand for increased flexibility in graduate programs, many students are not successful (Cohen, 2012; Girves & Wemmerus, 1988; Wendler et al., 2010). It was the aim of this study to spotlight the obstacles experienced by online-graduate students and spotlight the strategies they used to overcome those obstacles.

Defining the Problem

Despite favorable conditions for earning an advanced degree, student persistence through graduate programs remains an ongoing concern. Retention scholars continue to investigate the circumstances that promote or hinder degree persistence at both the undergraduate and graduate levels. The allocation of resources within academic departments, schools, and institutions is ultimately dictated by a program's ability to sustain students through the degree process (Braid, 1976; Byrd, 2015; Cross, 2017; Gardner & Barnes, 2007; Kraska, 2008; Wendler et al. 2010). For example, students who withdraw from graduate programs may face poor self-perception, extreme self-criticism, and the perception of rejection from others (Lovitts, 2002). Additionally, having withdrawn from a program they are still required to repay any loan or financial aid support they may have received (Mitchell, Leachman, & Masterson, 2017). Academic

departments and programs risk the loss of even more funding when retention or drop-out rates climb. It follows that a deeper understanding of persistence factors, (i.e. what helps and interferes with successful master's student degree completion), stands to bolster the way institutions recruit, train, and retain students. The advantages of that deeper understanding of persistence may be crucial to our institutions and programs of higher education, to professional field of education, and to our nation's economic future (Mattern & Radunzel, 2015). But what exactly does 'persistence' mean?

Wendler and colleagues (2010) state that the failure of students to persist is "one of the most vexing problems facing U.S. graduate education" and suggest that a deep understanding of persistence factors is not only important but essential (Wendler et al., 2010, p. 27). Wyrick (2007) emphasizes that institutional behavior will not change without a true understanding of the underlying causes of student persistence and warns that the need for this understanding is only increasing as "colleges and universities expand more and more into internet-based distance education programs" (Wyrick, 2007, p. 24). Research by Rovai (2003) and Tello (2007) spotlight the meaning of persistence on online-education environments. Rovai (2003) defines online persistence as "the behavior of continuing action despite the presence of obstacles" (Rovai, 2003, p.1). Tello (2007) adds that online persistence is "a student's commitment to complete a course and program of study" (Tello, 2007, p. 48). Currently, persistence, retention, completion, attrition, dropout, and withdrawal are all terms still currently in use that vary in their definition. Because these terms are used interchangeably, it can difficult to grasp an accurate understanding of the problem (Haydarov, Moxley, & Anderson, 2013; Willging & Johnson, 2009).

According to Haydarov, Moxley, and Anderson, "Student persistence is a multi-faceted concept that is inadequately measured" (Haydarov, Moxley, & Anderson, 2013, p. 4). Although master's students comprise 75% of all graduate enrollment, data specifically addressing master's student persistence is limited (K. Cohen, 2012; Girves & Wemmerus, 1988). Published persistence rates in traditional graduate programs range from 50-60% (Golde, 2005; Kraska, 2008; Xu, 2014), but these data represent findings from doctoral programs only. Despite the size or frequency of the master's degree persistence problem, the process of 'failed' persistence needs to be better understood Drummond Hays (2013) states that national education data does not track the number of master's students who struggle and ultimately discontinue, nor does it track how long those students struggle while attempting to persist. Specifically, "there is no national effort to track master's students from enrollment to the end of their master's degree efforts, whether they depart without a degree or graduate" (Drummond Hays, 2013, p. 3-4). Cohen (2012) also identifies that the issue of master's student persistence has been ignored. While persistence research focuses on undergraduate and doctoral students, Cohen (2012) states that the "cause for this neglect [in master's student persistence] is not well known" (Cohen, 2012, p. 2).

The limited availability of time and finances, regardless of student's diligence or strategies, are often common obstacles to student success (Ellis, 2014; Girves & Wemmerus, 1988; Kallio, 1995; Newhouse, 2016; Sheppard, 2013). Less obvious than the shortage of time and money is the degree of fit between the student and the program or institution or, "how well students integrate into a particular school" (Rovai, 2003, p. 4). Graduate student's persistence can be undermined when students feel inadequately supported or feel disconnected from their academic community (Greene, 2014; Janz, 2016; Rovai, 2003; Wyrick, 2007). These social and psychological variables of master's student persistence also need further explanation. Although

master's students often face and defeat multiple social, academic, and economic roles in their

pursuit of persistence, the experience of failure can be unforgiving (Arric, Young, Harris, &

Farrow, 2011; M. Cohen & Greenberg, 2011; Gibbs, 2012; Greene, 2014; Polson, 2003;

Shepherd & Nelson, 2012; Spaulding, 2012).

Scope of Investigation

The recent launch of several online master's and graduate certificate programs, housed

within the University of Kansas, School of Education (KU-SOE) provided an opportunity to ask

students "how" they persisted, or tried to persist in their online-master's degree and graduate

certificate programs. In 2014, KU-SOE, formed a partnership with a private online education

consulting firm who specializes in assisting universities develop high-quality, online learning

content. This consulting firm supports colleges and universities as they develop, implement,

and/or refine traditional face-to-face materials to an online venue. Consistent with its mission,

the SOE also commissioned a 5-year program evaluation project to assess the outcome of these

online masters and graduate certificate programs. This study of master's students' persistence

was born from this larger program evaluation effort. In short, this study design was meant to

provide key decision makers with the knowledge of factors that motivated students in their

program to pursue, persist, or withdraw without completing. Divergent from traditional theory-

of-knowledge philosophies (ex. logical positivism), this study draws upon the philosophical

foundation of pragmatism (Morgan, 2014). Rather than evaluating how or when our scientific

methods can be trusted, pragmatic social science research demands an answer to the question: is

this useful?

In conjunction with the program evaluation of these SOE online programs, this study

described the persistence barriers and strategies of students who graduated (Completers) and who

discontinued their online program (Non-completers). Persistence in this study will be defined as the ability of students to complete their degree requirements as expected (Rovai, 2003; Tello 2007). The specific research questions of Completers and Non-completers this study were:

1) **What were the experiences of students who graduated (Completers) from an online master's program at KU-SOE?**

   a) What did Completers identify as barriers to their progress?

   b) What strategies did Completers use to persist?

2) **What were the experiences of students who began, but did not complete (Non-completers) their online master's program at KU-SOE?**

   a) What barriers did they face towards completion of their degree?

   b) What strategies did Non-completers use to persist?

Contribution of the Study

The University of Kansas was an early pioneer in the advancement of distance education (Watkins & Wright, 1991) and earned national attention for its overhaul of teacher preparation in the early 1980's (Scannell, 1984). KU's Department of Special Education has been one of the top ranked programs for the last decade; the School of Education, as a whole, has been ranked in the top ten among education schools at public universities. In keeping with the School of Education's mission of excellence and leadership in education, the most immediate contribution of this study is to improve the experience of current and future online, master's in education students at KU. Students interested in pursuing an online, masters-in-education from KU may find it easier to predict their own success in these programs from learning about the persistence barriers and persistence strategies utilized by the participants in this study (see Table 1). Findings

that improve the experiences of all online-graduate students at KU (outside the School of Education) are also considered to be a potential contribution of this study.

The outcome of this study fits within the larger body of research that spotlights persistence and retention concerns for online-graduate students (Arric et al., 2011; Chou, 2013; Deggs, Grover, & Kacirek, 2010; Fedynich, 2015; Lee, 2014; Rakes & Dunn, 2010; Rovai, 2015; Verdinelli & Kutner, 2015). Only a handful of studies have taken a descriptive, qualitative approach to describing the experiences of successful and non-successful students in online-master's programs.

Organization of the Dissertation

Chapter 1 introduces the reader to the special context of this study, defines the problem of student persistence and proposes several research questions designed to elicit data on the detailed experiences of former KU-SOE students. Chapter 2 grounds the problem of student persistence in existing literature of graduate school and online persistence while framing the changes of graduate student demographics in the historical context. Chapter 3 describes the way participants were identified, selected, recruited, and compensated; the interview and data handling procedures are also described. Chapter 4 presents the data from participant interviews as answers to specific research questions of the study outlined in Chapter 1. Summarizing the key findings, Chapter 5 outlines the strengths and limitations of this study, provides suggestions for follow up investigation, and provides recommendations for students and programs on ways to increase student persistence.

Research Definitions

- Persistence in this study referred to the ability of students to complete their degree requirements as expected (Rovai, 2003; Tello, 2007).

- Barriers or Barriers-to-Persistence in this study referred to a collection of obstacles, identified from prior research, that impede student persistence (Muilenburg & Berge, 2005; Rovai, 2003).

- Strategy or Persistence Strategy in this study was defined as any intentional activity by a student to minimize the impact of a barrier (Schlemper, 2011).

- Completers in this study were defined as students who had completed their online master's program or graduate-certificate as expected, i.e., finished all program requirements on schedule with peers.

- Non-completers were defined in this study as students who discontinued or were dismissed from the initial 8-week mini-mester course sequence.

Chapter 2

Literature Review

Understanding online graduate persistence begins by understanding the four-way intersection of graduate school, family responsibilities, functional work commitments, and the online experience. The literature on traditional graduate program persistence is presented first as it examines the nuanced nature of investigating educational program success. The history of online education is briefly covered to illustrate how the combination of graduate learning with online learning, exponentially increases the complexity of persistence research. Summative data from Lee and Choi (2011) and other researchers is presented as a foundation for understanding the intersection of individual skills, program options, and contextual events in graduate student persistence. Finally, research on the specific skills that contribute to persistence, skills like time management, self-efficacy, or prioritizing, are presented as factors that can shape the experience of the graduate student and the online-graduate program. The literature review introduces the reader to the key findings of online graduate persistence and highlights the areas of literature that require more research.

Reasons to pursue a graduate degree vary by the individual, undergraduate experiences, and academic field (Belcastro & Koeske, 1996; Brus, 2006; Ethington & Smart, 1986; Mullen, Goyette, & Soares, 2003; Stoecker, 1991; Tucker & Fushell, 2013). However, increased lifetime earning potential as well as personal and professional prestige continue to be identified as the benefits of a graduate degree (Posselt & Grodsky, 2017). Some professionals elect graduate work early in their career while others prefer to earn experience in their respective field before their graduate work begins (Belcastro & Koeske, 1996; Brus, 2006; Stoeker, 1991). While other professionals are motivated to pursue graduate work in response to their early career experiences

and satisfaction (Belcastro & Koeske, 1996). For teachers, pursuing a master's degree is often motivated by the potential for increased wages, professional improvement, or consideration for building or district leadership positions (Tucker & Fushell, 2013).

Characteristics and Trends in Graduate Student Experiences

The U.S. Department of Education gathers extensive longitudinal data on the national statistics of graduate school attendance. Titled "The Baccalaureate and Beyond", the B&B longitudinal study followed 9,000 graduates via surveys and interviews in 1993, 2003, and 2007 (Nevill, Chen, & Carroll, 2007). The B&B project continued to select longitudinal cohorts to study, in 2000 and 2008. In 2010, the Council of Graduate Schools capitalized on this existing data and more recent cohort data to craft their most recent treatise on the future of graduate education (Wendler et al., 2010). The B&B study provides a rich data set from which to explore the characteristics and motivations of graduate students. Data from the B&B study identify graduate students as a small, growing, increasingly diverse, group of students who have a set of common barriers to timely completion (Nevill et al., 2007; Wendler et al., 2010).

Factors of age and completion time. Traditionally, graduate students tend to pursue their advanced degrees immediately after they have attained their bachelor's degree (Brus, 2006; Nevill et al., 2007; Wendler et al., 2010). However, data from Brus (2006) as well as the B&B study indicate that many students pursue career experiences between their bachelor's and master's or doctoral degrees (Brus, 2006; Nevill et al., 2007; Wendler et al., 2010). For example, graduate students who were married or had children, were of Hispanic descent, were older than 30-years of age, and whose parents earned a high school diploma as their highest level of education all took significantly longer to complete their graduate degrees (Brus, 2006; Nevill et al., 2007; Wendler et al., 2010). Students who were recent bachelor's earners, single, male, of

moderate income and white were most likely to finish their degree more quickly (Wendler et al., 2010).

Gender differences. Findings from the B&B study and others have documented differences between men and women in their time-to-degree, type of degree, and / or reasons to pursue or leave graduate (Nevill et al., 2007; Perna, 2004; English & Umbach, 2016; Wendler et al., 2010). Women, for example, who experienced a divorce, separation, or death of a spouse took longer to complete their graduate degrees than men who had experienced the same events (Nevill et al., 2007). While child rearing increased time-to-degree for both women and men, rearing children had a stronger negative impact on timely graduate degree attainment for woman than for men, even when time-to-degree was held constant (Nevill et al., 2007).

English and Umbach (2016), using the same B&B data set, reported that three-fifths of those who earned a master's degree in 2003 were women (English & Umbach, 2016). Wendler and colleagues also reported that the B&B results showed the largest number of master's degrees earned are in the field of education (Wendler et al., 2010). Based on the available studies, the increased female presence in master's degree programs since 2003 might be the increase in master's degrees in education, a highly feminized field, the result of more women across disciplines pursuing graduate degrees or a combination of factors (Perna, 2004; Wendler et al., 2010). Though women who have children while pursuing graduate study take longer to complete their graduate degree, neither the length of time toward degree completion nor the competing pressures of children and family have stopped women from pursuing graduate degrees at significantly increasing rates over the last 30 years (Perna, 2004; Wendler et al., 2010).

Socio-economic status. The B&B data and several other studies have traced the aspiration, likelihood, and completion of a graduate degree to the highest educational level

achieved by the student's parent (English & Umbach, 2016; Ethington & Smart, 1986; Isaac, Malaney, & Karras, 1992; Mullen et al., 2003; Nevill et al., 2007). Findings from multiple studies have shown that lower levels of parental education make it less likely that college graduates will pursue graduate degrees. English and Umbach (2016) found that higher parental education with moderate personal income increased the likelihood that the students would pursue graduate degrees (English & Umbach, 2016). However, bachelor's degree earners whose personal income was more than $50,000, were less likely to pursue graduate work (English & Umbach, 2016). Additionally, some bachelor's degree recipients whose parents had lower levels of education attainment, were found to be more likely to pursue graduate work based on their degree of cultural and social capital (Alig, 2014). Social capital in reference to graduate programs refers to a student's ability to successfully build relationships with faculty, staff, and peers (Winkle-Wagner & McCoy, 2016). It can be understood as a form of social currency. Similarly, cultural capital in relation to graduate school refers to the knowledge, skills, and abilities that help them successfully navigate the socio-cultural expectations of their degree (Alig, 2014; English & Umbach, 2016). Researchers suggest that earning a graduate degree was the best way for students to increase their social and financial standing (Alig, 2014; English & Umbach, 2016).

Satisfaction and engagement. Several studies have focused on the components of course content and interaction content in online courses rooted in Tinto's work.

In Tinto's model, the student must have the opportunity to be active with the new culture in order to remain enrolled (Tinto, 1993 & 1998). Tinto's Student Integration Model was built on a previous social psychology theory that posited that suicide resulted from society that lacked moral integration and collective affiliation (Tinto, 1975). He saw student dropouts to be the

result of two different but equally important phenomenon: experiencing insufficient interactions and experiencing incongruence with a person's own values. These experiences could be rooted in the student's academic or social experiences of their surroundings (Tinto, 1975).

Cooke, Sims, and Peyrefitte (1995) surveyed 230 graduate students from across disciplines and found that students were most likely to persist when their satisfaction with school and commitment were high and their program expectations had been met (Cooke, Sims, & Peyrefitte, 1995). These authors underscored the importance of both student attitudes and feeling connected to the university as key factors in graduate student persistence (Cooke et al., 1995). Reiff and colleagues collected data for three years on the way adult graduate students prefer to learn. Results showed that graduate students want instruction designed with their learning in mind and want instruction that emphasizes the role of affect in learning (Reiff & Ballin, 2016). Findings from Cooke et al. (1991) and Reiff and Ballin (2016) are consistent with Tinto's (1993) theory that graduate persistence is shaped by the reciprocity of engagement between a student and his or her campus environment.

Graduate student summary. The graduate student population is increasing in size and diversity (Nevill et al. 2007; Wendler et al. 2007). Individuals under age 30, who delay child-rearing, whose parents earned college or graduate degrees, and who begin their graduate degree adjacent to finishing their bachelor's degree are more likely to finish a master's degree in under three years. (Nevill et al., 2007; Wendler et al., 2010). Women with children can take longer than men with children to complete their degree following admission, but additionally, women are earning master's degrees at higher rates than men (Arric, 2011; Arric et al., 2011; Sheppard, 2013). Lower parent education status reduces the likelihood that college graduates will continue

academic study (Isaac et al., 1992; Santiago & Einarson, 1998). Reasons to pursue graduate

degrees are varied but include professional, personal, and financial enhancement.

Retention, Persistence, and Dropout in Higher Education.

Academic persistence is often defined by the term "dropout" or "dropout rate," and is one

kind of effectiveness measure for online and traditional higher education programs (Willging &

Johnson, 2009). Dropout rates can be difficult to track based on how institutions collect their

data (Willging & Johnson, 2009). However, as dropouts reflect poorly on graduate programs,

institutions may not be forthcoming with attritional data (Willging & Johnson, 2009). Early work

from Bean (1985) and Tinto (1975) suggest that undergraduate student persistence is a

combination of academic, social, and institutional factors (Bean, 1985; Tinto, 1975, 1993, 1998).

Bean (1975), however, demonstrated that academic, social-psychological, and environmental

factors were better predictor's of program success, more than a student's college grades, goals,

campus life, or institutional commitment. Specifically, Bean (1985) showed that environmental

factors like finances, options to transfer, and outside friends accounted for more variance than

the socialization or selection factors such as college grades, institutional fit, and institutional

commitment. Labeled the Dropout Syndrome, Bean's model accounted for 27% to 47% of the

variance thought to predict college dropout.

Dropout research at the undergraduate level has focused on direct and indirect academic

variables to explain student progress. Direct academic variables, for example, high school

achievement data (e.g. high school grade point average; ACD & SAT exam scores), are thought

to predict whether an undergraduate student will successfully achieve their degree (Lotkowski,

Robbins, & Noeth, 2004). But indirect academic variables have also been shown to play a more

vital role (Bean, 1985; Lotkowski et al., 2004). For example, academic and social involvement

at the community college level, in residence halls at four year institutions, or casual intellectual

involvement with peers related to academic subject matters, has all been shown to increase the

likelihood that an undergraduate student will continue their course of study (Astin, 1984;

Pascarella & Terenzini, 1979). Student involvement with faculty has been shown to be the

number one predictor of undergraduate student retention (Astin, 1984; Pascarella & Terenzini,

1979). Willing (2009) showed evidence that a student's unique situation during their degree

program (i.e. major life event, job change, health condition, natural disaster, etc.) was a better

predictor of persistence than the student's specific academic abilities. Studying three cohorts of

online graduate students, Willing's (2009) findings suggest that students may drop out even

when they report being able to effectively manage time.

Influential Factors of Online Higher Education

Gaytan (2015) suggests that role differences within online education programs (students

vs. faculty) may shape our current understanding of how the problem of persistence is identified.

Interviewing online faculty and students Gaytan (2015) found remarkable differences between

the two groups in their understanding of what would improve online student persistence (Gaytan,

2015). The top five emerging themes from faculty interviews indicated that online student

retention would be improved through student self-discipline, quality of faculty-student

interactions, institutional student supports, most recent online grade received, and failure of

previous credit transfer (Gaytan, 2015). The top five themes from student interviews indicated

that persistence would be improved through increased faculty instruction, meaningful evaluative

feedback, increased transfer of previous credits, sufficient GPA, and institutional student

supports (Gaytan, 2015).

Gaytan's (2015) qualitative study, with a sample size of 15 students and 15 faculty, points to strikingly different perspectives between faculty and students (Gaytan, 2015). Faculty perspectives indicated student self-discipline (or lack of) to be the most prominent theme impacting students' persistence while students indicated the most prominent theme impacting student persistence was the need for increased faculty instruction (Gaytan, 2015). Each group looked to the other to initiate change. However, even though both groups were quick to outline the deficits in the other, both faculty and student responses indicated a degree of appropriate self-criticism. Faculty acknowledged that improved interactions between faculty and staff would be key to improving persistence. Conversely, students acknowledged the need for students to maintain consistent and adequate academic standing during online courses (Graytan, 2015).

With the proliferation of online degree programs now available, Lee and Choi reviewed 69 factors from 35 studies regarding the persistence of students in online programs (see Table 2 and Figure 1; Lee & Choi, 2011). Sixty-nine research derived components that influence online education were distilled into 9 primary factors and grouped in 3 global domains: student factors of persistence, course/program factors of persistence, and environmental factors (Lee & Choi, 2011). One of the three domains emerged as a categorical front-runner, accounting for more scholarship than the other two domains: the student factor.

Student Persistence Factors. Within the domain or type of persistence factor studied by Lee and Choi, the student domain contained four sub-categories: academic background, relevant experiences, relevant skills, and psychological attributes. The *academic background* sub-category refers to student's previous academic performance and a student's overall academic aptitude. The *relevant experiences* sub-category captures a student's prior experience in higher education and with course materials. The *relevant skills* sub-category refers to student abilities to

manage time, effort, stress, coping, and technology. The fourth sub-category, *psychological attributes*, has components that have been frequently described in research literature. This sub-category refers to a student's management of self, i.e., their attitude towards learning and locus of control, along with self-efficacy and satisfaction.

Students' academic background, relevant experience, relevant skills, and psychological attributes accounted for 55% of the reviewed research on factors that contribute to online program dropout (Lee & Choi, 2011). The student psychological attributes was the most frequent factor, identified in 14 of the research studies reviewed; relevant skills was the second most frequently identified factor, found in 11 of the studies reviewed (Lee & Choi, 2011). Although the Lee and Choi study did not utilize statistical analysis to derive these nine core factors of online persistence, their analytical technique provides a conceptual model from which to understand the elements of online persistence. Among the variables reviewed, student psychological factors were the most frequently researched, comprising 20% of the variables reviewed (Lee & Choi, 2011). Student psychological factors included attitudes, self-efficacy, satisfaction, confidence, motivation, and locus of control (Lee & Choi, 2011).

Kauffman's (2015) analysis of the successful online student conforms to the student psychological attributes factor in the Lee and Choi review. Based on Kauffman's synthesis of published research she was able to create a profile of the successful online-learning student. According to Kauffman, this student would have emotional intelligence, be self-aware of his or her own needs, be able adequately manage feelings, could self-regulate, possessed self-discipline, could manage time, organize, plan, and self-evaluate, possess a reflective and visual learning style, and possess an internal locus of control (Kauffman, 2015). She concluded that

faculty should adjust their instructional designs to meet the needs of these learners (Kauffman, 2015).

      Course/Program Persistence Factors. Three of the nine subcategories for course/program persistence factors included the subcategories of course design, institutional supports and interactions (Lee & Choi, 2011). *Course design* refers to faculty-student and student-to student interactivity, overall quality of instructions, and the degree that course materials meet relative student needs (Lee & Choi, 2011). The *institutional supports* sub-category refers to the components of an academic experience that can influence student persistence: administrative structure, faculty compensation, student access to support services, program effectiveness and program evaluations (Lee & Choi, 2011). The *interactions* sub-category of online persistence captures student-to-student and student-to-faculty interactions as well as a student's involvement with activities (Lee & Choi, 2011). The interactions sub-category is most similar to the substantial corpus of literature for undergraduate retention showing the importance of academic and social involvement (Astin, 1984).

      Environmental Persistence Factors. The third domain outlined by Lee and Choi (2011) represents the work-related responsibilities of employment experienced by online students. The *work commitments* sub-category includes the circumstances or situational factors experienced by the student that help or hinder their academic persistence such as full or part-time employment, pressure to work more or longer at their jobs, and unexpected changes in their work responsibilities (Lee & Choi, 2011). The *supportive study environment* sub-category was the third most frequent factor identified by the research (Lee & Choi, 2011). Understood as simply the support and encouragement that students perceive from others in their environment, the

supportive study environment sub-category suggests a highly salient need of online students to feel encouragement and understanding from the people in their life (Lee & Choi, 2011).

Desposito (2006) and Chen and Jang (2010) also outlined the persistence factors of online students. Both studies show similar findings to the Lee and Choi (2011) review, that student-focused and circumstance-focused factors work together to shape the persistence of online students (see Table 3; Lee & Choi, 2011). The work of Chen and Jang (2010) suggests a connection between the personal, academic, and environmental domains. These authors tested several structural equation models built on Deci and Ryan's Self-Determination Theory that might explain motivational factors in online learning outcomes. Chen and Jang's (2010) review of online learning variables led them to craft four categories of variables for their models: contextual support, need satisfaction, motivation, and learning outcomes (Chen & Jang, 2010). Results of their structural path analysis found that perception of instructor support and perception of their own online learning competency (contextual support) positively predicted students' perception of autonomy, relatedness, and competency (need satisfaction), which in turn positively predicted student motivation (self-determination) (Chen & Jang, 2010). Of the theoretical models tested, need satisfaction was the strongest, positive predictor of learning engagement (hours per week studying), contextual support was the strongest positive predictor of overall course satisfaction (Chen & Jang, 2010).

A most interesting finding was the impact of contextual support on the learning outcome variables. Contextual support is defined as the degree of social "nutrients" a student is able to absorb from their academic environment (Chen & Jang, 2010). On its own, contextual support showed a negative relationship with the learning outcome variables such as engagement, achievement, perceived learning, and course satisfaction (Chen & Jang, 2010). However,

mediated through need satisfaction, contextual support had a positive, albeit indirect effect on the learning outcome variable. Stated differently, in order to positively impact learning outcomes, online students must have their needs met, not just "feel" supported. Results of this study suggest a relationship between student perceptions of environmental supports, student perception of their own online-learning efficacy, a student's ability to get their psychological and academic needs met, a student's academic engagement, and learning (Chen & Jang, 2010).

Working with online-graduate students, Desposito (2006) found that student self-efficacy did not directly impact persistence on its own but was successful in combination with dispositional, institutional, and epistemological factors (Desposito, 2006). Desposito's dispositional, institutional, and epistemological factors are strikingly similar to Lee and Choi's (2011) student, course/program, and environmental factors and similar still to Chen and Jang's (2010) contextual support, need satisfaction and motivation (Chen & Jang, 2010; Desposito, 2006; Lee & Choi, 2011). Table 2 provides an overview of the similarities and differences between these authors grouping of key online persistence factors.

Summary of online-persistence factors. The bulk of the literature on persistence factors across all of online-higher education establishes the complexity of the persistence question by showing how the student, the program, and the environmental or larger scale factors can impact a student's persistence. This multiple pathway model suggests more research is needed to understand the combination of factors that may worth together to help or inhibit student persistence.

Persistence Barriers of Online-Graduate Students

For graduate and online-graduate students, studies have shown that a variety of personal, social, and environmental variables can become obstacles for students wishing to earn an online-

graduate degree (see Table 3). While the student, program, and environmental factors, capture much of the variance in prediction models for online persistence, other barriers have been linked to the persistence of graduate students who earn their degrees online (see Table 3). Specifically, reduced or inadequate social or family support, managing a physical or emotional health issue in themselves or a family member, demonstrating insufficient confidence, motivation, or academic skills, struggling with costs, and trouble utilizing required technology have all been documented as barriers to the persistence of online-graduate students (Arric, 2011; Arric et al., 2011; Baltes, Hoffman-Kipp, Lynn, & Weltzer-Ward, 2010; Banyas, Gustafson, & Knott, 2011; Braun, 2008; Brus, 2006; Cauble, 2015; Desposito, 2006; DiGiuseppe, Van Oostveen, & Petrarca, 2015; El-Ghoroury, Galper, Sawaqdeh, & Bufka, 2012; Fedynich, Bradley, & Bradley, 2015; Milman, Posey, Pintz, Wright, & Zhou, 2015; Tallent-Runnels et al., 2005).

Understanding the specific motivations to pursue graduate study in an online format may draw out other aspects of persistence. Braun (2008) surveyed 90 graduate students who were enrolled in online only programs or hybrid programs in education. Seventy to eighty percent of participants indicated they were motivated to take online courses for the option to complete coursework at home (74%), because they perceived online courses to be more demanding (77%), and because they desired the programs flexibility (80%). Most of Braun's participants were happy with the features of their programs; 44% indicated they wanted more interaction with peers and instructors (Braun 2008). Flexibility and independence were the primary consideration for these online-graduate students. Online graduate students in various pharmacy programs also identified convenience of online-graduate programs, alignment of program with their personal goals, and student perception of the institution as their primary motivations to pursue online graduate work (Banyas, Gustaffson, & Knott, 2011).

The model of student, program, and environmental barriers describing online persistence (see Table 2 & Figure 1) provides an excellent framework for organizing all the barriers for graduate students studying online, but it does not include all known obstacles for online graduate students (see Table 4). For example, the costs of online graduate degrees, as a barrier, has received attention in the work of Arric (2011), Muilenburg and Berge (2005), and Grady and colleagues (2013). Rakes and Dunn (2010) showed that procrastination in online graduate students was linked to lower intrinsic motivation. Chou (2013) also found that high levels of motivation with online graduate students helped them push through difficult tasks or workloads. Furthermore, managing a physical or emotional health concern in themselves or in a family member has also received attention in the literature as a barrier for online, graduate, and online-graduate students (Arric, 2011; El-Ghoroury et al., 2012; Kauffman, 2015).

Time Management. Brus (2006) and others have documented that online-graduate students must tackle substantial issues regarding time management and that graduate students are faced with impossible decisions on a daily basis, torn between the competing demands of work, family, and school (Brus, 2006). "Regardless of the choice made, there is always something important that was not chosen" (Brus, 2006, p. 35). When studying the barriers to successful online learning, Wright (2015) found work-related concerns, poor time management skills, and personal issues to be the key impediments persistence. Persistence in the online degree, in her study, depended on successful time management skills, self-directed learning, motivation, dedication, technology skills, and communication skills in the online learning environment (Wright, 2015). This finding varies from Willing (2009) suggesting that while time management is extremely important, it may not be the factor that most determines drop-out.

Schlemper (2011) recorded similar sentiments, quoting the distress of graduate students trying to manage the demands of their online-program. Schlemper interviewed 117 master's and doctoral geography students in focus groups to discuss the challenges to graduate school (Schlemper, 2011). For these students, time management was their greatest challenge, second were issues in their curriculum, and third to the expectations of producing a thesis or dissertation (Schlemper, 2011). One participant said, "It's just the adjustment of structuring your time differently…A lot of just getting used to it and talking to my advisor and saying, 'Well, how do I structure my time?' and everything like that" (Schlemper, 2011, p. 70). Schlemper questioned "…if time management is a perennial issue, the how do these students deal with this challenge, finish their degree successfully, and advance into careers?" (Schlemper, 2011, p. 69).

Nurses in online-graduate programs feel similarly pulled in multiple directions. Waterworth (2003) recorded the strategies used by nurses to balance multiple patients, roles, and institutional needs. Results showed that nurses were prioritizing their time and carefully controlling their interactions with others (Waterworth, 2003). Prioritizing included the techniques of routinization, concealment, catch-up, juggling, and extending temporal boundaries. To control their interactions with others they used the techniques of focusing, avoiding, selective attention, short-cutting, saying no, making compromises, delegation, and synchronizing (Waterworth, 2003).

Stress and coping. Grady and colleagues (2013) also conducted focus groups of master's and doctoral level students, but his sample included a wide range of graduate disciplines from the University of Indiana. These students' top stressors included the strain from multiple roles (student, employee, family member, friend, parent, etc.) mentorships (connecting to those who can advise and support them), isolation (reduced opportunity for interaction with academic and

community supports), and funding (Grady, La Touche, Oslawski-Lopez, Powers, & Simacek, 2013).

Oswalt and colleagues surveyed graduates across multiple disciplines, inquiring about students' stress, coping, and campus services (Oswalt & Riddock, 2007). When surveyed, nearly three-quarters of students felt "stressed" or "very stressed" while earning their online graduate degree. Graduates reported that access to affordable health insurance, lack of adequate funding, and functional barriers that, though they seemed small, seriously contributed to the overall stress level of students (Oswalt & Riddock, 2007). The functional barriers in question were issues such as parking, office space, office location, and network access (Oswalt & Riddock, 2007).

The stress of graduate students and subsequent impact on retention led Mendenhall (2014) to provide an intervention aimed at retaining graduate students in their academic programs. Using a peer-to-peer model, Mendenhall implemented a solution-focused group counseling intervention to provide encouragement and reinforcement for student's existing strengths (Mendenhall, 2014). The model of solution-focused group therapy was designed provide an emotionally and culturally safe environment for students to build trust with one another (Mendenhall, 2014). Through the process of shared experiences, graduate students were able to empower each other to solve their school-related problems (Mendenhall, 2014), thus increasing the likelihood that they would continue their academic persistence.

Arric and colleagues (2011) surveyed 750 online-graduate women with the Social Readjustment Scale-Revised. Single, older, and Black women, those who historically had been the most marginalized by various social institutions (Nevill et al., 2007; Shepherd & Nelson, 2012; Wendler et al., 2010), reported the highest levels of stress compared to other graduate students (Arric et al., 2011). Consistent with the literature on why women leave graduate school,

these women reported stress from changing work responsibilities, transitioning to/from formal education, money, family, and work (Arric et al., 2011). Müller's interviews of 20 online-learning women revealed that multiple responsibilities, insufficient faculty interaction, technology, and coursework were the highest ranked barriers to successful online learning (Müller, 2008). They reported factors that facilitated persistence for these women included strong motivation to complete their degrees, learning engagement, and appreciation for online convenience (Müller, 2008).

Summary of online-graduate factors. Aspiring graduate students turn to online-graduate programs as a way to balance the multiple and competing responsibilities in family, work, and their community. While the motivation to pursue an online-graduate degree may fuel an online-graduate student's ability to persist, higher expectations of graduate material may add additional layers of stress, role strain, or isolation to a student who also faces the typical barriers of studying online. However, while the task of earning a graduate degree online seems skewed toward dropout, the ability to identify and implement successful strategies exists.

Persistence Strategies of Online-Graduate Students

Strategies, defined in this study, refer to any intentional mental or behavioral effort that is designed to counteract the experience of common or incidental barrier. While many studies identify the importance of these psychological strategies in undergraduate students, strategies specific to online-graduate or online-masters students are sparse. The following strategies and definitions are drawn primarily from the online-graduate experiences of students in Budash (2015) and Conceiaco and Lehman (2013) and summarized in Table 4.

Self-awareness. Budash (2015) and Conceiaco and Lehman (2013) found self-awareness to be positively related to the persistence of online-graduate students (Budash, 2015; Conceicao

& Lehman, 2013; Lee & Choi, 2011). As a psychological persistence strategy, self-awarness refers to students who can readily and independently, identify their needs, have knowledge of what and how they needed to learn, can identify what they need to be successful, can assess the needs of the situation, can maintain awareness of the consequences of not meeting expectations, and can consistently self-evaluate their progress (Budash, 2015; Conceicao & Lehman, 2013; Lee & Choi, 2011).

Self-efficacy. Conceiaco and Lehman defined self-efficacy as "the conviction of one's value and capability to achieve a defined task or goal and was determined by how people thought, felt, and behavior in the online environment" (Conceiaco & Lehman, 2013, p. 1918). (Conceiaco & Lehman, 2013). In their study, Conceicao and Lehman (2013)'s list organizes and operationalizes what is necessary to successfully move ahead and complete an online course. Self-efficacy Budash (2015) noted that persistent students continually think about what is required and adjust their efforts appropriately thus self-efficacy can be considered a strategy.

Goal Pathways. Conceicao and Lehman (2013) surveyed over 400 online graduate and undergraduate students and 60 instructors, across 10 academic disciplines, to investigate the motivation and support strategies needed to improve online persistence. Successful students in this study set multiple, short, and specific goals to help them maintain motivation throughout their academic program, and they recognized that their strategies and time had a purpose toward their end goal (Conceiaco & Lehman, 2013). These students also reported to incorporate sufficient rewards and reinforcements for themselves into their goal planning (Conceiaco & Lehman, 2013).

Time Management. Successful time management strategies incorporate self-control and strategic pacing of tasks (Budash, 2015; Conceicao & Lehman, 2013). Students can execute self-

control by restricting electronic or environmental distractions. They can execute strategic pacing by building a highly detailed schedule that incorporates reading, writing, researching, and posting tasks into their non-student (family, work, church, etc.) schedule. Additionally, persistent students are able to implement their self-awareness to schedule times for tasks that maximizes their own natural productivity (Budash, 2015; Conceicao & Lehman, 2013).

Planning & Prioritizing. Students persist in online learning forums when they execute their executive functioning skills to evaluate which tasks should come first, and when they assign different lengths of time for each task, based on its importance (Budash, 2015; Conceicao & Lehman, 2013). Students create maps, organizational charts, highlight due dates, merge calendars, build in reminders, download course documents, set personal due dates, and break down tasks into multple parts that are appropriately scheduled for completion with sufficient time built in for review and revisions (Budash, 2015; Conceicao & Lehman, 2013).

Learning Style. Students who persist, exercise their self-awareness and self-efficacy by knowing how they learn best and what they need to do to be successful in the course. They stage cognitively engaged in the material outside of their designated study times by trying to integrate their new knowledge in to their daily lives. They are mindful of their own learning needs and make adjustments accordingly to achieve their goals. They make connections between new and old learning, and stay actively engaged in their online learning community (Budash, 2015; Conceicao & Lehman, 2013).

Summary of Psychological and Academic Strateiges. The psychological and academic strategies used by graduate, online, and online-graduate students provide a guidepost for students and program leaders who want students to succeed. Psychological strategies shown to support student persistence include self-awareness, self-efficacy, and goal-setting. Academic strategies

shown to support student persistence include time-management, planning and prioritizing tasks, and individual learning styles (see table 4).

Summary of Relavant Literature

This chapter explored the foundation of persistence literature, explored the historical and social context of the graduate student, including significant demographic changes in the last 60 years, and presented key research findings on student persistence within the context of online education. A framework for understanding barriers to online persistence as well as academic and psychological characteristics that are linked to online persistence was discussed. The literature in this section informed the research questions and interview protocols described in the next chapter.

Table 1.

2018 KU-SOE Online Graduate Programs

Online Graduate Programs	Abbreviation
Masters in Special Education, High Incidence Disabilities	MSE SpEd HID
Masters in Special Education, Secondary and Transition Services	MSE SpEd STS
Masters in Special Education, Curriculum and Instruction, General	MSE C&I General
Masters in Special Education, Curriculum and Instruction, Reading	MSE C&I Reading
Masters in Special Education, Educational Administration, General	MSE Ed Admin General
Masters in Special Education, Teaching English to Speakers of Other Languages	MSE C&I TESOL
Graduate Certificate, Special Education	SPED Certificate
Graduate Certificate, Special Education, Autism Spectrum Disorders	ASD Certificate

Table 2.

Description of Online Persistence Factors as reviewed by Lee & Choi (2011)

Types of persistence factors	Sub-Categories	Description
STUDENT FACTORS	Academic background	Student's academic aptitude Student's pervious academic performance
	Relevant experiences	Prior experience with course content Prior experience with higher education
	Relevant skills	Ability to manage time and effort Ability to manage stress and coping responses Ability to manage technology
	Psychological attributes	Student attitudes toward learning Student locus-of-control Student self-efficacy Student satisfaction
COURSE / PROGRAM FACTORS	Course design	Interactivity Overall quality Relevance to student needs
	Institutional supports	Administrative structure Faculty compensation and time Student access to support services Program evaluation of effectiveness
	Interactions	Student-student interactions Student-faculty interactions Student-involvement in activities
ENVIRONMENTAL FACTORS	Work commitments	Full or part time employment Pressure to work additional hours Changes in work responsibilities
	Supportive study environments	Support and encouragement from others

Table 3.
Comparisons of Factors that Promote Online Course / Program Persistence

Desposito (2006)	**Student Factors** Student academic history; student experiences, abilities, world-view, and perspectives of self	**Course/Program Factors** Course design, institutional supports, perception of learning activities, faculty support, interaction with peers and instructors	**Environmental Factors** Perception of institution funding support; Financial and emotional support from family
Lee & Choi (2011)	**Dispositional Factors** Psychological, social, and physical conditions that impact persistence (e.g., interests, goals, attitudes, stress experiences, learning styles and time management).	**Institutional Factors** Course and program methods, instruction, instructor, technology, and institutional support services controlled by the institution despite the impact on students.	**Epistemological Factors** Student expectations of course learning that are based on their prior knowledge, emotional development or thinking-feeling congruence and the student's self-efficacy
Chen & Jang (2010)	**Need Satisfaction** Perception that the course structure and activities will provide autonomy; Perception that students are able to form relationships and are encouraged to by the instructor; Perception that the student has the skills to be successful in this format	**Contextual Support** Student perception of instructor support for the student's right to solve a problem on their own; student confidence that course will be delivered in a competent and accessible way	

Table 4.

Strategies of Online-Graduate Students from Conceiaro and Lehman (2013) and Budash (2015)

| Types of Strategies		Strategy Explanations & Examples
Psychological	Self-Awareness	Students' ability to quickly identify their own needs, strengths, and weaknesses while simultaniously evaluating the expectations of the academic situation, including what student skills are required for success.
	Self-Efficacy	Students' ability to adjust their mental effort, drive, or energy they direct towards a goal. As a strategy, students high in self-efficacy are able to adjust and re-adjust their level of goal directed motivation whenever needed.
	Goal Pathways	Students' ability to adjust their observable goals in order to maximize their motivation to achievement. As a strategy, successful students set multiple, specific, and short-term goals as stepping stones to their long-term goals. They are also well practicied in providing themselves appropriate reinforcement whenever smaller goals are met.
Academic	Time Management	Students' ability to impliment effective time-management strategies requ restricting electronic and environmental distractions and balancing other roles and responsibilities (work / family) with study time. Student's who excel in time management are more accurate estimators of how long a specific academic task will take and have knowledge of the best time of the day to execute that task.
	Planning & Prioritizing	Students who arrange the order in which various academc tasks should be completed are more likely to persist. They are skilled at creating maps or other visual schedules, highlight due dates, can merge multiple calendars, build-in electronic reminders, and break down tasks into more achieveable parts.
	Learning Style	Students' who persist have an awareness of their strengths and weaknesses but also have, specifically, an awareness of the environmental conditions that increase their probaility of success.

Figure 1. Published Online Persistence Factors
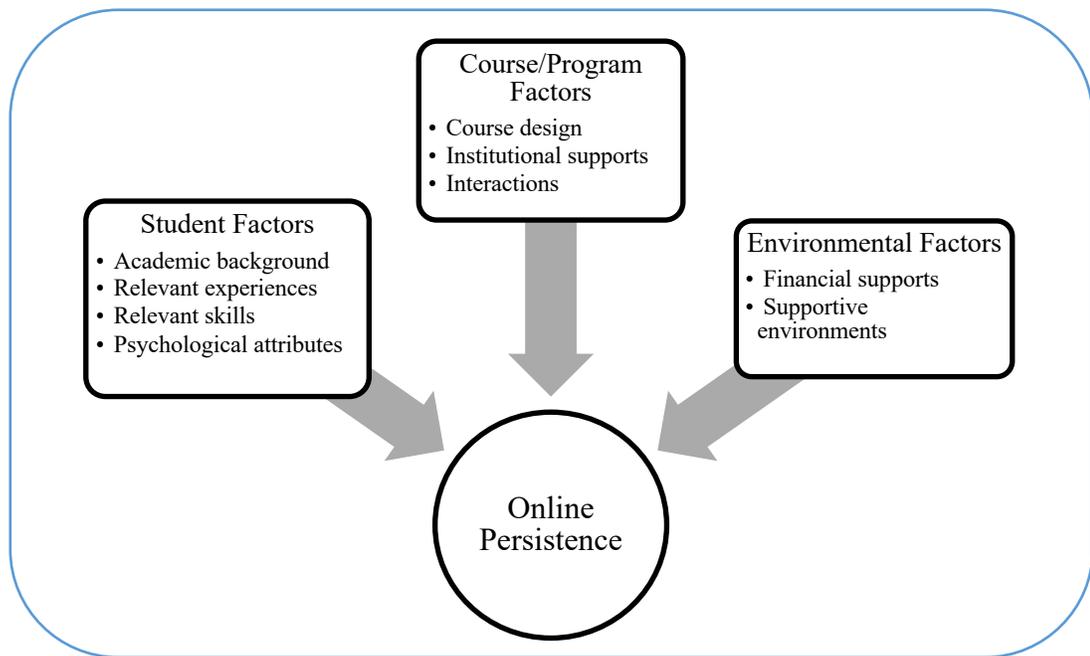
Figure 1.   Lee and Choi (2011) synthesized the results of 35 published studies on online persistence. Their findings provide an excellent framework for studying the persistence of online, masters-in-education students. The text, not the graphic, was published in Lee and Choi (2011).

Chapter 3

Methods

This study described the persistence barriers and strategies of online master's students at the KU-SOE. Consistent with that aim, this chapter restates the research questions, describes the participants demographics, provides definition of terms, describes the process of participant selection, details the interview process, describes how the data was handled and shows how it analyzed. The trustworthiness of the data, as well as the strengths and limitations of the study design are also addressed. Special attention is paid throughout the chapter to the influence of the researcher on the development of the research questions, the interview process, and data analysis.

Research Questions

The purpose of this study was to examine the experiences of students who enrolled in one of several, newly established online master's and online graduate certificate programs in the School of Education at the University of Kansas. Specifically, this descriptive study sought to answer the following questions:

1) **What were the personal and descriptive experiences of students who graduated (Completers) from an online master's program at KU-SOE?**

   a) What did Completers identify as barriers to their progress?

   b) What strategies did Completers use to persist?

2) **What were the personal and descriptive experiences of students who began, but did not complete (Non-completers) their online master's program at KU-SOE?**

   a) What barriers did they face towards completion of their degree?

   b) What strategies did Non-completers use to persist?

Study Participants

Sampling. All participants matriculated to one of several KU-SOE online master's programs between 2014 and 2016. These students were invited to participate in a comprehensive, program evaluation survey of their experiences in these new online-master's programs. All students and former students of that survey were given the option to be contacted by researchers for a series of interview questions. One hundred sixty-two students who had graduated with either a master's or graduate certificate program, who positively endorsed the item on the program evaluation survey giving their interest in a follow-up interview, were asked via email to participate in this study. One hundred four students who withdrew from an online graduate program in education at KU, who endorsed their interest for an interview, were asked via email to participate in this study. The researcher continued to send email messages and utilized a mail merge feature, to send more personalized email invitations to potential participants. The ten Completers of 162 and three Non-completers of 104 represented 6% and 3% respectively of those who initially agreed that they would participate in the idea of a research interview.

Demographics. The participants ranged in age from 26 to 62 (see Table 5.). Six of the 13 participants reported they had earned a master's degree prior to enrolling in an online program at the University of Kansas. Five of the 13 participants reported they had previous online education experience. Twelve of the 13 participants identified as Caucasian; one participant identified as African American. One of 10 Completers and one of three Non-completers identified as male. Eight of the 13 participants were enrolled in a master's degree program. Four of the 13 participants completed a graduate certificate program in Autism Spectrum Disorders (see Table 5.); one of the participants completed a graduate certificate in Special Education Leadership. The three Non-completer participants were enrolled in three different online master's degree

programs: Curriculum & Instruction, Educational Administration & Leadership, and Special

Education, High Incidence Learning Disabilities.

Study Procedures

Informed Consent. At the prearranged time, the researcher initiated a telephone

interview with all participants (Completers and Non-completers) in a quiet and private location.

Participants were informed of all foreseen risks and benefits. Completers and Non-completers

were informed that their participation was voluntary and reminded that they could be permitted

to withdraw from the study at any time, for any reason. Participants were asked to respond

verbally regarding their consent to electronically record the interviews. After all interview items

and follow-up questions were administered, participants were extended an invitation to follow-up

with the researcher it they wanted to share additional information regarding their experiences.

Process. All participants were reimbursed electronically with a $5 gift card to be

redeemed by an online vendor (Amazon). Human Subjects Committee-Lawrence approval

appears in Appendix A, the standardized interview protocol for Completers appears in Appendix

B, and the standardized interview protocol for Non-completers appears in Appendix C.

Participants were provided a verbal summary of their responses at the end of the interview and

asked if the summary accurately captured the content of what they wanted. Participants also had

the opportunity to respond to a written summary of their interview responses. To ensure their

experiences were appropriately captured and described, interview summaries were individually

sent to participants over email, inviting any corrections to their statements or summaries (see

Table 7).

Take from the work of Lee and Choi (2011), Desposito (2006), and Chen and Jang

(2010) a comprehensive list of previously discovered barriers to online persistence was

assembled and presented to all participants during the interview protocol. Referencing the research derived list of potential persistence barriers allowed each participant to consider if the barrier presented in the literature resonated with their experiences. The category of Health as a barrier, i.e., managing health conditions in themselves or in family members (Arric, 2011; El-Ghoroury et al. 2012; Kauffman, 2015) did not appear in the Lee and Choi (2011) model of Student, Program, or Environmental Factors shown to influence persistence. When considering other models on student persistence (see Table 3 & Figure 1), the Environmental Factors (Lee & Choi, 2011) and Epistemological Factors (Desposito, 2006) and Contextual Support (Chen & Jang, 2010) factors were renamed Environmental Supports. As a result, Health was tentatively placed under the Environmental Supports domain.

Interview Style. In this study, I played the role of the researcher and the data collector. Specifically, all written correspondence and interview procedures were implemented by me. It is important to note that my therapeutic training (described below) played a significant role in the way I collected this interview data. My verbal interaction with participants was person-centered, non-judgmental, calm, warm, and attentive. I hold a master's degree in Counseling Psychology, an Educational Specialist degree in School Psychology, and at the time of the interviews, I had been working in private practice under licensed supervision as a Doctoral Intern for four years. Holding to a semi-structured interview process, I committed to asking each participant every question in the interview protocol (see Appendix B) while also allowing the interview to feel more like a conversation that evolved organically. Consistent with my therapeutic training, I used techniques like summarizing, restating, reframing, and rephrasing to clarify participant answers. I used techniques of joining and aligning with participants and their stories in order to gain their trust. Most importantly, I created an interview environment that made it easy for

participants to correct any misunderstanding I might have regarding their persistence experiences during the interview. As a safeguard, I summarized and emailed the key points of the participants' interview responses inviting review and correction. This procedure was important in emphasizing the student experience, exactly as they wanted it to be told.

Data Handling. Digital audio and other electronic data files were stored on password protected computers and services and participants were labeled by pseudonyms. Participants who had graduated from their online program were given a pseudonym that began with the letter "G," for "graduate." Non-completers, or students who discontinued from their online programs were given a pseudonym beginning with the letter "D," for "discontinued." The gender of participants' pseudonyms was matched to their reported gender. Interviews were digitally recorded via a windows-based program (OneNote) that allowed for the integration of text and multimedia data. Notes from the interview served as the preliminary transcripts. Interview data was initially analyzed by the Rapid Identification of Themes from Audio Recordings (RITA) (Neal, Neal, Vandyke, Kornblush, 1999). Neal and colleagues posit the RITA procedures as a "happy medium" between the high detail, low nuance, high time constraints of coding through transcription and the low detail, high nuance, and low time constraints of drawing themes from field notes. Playback of each interview was repeated until the researcher became familiar with the style and circumstances reported by each participant. Each interview was formatted into a summary document and sent to the participant for feedback. Student interviews and were also transcribed and uploaded to a web-based application (Dedoose, www.dedoose.com) as part of the larger program evaluation project.

Identifying Barriers. Participants were asked to identify if various social, individual, or program barriers to persistence, as identified in the literature, were barriers for them in their

online-graduate program. As detailed in the interview protocol (Appendix B & C), participants

were asked to generate a list of barriers or obstacles that interfered with their ability to persist.

Secondly, participants were informed of the various persistence barriers identified in literature

and asked if these research derived barriers were also an issue for them during their degree

process. Thirdly, participants were asked what other barriers, based on their experience, might be

relevant for other students (i.e. Now that I've shared that list with you, are there any other

barriers that you can think of that should be included on that list?).

   Identifying Strategies. Prior to inquiring on participants' persistence strategies, the

interviewer defined "strategy" for the participant as "any intentional response to a barrier". After

the definition was provided the participant was asked to identify every approach or strategy they

used to persist in their program. Next, participants were asked if the strategies they used to

persist were at the time, new for them or if they had used that kind of strategy before, in other

situations (i.e. of the strategy / strategies you mentioned, which strategy/strategies had you used

before this online program?). Lastly, the participants were asked if they had considered using a

strategy but decided not to (and why).

   Data Analysis. Interview data was analyzed according the initial research questions for

responses by Completers and Non-completers as two separate groups. Barriers reported by

Completers were analyzed to determine if they could be categorized as primary, secondary, or

extraordinary. *Primary* barriers were those acute situations that caused significant student effort

to resolve or were reported verbatim as barriers by Completers. *Secondary* barriers, those

barriers that were less intense but chronic and included the Completers evaluation of the barriers

list derived from previous literature. *Extraordinary* barriers were those situations that were

deemed unfortunate and unusual when compared with other student experiences. Barriers

reported by Non-completers were analyzed under the same headings. Strategies reported by Completers and Non-completers were described in detail and examined for themes.

      Trustworthiness of the Data. Consistent with qualitative designs, the consistency of the data were conceptualized as "trustworthiness" (Stark & Trinidad, 2007) where multiple member checks were embedded in the process at three levels: 1) at the end of each interview section, 2) as needed during the interview following longer responses to items, and 3) written summaries provided post interview along with the opportunity for participants to correct responses if needed. The rationale for the member checks at the end of each section during the interview was to allow participants an opportunity to respond immediately to their own statements, so as not to move forward in the interview without a clear understanding between both participant and interview regarding the content of their responses. During the interview, the interviewer was very deliberate to elicit the participants response when verbally summarizing longer responses or re-framing responses in an effort to expand meaning. Those clarifying member checks were followed by an additional question from the interviewer, "Did I get that right?", used as needed throughout the interview protocol. Finally, participants were emailed a written summary of their interview and invited to correct or comment on any portion of the interview.

      Researcher Bias. When presented with the opportunity to interview graduate students about their personal experiences, I was excited for the opportunity to ask students "what gets in the way." Unlike the participants in this study, I had not taken any of my courses online. However, like the students I would be studying, I had encountered significant persistence barriers in my own academic career. In truth, I did not feel my own strategies in graduate school had been particularly effective. It could be said that I looked forward to hearing these students' persistence strategies because, for myself, I wanted better ideas. I was sympathetic to the

frustrations of those whom I considered to be peers and felt compelled to tell their story. Disclosing this connection to the reader allows me to acknowledge the likelihood that my experience with these participants introduced bias in collecting and analyzing the data.

Summary

This study described the experiences of students in online master's programs and sought to assist those who initiate or manage online masters-in-education programs. It also sought to supplant the research deficit regarding the strategies used by online graduate students to succeed in their programs. Additionally, determining the barriers and strategies that consistent with prior research and discovering the barriers and strategies that are unique to the online-masters-in-education students at KU will allow program leaders at KU to be more strategic in recruiting students, evaluating program effectiveness, evaluating program satisfaction, or considering additional student support offerings.

Table 5.

Participant Demographics

Participants (n)	Age (n)	Race (n)	Gender (n)	Prior Experience (n)
Completers (10)	20-29 (3) 30-39 (2) 40-49 (1) 50-59 (2) 60-69 (2)	White (10)	Male (1) Female (9)	Previous Online Experience (3) Previous Graduate Experience (4) Previous Online-Graduate Degree (2) No Prior Online or Graduate Experience (1)
Non-Completers (3)	20-29 (1) 30-39 (0) 40-49 (1) 50-59 (1) 60-69 (0)	White (2) African American (1)	Male (1) Female (2)	Previous Online Experience (0) Previous Graduate Experience (1) Previous Online-Graduate Degree (1) No Prior Online or Graduate Experience (1)

Chapter 4

Results

Thirteen former students volunteered their participation and time and spoke openly about online experiences at the University of Kansas. Most participants reported both positive and negative experiences in their respective programs. All participants were forthcoming about the choices they made, would make again, or choices they would re-do. Each participant seemed to respond to items in a thoughtful, deliberate manner that provided a rich narrative for analysis.

Research Question # 1 – What are the experiences of students who graduate or complete their degree (Completers) in a KU-SOE, online master's or online graduate certificate program?

Completers ranged from 26 to 62 years old and reported annual yearly incomes between $30 to $400 thousand per year. Nine of the ten Completers identified as female[a]; ten of ten identified as Caucasian. Gail, Gwen, Gilda and Gloria completed the online-graduate special education certificate program in autism spectrum disorders. Gabriel, Garry, Gretchen and Georgia completed one of several master's programs in special education (see Table 1.) emphasizing, high incident disabilities, reading, or secondary/transition needs. Half of the Completers earned a masters' degree before starting their KU program. Four of the Completers, Gladys, Grace, Gina, and Gretchen had taken online courses before their experience at KU.

Gilda, Gretchen, and Gladys were the youngest Completers in the study and unlike several other participants, their time at KU was their first graduate-level experience. Gilda, age 26, enjoyed living on the west coast and described herself as "outdoorsy." In addition to this being Gilda's first graduate-level experience, it was also her first online learning experience.

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[a] Although several non-binary gender options were offered to participants (male, female, intersexed, transitioning, or gender fluid), all participants identified themselves as either male or female.

Gilda was "nervous about...not having a physical instructor, or not really having face-to-face encounters with people." Gretchen, also age 26, did have online courses before beginning her degree. During her degree, Gretchen was teaching in the elementary setting and managing a significant health issue. She liked that the program offered "one [course] at a time because that was really manageable." Gladys, age 28, said the KU's online courses "were better structured... and they were harder" than the previous online courses she had experienced at Arizona Community College. Having completed a 5-year undergraduate program in curriculum and instruction, Gladys was drawn to the program because many of her undergraduate courses transferred. She also liked that KU was "fairly priced" and said, "other online schools didn't have...as good of accreditation as KU".

Garry, Gabriel, and Grace ranged in age between 35 and 41 years. But beyond their chronological age, all these three Completers identified themselves as parents of school-aged children. Garry, age 35, indicated he was a parent of a child with special needs. He was drawn to KU for its exceptional reputation in the field of special education. Gabriel, age 38, was drawn to the program for the flexibility it afforded while she took care of her daughter saying, "The flexibility was good, but fast... I mean, I have a fulltime job because I have fulltime care of my daughter." Grace, age 41, was a stand-out participant for her prior experience and creative study strategy. Having previously earned an online master's degree from another university, during her KU program Grace routinely had her husband care for their children while she spent the weekend in a hotel completing her academic work without distractions.

Georgia, Gloria, Gwen, and Gail ranged in age from 57 to 62. Three of these four Completers came to KU having already earned a master's degree. Georgia, a 57-year old career teacher did not have any prior graduate or online learning experience before KU. Drawn to the

reputation and affordability of the special education program, Georgia was looking for an academic experience that might help her gain an edge in her new position said, "[Y]ou know, I wanted to feel like I belonged at my job I guess." Gloria, a 58-year-old special education teacher, already had a master's degree in education but was looking for a professional edge when she enrolled in the autism certification program. She wasn't pleased with her perceived social ranking among other high school faculty and hoped her KU experience would "let them know" that she was "credible".

Gwen was a 61-year-old, occupational therapist with a master's degree who also had experience with online courses. Drawn to KU by the research of leading occupational therapist Winnie Dunn, author of the highly influential Sensory Profile assessment and faculty at the University of Kansas, Medical Center, Gwen took pride in reinforcing her husband's support during her ASD Certificate saying she "gave him M&M's for it". And lastly, Gail, age 62, was a reticent online student. Working as a special educator in schools with a previous master's degree, Gail reported an initial fear that the online format of KU's ASD master's certificate program wouldn't provide the kind of personal course feedback she craved.

The participant Completers fell unexpectedly and naturally into three different age or professional-stage groups: (1) early career stage, ages 26-28, (2) middle career state, ages 35-41, and (3) later career stage, ages 57-62. Completers were also moderately balanced between those who had previous graduate degrees and those who had previous online course experience. Half of the Completers (5 of 10) had earned a master's degree in education or related field before they participated in an online graduate program at KU. Two-fifths of Completers (4 of 10) started their KU program having had some experience with online courses. Overall, Completers reported

satisfaction with their KU program while also providing suggestions to improve the program for future students.

(A)   What barriers did Completers face?

Completers identified a range of described situations, scenarios, or conditions that hat threatened their degree pursuits (see Tables 6 & 8). **Primary** barriers were those identified from interview questions, primarily from an active, open-ended interview question asking them to respond to the statement "Tell me everything that got in your way on your path toward a degree" **Secondary** barriers were those barriers passively endorsed by Completers when they were presented with list a research-derived persistence challenges and asked if these things interfered or challenged their persistence.

Findings from Completers suggest that the Primary and Secondary barriers – descriptors used in this study to differentiate responses between open-and closed ended items – were not as clearly separated as anticipated. Often, Completers reported primary and secondary barriers as the same but also, Completers appeared to have their memory awakened or began to evaluate their experience differently following the presentation of the research-derived list. The list report of barriers or report of a barrier as "Primary" may or may not explain the entire experience of the Completer as well as would an examination of a Completers Primary and Secondary barriers. As is expected, some Completers experienced barriers that were unique or "extraordinary". **Extraordinary** barriers were those identified as unique or nuanced or that is specific to an individual or program of study. Barriers reported by Completers are reported in either the **Primary**, **Secondary**, or **Extraordinary** groups.

1) Primary Barriers

All Completers (10 or 10) identified at least one of the following as a circumstance as negatively influencing their degree or certificate a) Competing Fulltime Work, b) Program Expectations and Pace, or c) Time and Time Management. Less frequent barriers identified by Completers included Learning Style, Health, Environment, and Unexpected Costs (see Table 8.). Seven of the 10 Completers reported Competing Work Responsibilities of the first three barriers reported. Six of ten Completers (60%) identified at least two or three of the top four barriers: work, time, program requirements, or technology. Four of ten (40%) identified the intensity or high expectations of the program (Program Expectations and Pace), and still four of ten (40%) identified technology as a barrier to their degree. Two Completers identified their own learning style as a barrier to their success; two Completers identified certain kinds of distractions (geographic and lifestyle) as persistence barriers.

(a) Competing Fulltime Work

Competing with their full-time work was reported as a barrier by 7 of 10 Completers. At the time they were pursuing their degree or certificate, all Completers worked professionally in the field of education. The experience of being a practitioner of learning and consumer of learning at the same time presented advantages and disadvantages for these Completers. For example, when asked about what "got in her way", Gretchen said "I think just trying to prioritize it with my other job. Like I said, I was a second-year teacher, so trying to be good at teaching and good at being a student myself was the biggest barrier for me". Gladys said work was a barrier when she had "to do additional roles [duties] around the school during times when I needed to be working on schoolwork". Gloria talked about having to "schedule around my job" and Grace talked about the challenge of having the same deadlines at work and at school; "I was

having that same kind of rush period in my own professional life".   Georgia had "started a job in a new school district" and described it as "stressful". She said, "It all kind of happened at the same time, so those two personal things were the biggest barriers I think." Grace's description of the conflict between being a professional student and professional teacher simultaneously was insightful. She said:

"...the ending of it came at the natural ending for me professionally too. So, the end of the first group of classes came at the end of the quarter at school, and I was trying to finish up all of my progress reports and all of the required paperwork for that. Again, for the next group of classes, it came at the ending of the school year. So just as you would have all of your final projects and things that you needed to be doing, um, I was having that same kind of rush period in my own professional life."

Gwen's experience was this:

I work at, I work in a setting where I am on my feet and on the move and mental alert all day long. And so, to come home, and I'm sure you've heard this too, to come home and then begin to try to study some… It was just really hard.

Gail also was poignant in her reflection saying:

And truly, uhm, you know when your teaching fulltime, you know you've got lesson plans do to, you've got the hours that your putting in at school, uhm, and especially when you're doing special ed, I mean, and you're, most of your kiddo's need to be planned for individually because you're a parochial school where you don't really have IEP groups, and then heading the progress monitoring for the school too, that made it very difficult also.

Gail went on to provide a quote that truly seemed to capture the experience of all Completers when she said, "So, you had to come up with time you didn't necessarily have."

(b) Program Pace

Completers described the expectations of their respective programs as intense and faced-paced. Gretchen said, "You have a paper due every single week, a test every single week...with a project...then you are crunching it into an eight-week period, which becomes more difficult". When listing her barriers, Gail said "It was the amount of material in the time allotted...You know what, they pack a lot of information into those courses… I mean 13 credit hours in eight months is a lot." Gladys said,

> [T]he group projects, the types of things we were assign to do were sometimes a barrier
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> like if everyone in the group wasn't doing it, and doing their part, then a lot of times…
>
> myself and other group members ended up doing more than we had originally planned. It
>
> was more time-consuming than we had originally mapped out.

It was difficult for Grace to manage required courses that had to be taken simultaneously. For her it was a barrier to complete one "as I was beginning the next one". Georgia said, "When they saw how much – especially my kids – when they saw how much work was involved, they were like, 'Wow, mom, you're crazy for this, but I really respect you for doing it." Gwen described her program as having "having more rigor than any of the other courses I had done." She went on to say:

> I felt they were more in-depth. There were also more time-consuming than even I had
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> sort of expected, but overall more rigor, and I felt also, more current. You know, I had
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> just finished a University of Pacific course three weeks ago and the most recent stats
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> were in 2012. And for an online course you think it'd be easy to upgrade stats. I would

definitely say the KU program was the best quality program that I had and probably will ever have.

(c) Time

Completers who considered "time" to be a barrier for them were not universal in their definition or use of the word time. Time as a barrier referred to time commitment, time management, insufficient time, or differing time zones. When asked what were the things that got in her way, Grace said "I would say time was a big one." Gwen said, "The time commitment…was greater than I had anticipated....I know now, well, if I had known that then, then I probably would have thought twice....so it just goes back to... that time factor, and some weeks would be just more time-intensive than others, and overall more time-intensive than I anticipated." In the middle of discussing another aspect of her experience, Gretchen suddenly remembered an aspect of time that had caused her significant trouble. She said,

> [O]h actually one thing that did get in the way for me was being in a different time zone! Because....due dates for assignments were always on central time, yeah KU time, or Kansas time. Yeah, and I was on the west coast. So, I had a couple instances... where I just missed the due date by a handful of hours because of the time change. Unfortunately, my professor wasn't very understanding of that. There were a couple times where if I was a little bit close on submitting something, it could be almost considered late, or definitely considered late. So, I had to factor that in. That was a little extra math than I was used to (laughs). But that was probably the biggest one now that I think of it. That was probably the biggest challenge for me- planning accordingly, yeah.

2)   Secondary Barriers

After responding to the open-ended question regarding barriers, Completers had the opportunity to consider whether a list of barriers, gathered from research, also interfered with their degree persistence. The secondary barriers were groups by the Lee and Choi model of student, program and environmental factors that impact persistence. Secondary barriers endorsed with the most frequency included *health* (managing a mental or physical health issue in themselves or their family), *time management* (trouble setting aside time, scheduling, or adhering to timelines), *academic skill* (trouble with note taking, reading skills, research, or scientific writing), *program flexibility* (limited student choice in course/program content), and *motivation* (trouble sustaining drive, effort, or ambition to continue).

Seventy percent (7 of 10) of Completers indicated that a managing a health condition, in themselves or a family member was an obstacle to their success. Health conditions reported by Completers varied from chronic to terminal conditions, mostly experienced by family members they were responsible for. Georgia reported:

> Well, I'll tell you. So I was- it was kind of weird, but sometimes when I look back on those two years when I was in school, I don't know how I did it, how I figured out how to do it, because my step mother died, my dad died, so- after step mother died, my dad got really needy and so I was having to spend all of this time that I never usually spent with him, but the best thing about it was, I could do it when I had time.

Gabriel's father and Gail's daughter received cancer treatments during their academic programs. Grace and Garry indicated they had children with chronic health conditions that they endorsed as obstacles. Gladys and Garry reported the obstacle of their own fatigue and stress as a health

concern during the program. Gabriel's step-mother and father died from illness and Gail lost her own mother to Alzheimer's.

Half of Completers (5 of 10) reported academic skills, half of Completers (5 of 10) indicated time management, and a third (3 of 10) of Completers indicated that both the barriers academic skill and time management were barriers for them. Forty percent of Completers (4 of 10) identified that they struggled with motivation, forty percent (4 of 10) endorsed problems with program flexibility, thirty percent (3 of 10) reported their lack of confidence was a barrier, and thirty percent (3 of 10) indicated that supports were missing for them at the program or institutional level. Garry used the word burnout and said "you just get tired" when referring to the difficulty he had sustaining his motivation for work, family, and school. After endorsing program flexibility as a barrier, Gabriel voiced frustration saying " I mean, it's just like, 'Here's your paper, here's your topic, now you write it and it has to be three to five pages' and it's like okay what if I wanted to do this instead?...I can show that I've mastered the content in an alternate way, but they didn't even really want to give you that option." Garry repeated the same sentiment saying "Oh there was no flexibility unless you had done what they said. Oh yeah. Okay. It was a railroad." No Completers (0%) indicated that they struggled with social support, family support, or technology.

3) Extraordinary Barriers

One Completer identified three barriers that were unique or extraordinary from the other Completers. This Completer reported a conflict with an individual faculty member that required administrative assistance to resolve. This same Completer also identified feelings of burnout and struggled with the unexpected financial costs of the program.

Summary of Completer Barriers. Completers reported difficulty in balancing work responsibilities (Competing Work Responsibilities) and the pace or intensity of the program expectations (Program Pace) the as the barriers they experienced the most (see Table 6.). The barriers of Learning Style and Technology Skill were identified by Completers with less frequency. Several completers reported variations between their initially described barriers (primary barriers) and the barriers they endorsed from the research-derived list (secondary barriers). Completers indicated that work and pace were barriers to their degree persistence. A few non-completers encountered unexpected life events that were outliers from other student experiences in this study and outliers from the literature on online-graduate persistence.

(B). What strategies did Completers use to persist?

Completers provided thoughtful descriptions of the strategies they used to help themselves persist towards their online master's degree or online graduate certificate (see table 7 & 8). The strategies reported by Completers illustrated different methods used by these former students as they: a) managed time and tasks, b) maintained their motivation and other relationships, and c) monitored their own process and progress. Individually, Completers reported at least two strategies and some reported up to six strategies. A list of the strategies reported appear in Table 8.

1) Managing Time and Tasks. Most Completers reported two distinct strategies for managing time: setting aside time for school work or capitalizing on free time. Setting aside time referred to the strategy of being structured in their academic schedule. Half of Completers (5 of 10) indicated they set aside time to complete tasks or ensure work was completed. Three Completers (3 of 10) reported they took advantage of unexpected moments of free time. They

were able to shift quickly between work or family and school when an opportunity arose. Gladys said

> Yeah, there were a couple days of the week that were easier for me, um, at the time, uh, my husband's work schedule is different, and he worked on Saturdays all day. So, like, days when he was not home. Those were my days to get it done.

Gabriel said,

> "I mean I definitely set aside time every day to work on things, and like put it in my agenda so it- and I knew during that time that's all I had to focus on, which was great."

Grace said,

> "I knew that from having studied online before one of the benefits is you don't have to go to class every Monday night, but if you don't set aside time in which you have to do class, it never becomes a priority.

Georgia identified as an experienced planner and thought that she utilized both strategies in her program saying,

> I think I capitalized on free moments. Kind of a combination of both, I think. Because I am a planner. But if something came up and it was unplanned free time, then I tried to use it and be efficient."

> Other strategies aimed at helping Completers manage time and tasks included: prioritizing, consolidating calendars, using electronic reminders, and using an Excel spreadsheet to track every available minute per day.

2) Maintaining Motivation and Relationships. Several Completers talked about the strategy of advocating for their personal needs as a means of staying motivated to continue their academic program. Gail, for example, exercised several strategies that encouraged her to, given

the material she was learning, consider the positive long-term effects for children. To help herself stay motivated to continue fulltime, work, school, and family, she reported the following:

> With the kiddos that I was struggling with the most at school, I put their pictures, I set everything up on the dining room table and I put their pictures up on the dining room table, and every time I'd go by it, I'd remind myself why I'm doing it. ... And then I had paper underneath each name, and when I would learn something new, a new strategy, whether it was an ABA strategy, whether it was power cards, I would put it under their picture, if I felt that would be advantageous to them for me to try to institute in the following school year. So, it was kind of a motivator because I knew these children would benefit from it. I got up every morning at 4 and I worked on it. And I did this until 6:30 when I would get ready, shower and get ready and head off to school. So, I had a good two and a half hours, I had their little faces facing me, everything from a preschooler to an 8th grader.

Georgia explained how she connected with her cohort offline as a motivating strategy for her:

> We actually exchanged phone numbers, a group of us that had worked together and talk about things in a group conversation…it always seemed that one was down while the other was up so it was the comradery with classmates more than anything…I think we all helped each other.

Garry's report on strategy was partially about management of tasks and time, but overall, Garry was very mindful of his identity outside of being a student and very mindful of his personal relationships that served to anchor his experience.

> Oh, okay. Well, I had a lot of support from my wife. I got married my first semester in the program. So, I had a lot of support from my wife. I would, when it got to be too

much, I would consciously take a day off. And just put it away. I would make sure I was in a good spot, you know, just put it away. Because when it's online, you can work on it anytime, any- just 24/7. So it kind of feels like it's always there, so I made a point to take specific days off. Um…I made sure I slept a lot, because it was a grind. And I made sure to do a little bit every day, as I could, until I needed a break. You know, be very consistent, don't just wait till the last minute, which can be- which seems like it's easier to do when you're in a class, like an in-person class you can kind check stuff off and do it at last minute. And I never really did that. I did a little bit every day, so I didn't have to, you know, that rush, 'but I got to get this turned in at midnight,' I, I never really did that. It could be that I'm older, and I have previous college experience but, basically, I paced myself. You know, I learned how to pace myself. So that's really the big strategy, is just, do a little bit every day…and take a break when you need one.

He shows awareness of personal factors that can interfere with graduate study but also acknowledges the flexibility that online learning can offer:

Um, I think online learning is fantastic. For a lot of people, it's the only way they can do it. If you're a single parent, you've got a full-time job, and you have children, online is the only way you can really progress.... Graduate school...[is] so demanding. And if you get sick or a child gets sick, or you have, you know, job issues or divorces, it's like, you know, grown-up shit happens (laughs)…pardon my French. (Laughs) Yes. And online courses can kind of allow for that.

He talked about his graduate school experience as a mixed bag of challenges and opportunities. He described the occasional feeling of waning motivation by saying, "you just get tired".

3) Monitoring Process and Progress. Completers developed various systems or

routines to help them monitor their own process and monitor their progress through the material.

Grace, for example discussed a highly organized strategy for getting things done at the end of the

semester that involved her husband taking over childcare while she remained out of the home

until her end of semester projects were completed. Working as a professional educator, the end

of the semester in her career also corresponded with end of semester deadlines in her academic

program. To cope with that, she and her husband would plan for her to leave her job on a Friday

night and head to a hotel. She would stay focused and working and not come home until she had

finished the tasks for her semester. It was a strategy she had developed from her previous online

master's degree. She would think about how much work she would have to accomplish over a

short amount of time (like a weekend) and tell her husband, "I'm going to get a hotel room. I'm

going to go there right after work. I'm going...to stay up as late as I need to – to work, and then

get some sleep and get up in the morning... I will come home when I'm finished and then when

I'm home, I'm home." She reported that this motel strategy "worked amazingly well" and not

just for high productivity weekends. Grace also reported the importance of finding other spaces

to complete school-work outside the home. She joked, saying, "I did most of this program at

Panera" where she had free Wi-Fi, access to snacks and an environment conducive to

productivity.

Gloria monitored her progress via a weekly checklist provided to her by program and

how it helped her stay current.

> I would do different things on different days. Like if it was a module, which are the high
>
> bandwidth, I would take enough time to get through those. Because those were hard, and
>
> they were over the plot behavioral analysis and so I would do those on Tuesday. And

then like the writing assignments were my favorite because I liked to write. And so, I

would do those on Monday. I would break up different things throughout the week.

Gloria reported that she also found weekly course checklist to be very helpful. She used the

checklist to ensure she had everything done that as required for the course.

Summary. Strategies used by Completers (see Table 6.) show the use of several academic

and psychological strategies. Several completers set aside time for academics while others

capitalized on unscheduled moments. All participants reported using several strategies to help

themselves persist.

Research Question # 2 – What are the experiences of students who began, but did not

complete (Non-completers), a program in a KU-SOE online master's or online graduate

certificate program?

The three Non-completers who participated in this study identified themselves as

professionals in various school settings. Danielle and Donna identified themselves as Caucasian

females; Daryl identified himself as an African American male. Danielle and Donna

discontinued their program midway through their first 8-week academic sessions (mini-mesters).

Daryl discontinued his study during his second 8-week academic session. All three former

students disclosed they were excited to pursue their graduate work. All three former students

struggled with one or more events for which they were unprepared. The "unexpected events", for

each of them, played a key role in their decision to withdraw.

Danielle, age 53, was an experienced science teacher who had moved to a part-time

tutoring position at a small elementary school when she enrolled in KU-SOE's online high

incident learning disabilities master's program in special education. She withdrew from her

program when it became clear that she would not be able to keep pace with the expectations of

the program and pursue the new, fulltime-tutoring position, that had just opened at her school. Daryl, was a 25-year old early-education teacher pursuing an online KU-SOE master's degree in Curriculum and Instruction, focused on teaching English as a Second Language. His unexpected moment came when he learned that he could not get the financial support he thought he would to complete his KU program. In addition, Daryl felt a degree of mismatch between his urban, early-education experience and the education experiences of his cohort. Combined with the professional sacrifice he made to attend school Daryl found himself disillusioned with the program. Donna was a 46-year old high-school performing arts teacher and department chair expanding her professional development by enrolling in a KU-SOE master's program that emphasized educational administration.

Danielle's Barriers. At the time of her enrollment, Danielle was working as a part-time tutor in a very small school. When she started the program in the spring semester, she loved the course/program material. With only part-time employment she found the course requirements manageable. A few months later, however, a highly desired full-time position in her school came open unexpectedly. When she was hired for the position, she realized she would not be able to continue with the program and work fulltime. She said, "this is way too much time, and I realized when school started with this new position there would be no way to keep up." In addition to her unexpected employment change at her school, Danielle talked about the frustration of feeling that her "posts" on the discussion board for her courses were contrived, saying "[W]hy am I posting again? that just took so much time. . . I just kept wishing about different things to post…It was torture." Danielle expressed that she was looking for more variety in course activities and more diversity in her cohort. Referring to the academic content of the course, Danielle stated, "I adored the work." However, she became disillusioned by the

personal and social dynamics of peers posting when she noticed that most of the class was responding to threads from only a few people. She said, "It didn't feel like I had a connection…there were 3 or 4 of us that never had a post back." For her, the lack of reciprocity, "didn't foster a balance or discussion," and she began to ask herself, "well, was my post not worthy?" She began to have doubts about the cohort model going forward: "[J]ust the thought that there would never be any new blood," or that she would be with, "the same 20 people," became uncomfortable. She began to think that she was out of sync with the peers in her course. She thought, "Oh wow, it's going to be like this for two years…am I going to be judged if I don't agree with them? ...I just didn't know the culture...I felt like maybe that was disadvantage for me."

Daryl's Barriers. At the time of his application to the Curriculum and Instruction – English as a Second or Other Language (ESOL) master's program, Daryl was the director of an early education center, overseeing 25 staff and 200 children. He loved his early childhood role and sought out a Pre-K teaching post. "[E]ven though it didn't pay as much because I was getting off at 2:30. So it gave me more time to study and really dive into the content." He was advised to apply early and told financial aid would not be a problem: "I indicated...that I was not in a place where I could pay for the program out of pocket...I applied for my FAFSA, I got everything approved. And the disconnect kind of started." Having been accepted early, the program expected him to enroll immediately. For Daryl, "the timing wasn't exactly right for me to start in the summer." The program told him "I would not be able to get financial aid if I waited until the fall" to enroll. For him, starting the program immediately was "uh, unexpected" and, unfortunately expensive. "I do feel like if I had the summer to figure things out and piece everything together before that fall semester started, then I would've got off on a better foot, and,

you know, who knows where I would've ended up in the program." Having to start the program earlier than he intended, became for him, too much to overcome. "I think I had started experiencing a lack of enthusiasm at that point... and I already owe $6,000 ... and just felt like I needed to part ways."

In addition to the unexpected financial burden and unexpected life style change (having to start the program before he was ready), Daryl expressed personal difficulty connecting to classmates. "I was a minority, and my experience is, my background and the type of students I interact with, is going to be different than some of my peers. I mean that's an opportunity for all of us to learn something from each other in a cultural, diverse-like setting. I would say that for me- maybe that was a personal barrier that was I guess difficult for me to be as transparent as I would've liked to be."

Donna's Barriers. Out by week four of her first mini-mester, Donna regretted that she spent so little time in the program. She reported that it "wasn't too hard" for her, she found it "interesting," called the professors "great" and enjoyed the online format. For Donna, "[i]t was more time consuming than I anticipated it would be... it became clear to me even just a few weeks in, that I wasn't going to be able to manage it, particularly during the school year." As the chair of the fine arts department, Donna was an experienced high school educator and leader who sought out the Master's in Education, Leadership to advance her career and complete her professional development requirements for her licensure renewal. The timing of mini-mester overlapping with the end of her school semester became too much for Donna to continue.

> I was coming to a point where it should have been a little bit easier for me time
>
> wise, and so I decided to pull out while I could still get some money back. In
>
> part because money is tight, my husband had a job change in the last couple of

years and we took a huge pay cut when he made that job change. So, getting a

few hundred dollars back, and I regret that 'cause I totally wish I would have at

least finished the first class and gone ahead and got that credit for the first class

before I withdrew. And I regretted it almost immediately, but it was still clear to

me. I don't regret dropping the program, 'cause it was so clear to me that I'm

just not at that phase of my life where I can manage 10 or 20 hours of work in

the evenings and on weekends. And that I need to wait until my kids are a little

bit older.

Donna very much wanted the opportunity to be part of the KU community but understood

also that her own working and learning style was an advantage and a disadvantage.

If I hadn't been working fulltime this would have been really easy to do…I'm not a

teacher that leaves the building every day at 3 o'clock…for me, it wasn't as manageable

with fulltime work as I thought it would be...I'm a perfectionist. In my last Master's

degree I got a four point. It's just my personality that I like to do things really well, so I'm

one of those people that if we're assigned to read something, I read it. ...I don't skim

through it and I feel like I'd be cheating myself if I didn't do the entire assignment. And

that's sometimes to a fault for me, because I know from my colleagues and friends that

sometimes they're able to figure out what it is you don't have to read when taking a class,

but for me, making sure that all the assignments were done in a timely way, I was

struggling to keep up with the amount of reading that they had along with the

assignments. And we would have to watch videos and lectures and such, and between

that and the reading and doing the work, it was more than I anticipated.

Summary. Danielle, Daryl, and Donna each reported an unexpected event or circumstance that interfered with their academic program persistence. Danielle encountered an unexpected work commitment when a fulltime position opened in her school; Daryl encountered an unexpected time line, when he learned he needed to commit to the program and enroll before he was ready; and Donna capitalized on a partial course refund when she realized that her program work would take significantly more time to complete than what she expected. All three reported some satisfaction with their respective course materials and involvement with their course curricula. All three were excited to start their respective programs but felt unprepared to complete their academic journey.

Donna's Strategies. Donna "Set aside" specific times to complete work and to "be very intentional about that time and not being interrupted." She kept a balance between what was due now and what was due later by looking ahead in the course to find ways to complete the work in smaller chunks. "We had deadlines in the course about when things were due, but I would look ahead to see how much needed to be done and I would set deadlines for myself that would allow me to break that up. I wasn't a crammer, like waiting until the last minute. That's not my personality." Additionally, Donna made a point to keep her technology up-to-date and made sure she had all the necessary supplies or materials she needed readily accessible. She used her 30-minute lunch break at work (where she worked as a teacher) to read or watch course videos. She set aside time in the evenings and weekends to complete projects. The key for her was making sure her academic time was "uninterrupted."

Daryl's Strategies. Prior to starting the program, Daryl took a reflective look at the time available to him in his position as the director of an early childhood center. Although he loved his position as an early childhood director, he knew that managing this type of position and

pursuing a master's degree seemed incompatible. He made a conscious choice to take a teaching position in a pre-K classroom "for the sake of the program – to be more successful in the program". When asked if there was a strategy he considered using but didn't, Daryl said he considered taking out loans to relieve his unexpected financial stress but ultimately decided to withdraw from the program instead. Daryl thought that having a conversation about his experience, similar to the interview topics may have helped me persist. He said, "I mean, honestly, a conversation like we're having would have definitely been efficient, with somebody that I could have spoken to, that was able to reason and help me understand what I did wrong and vice versa, I think would have been helpful."

Danielle's Strategies. Danielle reported that her primary strategy was to put forth a great deal of effort and focus on her academic tasks. She said, "I just sat down and really worked hard. Tried to do exactly what it said to do on the ...Syllabus... I tried to work outside with the natural light, so I didn't have to be stuck indoors... I took my time. Just did everything I needed to do."

Non-Completer Summary. Although they discontinued their program participation, Donna, Daryl, and Danielle reported their persistence strategies without any mention that those strategies may have been insufficient. Similar to the strategies reported by Completers, these Non-completers reported the strategies of leaving high-responsibility positions, setting aside time to study, protecting study time so it was uninterrupted, creating mini deadlines, planning-ahead, working ahead, and strategically selecting specific study locations. It would be easy to assume that students who do not persist in their online-graduate programs, do so because their motivation or skills are insufficient. While ultimately, a larger sample of non-completers may support that idea, the findings here suggest that the skills and or motivation of non-completers are not the primary "cause" of their withdrawal from their respective programs.

Summary of Findings

Barriers reported and endorsed by Completers and Non-Completers were similar. both groups struggled to manage unexpected life events, both groups struggled with the lack of program flexibility, both struggled with health, family, time management, and motivation. A few participants struggled with technology, advanced reading, and scientific writing. Most challenges identified by Completers and Non-Completers are consistent with the literature on the barriers. The identification of Program Pace (ex. expected rate of learning) as a prominent barrier for these students is unique to the scientific literature. Completers and Non-Completers reported frustrations with various program practices in equal measure.

Strategies between Completers and Non-Completers were not qualitatively different. Both groups set aside and capitalized on time, both groups were mindful of their need to stay motivated and to closely monitor their own progress.

Table 6.

Primary Persistence Barriers by Completers & Non-Completers

Pseudonym	Program	Reported Barriers to Persistence
Gabriel	SPED Certificate	Competing Fulltime Work; Intensity of Program, Technology Support
Gail	ASD Certificate	Time; Competing Time; Technology Skills, Intensity of Program
Garry	MSE – SPED	Conflict with Individual Instructor; Unexpected Costs; Burnout
Georgia	MSE – SPED	Family Health; Competing Fulltime Work; Technology Skills
Gilda	ASD Certificate	Time Zone; Time Management; Geographic Distractions
Gladys	MSE – C&I	Competing Fulltime Work; Auditory Learning Style
Gloria	ASD Certificate	Inadequate Bandwidth; Program Requirements; Technology Skills
Grace	SPED Certificate	Time; Competing Fulltime Work
Gretchen	MSE – SPED	Competing Fulltime Work; Perfectionist Learning Style; Application of Learning; Lifestyle Distractions
Gwen	ASD Certificate	Time; Competing Fulltime Work; Program Requirements
Danielle	MSE – SPED	Time; Program Requirements; Quality of Instruction; Peer Connections; Competing Fulltime Work
Daryl	MSE – C&I	Costs; Competing Work Priorities; Program Requirements; Peer Connections
Donna	MSE – Leadership	Time; Program Intensity; Perfectionist Working Style; Program Structure; Family, Costs

Table 7.

Strategies by Completers & Non-Completers

Pseudonym	Program	Reported Strategies
Gabriel	SPED Certificate	Set aside time for academics; Utilized research from work; Maintained constant communication with instructors
Gail	ASD Certificate	Set aside time for academics; Posted visual reminders; Applying learning to students; Focused on results of new learning
Garry	MSE – SPED	Set aside time for academics; Paced work daily; Strategically took time off from academics; Made a point to sleep
Georgia	MSE – SPED	Planned ahead; Capitalized on study opportunities; Attacked work in small chunks; Built comradery with classmates
Gilda	ASD Certificate	Logged in daily; Utilized planner; Worked according to strengths and weaknesses; Advocated for self-care; Often had food
Gladys	MSE – C&I	Push-through; Re-read; Ask for help; Do extra work; Rearrange Schedule; Capitalize on study opportunities
Gloria	ASD Certificate	Utilized the weekly program checklist of tasks; Capitalized on study opportunities
Grace	SPED Certificate	Set aside time for academics; Prioritized; Used reminders; Reduced quality; Used motel to complete semester without family
Gretchen	MSE – SPED	Set aside time for academics; Utilized Excel spreadsheet to track every minute of every day.
Gwen	ASD Certificate	Coordinated calendars and planned 1 week at-a-time; Identified good area to study; Enjoyed a cup of hot tea
Danielle	MSE – SPED	Set aside time for academics; Worked hard; Tried to work in natural light
Daryl	MSE – C&I	Took time off from work; Changed jobs
Donna	MSE – Leadership	Set aside time for academics; Became "intentional" about productivity; Set small, personal deadlines

Chapter 5

Discussion

This study sought to improve the experiences of online-masters students at KU by documenting their experiences of barriers that understand the experiences of former students, Completers and Non-completers, from the online master's degree and graduate certificate programs within the School of Education, at the University of Kansas. In this chapter, the major findings will be reviewed and considered in relationship to previous studies. The unique contributions of this study as well it's the major limitations will be reviewed. Finally, suggestions for future research are included.

Major Findings

Many Completers reported that the speed and expectations of their program, Program Pace, stands out to them as a unique barrier of students in online-master's and graduate certificate programs within the School of Education at the University of Kansas. Most participants, Completers and Non-completers indicated the quick pacing and high expectations made it difficult for them to persist.

Competing Work Responsibilities, along with Program Pace, was the most reported barrier in this study and is consistent with previous research in online persistence barriers (Lee & Choi, 2010). While a true comparison between Completers and Non-completers could not be made with the current participants, it is interesting to see that none of Non-completers indicated that technology was a barrier whereas 33% of Completers indicated that technology had been a barrier for them. Non-completers and Completers did not vary drastically from one another in the barriers they reported or the strategies they used. Future research should secure a large sample of Non-completers so that a more thorough comparison could be made.

Consistent with a case study design, it is relevant to highlight that 10 of the 13 participants were enrolled in one of two master's programs within the Special Education department: 1) a general master's degree in Special Education or 2) a master's degree in Autism Spectrum Disorders. As a department, Special Education, at the University of Kansas has been ranked 1st, 2nd, or 3rd, every year in the last 15 years. The intensity or pace of these programs, reported by participants as barriers might be the expected "pace" of any top-ranked higher education program available in an online or traditional format.

Completers and Non-completers identified a set of barriers they faced in response to an initial open-ended question posed during the interview: "tell me everything that got in your way." When presented with a list of barriers from other online graduate students, identified from prior research, both Completers and Non-completers endorsed or recognized barriers on the list that they did not describe in the open-ended portion of the interview (see Table 9). For example, Health emerged frequently by Completers and Non-completers alike when presented as a closed-ended item, but only one completer and one non-completer mentioned health or a health-related concern as a barrier in the open-ended portion of the interview. It could be argued that these participants did not provide reliable data on their own barrier complications, given the low level of agreement between the open-ended and closed-ended barrier inquires. It is also possible that participants intuitively prioritized their response to the open-ended question: "tell me everything that got in your way" so much so that they forgot little barriers or obstacles that challenged their persistence. It is also possible that certain research-identified barriers were endorsed because participants recognized the potential for that kind of obstacle to be a barrier to persistence. For example, when responding to the list of research-identified barriers, Garry said:

I'm going to be honest, I mean everything that you mentioned, I guess I could see that

could be a problem for someone else having that feeling. Definitely in regards with the

personal dynamics. I didn't experience any of those.

Participants reported using multiple strategies, some cognitive, some behavioral, and so

and specific strategies utilized to help themselves persist through to completion. Completers and

Non-completers managed time by intentionally blocking time off, scheduling, or setting aside

time, by capitalizing on unexpected moments, or both.

Comparisons with the Extant Literature

Findings from this study suggest that online-masters-in-education students at the

University of Kansas, face similar barriers to persistence as reported in the literature, such as

competing work responsibilities, time management, and personal/health-related concerns.

Consistent with prior research participants in this study also reported challenges with technology

access, type of learning style, and technology skills, as components of persistence. Cost of

online-graduate learning was seen as a barrier in this study as well as in the literature. Divergent

from other studies, this study showed that course and program expectations were reported by

participants as a significant barrier to success.

While the presence of family or family-related stress has traditionally been discussed in

the literature as a problem of multiple roles or multiple role strain (Ellis, 2014; Gradey et al.,

2013), participants in this study did not identify family as a source of stress. When asked

specifically if family support was perceived by participants as "inadequate", none of the

participants indicated that they experienced inadequate or reduced family support during their

academic work. Participants did, however, identify health, specifically, health of a family

member, as a frequent barrier or obstacle to their persistence. As such, asking participants if

"managing a health condition in yourself or in a member of your family", was interpreted in this study as a health issue. As family support is related to the literature on the obstacles faced by graduate students when they struggle to fulfill the expectations of multiple roles (e.g. as students, parents, spouses, employees, and community members), the results of this study would seem to be contraindicated.

Online-masters-in-education students at the University of Kansas reported using persistence strategies common in the literature such as: setting small goals (goal pathways), knowing the way that they learn and knowing their own strengths and weaknesses (learning style; self-awareness; self-efficacy), and by being intentional about when and how they accomplish academic requirements (planning & prioritizing). Other strategies found in this study do not appear to be mentioned in the findings of Budash (2015) and Conceicao and Lehman (2013). For example, Grace, Gail, Gwen, and Danielle reported on the importance of their physical environment to their success, making specific choices to change their environment as a persistence strategy (e.g. finding natural light, identifying a good place to study, leaving home to avoid distractions, designating an area to work at home). The description of these strategies reported by participants in this study may encourage future researchers to investigate persistence strategies with greater specificity.

Given the body of research on self-regulation and academic achievement (Zimmerman, 2002) an assumption could easily be made that online-graduate Non-completers discontinue their academic program for reasons similar to undergraduates; because they lack sufficient effort or motivation. However, the findings of this study, consistent with Willing and Johnson (2009), suggest that both Completers and Non-completers reported the use of multiple strategies, used intentionally, to help themselves succeed. In this study, as with Willing and Johnson's study, use

of strategies is not a factor that separates students who persist and those who withdraw (Willing & Johnson, 2009). An increased sample of Non-completers in future studies would help shed light on this issue. Furthermore, observations, teacher reports, or permanent products (i.e. course postings) taken from students before they become Completers or Non-completers would go further to determine if the strategies of Completers and Non-completers actually differ.

Contributions of the Study

Three findings of this study will contribute to the persistence/retention literature. First, findings from this study that are unique to the persistence/retention literature include "program pace" as a significantly reported barrier to student persistence. It is hypothesized that nature of KU's competitive and top ranked graduate programs influenced the intensity of the requirements reported by many participants. The second finding showed that participants were not consistent within their own description, when reporting their barriers to persistence and when recognizing barriers presented to them from the literature. Because the method here did not lend itself to any post-hoc analysis, future research may want to clarify that the data on barriers in the existing persistence literature is consistent across multiple modes of measurement. Finally, this study highlighted the lack of research on persistence strategies specific to online-graduate students. This study contributes to that scarce body of research by providing detailed summaries and descriptions of the strategies used by participants to succeed in similar online graduate programs.

Suggestions for Administrators. The bulk of data on the obstacles of online-graduate students alone would suggest that universities continue to explore more individualized methods, even more than providing online-program options, to support the needs of current or future students. Data from this study, particularly from Non-Completers, should generate key points for university administrators to consider when building and maintaining online-master's programs.

To that end, the following items ought to be considered whenever online courses or programs are delivered at the University of Kansas.

Admissions coaches. Transition the role of admissions in online-graduate programs from recruiter to decision-coach. In this model, staff members would engage in learning about the prospective student's current social, economic, psychological resources over an extended period of time. The admissions representative should be able to act collaboratively with faculty but still be free to make an independent recommendation to the student on the likelihood of their success. The primary function of this kind of "admissions coach" would be to provide opportunities for students to sample the expectations of the program before they apply. Rather than faculty, this kind of admissions coach would remain engaged with this potential student for longer periods of time, would organize simulated online-graduate experiences for students to assess their own comfort level, and if needed, provide the potential student with critical feedback or key observations of a potential mismatch between what the potential student is needed and what the expectations of the program currently are.

Strategic stopping points. Completers and Non-completers in this study encountered moments during their mini-mester where they needed to "hit the pause button." While faculty are most always support of students who encounter unexpected health events, in the student or their family, these participants conveyed that they wanted to have the option of pre-arranged stopping points. For example, universities could focus more on a module model for credits, rather than the traditional 8 or 16-week course model. One idea is to divide up the semester in three-one credit or six-half credit modules and allow students to stop and start a particular module of the course as they are able. Another idea is to align business office refund dates with student needs or give faculty permission to collaborate with the business office policy makes when students get stuck

trying to determine if they should stay and fail or quick and receive a refund. If pre-arranged stop points were established in the online-master's mini-mester, where program staff discussed midterm or 3-week progress with every student automatically, students may be able to make a more informed decision about where to stay in a program – and certainly, they would be able to make a less isolated decision compared to the current model.

Alternative cohorts. A Non-completer in this study reported that she loved the readings and topics in her program but that she felt rejected by her online community of peers. The idea that she would have to stay with these same people for a few years was a strong factor for her to leave the program. Universities are encouraged to be more open with students regarding how they choose to earn their degree. One alternative would be to capitalize on the natural cohorts of students that can occur, when students of similar interests become increasing involved in each other's academic and personal interests. Another alternative would be to match students up with peers, either for a semester or part of a semester, giving them specific tasks that create collaboration. It is recommended that universities examine the underlying aspects of a cohort model that they are trying to achieve and to think creatively about how to get students to interact with those who have similar and different views.

Limitations

The data collection methods in this study aligned with the purpose of the study – to explore and describe the barriers and strategies experienced by Completers and Non-completers of online-masters and online-graduate certificate programs in the School of Education at the University of Kansas. However, significant limitations of this study can be found in the way the data was collected and the ultimate use of the data collected. In sum, this study is limited by the trustworthiness data and the generalizability of these findings.

Threats to the Trustworthiness of Data

While attempts were made to strengthen the trustworthiness of data by 1) informing participants of the purpose, procedures, nature of the study and use of results (Brink, 1993), 2) using person-centered interview strategies to a) strengthen participant trust b) provide immediate data summaries to participants for feedback, and 3) soliciting post-interview feedback on the accuracy of participant responses by sending written summaries of their interview data (Brink, 1993), a number of threats to reliability and validity remain.

One-time data collection. First, participants were sampled one time for their responses to interview items. A second or third collection of interview data from these participants would have provided more reliability support for their responses and may have created a greater opportunity for participants to provide responses that were more in-depth. For example, if participants were interviewed again a month after the initial interview and asked to re-consider their responses or were presented with screen shots of their posting threads and asked to re-consider or re-remember their experiences, the data presented here would have demonstrated more trustworthiness.

Threats to self-report data. Second, self-report data, as presented in this study, is always threatened by social desirability (Brinks, 1993). Brinks (1993) recommends comparing results with other evidence as a way to strengthen findings. As such, permanent produces such as emails, posts, or assignments could have been collected and incorporated into participant interviews to reduce the social desirability threat. Additionally, family, friends, faculty, and co-workers of participants could have been interviewed as another means to triangulate the data and reduce response bias.

Experimental data collection[b]. Asking participants to respond first to an open-ended question regarding their experienced barriers in an online-graduate program and then asking participants to respond to a series of closed-ended interview items is not a standard qualitative research technique. While both the open-ended and closed-ended data collection was consistent with the purpose of the study, the comparison of open-ended to closed-ended results did not always align and put scrutiny on the trustworthiness of the data collected as a whole.

Generalizability of Results

The findings presented here are presumably most valuable to individuals in leadership positions at the School of Education at the University of Kansas who are interested in evaluating the recently established fully online-graduate certificate and online-master's program from the School of Education. These findings however may not represent the experiences of other online-graduate programs at other universities. For example, research has not yet determined that the described barrier of expectations, intensity, or pace is a typical experience of some, most, or all individuals who pursue an online-graduate certificate or online-master's program in education at a major research university. The absence of these descriptors from the online barrier literature (program pace, program intensity, program expectations) may suggest that this finding is specific to other top tier graduate programs in education or it may only be an experience reported by participants of programs at the University of Kansas. The sample of participants does not equally represent all the online-graduate programs in the School of Education. The concentration of participants in Special Education programs may over-represent the experiences of that academic department and under-represent the experiences of participants in the seven programs (see Table 3). Given that the Special Education program is (and has been) one of the most highly ranked

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[b] "Experimental data collection" here refers to use of exploratory qualitative data collection and not the traditional qualitative "experimental design" that includes random assignment to treatment or control groups.

departments both in the U.S. at the University of Kansas, given that so many participants in this study came from the Special Education course of study, it is easy to infer that those Completers really did experience a high level of program intensity. As a result, findings from this study may generalize more to students in the Special Education program at the University of Kansas, students enrolled in a highly competitive online-graduate program in Special Education at another university, or other students enrolled in any highly competitive online-graduate program in education; but these findings do not generalize or represent all online-graduate certificate or online-master's program student experiences.

Future Research

These findings beg follow-up research for several reasons. First, Completers and Non-completers described similar barriers and similar persistence strategies and could not be easily be grouped based on their interview responses. Follow-up research would be wise to study Completers and Non-completers in greater numbers in order to determine significant differences. Although, three of three Non-completers in this study referenced competing work responsibilities as an obstacle, further research is needed to determine when and how work responsibilities can become terminal barriers for student persistence. Additionally, future research should consider studying all students at specific stages in their program in the hopes of finding patterns, series of events, or situational shifts that influence students to become Completers versus Non-completers.

Second, the theme of Program Pace or academic rigor played a large role in the experiences of these former students, more so than what would be expected from the existing literature. Given that more than one participant vocalized perfectionism as a Learning Style that became a barrier for them, follow-up research should consider if there are more students with perfectionism barriers drawn to competitively ranked academic programs in an effort to

determine if Program Pace becomes a problem for students based on their need to achieve or based on a perception or self-fulfilling prophecy regarding the programs work load.

Third, it would be important for follow-up research to explore the relationship between student characteristics and environment characteristics (Lee & Choi, 2011), specifically to study a student's accuracy in deciding if they can balance their home and work life with an online graduate program before they enroll.

In studying online graduate student persistence, Rovai's (2014) doctoral dissertation posited a new integrated model of persistence, bridging the models from Bean and Metzner and Tinto. His model stressed a more complex process, with multiple consideration factors for students and programs (see Figure 2). For example, his research pulled on existing literature to highlight the importance of Student Needs, like self-esteem. Research has shown that higher levels of self-esteem is linked to greater student persistence in online programs. What this study suggests, is that **External Factors** and the student need, **Internal Factors** can compete within the person.

In sum, researchers would do well to uncover new ways to deliver online graduate content to students with the goal of increasing persistence. Hopefully, future research will guide online programming increasing the likelihood that graduate students are more likely to persist. The academy, the advancement of science, and our nation's economy stand to benefit when online graduate students experience less pressure to choose between competing professional, personal, or practical needs.
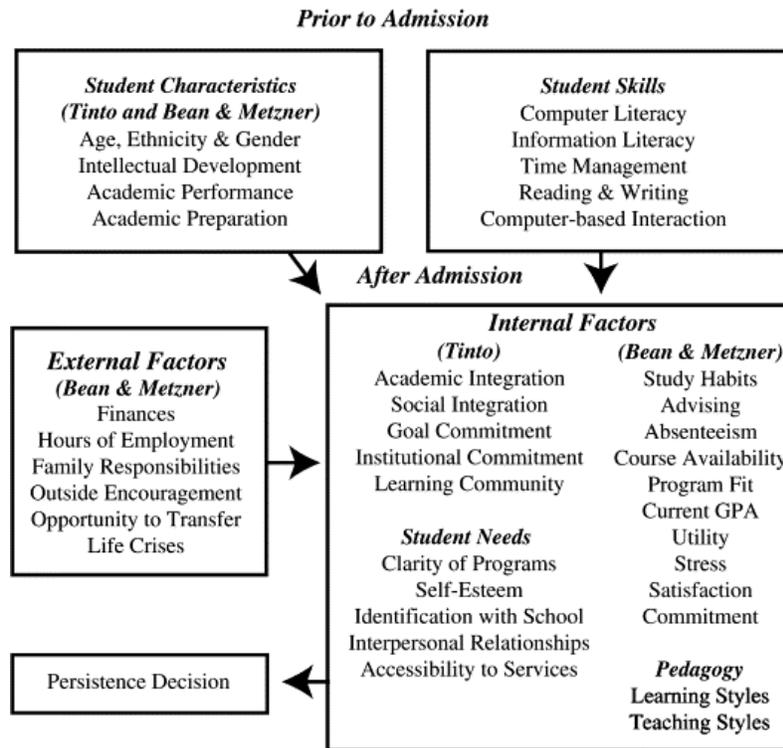
Rovai Composite Persistence Model

Prior to Admission

Student Characteristics
(Tinto and Bean & Metzner)
Age, Ethnicity & Gender
Intellectual Development
Academic Performance
Academic Preparation

Student Skills
Computer Literacy
Information Literacy
Time Management
Reading & Writing
Computer-based Interaction

After Admission

Internal Factors

(Tinto)	**(Bean & Metzner)**
Academic Integration	Study Habits
Social Integration	Advising
Goal Commitment	Absenteeism
Institutional Commitment	Course Availability
Learning Community	Program Fit
	Current GPA
Student Needs	Utility
Clarity of Programs	Stress
Self-Esteem	Satisfaction
Identification with School	Commitment
Interpersonal Relationships	
Accessibility to Services	**Pedagogy**
	Learning Styles
	Teaching Styles

External Factors
(Bean & Metzner)
Finances
Hours of Employment
Family Responsibilities
Outside Encouragement
Opportunity to Transfer
Life Crises

Persistence Decision

Figure 2. Rovai (2014) Composite Persistence Model.

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Appendix A

THE UNIVERSITY OF KANSAS

Research

APPROVAL OF PROTOCOL

June 21, 2016

Christopher Niileksela
chrisn@ku.edu

Dear Christopher Niileksela:

On 6/21/2016, the IRB reviewed the following submission:

Type of Review:	Modification
Title of Study:	Quality of Online Instruction
Investigator:	Christopher Niileksela
IRB ID:	STUDY00003559
Funding:	None
Grant ID:	None
Documents Reviewed:	• Oral Consent - Students_revised.docx, • Information Statement - Students in Online Degree Programs.docx, • Oral Consent - Faculty_revised.docx, • Correspondence_for_STUDY00003559.doc, • Quality of Online Instruction_HSCL_Initial_Submission_Form_Mod 6-9-16.pdf, • Faculty Survey, • Revised Student Interview, • Student Survey, • Everspring Faculty Interview_9-30-15.docx

The IRB approved the study on 6/21/2016.

1. Notify HSCL about any new investigators not named in the original application. Note that new investigators must take the online tutorial at https://rgs.drupal.ku.edu/human_subjects_compliance_training.
2. Any injury to a subject because of the research procedure must be reported immediately.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.

Continuing review is not required for this project, however you are required to report any significant changes to the protocol prior to altering the project.

Please note university data security and handling requirements for your project: https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm

You must use the final, watermarked version of the consent form, available under the "Documents" tab in eCompliance.

Sincerely,

Stephanie Dyson Elms, MPA
IRB Administrator, KU Lawrence Campus

Appendix B

Student Interview Protocol (Completers)

Oral Consent	Read to Participant
Hi, my name is <u>Tiffany Arrington</u> and I would like to chat with you about your experiences in the Everspring-supported online course(s) at KU. We are a part of the School Program Evaluation and Research, or SPEaR, team at KU. We are a team of faculty and students who evaluate the effectiveness of initiatives, such as the online programs developed for KU. First, I want to let you know about your protections. This interview is completely voluntary and we will not be collecting or reporting any personally identifying information. Your name or anything specific information that may identify you will not be reported. The SPEaR team will have access to the data and we will be discussing results in our meetings. All SPEaR team members will keep your information confidential. [If using internet (Skype, Lync) for interview, include the following statement] It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.	☐
Your data will be aggregated with interviews from other students so we can better understand student experience in the Everspring initiative. This information will be used in reports to stakeholders. We would like to record these interviews, and it is up to you if you would like this to be recorded. All interviews will be recorded electronically and then stored on password protected computers. Any notes and transcripts made about the interviews will be kept in locked file cabinets. Is it that okay with you that I record this interview? For your participation in this interview, we are providing you with a $5.00 gift card to Amazon.com. Investigators may ask for your social security number in order to comply with federal and state tax and accounting regulations. With your permission, I will submit your email address to our project leader, Dr. Steve Lee, who will electronically provide you with your participation gift card.	☐
Participation in the interview indicates your willingness to take part in this study and that you are at least 18 years old. Should you have any questions about this project or your participation in it you may ask me or any of the co-investigators who are part of the School Program Evaluation and Research team in the Department of Educational Psychology.	☐
You may withdraw your participation from this interview at any time. If you have any questions about your rights as a research participant, you may call the Human Subjects Protection Office at (785) 864-7429 or email irb@ku.edu. If you are ready to participate in the interview I will begin recording now.	☐

Thank you for your willingness to participate in this research project. I'd like to start by asking you to respond to a few questions about your background and about your KU program	☐
D1) What year were you born?	
D2) Do you identify as male, female, intersexed, transitioning, or gender fluid?	
D3) What is your racial / or ethnic identity?	
D4) What is your annual yearly income?	
P1) What online program have you completed?	
P2) When did you start taking classes?	
P3) How long did it take you to complete the program?	

P4) Where you continuously enrolled in the program?	

Next, I have a few questions about your Online Experiences:	☐
OL1) Have you taken online courses through another institution? (a) Where? (b) How many?	
OL2) (If applicable) How do the online courses you have taken so far compare to the online course(s) you have taken from other institutions?	
OL3) What do you enjoy, like, or appreciate about your course(s)? (a) What do you dislike?	
OL4) What specifically do you enjoy/like or dislike about your program?	
OL5) What supports does KU provide that are important to your success in the program?	

Next, I'll ask about your Program Choice and how this program fits within your overall life experiences	☐
LS1) What factors had the greatest impact on your decision to enroll in this program?	
LS2) There are many financial and personal costs and benefits to an online program. What would you consider to be the "costs" and "benefits" of this program now and in the future?	
LS3a) What were the reactions from family, colleagues, or friends when they learned you were enrolling in this program?	
LS3b) Have the reactions or attitudes from family, colleagues, or friends changed now that you have completed the program?	

The next section includes a discussion on degree completion barriers and degree completion strategies. First, we define a barrier as anything that may have interfered with your degree progress.	☐
4a. "Please list for me of all the things that seemed to get in your way on your path to a degree? Let's start with the major things that interfered with you completing your degree and work our way down to the things that got in your way to a lesser degree. I'll give you some time to think, you can begin whenever you are ready.	
4b. Thank you! Now that we have this list of all the things that interfered with your degree progress, if you haven't already, tell me why each one was a barrier for you? (Note and re-iterate each barrier mentioned by the respondent)	
4c. Before we leave the topic of barriers, I want to share with you a list of barriers identified by other students as obstacles to their degree completion. Ok? Here are the barriers identified by other students as obstacles. Tell me if any of these were a barrier for you. I'll go through them one-by-one.	

YES	Research identified barriers	Comments
☐	Friends or community members who resist supporting your academic efforts (Social Support),	
☐	Family members not willing to participate or negotiate (Family Support)	
☐	Managing a physical or mental condition yourself or in your family (Physical & Emotional Health)	
☐	Doubting you have the right skills to be successful (Confidence)	

☐	Trouble sustaining drive, effort, or ambition to continue (Motivation)	
☐	Trouble with note taking, reading skills, research, or scientific writing (Academic Skills)	
☐	Trouble negotiating extra costs associated with school (Costs)	
☐	Trouble setting aside time, scheduling, or adhering to timelines (Time Management)	
☐	Class sessions that do not invite student engagement with the content and classmates (Quality of Instruction)	
☐	Few opportunities for students to exercise choice in completing course/ program content. (Course/ Program Flexibility)	
☐	Limited opportunity to know or engage with classmates in activities meaningful to course content. (Peer Collaboration)	
☐	Limited support services, program advising, or access to campus resources (Program or Intuitional Supports)	
☐	Limited access to technology support, poorly designed, or poorly operating learning platforms. (Technology)	

4d. Now that I've shared that list with you, are there any other barriers that you can think of that should be included on that list?	
4e. Next, I want to know about the strategy or strategies you used to persist through your degree. We define a strategy as any intentional response you had to a barrier. Will you think back for me and tell me about all the intentional things you did to help yourself persist in your program?	
4f. Of the strategy / strategies you mentioned, which strategy/strategies had you used before this online program?	
4g. Was there a strategy you considered using but didn't? Why or why not?	

That concludes the questions I have. I thank you so much for your time during this process. Is there anything else you would like to say regarding your online course?	

Appendix C

Student Interview Protocol (Non-completers)

Oral Consent	Read to Participant
Hi, my name is <u>Tiffany Arrington</u> and I would like to chat with you about your experiences in the Everspring-supported online course(s) at KU. We are a part of the School Program Evaluation and Research, or SPEaR, team at KU. We are a team of faculty and students who evaluate the effectiveness of initiatives, such as the online programs developed for KU. First, I want to let you know about your protections. This interview is completely voluntary and we will not be collecting or reporting any personally identifying information. Your name or anything specific information that may identify you will not be reported. The SPEaR team will have access to the data and we will be discussing results in our meetings. All SPEaR team members will keep your information confidential. [If using internet (Skype, Lync) for interview, include the following statement] It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.	☐
Your data will be aggregated with interviews from other students so we can better understand student experience in the Everspring initiative. This information will be used in reports to stakeholders. We would like to record these interviews, and it is up to you if you would like this to be recorded. All interviews will be recorded electronically and then stored on password protected computers. Any notes and transcripts made about the interviews will be kept in locked file cabinets. Is it that okay with you that I record this interview? For your participation in this interview, we are providing you with a $5.00 gift card to Amazon.com. Investigators may ask for your social security number in order to comply with federal and state tax and accounting regulations. With your permission, I will submit your email address to our project leader, Dr. Steve Lee, who will electronically provide you with your participation gift card.	☐
Participation in the interview indicates your willingness to take part in this study and that you are at least 18 years old. Should you have any questions about this project or your participation in it you may ask me or any of the co-investigators who are part of the School Program Evaluation and Research team in the Department of Educational Psychology.	☐
You may withdraw your participation from this interview at any time. If you have any questions about your rights as a research participant, you may call the Human Subjects Protection Office at (785) 864-7429 or email <u>irb@ku.edu</u>. <u>If you are ready to participate in the interview I will begin recording now.</u>	☐

<u>Thank you for your willingness to participate in this research project. I'd like to start by asking you to respond to a few questions about your background and about your KU program</u>	☐
D1) What year were you born?	
D2) Do you identify as male, female, intersexed, transitioning, or gender fluid?	
D3) What is your racial / or ethnic identity?	
D4) What is your annual yearly income?	

<u>The next section includes a discussion on degree completion barriers and degree completion strategies. First, we define a barrier as anything that may have interfered with your degree progress.</u>	☐
4a. Why did you drop out or leave your KU SOE online program?	

4b. "Please list for me of all the things that seemed to get in your way on your path to a degree? Let's start with the major things that interfered with you completing your degree and work our way down to the things that got in your way to a lesser degree. I'll give you some time to think, you can begin whenever you are ready.	
4c. Thank you! Now that we have this list of all the things that interfered with your degree progress, if you haven't already, tell me why each one was a barrier for you? (Note and re-iterate each barrier mentioned by the respondent)	
4d. Before we leave the topic of barriers, I want to share with you a list of barriers identified by other students as obstacles to their degree completion. Ok? Here are the barriers identified by other students as obstacles. Tell me if any of these were a barrier for you. I'll go through them one-by-one.	

RESEARCH IDENTIFIED BARRIERS	Yes ☐ No ☐
Participant Input Should any other barriers be on the list?	
☐ Family members not willing to participate or negotiate (Family Support)	
☐ Managing a physical or mental condition yourself or in your family (Physical & Emotional Health)	
☐ Doubting you have the right skills to be successful (Confidence)	
☐ Trouble sustaining drive, effort, or ambition to continue (Motivation)	
☐ Trouble with note taking, reading skills, research, or scientific writing (Academic Skills)	
☐ Trouble negotiating extra costs associated with school (Costs)	
☐ Trouble setting aside time, scheduling, or adhering to timelines (Time Management)	
☐ Class sessions that do not invite student engagement with the content and classmates (Quality of Instruction)	
☐ Few opportunities for students to exercise choice in completing course/ program content. (Course/ Program Flexibility)	
☐ Limited opportunity to know or engage with classmates in activities meaningful to course content. (Peer Collaboration)	
☐ Limited support services, program advising, or access to campus resources (Program or Intuitional Supports)	
☐ Limited access to technology support, poorly designed, or poorly operating learning platforms. (Technology)	
4d. Now that I've shared that list with you, are there any other barriers that you can think of that should be included on that list?	
4e. Next, I want to know about the strategy or strategies you used to persist through your degree. We define a strategy as any intentional response you had to a barrier. Will you think back for me and tell me about all the intentional things you did to help yourself persist in your program?	
4f. Of the strategy / strategies you mentioned, which strategy/strategies had you used before this online program?	

4g. Was there a strategy you considered using but didn't? Why or why not?	
That concludes the questions I have. I thank you so much for your time during this process. Is there anything else you would like to say regarding your online course?	
If not I will be forwarding your email to our project leader so he can provide you with your participation gift card. Please don't hesitate to contact me if you have any questions or concerns. In a few weeks, I will be sending you a summary of our interview for your review. The purpose of this review is to ensure I have captured the key elements you reported in this interview. If I have missed a key piece of information or misrepresented your thoughts, this review will provide the opportunity for any corrections to be made. You can look for the interview review in your email. Thank you, again for your participation! Good bye!	☐