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EXAMINING EDUCATIONAL LEADERSHIP DOCTORAL STUDENTS' SELF-EFFICACY AS RELATED TO THEIR ROLE AS A SCHOLARLY PRACTITIONER RESEARCHER

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ABSTRACT

Aim/Purpose	This study examined an educational leadership doctoral preparation program to better understand how students' self-efficacy evolves from the lens of a scholarly practitioner researcher as they progress through specified checkpoints to degree completion. The aim was to identify what factors contributed to building scholarly practitioner researcher skills and what factors hindered the development of doctoral students as they progressed through their educational leadership preparation program.
Background	Doctoral programs have the highest attrition of graduate programs, with almost half of the successful students taking six to seven years to complete. Thus, educational leadership doctoral preparation programs must find ways to enhance students' perceived capability in an effort to facilitate their progress through the program in a timely manner. The researchers believe having high research self-efficacy coupled with evidence-based practices to strengthen scholarly

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	practitioner research skills may be a contributor to effective program progression if viewed from the lens of a scholarly practitioner researcher.
Methodology	A mixed-methods study utilizing an ex-post-facto research design based on descriptive statistics coupled with an analysis of qualitative data examined students' perceived self-efficacy of educational leadership doctoral students in relation to their rate of progression.
Contribution	This study provides other doctoral programs a lens into the importance of maintaining students' high self-efficacy, specifically in the area of scholarly practitioner research to ensure efficient progression through the program to completion in a timely manner.
Findings	Educational leadership doctoral students in the specified cohorts reported high self-efficacy at the pre-, mid-, and post-assessment checkpoints in the program during their coursework tier, and findings revealed this high self-efficacy was sustained throughout this progression to the dissertation tier. Four overarching narrative themes influencing students self-efficacy in scholarly practitioner research were identified as Social Support, Academic Challenges, Discipline, Effort, and Motivation, and Personal Challenges.
Recommendations for Practitioners	Educational leadership and related doctoral programs should consider using a scholarly practitioner researcher approach. This focus may lead to faster rates of degree completion and better prepared students to solve problems of practice in their practitioner settings.
Recommendations for Researchers	While the results are promising in support of evidence-based practices to prepare scholarly practitioner researchers, in turn sustaining or supporting high levels of self-efficacy may prove impactful, thus warranting further research.
Impact on Society	Ensuring high levels of self-efficacy may help students to complete their doctoral degree in a timelier manner due to the perception they are capable of program completion and may also, better prepare students to serve as scholarly practitioner researchers in their educational settings.
Future Research	Future research should continue longitudinally to examine self-efficacy from the lens of a scholarly practitioner researcher to better understand how this shapes doctoral students' efforts and capabilities in their doctoral work from admit to program completion. Additionally, future research can quantitively assess a model identifying the relationship between self-efficacy and the four identified themes for the development of doctoral students' research skills as scholarly practitioners.

Keywords	self-efficacy, educational leadership, leadership preparation, problem of practice, scholarly practitioner researchers

INTRODUCTION

Within an educational leadership preparation program at a Carnegie designated public university with high activity doctoral research, which defines an R2 institution located in the rural southeast United States, we examined the self-efficacy of our doctoral students from the lens of a scholarly practitioner researcher as they transitioned through the coursework tier of a doctoral program to the dissertation tier. The need to address educational leadership preparation program effectiveness and doctoral students' capabilities to be successful most accurately conveys our vision for this study, and thus the focus was on self-efficacy and the factors impacting self-efficacy. In an effort to better understand students' self-efficacy, our research team was intentionally composed of multiple educational leadership

faculty and both undergraduate and graduate research assistants. To examine self-efficacy, the Carnegie Project on the Education Doctorate (CPED, 2021) principles were utilized to focus on an education doctoral program (Ed.D.) emphasizing scholarly practitioner research. CPED describes the education doctorate as "the professional doctor in education prepares educators for the application of appropriate and specific practices, the generation of new knowledge, and for the stewardship of the profession" (2021, p. 1). As consumers of knowledge, our students are scholarly practitioner researchers as they apply a theory to practice approach to their scholarship, merging practical application and professional skills with research in an effort to solve problems of practice and achieve educational reform (McBrayer et al., 2018). Prior to conducting our study, we predicted our students would have high self-efficacy at the start of the program, potentially take a decline at the midpoint (at the point in the program in which active compilation and analysis of research is occurring coupled with extensive academic writing), and return to the initial high levels of self-efficacy as they completed their coursework, if they were indeed successfully progressing through the program.

Students' perceptions of their capability (their self-efficacy) in progressing through a doctoral program was the focus of this study, with three equally weighted research questions:

> *How does the self-efficacy of doctoral students evolve as they progress through their educational leadership preparation program at specified checkpoints through to coursework completion?*
>
> *What factors are contributing to building scholarly practitioner researcher skills as doctoral students transition through their educational leadership preparation program? and*
>
> *What factors are hindering the development of building scholarly practitioner researcher skills as doctoral students transition through their educational leadership preparation program?*

In addition, through an examination of student input and feedback, we sought to determine if the intended goals of our program translated into the field of practice in preparing educational leadership students who are scholarly practitioner researchers. In addition, we sought to discover factors that may either relate to the success or hindrance of doctoral students on this academic endeavor.

REVIEW OF THE LITERATURE

An examination of the literature related to the challenges surrounding doctoral students' self-efficacy in terms of their progression and completion of coursework was conducted. Using a scholarly practitioner researcher lens and general self-efficacy as the theoretical framework, this review included relevant literature on the topics of general self-efficacy, research self-efficacy, educational leadership preparation program effectiveness, educational leadership preparation program improvement, challenges doctoral students face in conducting research, and utilization of evidence-based practices specifically focused on strengthening scholarly practitioner research skills.

THEORETICAL FRAMEWORK: GENERAL SELF-EFFICACY

As educational leadership faculty, we reviewed feedback from the students in our program that focused on their capability of progressing through the educational leadership doctoral program from admission to degree completion. For this particular study, we focused on the coursework tier of our program, which is designed to assist students in developing and writing chapters one, two, and three of the dissertation as scholarly practitioner researchers (based on a traditional five-chapter dissertation). To better understand our students' perceptions of their capabilities, we centered on the notion of general self-efficacy as the conceptual framework for this study. Bandura (1977) defined a students' general self-efficacy as "the conviction that one can successfully execute desired behavior" (p. 93), and more specifically, included students' perceptions of their ability to be successful. Additionally, Bandura (2012) noted self-efficacy impacts people's actions and behaviors, how much effort they place on specified tasks, and the time they will commit to resolving the challenges that may arise with progression, in an effort to achieve a faster rate of degree completion. The utilization of a

General Self-Efficacy (GSE) Scale modified to reflect the perceptions of students as scholarly practitioner researchers may prove impactful in future studies (Schwarzer & Jerusalem, 1995). According to the researchers, the scale was created to assess a general sense of perceived self-efficacy with the aim to predict ability to cope with daily hassles as well as adapt after experiencing both program and external challenges. Bandura (2001) stated that the higher the perceived self-efficacy, the greater the efforts will be to achieve an intended goal. There is a positive relationship between students' self-efficacy and academic performance (Hayat et al., 2020; Lambie et al., 2014; Lent et al., 1984; Multon et al., 1991). Multon et al. (1991), through seminal work, investigated the relationship of self-efficacy to academic performance and persistence through a metanalysis on self-efficacy and the results revealed positive and statistically significant relationships among self-efficacy beliefs and academic performance and persistence outcomes. On the contrary, McBrayer et al. (2018) found high self-efficacy scores among doctoral students, but did not find a correlation between self-efficacy and time to degree completion warranting further research. Thus, it is important to note, current research has shown a potential explanation of high self-efficacy scores may be indicative of overconfidence as leaders by nature may exhibit confidence in their capabilities due to their chosen leadership field (Matheka et al., 2020). Additionally, researchers have cautioned there are existing problems with differentiating the effects of self-efficacy and other constructs, such as self-concept, expectancy value, student demographics, as well as measures of personal, psychosocial, and institutional factors (Gardner, 2010). Furthermore, if a student were to do extremely well on one section of their dissertation their self-efficacy may rise, but if they were to struggle and complete another section of the dissertation poorly then their self-efficacy might fall (Niehaus et al., 2018).

For the purposes of this study, self-efficacy was examined through the lens of a scholarly practitioner researcher preparing to be an effective educational leader. Using the seminal work of Bandura (2012) as a guide, we defined doctoral students' self-efficacy as "their perceptions and confidence in their ability as scholarly practitioner researchers to conduct research and progress through the program." According to Marsh et al. (2019), a distinguishing feature of self-efficacy is that by examining what one is able to accomplish in the future may be related to accomplishing a particular task in the present. Often doctoral students report experiencing a certain level of uncertainty about their capabilities and when this self-doubt is ongoing, students may end up procrastinating or not attempting tasks for fear of being unsuccessful (Wao & Onwuegbuzie, 2011). Another notion to examine is the possibility that our doctoral students' research self-efficacy may be impacted by their prior leadership experiences, which plays a role in self-efficacy outcomes (Cannonier & Katsioloudes, 2020).

Dissertations and Scholarly Practitioner Writing

Student time to degree completion through a doctoral program relies exceedingly on their dissertation work and this commitment to work leads to vast amounts of anxiety, despair, and mistrust (McBrayer et al., 2020). Furthermore, contributing to these challenges, two overall themes – lack of writing skill maturation and uncertainty in expectations for written assignments – leads to increased student stress (Klocko et al., 2015). As doctoral students progress, their underlying goal must be to develop an identity of a scholar (Kriner et al., 2015). For doctoral students to assume the role of a scholarly practitioner, they must have formal research preparation to demonstrate the skills of theoretical application, scholarly research, and instructional proficiency to solve problems of practice (Kennedy et al., 2018). Doctoral students should seek to achieve a well-written dissertation with findings related to current problems of practice within the educational arena to provide practice-based knowledge and inquiry-based learning to navigate any challenges to degree completion (Fertman, 2018). Ross (2010) noted that any graduate level educational leadership faculty seeking to better support students should engage in discussions about their underlying assumptions of what equates to timely degree completion in order make program improvements. Thus, doctoral programs must continually assess their performance in an effort to ensure doctoral students have the scholarly practitioner research and academic writing support needed to progress through to degree completion in a timely manner.

Research Self-efficacy

The purpose of doctoral education is to transform students into scholarly practitioner researchers by translating what they learned from their coursework into practical applications in their educational arenas (Ames et al., 2018). When preparing scholarly practitioner researchers, time to degree completion may impact self-efficacy. As such, it has been proposed that doctoral programs consider designing their research courses to provide students opportunities to conduct research, as well as apply research skills to achieve data-driven accountability to meet the expectations that occur in the work arena (Kerrigan & Hayes, 2016). According to Niehaus et al. (2018), a major component in training researchers is the development of research self-efficacy. Research self-efficacy can be related to the achievement goal theory, in which the researcher's confidence in ability can affect the researcher's behaviors and selected actions intended to reach a specified goal (Wester et al., 2018; Wester et al., 2020). Graduate students who possess lower research self-efficacy may engage in perfectionism and procrastination as well as have a lack of academic preparedness often associated with imposter syndrome, which acts as a psychological barrier (Chakraverty, 2018). If research self-efficacy is low, it can negatively impact the practitioner's willingness to conduct research (Razavi et al., 2017).

In an effort to combat the challenges of time to degree completion, doctoral programs need to be centered around academic writing and scholarly practitioner research (McBrayer et al., 2018). Experiences conducting research have been shown to result in higher degrees of research self-efficacy in doctoral students (Petko et al., 2020). Sunal (2020) explained that examining research self-efficacy collectively is needed to focus on the individual parts that are interpersonal, intrapersonal, and systematic, which all work together to strengthen research capabilities of students. The ability to collect and analyze results are important skills that play a significant role in doctoral coursework completion, as doctoral students who learn to conduct and disseminate research in their coursework are more likely to achieve success in their studies (Boyce et al., 2019). However, it is also important to provide doctoral students with research experiences outside of their coursework (Lamar & Helm, 2017). Providing doctoral students with opportunities to do research early in their program is consistent with providing a research training environment that is positive and productive (Gelso, 2006). Additionally, doctoral students need to show high levels of research self-efficacy based on research knowledge, the research training environment, research mentoring, and interest in research (Poh & Kanesan Abdullah, 2019). Lamar et al. (2019) noted the development of courses related to research topics of choice, analyzing data, and writing papers are good strategies for improving research self-efficacy. We should continue to encourage doctoral students to participate in research practices and academic exchanges to disseminate findings to better solve problems of practice (Liu et al., 2018).

Educational Leadership Preparation Program Effectiveness and Improvement

In seminal work on the education doctorate, programs faced "chronic and crippling" issues with doctorate of education preparation programs and a revamp was needed to carry out the mission of advancing knowledge and preparing quality practitioners (Shulman et al., 2006, p. 25). Doctoral preparation programs of all disciplines have a 43% dropout rate and only 41% of students complete their doctoral degrees within six to seven years (Ampaw & Jaeger, 2012; National Science Foundation [NSF], 2017). Educational leadership faculty have been challenged to reevaluate educational leadership doctoral programs by focusing on doctoral students as scholarly practitioners charged with ensuring school improvement (CPED, 2021; McBrayer et al., 2018). Schools of Education, specifically doctoral programs in educational leadership, have been criticized for lack of sufficient academic rigor and have received recommendations calling for redesign and reform (Maranto et al., 2010; Porfilio & Strom, 2019; Zirkel, 2012). Because students make an investment in pursuit of a doctorate, factors leading to success or hindrance of the degree need to be addressed from both the faculty and student perspectives, as unclear expectations, feelings of isolation, and lack of preparedness for the work of the dissertation have been cited as factors negatively impacting time to doctoral degree completion in

all fields (Gittings et al., 2018). Storms et al. (2011) found a factor leading to success was a quality relationship between the candidate and major professor and recommended dissertation advisors be trained on how to support students during degree completion. Similarly, Maul et al. (2018) found that encouragement and coaching by dissertation chairs led to improvements in research self-efficacy and retention of doctoral students. Leadership preparation programs must continue to support leadership candidates as they progress through their doctoral program by strengthening graduate student-faculty relationships, to get feedback from their mentors, which may increase graduate students' confidence and willingness to conduct future research (Anekstein & Vereen, 2018; Chesnut et al., 2015; Posselt, 2018). In order for programs to facilitate the progress of emerging researchers, pragmatic solutions need to be addressed to allow researchers to become successful in producing academic research (Ames et al., 2018). In addition, educational programs should be intentional in the design and the development of curriculum (McSherry et al., 2019). There has been an increase in the number of educational leadership degrees awarded which raises questions as to the quality of these programs, which may support the research that denoted doctoral students' may be overconfident leading to inflated self-efficacy, as those in leadership positions by nature hold belief of their own capability or they would not have sought a leadership position. Additionally, programs should continue to work to provide quality and rigorous instruction and prepare students for future leadership roles (Perrone & Tucker, 2019).

Challenges Doctoral Students Face in Conducting Research

Lachance et al. (2020) mentioned student self-efficacy can be impacted by teaching and mentoring practices to provide opportunities for active, hands-on learning; giving prompt and encouraging feedback; establishing explicit guidelines of mutual respect and support; and encouraging students to value one another's research contributions. Within the scope of challenges students face in conducting research, limited resources and funding hinder student abilities to conduct research (Niemcyzk, 2018). More so, another challenge faced by student researchers is the insufficient training of doctoral faculty supporters (Niemcyzk, 2018). External factors also need to be considered, as work/life balance can prove to be a challenge for doctoral students when conducting research. There are many decisions related to work, school, and familial responsibilities that may prove to hinder research and cause students this work/life imbalance (Cornwall et al., 2019; Sverdlik et al., 2018). In a time of heightened demand for scholarly activity at the institutional level, many doctoral students may find themselves grappling with a number of barriers hindering the efficacy of their research as students are being pushed to produce extensive research without coinciding research training (Wester et al., 2018). Reflection on performance is a key aspect of the doctoral journey as it aids the researcher in navigating problems of practice by building their confidence and developing their scholarly practitioner identities (Pieridou & Kambouri-Danos, 2020).

Evidence-Based Practices to Strengthen Research Self-Efficacy

Doctoral students thrive in environments conducive to fostering positive student-faculty relationships and opportunities to conduct research and collaborate with peers and mentors (Hill & Conceição, 2020; Kainz et al., 2018; Young et al., 2019). Education leadership faculty strive to afford students the opportunity for proper support resources, including adequate writing support for students, effective faculty who are well-versed on doctoral level research and the necessary requirements for dissertation completion, and faculty support commitment of time for reflective feedback (LaFrance et al., 2020). The cultivation of a scholarly practitioner researcher serves as the focal point of developing an effective doctoral program, so implementing practices to enhance doctoral student self-efficacy and research skills is needed (Ezzani & Paufler, 2018). Providing doctoral students with a supportive research training environment can equip them with the resources necessary to produce stronger research and increase productivity. Therefore, training of doctoral students and faculty is needed to further strengthen skills among students (Dorimana et al., 2021; Garg et al., 2018).

Niemczyk (2018) explained the importance of focusing on research skills needed and then using these skills to assess how programs and research supporters can be most effective in ensuring doctoral students continue to progress through to degree completion.

METHODOLOGY

RESEARCH DESIGN

A mixed-methods ex-post-facto research design utilized quantitative and qualitative data to determine the self-efficacy of our doctoral students as they progressed through to degree completion, via conducting scholarly practitioner research to better understand what contributes to effective research skills as well as the hindrances they face in conducting research. Ex-post facto, meaning after the fact, is the most relevant approach to the research questions of this study due to the fact that data had been collected initially for program assessment and improvement prior to engagement in this research study (Gay & Airasian, 2003). Descriptive statistics were utilized as the researchers were trying to build the groundwork for the importance of examining self-efficacy from the lens of a scholarly practitioner researcher based on a general self-efficacy scale as they progressed through to coursework completion. Additionally, qualitative analysis, using a deductive coding scheme, was conducted to identify passages of text from open-ended data allowing common ideas to be organized into emerging themes regarding the strengthening or reduction in scholarly practitioner self-efficacy. The purpose of this study was to determine educational leadership doctoral students' self-efficacy as they progressed through the coursework tier of their doctoral program utilizing a longitudinal model with three cohorts (Cohort A, Cohort B, and Cohort C) of whom we had collected pre-assessment, mid-assessment, and post-assessment data longitudinally over a two-year period for each cohort.

Doctoral students are required to complete a minimum of 69 graduate credit hours that are offered in three tiers. In Tier I, students are required to complete 30 graduate credit hours post-master's degree. In Tier II, students complete an additional 30 graduate semester hours in a sequential mode over a two-year period, which consists of coursework aligned to conducting scholarly practitioner research and engaging in extensive academic writing. Tier II uses a cohort model with hybrid content delivery consisting of 14 students in Cohort A, 12 students in Cohort B, and 17 students in Cohort C for a total of 43 participants. Students represent the areas of both P-12 educational school leadership and higher education leadership. During Tier II, students take two courses for a total of five semesters and are expected to exit this tier with compilations of the dissertation for chapter one (overview), chapter two (review of the literature), and chapter three (methodology). Upon completion of Tier II, doctoral students move to the dissertation phase of the program, Tier III. The goal of the doctoral program timeline is to finish Tier II in five semesters and to complete the minimum of nine graduate credit hours of dissertation in three semesters in Tier III to complete the degree.

While the educational leadership doctoral program identified in this study underwent several iterations of redesign over its lifetime, each change had a different focus and limited formal evaluations were conducted. We began to formalize this assessment process and utilized descriptive measures to examine students' self-efficacy as scholarly practitioner researchers based on a general self-efficacy scale by shifting the lens to that of a scholarly practitioner researcher. We set our focus on the CPED principles (2021), an organization dedicated to the development and implementation of rigorous doctoral programs (Ed.D. versus a Ph.D.). These CPED principles served as our threshold for achievement, as we set our efforts on distinguishing our program as one that prepares scholarly practitioner researchers with strong academic writing skills. From these conversations about CPED and with a new focus on implementing innovative course content aligned with research initiatives, keeping a hybrid delivery model that was cohort-based, and offering intensive research courses focused on scholarly practitioner research with an emphasis on academic writing, a commitment to program redesign was established. A unique characteristic of the redesign was providing students with several options to use their skills, abilities, and dispositions to resolve educational issues and problems based on their

practice and go beyond the traditional dissertation (Perry, 2013) via scholarly practitioner research coupled with academic writing. Additionally, the framework of these dissertation options allows candidates to enhance the practice of professional leadership by working through a lens of evaluative consideration as they engage in solving the contemporary problems of practice.

Setting and Participants

The participants for the study were educational leadership doctoral students at a designated large public university with high doctoral research activity (R2) located in the rural southeast of the United States. Participants were identified by the initial start date of the academic year in which they entered Tier II of the educational leadership doctoral program and the sample consisted of a total of 43 participants. Although a seemingly low number of participants, our program only admits a maximum of 20 students per cohort yearly, and these cohorts had comparable pre-, mid-, and post-assessment data sets for analysis, which is time-consuming and took approximately two years for each of the three cohorts to collect data longitudinally. The sample consisted of 20 males (46.5%) and 23 females (53.5%). The participants self-identified as 67.4% White/Caucasian (N=29), 25.6% Black/African American (N=11), 4.7% Hispanic/Latino (N=2), and 2.3% Other (N=1). Ages of the participants ranged from 25 to 59, with 16.3% (N=7) identifying between 25-29, 30.2% (N=13) between 30-34, 23.3% (N=10) between 35-39, 14% (N=6) between 40-44, 9.3% (N=4) between 45-49, 4.7% (N=2) between 50-54, and 2.3% (N=1) between 50-54. All of the participants reported being fully employed, with 39.5% (N=17) employed within the P-12 arena, 58.1% (N=25) employed within higher education, and 2.3% (N=1) employed through another arena. The participants' demographic reportings are summarized in Table 1. Again, to reiterate, these students were selected as they were the first three cohorts to yield quantifiable and sufficient data, which were collected at the pre-assessment (start of Tier II), mid-assessment (mid-point of Tier II), and post-assessment transition points in their doctoral program (end of Tier II).

Instrument

An online survey, the EdD Program Completion Factor Survey, was utilized to collect data from students about their self-efficacy and challenges with program progression from the lens of scholarly practitioner research. In addition, demographic data were gathered for each student, including identified gender, race, age, employment status and role, academic history, and current academic position (see the Appendix for a modified survey minus the demographic questions reported in Table 1). The survey included the General Self-Efficacy (GSE) Scale with a modified stem to reflect the perceptions of students as scholarly practitioner researchers (Schwarzer & Jerusalem, 1995). This GSE Scale measures the positive factors of emotion, optimism, and work, and the negative factors of depression, stress, health complaints, burnout, and anxiety (Schwarzer & Jerusalem, 1995), all factors associated with doctoral work. The GSE Scale was embedded into the questionnaire to measure self-efficacy, as the scale was designed for use with adults to predict coping with a variety of stressful life events. The GSE Scale consisted of 10 questions each with a four-point response, yielding a composite score of 10-40, which was converted to a mean score out of four by dividing by a factor of 10. The GSE Scale presents high validity and reliability with Cronbach's alphas ranging from .79 to .90, with the majority falling in the high indicator of .80s (Schwarzer & Jerusalem, 1995). While the GSE Scale takes approximately four minutes to complete, the entire questionnaire took approximately 15 minutes to complete due to the additional questions to attain information about demographics and students' experiences throughout the program, with the latter being four open-ended questions. The instrument consisted of 18 demographic questions, 10 statements with the modified stem from the GSE Scale (Schwarzer & Jerusalem, 1995), and four questions evaluating participants' expected challenges and supports to becoming a scholarly practitioner researcher. The stem of these statements was changed to specifically focus on the scholarly practitioner researcher and used a Likert scale running from 1-4 with 1= 'Exactly True', 2= 'Moderately True', 3= 'Hardly True', and 4= 'Not at All True'.

Table 1. Demographic information of participant sample

		Cohort A N=14	Cohort B N=12	Cohort C N=17	Total N=43
Gender	Male	N=7 (50%)	N=5 (41.7%)	N=8 (47.1%)	N=20 (46.5%)
	Female	N=7 (50%)	N=7 (58.3%)	N=9 (52.9%)	N=23 (53.5%)
Race/ethnicity	White/Caucasian	N=6 (42.9%)	N=8 (66.7%)	N=15 (88.2%)	N=29 (67.4%)
	Black/African American	N=7 (50%)	N=4 (33.3%)	N=1 (5.9%)	N=11 (25.6%)
	Hispanic/Latino	N=1 (7.1%)	-	N=1 (5.9%)	N=2 (4.7%)
	Other	-	-	N=1 (5.9%)	N=1 (2.3%)
Age	25-29	N=2 (14.3%)	N=2 (16.7%)	N=3 (17.6%)	N=7 (16.3%)
	30-34	N=6 (42.9%)	N=1 (8.3%)	N=6 (35.3%)	N=13 (30.2%)
	35-39	N=4 (28.6%)	N=4 (33.3%)	N=2 (11.8%)	N=10 (23.3%)
	40-44	N=1 (7.1%)	N=3 (25%)	N=2 (11.8%)	N=6 (14%)
	45-49	N=1 (7.1%)	N=2 (16.7%)	N=1 (5.9%)	N=4 (9.3%)
	50-54	-	-	N=2 (11.8%)	N=2 (4.7%)
	55-59	-	-	N=1 (5.9%)	N=1 (2.3%)
Employment Status	Full-time	N=14 (100%)	N=12 (100%)	N=17 (100%)	N=43 (100%)
Employment Arena	P-12	N=3 (21.4%)	N=7 (58.3%)	N=7 (41.2%)	N=17 (39.5%)
	Higher Education	N=11 (78.6%)	N=4 (33.3%)	N=10 (58.8%)	N=25 (58.1%)
	Other	-	N=1 (8.3%)	-	N=1 (2.3%)

DATA COLLECTION

The researchers designed the Ed.D. Program Completion Factors Survey instrument and it was delivered electronically via Qualtrics™, an online survey platform. Prior to contacting potential participants and administering the survey, the researchers received permission from their Institutional Review Board (IRB). Contact with potential participants occurred through email as the survey was distributed electronically and on a one-time basis. The survey was utilized to collect data at specified checkpoints of Tier II as pre-assessment (year one, semester one), mid-assessment (year one, semester three), and post-assessment (year two, semester five) data sets for the Cohorts A, B, and C as part of program assessment. Written informed consent was confirmed for each student, opting out was an option, and no risks were involved beyond that of everyday life. Creswell and Creswell (2018) suggested a four-part survey request to include an advance notice alerting potential participants of the survey, a notice requesting participation in the survey, a follow-up notice, and personalized contact to all non-respondents. Considering these recommendations, and to obtain a high rate of response, the researchers followed this four-part invitation to the survey over a four-week period. First, the researchers sent a recruitment email to all potential participants explaining the details of the study and

confirming correct contact information. Second, and one week following the recruitment, the researchers sent an invitation email to all participants requesting their participation in the survey. This email indicated the purpose and significance of the research, anonymity assurance in the reported findings, informed consent, and a link to the survey using Qualtrics™. It clearly addressed that the survey results would be anonymous when presenting the findings (student names would be redacted) and emphasized was the voluntary nature of the study in that no participant would be identified when reporting the findings. In addition, the email outlined the rights of the participant, including the right to opt-out of the survey after having started their responses and the right to skip over questions during the survey. As a third contact and one week following the invitation email, the researchers sent a reminder and follow-up email to potential participants of the survey. The researchers made a fourth contact one week later as an additional and final reminder. The survey closed one week following the final reminder email. The typical completion time for the survey was noted to be about 15 minutes. Responses were downloaded and analyzed in an excel spreadsheet by a graduate assistant and presented to the research team as de-identified data. A three-digit identifier was assigned to each student to maintain confidentiality so de-identified data could be provided to the researchers.

Data Analysis

To address research question one, descriptive statistics were calculated to determine the mean and frequency scores the participants reported various levels of self-efficacy in their ability to complete scholarly practitioner research and overcome hindrances during this process. Additionally, descriptive statistics were used to measure the average score, reported through means, of self-efficacy for 10 items seeking information from students about their self-efficacy, challenges, and support with program progression from the lens of scholarly practitioner research. Frequency and average statistics were analyzed with all participants combined, by cohort level, and by pre-, mid-, and post-evaluation. To address research questions two and three, a qualitative analysis was used to make sense of the text and descriptive data pulled from the open-ended questions. Descriptive data can take the form of words and pictures, which allows the participants to illustrate and corroborate their experiences (Bogdan & Biklen, 1992). Using a deductive coding scheme, the researchers identified passages of text throughout the open-ended data that had common ideas and organized them into emerging themes (Merriam & Tisdell, 2016). These open-ended responses uncovered additional information regarding internal and external factors that influence the growth, or lack of significant growth, in perceived research self-efficacy. All analyses were based on the students' reporting across their time in a doctoral program to determine if these factors whether hindering or bolstering their perceived capabilities, specifically during Tier II of their coursework.

FINDINGS

The findings provide tentative insights and information regarding the mechanisms involved in better understanding educational leadership doctoral students' self-efficacy in scholarly practitioner research as related to the theoretical framework of general self-efficacy. Descriptive measures yielded an average overall self-efficacy score for the 10 self-efficacy items of 3.48 (out of 4.00) for the total participant sample, and their overall self-efficacy scores ranged from 3.12 to 3.73. Cohort A reported an average overall self-efficacy score of 3.55 (out of 4.00), with individual overall self-efficacy scores ranging from 3.10 to 3.83. Similarly, Cohort B reported an average overall self-efficacy score of 3.40 (out of 4.00), with individual overall self-efficacy scores ranging from 3.24 to 3.61. Cohort C reported an average overall self-efficacy score of 3.48 (out of 4.00), and their individual overall self-efficacy scores ranged from 3.06 to 3.74. The higher the self-efficacy scores denoted greater levels of scholarly practitioner researcher self-efficacy. Overall, the majority of educational leadership students in these cohorts self-reported high levels of self-efficacy as displayed in Table 2.

Table 2. Descriptive statistics of self-efficacy by cohort

	Mean	Range of Means (M) for 10 Self-Efficacy Items	Std. Dev.
All Participants	3.48	3.12-3.73	.164
Cohort A	3.55	3.10-3.83	.189
Cohort B	3.40	3.24-3.61	.109
Cohort C	3.48	3.06-3.74	.236

Note: N=43

Most participants reported moderate to high levels of self-efficacy regarding their confidence and abilities to develop scholarly practitioner research and resolve challenges arising during this process. Mean values are reported on a scale of 1-4. The overall sample of participants expressed the highest level of self-efficacy (M=3.73) when evaluating their ability to solve problems if they invest the necessary effort (Item 6) with 69.8% (N=90) of participants reporting this as 'Exactly True' and 25.6% (N=33) reporting this as 'Moderately True'. Additionally, the majority of participants expressed high self-efficacy levels (M=3.60) in their ability to remain calm when facing difficulties due to their coping abilities (Item 7), as evidenced by 65.1% (N=84) of participants reporting this as 'Exactly True' and 27.1% (N=35) reporting as 'Moderately True'. Many participants expressed high self-efficacy levels (M=3.59) in their ability to manage and solve difficult problems if they try hard enough (Item 1). Specifically, 57.4% (N=74) of participants expressed believing this to be 'Exactly True', whereas 39.5% (N=51) believed this as 'Moderately True'. Overall, participants reported having the lowest perception of self-efficacy (M=3.12) in their ability to address concerns if someone opposes them and finding means and ways to get what they want (Item 2). Specifically, 10.1% (N=13) of participants reported this as 'Hardly True', and only 21.7% (N=28) believed this as 'Exactly True'. Frequency reporting of these data are displayed in Table 3.

Table 3. Frequencies and percentage of all participants endorsing perceived self-efficacy

	1- Not at all True	2- Hardly True	3- Moderately True	4- Exactly True	Missing
Q1	-	-	39.5% (N=51)	57.4% (N=74)	3.1% (N=4)
Q2	-	10.1% (N=13)	65.1% (N=84)	21.7% (N=28)	3.1% (N=4)
Q3	.8% (N=1)	4.7% (N=6)	46.5% (N=60)	45.0% (N=58)	3.1% (N=4)
Q4	-	7% (N=9)	45.0% (N=58)	45.0% (N=58)	3.1% (N=4)
Q5	-	2.3% (N=3)	51.9% (N=67)	41.9% (N=54)	3.9% (N=5)
Q6	-	-	25.6% (N=33)	69.8% (N=90)	4.7% (N=6)
Q7	2.3% (N=3)	2.3% (N=3)	27.1% (N=35)	65.1% (N=84)	3.1% (N=4)
Q8	-	2.3% (N=3)	39.5% (N=51)	55.0% (N=71)	3.1% (N=4)
Q9	-	3.9% (N=5)	38.0% (N=49)	54.3% (N=70)	3.9% (N=5)
Q10	-	3.9% (N=5)	44.2% (N=57)	48.8% (N=63)	3.1% (N=4)

Note: N=43

Overall, the participants reported self-efficacy expressed a growing trend in the belief of capabilities from the pre-assessment time point to post-assessment as noted by the increase in mean self-efficacy scores. The largest growth from pre-assessment to post-assessment was expressed in the reportings of participants' responses to GSE Scale Item 8 (find several solutions to problems) and participants reported equal beneficial growth in Item GSE Scale Item 1 (manage to solve difficult problems if trying hard), GSE Scale Item 4 (deal efficiently with unexpected events), and GSE Scale Item 5 (handle

unforeseen events due to resourcefulness). Participants' perceived self-efficacy in ability to find several solutions when confronted with a problem (GSE Scale Item 8) displayed the largest growth of 0.31 (Pre M=3.40, Post M=3.71) from pre- to post-assessment. Participants' perceived ability to manage and solve difficult problems if they try hard enough (GSE Scale Item 1) displayed a growth of 0.21 (Pre M=3.50, Post M=3.71) from pre- to post-assessment. Participants' perceived confidence in dealing efficiently with unexpected events (GSE Scale Item 4) displayed a growth of 0.21 (Pre M=3.29, Post M=3.50) from pre- to post-assessment. Additionally, participants' perceived knowledge of how to handle unforeseen situations due to their resourcefulness (GSE Scale Item 5) displayed a growth of 0.21 (Pre M= 3.34, Post M= 3.55) from pre- to post-assessment. The area of noted smallest change from pre- to post-assessment was participants' perceived ability to solve problems if they invest the necessary effort (GSE Scale Item 6) with a growth of .12 (Pre M=3.74, Post M=3.86). Descriptive means and comparisons within pre, mid, and post means are displayed in Table 4.

Table 4. Means (M) and gains in perceived self-efficacy of all participants by overall sample

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Overall	3.59	3.12	3.40	3.39	3.41	3.73	3.60	3.54	3.52	3.46
Pre	3.50	3.05	3.33	3.29	3.34	3.74	3.52	3.40	3.46	3.40
Mid	3.56	3.10	3.34	3.39	3.34	3.59	3.56	3.51	3.46	3.39
Post	3.71	3.21	3.52	3.50	3.55	3.86	3.71	3.71	3.64	3.60
Gains from Pre to Post	.21	.16	.19	.21	.21	.12	.19	.31	.18	.2
Gains from Pre to Mid	.06	.05	.01	.1	0	-.15	.04	.11	0	-.01
Gains from Mid to Post	.15	.11	.18	.11	.11	.27	.15	.2	.18	.21

Note: N=43

When evaluating by cohort levels, similar trends are exhibited across the three cohorts, where predominantly most participants reported moderate to high levels of self-efficacy in their confidence and abilities to conduct scholarly practitioner research. Participants in Cohort A (M=3.83) and Cohort B (M=3.61) expressed the highest level of self-efficacy when evaluating their ability to solve problems if they invest the necessary effort (GSE Scale Item 6). Comparatively, participants in Cohort C also reported high levels of self-efficacy (M=3.73) when evaluating their ability to solve problems if they invest the necessary effort (GSE Scale Item 6). However, Cohort C participants reported the highest level of self-efficacy (M=3.74) in scholarly practitioner research for their ability to remain calm when facing difficulties due to their coping abilities (GSE Scale Item 7). Opposingly, participants in all three Cohorts reported having the lowest perception of self-efficacy (Cohort A reported M=3.10, Cohort B reported M=3.24, Cohort C reported M=3.06) in their ability to address concerns regarding if someone opposes them and finding means and ways to get what they want (GSE Scale Item 2). Descriptive means across Cohort A, Cohort B, and Cohort C are noted in Table 5.

Table 5. Means (M) and gains in perceived self-efficacy of participants by cohort level

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Cohort A (N=14)	Overall	3.55	3.10	3.69	3.52	3.52	3.83	3.64	3.57	3.63	3.48
	Pre	3.36	2.93	3.64	3.43	3.43	3.79	3.57	3.29	3.46	3.36
	Mid	3.50	3.21	3.71	3.50	3.50	3.77	3.64	3.71	3.71	3.50
	Post	3.79	3.14	3.71	3.64	3.64	3.93	3.71	3.71	3.71	3.57
	Gains from Pre to Post	.43	.21	.07	.21	.21	.14	.14	.42	.25	.21
Cohort B (N=12)	Overall	3.52	3.24	3.30	3.39	3.38	3.61	3.48	3.39	3.36	3.33
	Pre	3.50	3.17	3.17	3.33	3.45	3.67	3.42	3.42	3.42	3.33
	Mid	3.40	3.10	3.10	3.40	3.10	3.30	3.30	3.10	3.10	3.10
	Post	3.64	3.45	3.64	3.45	3.55	3.82	3.73	3.64	3.55	3.55
	Gains from Pre to Post	.14	.28	.47	.12	.10	.15	.31	.22	.13	.22
Cohort C (N=17)	Overall	3.68	3.06	3.22	3.28	3.34	3.73	3.74	3.62	3.54	3.54
	Pre	3.63	3.06	3.19	3.13	3.19	3.75	3.56	3.50	3.50	3.50
	Mid	3.71	3.00	3.18	3.29	3.35	3.63	3.65	3.59	3.47	3.47
	Post	3.71	3.12	3.29	3.41	3.47	3.82	3.71	3.76	3.65	3.65
	Gains from Pre to Post	.08	.06	.10	.28	.28	.07	.15	.26	.15	.15

For Cohort A participants, the greatest growth from pre-to post-assessment was in perceived ability to manage and solve difficult problems if they try hard enough (GSE Scale Item 1), evidenced by a growth of 0.43 from pre- (M=3.36) to post-assessment (M=3.79). Specifically, 35.7% (N=5) of participants in Cohort A initially reported 'Exactly True' for GSE Scale Item 1 at the pre-assessment, whereas 78.6% (N=11) reported this at the post-assessment. Cohort A participants perceived self-efficacy in ability to stick to aims and accomplish goals (GSE Scale Item 3) displayed the least amount of growth of .07 from pre- to post-assessment (Pre M=3.64, Post M=3.71). For Cohort B participants, the greatest growth from pre-to post-assessment was in perceived ability to stick to their aims and accomplish their goals (GSE Scale Item 3), evidenced by a growth of .47 from pre- (M=3.17) to post-assessment (M=3.64). Specifically, 16.7% (N=2) of participants in Cohort B initially reported 'Exactly True' for Item 3 at the pre-assessment, whereas 58.3% (N=7) reported this at the post-assessment. Cohort B participants perceived self-efficacy in having the knowledge of how to handle unforeseen situations due to their resourcefulness (GSE Scale Item 5) displayed the least amount of growth of .10 from pre- to post-assessment (Pre M=3.45, Post M=3.55). Cohort C participants reported the greatest growth from pre- to post-assessment for confidence in dealing efficiently with unexpected events (GSE Scale Item 4) and knowledge of how to handle unforeseen situations due to their resourcefulness (GSE Scale Item 5). Specifically, for Item 4, Cohort C participants expressed a growth of .28 from pre- (M=3.13) with 29.4% (N=5) of participants reporting this as 'Exactly True' to post-assessment (M=3.41) with 47.1% (N=8) of participants reporting this as 'Exactly True'. For Item 5, Cohort C participants expressed a growth of .28 from pre- (M=3.19) with 29.4% (N=5) of participants reporting this as 'Exactly True' to post-assessment (M=3.47) with 47.1% (N=8) of participants reporting this as 'Exactly True'. Cohort C participants perceived self-efficacy in

ability to address concerns regarding if someone opposes them and finding means and ways to get what they want (GSE Scale Item 2) displayed the least amount of growth of .06 from pre- to post-assessment (Pre M=3.06, Post M=3.12). Frequency reportings and percentages of perceived self-efficacy for Cohort A are displayed in Table 6. Frequency reportings and percentages of perceived self-efficacy for Cohort B are displayed in Table 7. Frequency reportings and percentages of perceived self-efficacy for Cohort C are displayed in Table 8.

Table 6. Frequencies and percentage of Cohort A participants endorsing perceived self-efficacy

Cohort A		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Pre	1-Not at all True	-	-	-	-	-	-	-	-	-	-
	2-Hardly True	-	N=2 (14.3%)	-	N=1 (7.1%)	-	-	N=1 (7.1%)	-	-	N=1 (7.1%)
	3-Moderately True	N=9 (64.3%)	N=11 (78.6%)	N=5 (35.7%)	N=6 (42.9%)	N=8 (57.1%)	N=3 (21.4%)	N=4 (28.6%)	N=10 (71.4%)	N=7 (50%)	N=7 (50%)
	4-Exactly True	N=5 (35.7%)	N=1 (7.1%)	N=9 (64.3%)	N=7 (50%)	N=6 (42.9%)	N=11 (78.6%)	N=9 (64.3%)	N=4 (28.6%)	N=6 (42.9%)	N=6 (42.9%)
Mid	1-Not at all True	-	-	-	-	-	-	-	-	-	-
	2-Hardly True	-	N=1 (7.1%)	-	N=1 (7.1%)	-	-	-	-	N=1 (7.1%)	-
	3-Moderately True	N=7 (50%)	N=9 (64.3%)	N=4 (28.6%)	N=5 (35.7%)	N=7 (50%)	N=3 21.4%)	N=5 (35.7%)	N=4 (28.6%)	N=2 (14.3%)	N=7 (50%)
	4-Exactly True	N=7 (50%)	N=4 (28.6%)	N=10 (71.4%)	N=8 (57.1%)	N=7 (50%)	N=10 (71.4%)	N=9 (64.3%)	N=10 (71.4%)	N=11 (78.6%)	N=7 (50%)
Post	1-Not at all True	-	-	-	-	-	-	-	-	-	-
	2-Hardly True	-	N=2 (14.3%)	-	-	-	-	-	-	-	-
	3-Moderately True	N=3 21.4%)	N=8 (57.1%)	N=4 (28.6%)	N=5 (35.7%)	N=5 (35.7%)	N=1 (7.1%)	N=4 (28.6%)	N=4 (28.6%)	N=4 (28.6%)	N=6 (42.9%)
	4-Exactly True	N=11 (78.6%)	N=4 (28.6%)	N=10 (71.4%)	N=9 (64.3%)	N=9 (64.3%)	N=13 (92.9%)	N=10 (71.4%)	N=10 (71.4%)	N=10 (71.4%)	N=8 (57.1%)

Note: N=14

Table 7. Frequencies and percentage of Cohort B participants endorsing perceived self-efficacy

Cohort B		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Pre	1-Not at all True	-	-	-	-	-	-	N=1 (8.3%)	-	-	-
	2-Hardly True	-	-	-	N=1 (8.3%)	-	-	N=1 (8.3%)	N=1 (8.3%)	N=1 (8.3%)	N=2 (16.7%)
	3-Moderately True	N=6 (50%)	N=10 (83.3%)	N=10 (83.3%)	N=6 (50%)	N=6 (50%)	N=4 (33.3%)	N=2 (16.7%)	N=5 (41.7%)	N=5 (41.7%)	N=4 (33.3%)
	4-Exactly True	N=6 (50%)	N=2 (16.7%)	N=2 (16.7%)	N=5 (41.7%)	N=5 (41.7%)	N=8 (66.7%)	N=8 (66.7%)	N=6 (50%)	N=6 (50%)	N=6 (50%)

Cohort B		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Mid	1-Not at all True	-	-	-	-	-	-	-	-	-	-
	2-Hardly True	-	-	N=2 (16.7%)	-	-	-	N=1 (8.3%)	-	-	-
	3-Moderately True	N=6 (50%)	N=9 (75%)	N=5 (41.7%)	N=6 (50%)	N=9 (75%)	N=7 (58.3%)	N=5 (41.7%)	N=9 (75%)	N=9 (75%)	N=9 (75%)
	4-Exactly True	N=4 (33.3 %)	N=1 (8.3%)	N=3 (25%)	N=4 (33.3%)	N=1 (8.3%)	N=3 (25%)	N=4 (33.3%)	N=1 (8.3%)	N=1 (8.3%)	N=1 (8.3%)
Post	1-Not at all True	-	-	-	-	-	-	-	-	-	-
	2-Hardly True	-	-	-	-	-	-	-	-	-	-
	3-Moderately True	N=4 (33.3 %)	N=6 (50%)	N=4 (33.3%)	N=6 (50%)	N=5 (41.7%)	N=2 (16.7%)	N=3 (25%)	N=4 (33.3%)	N=5 (41.7%)	N=5 (41.7%)
	4-Exactly True	N=7 (58.3 %)	N=5 (41.7%)	N=7 (58.3%)	N=5 (41.7%)	N=6 (50%)	N=9 (75%)	N=8 (66.7%)	N=7 (58.3%)	N=6 (50%)	N=6 (50%)

Note: N=12

Table 8. Frequencies and percentage of Cohort C participants endorsing perceived self-efficacy

Cohort C		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Pre	1-Not at all True	-	-	N=1 (5.9%)	-	-	-	N=1 (5.9%)	-	-	-
	2-Hardly True	-	N=3 (17.6%)	N=2 (11.8%)	N=3 (17.6%)	N=2 (11.8%)	-	-	N=1 (5.9%)	N=2 (11.8%)	N=1 (5.9%)
	3-Moderately True	N=6 (35.3%)	N=9 (52.9%)	N=6 (35.3%)	N=8 (47.1%)	N=9 (52.9%)	N=4 (23.5%)	N=4 (23.5%)	N=6 (35.3%)	N=4 (23.5%)	N=6 (35.3%)
	4-Exactly True	N=6 (58.8%)	N=4 (23.5%)	N=7 (41.2%)	N=5 (29.4%)	N=5 (29.4%)	N=12 (70.6%)	N=11 (64.7%)	N=9 (52.9%)	N=10 (58.8%)	N=9 (52.9%)
Mid	1-Not at all True	-	-	-	-	-	-	N=1 (5.9%)	-	-	-
	2-Hardly True	-	N=4 (23.5%)	N=1 (5.9%)	N=2 (11.8%)	N=1 (5.9%)	-	-	N=1 (5.9%)	N=1 (5.9%)	N=1 (5.9%)
	3-Moderately True	N=5 (29.4%)	N=9 (52.9%)	N=12 (70.6%)	N=8 (47.1%)	N=9 (52.9%)	N=6 (35.3%)	N=3 (17.6%)	N=5 (29.4%)	N=7 (41.2%)	N=7 (41.2%)
	4-Exactly True	N=12 (70.6%)	N=4 (23.5%)	N=4 (23.5%)	N=7 (41.2%)	N=7 (41.2%)	N=10 (58.8%)	N=13 (76.5%)	N=11 (64.7%)	N=9 (52.9%)	N=9 (52.9%)
Post	1-Not at all True	-	-	-	-	-	-	-	-	-	-
	2-Hardly True	-	N=1 (5.9%)	N=1 (5.9%)	N=1 (5.9%)	-	-	-	-	-	-
	3-Moderately True	N=5 (29.4%)	N=13 (76.5%)	N=10 (58.8%)	N=8 (47.1%)	N=9 (52.9%)	N=3 (17.6%)	N=5 (29.4%)	N=4 (23.5%)	N=6 (35.3%)	N=6 (35.3%)
	4-Exactly True	N=12 (70.6%)	N=3 (17.6%)	N=6 (35.3%)	N=8 (47.1%)	N=8 (47.1%)	N=14 (82.4%)	N=12 (70.6%)	N=13 (76.5%)	N=11 (64.7%)	N=11 (64.7%)

Note: N=17

THEMES

The open-ended questions in the survey measure yielded narrative responses that were coded into four overarching themes to include: Social Support, Academic Challenges, Discipline, Effort, and Motivation, and Personal Challenges based on patterns and trends in the findings.

Social support

The overarching theme of Social Support resulted from the interpretation of the data generated to explore what factors contribute to or hinder the development of scholarly practitioner researcher skills as doctoral students transition through their educational leadership preparation program. This theme was significant for a large number of students believing the importance of needed support by faculty, dissertation chair and committee members, student peers, external friends, and family. For example, many students acknowledged the benefit of multiple support personnel in their graduate-level experience in order for them to be successful in their coursework. One student reported:

> I am confident I have or will gain the knowledge, skills, and abilities, to be successful in my coursework. I know I have the faculty and resources available to assist me when I need help. I also have my cohort to rely upon when I face a challenge.

Another commented on the importance of encouragement both within and outside of academia: "I have been provided much support at home, as well as through the program. I should have little trouble being successful with this support system." Further, a few students noted that not only support by these members in accessible resources but an opportunity for a candid relationship, open to feedback, criticism, and 'intentional guidance from experts', is favorable for advantageous scholarly research. For example, one student reported they believe they can find success in their dissertation and scholarly research by "being sure to have a strong team formed that will provide open and honest feedback, guidance, and suggestion during the writing process." Another student further supported the importance of intentional relationships by noting their dissertation success will be attributable to "developing a solid relationship with [their] chair and other committee members...and taking ownership about the success of the project."

Although many students report the benefits of support systems, some students indicated these same support networks may expectedly or unexpectedly provide hindrances to their scholarly research or dissertation work ethic and motivation. Students note difficulties with time management between academic, occupational, and family obligations such as caring for ill family members, and experiencing guilt for not spending as much time with family members. One student who disclosed having a sick parent shared:

> This has become harder to balance as things progress. Additionally, changes at work have resulted in longer hours and additional responsibilities which have made it challenging. I also have guilt about not being around for my husband and son.

Even with these impediments, one student reported they expect "typical impediments of family and career, but these impediments are not reasons to give up on this degree."

Academic challenges

The overarching theme of Academic Challenges resulted from the interpretation of the data generated to explore what factors contribute to or hinder the development of scholarly practitioner researcher skills as doctoral students transition through their educational leadership preparation program. There were a wide range of personal challenges related to academia in terms of the doctoral program requirements mentioned in survey responses. These academic challenges include American Psychological Association (APA) format, writing skills, and ability to find relevant research. One student remarked, "I am most concerned with just finding enough research. Research in my field is quite limited, so I worry about having enough." In addition, students noted concerns with their

committees, including scheduling difficulties and having sufficient time for regular meetings. Additionally, uncertainty of the process was mentioned. For example, one student stated "There is still so much that I am unfamiliar with, regarding this process. I haven't experienced anything like this so it is all new to me and that makes me nervous." Another student noted:

> It may be challenging to maintain focus on my primary research topic to ensure it is concrete and not bring in other elements not needed. The next steps in the process of developing methods, IRB, committee members and others can be potential challenges.

In terms of timeline, another student said:

> I foresee possible challenges adhering to the timeline due to items that may not be in my control like IRB approval, changes in committee members, and etc. However, I am trying really hard to create a realistic timeline and get items for IRB completed in advance and be ready for my pre-prospectus defense to continue moving the process in the appropriate direction.

Discipline, effort, and motivation

The overarching theme of Discipline, Effort, and Motivation resulted from the interpretation of the data generated to explore what factors contribute to or hinder the development of scholarly practitioner researcher skills as doctoral students transition through their educational leadership preparation program. Many students reported the need for structured discipline to encourage time management and consistency in their research process. Specifically, one student reported, "At this point, it is about discipline, managing my time well, and saying 'no.' " Comparatively, another stated, "I believe the key to my success in this area will be setting a schedule for myself and sticking to it. I generally am very disciplined and can even become unnecessarily rigid with my time." Additionally, students indicated the need to maintain internal drive, "putting forth effort, following instructions, motivations and not being afraid to seek assistance from faculty" in order to successfully complete the numerous steps of scholarly research. Another student commented on a need for the combination of discipline and motivation to achieve their goals and not feel defeated in this process, "...Time. I need to maintain my focus, enthusiasm, and drive. At our convocation, someone mentioned 'dragging the anchor'. I really enjoyed that, as sometimes (usually towards the end of the term) I feel like I have an anchor."

Personal challenges

The overarching theme of Personal Challenges resulted from the interpretation of the data generated to explore what factors contribute to or hinder the development of scholarly practitioner researcher skills as doctoral students transition through their educational leadership preparation program. Overwhelmingly, many students reported challenges outside of school to include balancing school, research, full-time jobs, and family responsibilities. Time management becomes a major challenge to these students when balancing many moving parts in their lives. One student reported this difficulty with time management to be his primary concern:

> Time. As with most (if not all) of us, I have a full-time job, I am a dad, I am a husband, and I have other social and familial obligations. I need to manage my time much better than I am accustomed to, but I know I can do it. I just have to constantly keep the goal in my sights.

Multiple students responded that family is first and foremost; however, this decision may hinder their research progress. Specifically, one student wrote, "My family is my primary impediment. They truly are a priority over this program, and my career. Sometime I do not put forward my best school work simply because I've made the intentional decision to serve my family." Furthermore, holding a schedule of consistently overwhelming demands can lead to additional concerns, in turn, creating a vicious cycle for many students. Regarding this, one student stated:

> Mostly my challenges are outside of the classroom. My work schedule, while I work the traditional "9-5", I have a lot more responsibilities on my plate currently that calls for additional hours past the standard university operating hours. This becomes a challenge because the added stress and time needed to do my job outside of the office sometimes poses an issue with my school responsibilities. Additionally, I believe that my mental health is a challenge at times in completing coursework and scholarly research because sometimes I just struggle (I am getting help)."

Few students noted unexpected circumstances that cause challenges such as:

> Of course, a balance of work, school, family, and other unexpected factors can be a challenge when completing coursework. This past year my challenges have been linked to recovering from foot surgery and adjusting to the unexpected death of my uncle. However, I was able to overcome these impediments and continue to strive towards my goals.

Similarly, another student mentioned that many challenges and external circumstances may cause great impediments to his research progress; however, they noted still have the drive to continue progressing in their studies, "Typical impediments of family and career, but these impediments are not reasons to give up on this degree."

PROPOSED MODEL OF SELF-EFFICACY & SCHOLARLY PRACTITIONER RESEARCH

Acknowledging the development of scholarly practitioner research skills are impacted by students' self-efficacy, the qualitative findings from our open-ended questions led us to believe the importance of both internal program and external factors on student success. We found self-efficacy is influenced by the convergence of four themes/factors: 1) Social support, 2) Academic Challenges, 3) Discipline, Effort, and Motivation, and 4) Personal challenges. To that end, we believe the relationship between self-efficacy (and these factors) is inextricably linked to the development of doctoral students' research skills as scholarly practitioners (Figure 1). As students' self-efficacy increases, we ought to see an increase in the development of their research skills.

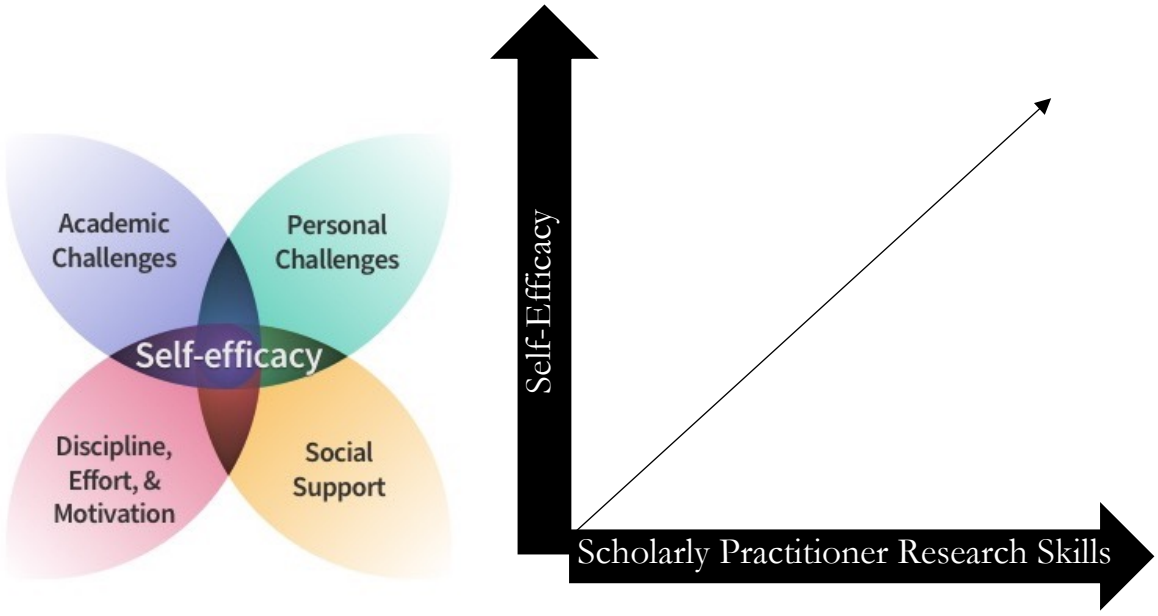

Figure 1. Proposed self-efficacy model on scholarly practitioner research

DISCUSSION

We see "growth" from pre- to post-assessment of self-efficacy, but the gains are minimal. Conversely, we predicted doctoral students' self-efficacy would fluctuate throughout the progression of their program as they faced varied challenges; however, this did not occur. Although there was minor growth from pre-, mid-, to post-assessment for students, overall students reported growth in their perceived self-efficacy regarding their confidence and abilities to develop as scholarly practitioner researchers and resolve problems arising across this process. This trend was apparent when evaluating all participants collectively, as well as analyzing between the three cohorts surveyed. Overall, students reported the highest levels of self-efficacy in their ability to solve problems if they invest the necessary effort, ability to remain calm when facing difficulties due to their coping abilities, and ability to manage and solve difficult problems if they try hard enough. However, across cohorts, there was a variety of responses for items related to students believing they progressed in their confidence and abilities in scholarly practitioner research over the years of their doctoral program. However, these findings were in opposition to previous findings in the literature suggesting doctoral students experience a level of uncertainty about their capabilities leading to procrastination or non-attempts of difficult tasks (Wao & Onwuegbuzie, 2011). This procrastination and avoidance of approaching goals is heavily related to education students commonly experiencing "imposter phenomenon" or believing they are lacking in capability and competence, which can be impairing to scholarly productivity (Wester et al., 2020). This could be that our students started with high self-efficacy to begin with or perhaps they are overconfident in their capabilities upon the start of their doctoral journey, comparative to results found by Matheka and colleagues (2020). We suspect educational leadership programs by nature attract students with high self-efficacy; however, as students fail to progress in an adequate manner, we believe self-efficacy scores were inflated and, as a program, we need to identify what students feel capable of when they are not performing at levels acceptable for doctoral work. Although reporting of high-efficacy in doctoral students is a program goal, constantly high perceptions can be indicative of too low of expectations. Possibly, our doctoral program was not as rigorous as intended and did not allow for considerable growth in students' abilities, as seen in other schools of education (Maranto et al., 2010; Porfilio & Strom, 2019; Zirkel, 2012). In turn, faculty and administrators may consider increasing the rigor moving forward and continue to redesign our program for improvement (Perrone & Tucker, 2019). As faculty supporters, we need to examine our admissions criteria and see if we are admitting qualified students who seek to earn a terminal degree. Given the enrollment challenges of universities to admit more students to attain more revenue, perhaps we need to consider if we are serving as a "doctoral mill" for students underprepared for the tasks of doctoral work, specifically in the areas of scholarly practitioner research and in the future include academic writing self-efficacy, as writing was noted numerous times as a hindrance to progression. Certainly, as faculty who chair these doctoral committees, these challenges are at the forefront of what we do to ensure our students are successful as weeding out unqualified students is a point of much contention at institutions of higher education faced with drastic budget cuts, placing the focus on enrollment management.

Four overarching narrative themes were identified as Social Support, Academic Challenges, Discipline, Effort, and Motivation, and Personal Challenges. For example, one of the challenges noted was having the ability to develop efficient time management skills to balance academic, occupational, familial, and other personal responsibilities. Along with feeling as though time is limited, students expressed concerns about having basic tools to fuel their research, including motivation, discipline, and comfortability in implementing boundaries in their school and work lives. Additionally, students disclosed having concerns of difficulties outside of their control, such as awaiting IRB approval, scheduling within faculty's availability, and changes in committee members. Comparative to Lachance et al.'s (2020) understanding of how relationships can influence students' self-efficacy, many participants expressed the availability of and comfortability to seek out mentoring roles through faculty, dissertation chair, committee members, and student peers while being open to feedback and guidance

was of the utmost importance when learning to progress through potential roadblocks of scholarly research (Hill & Conceição, 2020; Kainz et al., 2018; Maul et al., 2018, Storms et al., 2011, Young et al., 2019). Further, although some students expressed having the pressure to maintain their personal relationships to a high degree with family members and friends outside of the program, as many students believe these individuals were also great sources of comfort and support (Cornwall et al., 2019; Sverdlik et al., 2018). Based on this narrative feedback, we as a program need to identify evidence-based strategies to aid students in timely progression through to degree completion, specifically in the areas of scholarly practitioner research and academic writing. We learned there are a number of challenges internal to the doctoral program that we may be able to control for, but it would be remiss not to note there are also several external challenges impacting time to degree completion that warrant further research via empirical research from the students who are navigating these programs.

LIMITATIONS

A limitation in our study was the small sample size, however, it should be noted that the data were attained from all students from which we had pre-assessment, mid-assessment, and post-post-assessment data from the survey utilized in this study. In addition, our maximum number of students admitted into each annual cohort is 20. However, the researchers do intend to continue to gather longitudinal data and look further at self-efficacy as scholarly practitioner researchers over the course of our program.

CONCLUSION

Educational leadership and related doctoral programs should consider using a scholarly practitioner research approach. This focus may lead to faster rates of degree completion and better prepare students to solve problems of practice in their practitioner settings. While the results are promising in support of evidence-based practices to prepare scholarly practitioner researchers, maintaining or strengthening high levels of self-efficacy may also prove impactful, thus warranting further research. Ensuring high levels of self-efficacy may enable students to complete their dissertation sooner due to the perception they are capable of program completion and in turn, better prepare students to serve as scholarly practitioner researchers based on high levels of self-efficacy. Future research should continue longitudinally to examine self-efficacy from the lens of a scholarly practitioner researcher to better understand how this shapes doctoral students' efforts and capabilities in their doctoral work from admission to program completion. We as faculty supporters need to better understand how self-efficacy is impacting progression. More specifically, we must determine if the need for higher self-efficacy may be the factor, or rather it may be all educational leadership students come to the table with high self-efficacy, and develop an understanding of how to provide rigor in our programs that may shape the evolution of self-efficacy across the program.

REFERENCES

Ames, C., Berman, R., & Casteel, A. (2018). A preliminary examination of doctoral student retention factors in private online workspaces. *International Journal of Doctoral Studies, 13*(1), 79-107. https://doi.org/10.28945/3958

Ampaw, F., & Jaeger, A. (2012). Completing the three stages of doctoral education: An event history analysis. *Research in Higher Education, 53*(6), 640-660. https://doi.org/10.1007/s11162-011-9250-3

Anekstein, A. M., & Vereen, L. G. (2018). Research mentorship: Implications for the preparation of doctoral students. *The Journal of Counselor Preparation and Supervision, 11*(2), 1-24.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(1), 191-215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*(1), 1-26. https://doi.org/10.1146/annurev.psych.52.1.1

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, *38*(1), 9-44. https://doi.org/10.1177/0149206311410606

Bogdan, R., & Biklen, S. (1992). *Qualitative research for education: An introduction to theories and methods* (2nd ed.) Allyn & Bacon.

Boyce, B. A., Lund, J. L., Napper-Owen, G., & Almarode, D. (2019). Doctoral students' perspectives on their training as researchers in higher education. *Quest, 71*(3), 277-288. https://doi.org/10.1080/00336297.2019.1618065

Cannonier, N. & Katsioloudes, V. (2020). Leadership self-efficacy: Development of a measure for college students. *International Journal of Business & Public Administration, 17*(1), 84-102.

Carnegie Project on the Education Doctorate (CPED). (2021). *CPED Initiative.* http://www.cpedinitiative.org

Chakraverty, D. (2018). Imposter phenomenon in STEM: Occurrence, attribution, and identity. *Studies in Graduate and Postdoctoral Education, 10*(1), 2-20. https://doi.org/10.1108/SGPE-D-18-00014

Chesnut, S. R., Siwatu, K. O., Young, H. A., & Tong, Y. (2015). Examining the relationship between the research training environment, course experiences, and graduate students' research self-efficacy beliefs. *International Journal of Doctoral Studies, 10*(1), 399-418. https://doi.org/10.28945/2310

Cornwall, J., Mayland, E.C., van der Meer, J., Spronken-Smith, R. A., Tustin, C., & Blyth, P. (2019). Stressors in early-stage doctoral students. *Studies in Continuing Education, 41*(3), 363-380. https://doi.org/10.1080/0158037X.2018.1534821

Creswell, J. W. & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.

Dorimana, A., Ndihokubwayo, K., & Uworwabayeho, A. (2021). Doctoral student research skills: Case of the University of Rwanda – College of Education. *Rwandan Journal of Education, 5*(1), 4-20.

Ezzani, M., & Paufler, N. (2018). Doctoral program in educational leadership redesign: Utilizing a multicriteria framework. *Impacting Education: Journal on Transforming Professional Practice, 3*(2), 11-16. https://doi.org/10.5195/ie.2018.70

Fertman, C. (2018). Facilitating and supporting EdD students' scholar practitioner writing as an epistemological tool. *Impacting Education: Journal on Transforming Professional Practice, 3*(2), 51-58. https://doi.org/10.5195/ie.2018.87

Gardner, S. K. (2010). Contrasting the socialization experiences of doctoral students in high- and low-completing departments: A qualitative analysis of disciplinary contexts at one institution. *The Journal of Higher Education, 81*(1), 61-81. https://doi.org/10.1080/00221546.2010.11778970

Garg, A., Madhulika, & Passey, D. (2018). *Research skills future in education: Building workforce competence: Research Report 1: Do we cultivate research skills? Veracity versus falsity*. Lancaster University.

Gay, L. R., & Airasian, P. (2003). *Education research: Competences for analysis and applications* (7th ed.). Merrill Prentice Hall.

Gelso, C. J. (2006). On the making of a scientist-practitioner: A theory of research training in professional psychology. *Training and Education in Professional Psychology, S*(1), 3-16. https://doi.org/10.1037/1931-3918.S.1.3

Gittings, G., Bergman, M., Rose, K., & Shuck, B. (2018). The impact of student attributes and program characteristics on doctoral degree completion. *New Horizons in Adult Education & Human Resource Development, 30*(3), 3-22. https://doi.org/10.1002/nha3.20220

Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: A structural equation model. *BMC Medical Education*, *20*(76), 1-11. https://doi.org/10.1186/s12909-020-01995-9

Hill, L. H., & Conceição, S. C. O. (2020). Program and instructional strategies supportive of doctoral students' degree completion. *Adult Learning, 31*(1), 36-44. https://doi.org/10.1177/1045159519887529

Kainz, K., Jensen, T., & Zimmerman, S. (2018). Cultivating a research tool kit for social work doctoral education. *Journal of Social Work Education, 54*(4), 792-807. https://doi.org/10.1080/10437797.2018.1434446

Kennedy, B., Altman, M., & Pizano, A. (2018). Engaging in the battle of the snails by challenging the traditional dissertation model. *Impacting Education: Journal on Transforming Professional Practice, 3*(1), 4-12. https://doi.org/10.5195/ie.2018.27

Kerrigan, M. R., & Hayes, K. M. (2016). EdD students' self-efficacy and interest in conducting research. *International Journal of Doctoral Studies, 11*(1), 147-162. https://doi.org/10.28945/3413

Klocko, B. A., Marshall, S. M., & Davidson, J. F. (2015). Developing practitioner scholar doctoral candidates as critical writers. *Journal of Higher Education Theory & Practice, 15*(4), 21-31.

Kriner, B., Coffman, K., Adkisson, A., Putman, P., & Monaghan, C. (2015). From students to scholars: The transformative power of communities of practice. *Adult Learning, 26*(2), 73-80. https://doi.org/10.1177/1045159515573021

Lachance, K., Heustis R. J., Loparo, J. J., & Venkatesh, M. J. (2020). Self-efficacy and performance of research skills among first-semester bioscience doctoral students. *CBE-Life Sciences Education, 19*(3), 1-14. https://doi.org/10.1187/cbe.19-07-0142

LaFrance, J., LaFrance, D., & Melton, T. D. (2020). Chair agency, chair preparation, and academic supports in educational leadership doctoral programs in the United States. *International Journal of Doctoral Studies, 15*(1), 111-133. https://doi.org/10.28945/4507

Lamar, M. R., Clemens, E., & Dunbar, A. S. (2019). Promoting doctoral student researcher development through positive research training environments using self-concept theory. *The Professional Counselor, 9*(4), 298-309. https://doi.org/10.15241/mrl.9.4.298

Lamar, M., & Helm, H. (2017). Understanding the researcher identity development of counselor education and supervision doctoral students. *Counselor Education and Supervision, 56*(1), 2-18. https://doi.org/10.1002/ceas.12056

Lambie, G., Hayes, B., Griffith, C., Limberg, D., & Mullen, P. (2014). An exploratory investigation of the research self-efficacy, interest in research, and research knowledge of Ph.D. in education students. *Innovative Higher Education*, *39*(2), 139-153. https://doi.org/10.1007/s10755-013-9264-1

Lent, R., Brown, S., & Larkin, K. (1984). Relation of self-efficacy expectations to academic achievement and persistence. *Journal of Counseling Psychology, 31*, 356-362. https://doi.org/10.1037/0022-0167.31.3.356

Liu, C., Wang, L., Qi, R., Wang, W., Jia, S., Shang, D., Shao, Y., Yu, M., Zhu, X., Yan, S., Chang, Q., & Zhao, Y. (2018). Prevalence and associated factors of depression and anxiety among doctoral students: The mediating effect of mentoring relationships on the association between research self-efficacy and depression/anxiety. *Psychology Research and Behavior Management, 12*(1), 195-208. https://doi.org/10.2147/PRBM.S195131

Maranto, R., Ritter, G., & Levine, A. (2010). The future of ed schools. *Education Week, 29*(16), 36.

Marsh, H. W., Pekrun, R., Parker, P. D., Murayama, K., Guo, J., Dicke, T., & Arens, A. K. (2019). The murky distinction between self-concept and self-efficacy: Beware of lurking jingle-jangle fallacies. *Journal of Educational Psychology, 111*(2), 331-353. https://doi.org/10.1037/edu0000281

Matheka, H, Jansen, E, & Hofman, A. (2020). Kenyan doctoral students' success: Roles of motivation and self-efficacy. *Perspectives in Education 38*(1), 115-129. https://doi.org/10.18820/2519593X/pie.v38i1.9

Maul, J., Berman, R. & Ames, C. (2018). Exploring the psychological benefits of using an emerging video technology to coach and retain doctoral learners. *International Journal of Doctoral Studies, 13*(1), 49-78. https://doi.org/10.28945/3954

Merriam, S. B. & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

McBrayer, J.S., Melton, T., Calhoun, D., Dunbar, M., & Tolman, S. (2018). The correlation between self-efficacy and time to degree completion of educational leadership doctoral students. *International Journal of Doctoral Studies, 13*(1), 413-439. https://doi.org/10.28945/4138

McBrayer, J.S., Tolman, S., & Fallon, K. (2020). Doctoral candidacy examination scores and time to degree completion. *International Journal of Doctoral Studies, 15*(1), 181-198. https://doi.org/10.28945/4529

McSherry, R., Bettany-Saltikov, J., Cummings, E., Walker, K., Ford, K., & Walsh, K. (2019). Are you measuring the impacts and outcomes of your professional doctorate programme? *Studies in Continuing Education, 41*(2), 207-225. https://doi.org/10.1080/0158037X.2018.1555801

Multon, K., Brown, S., & Lent, R. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology, 38*(1), 30-38. https://doi.org/10.1037/0022-0167.38.1.30

National Science Foundation, National Center for Science and Engineering Statistics. (2017). *Survey of Earned Doctorates (SED).* https://www.nsf.gov/statistics/2018/nsf18304/data/tab12.pdf

Niehaus, E., Garcia, C. E., & Reading, J. (2018). The road to researcher: The development of research self-efficacy in higher education scholars. *Journal for the Study of Postsecondary and Tertiary Education*, *3*, 1-20. https://doi.org/10.28945/3950

Niemczyk, E. K. (2018). Developing globally competent researchers: An international perspective. *South African Journal of Higher Education, 32*(4), 171-185. https://doi.org/10.20853/32-4-1602

Petko, J. T., Sivo, S. A., Lambie, G. W. (2020). The research self-efficacy, interest in research, and research mentoring experiences of doctoral students in counselor education. *The Journal of Counselor Preparation and Supervision, 13*(1), 1-27.

Perrone, F., & Tucker, P. D. (2019). Shifting profile of leadership preparation programs in the 21st century. *Educational Administration Quarterly, 55*(2), 253-295. https://doi.org/10.1177/0013161X18799473

Perry, J. (2013). Carnegie Project on the Education Doctorate: The education doctorate–A degree for our time. *Planning and Changing, 44*(3/4), 113-126.

Pieridou, M., & Kambouri-Danos, M. (2020). Qualitative doctoral research in educational settings: Reflecting on meaningful encounters. International *Journal of Evaluation and Research in Education, 9*(1), 21-31. https://doi.org/10.11591/ijere.v9i1.20360

Poh, R., & Kanesan Abdullah, A. G. B. (2019). Factors influencing students' research self-efficacy: A case study of university students in Malaysia. *Eurasian Journal of Educational Research, 82*(1), 137-168. https://doi.org/10.14689/ejer.2019.82.8

Porfilio, B., & Strom, K. (2019). In pursuit of socially just and socio-culturally responsive educational leadership preparation: One Ed.D. program's process of transformation. *Journal of Educational Leadership and Policy Studies, 3*(2), 1-12.

Posselt, J. (2018). Normalizing struggle: Dimensions of faculty support for doctoral students and implications for persistence and well-being. *The Journal of Higher Education, 89*(6), 988-1013. https://doi.org/10.1080/00221546.2018.1449080

Razavi, S. A., Shahrabi, A., & Siamian, H. (2017). The relationship between research anxiety and self-efficacy. *Mata Socio-medica, 4*(1), 247-250. https://doi.org/10.5455/msm.2017.29.247-250

Ross, M. (2010). Designing and using program evaluation as a tool for reform. *Journal of Research on Leadership Education, 5*(12), 481-506. https://doi.org/10.1177/194277511000501207

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self Efficacy Scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (p. 35-37). nferNelson. https://doi.org/10.1037/t00393-000

Shulman, L., Golde, C., Bueschel, A., & Garabedian, K. (2006). Reclaiming education's doctorates: A critique and a proposal. *Educational Researcher, 35*(3), 25-32. https://doi.org/10.3102/0013189X035003025

Storms, B., Prada, M., & Donahue, E. (2011). Advising doctoral candidates to degree completion. *Educational Leadership and Administration: Teaching and Program Development*, *23*, 85-92

Sunal, Z. (2020). *Counselor education doctoral students' research self-efficacy: A concept mapping approach* [Doctoral Dissertation, Counseling and Human Services, Old Dominion University]. https://digitalcommons.odu.edu/chs_etds/118

Sverdlik, A., Hall, N. C.,McAlpine, L., & Hubbard, K. (2018). The PhD experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. *International Journal of Doctoral Studies, 13*(1), 361-388. https://doi.org/10.28945/4113

Wao, H., & Onwuegbuzie, A. (2011). A mixed research investigation of factors related to time to the doctorate in education. *International Journal of Doctoral Studies, (6)*, 115-134. https://doi.org/10.28945/1505

Wester, K. L., Borders, D., Gonzalez, L. M., & Waalkes, P. (2018). Factors contributing to scholarly productivity of assistant professors in counseling. *Counselor Education & Supervision, 58*(3), 225-237. https://doi.org/10.1002/ceas.12152

Wester, K. L., Vaishnav, S., Morris, C. W., Austin, J. L., Haugen, J. S., Delgado, H., & Umstead, L. K. (2020). Interaction of imposter phenomenon and research self-efficacy on scholarly productivity. *Counselor Education & Supervision, 59*(4), 316-325. https://doi.org/10.1002/ceas.12191

Young, S. N., Vanwye, W. R., Schafer, M. A., Robertson, T. A. & Poore, A. V. (2019). Factors affecting PhD student success. *International Journal of Exercise Science, 12*(1), 34-45.

Zirkel, P. (2012). Doctoral programs in educational leadership: A duality framework of commonality and differences. *Educational Considerations, 40*(1), 20-32. https://doi.org/10.4148/0146-9282.1078

APPENDIX. EDD PROGRAM COMPLETION FACTOR SURVEY: GENERAL SELF-EFFICACY (GSE) SCALE

		1- Not at all True	2- Hardly True	3- Moderately True	4- Exactly True
Q1.	In terms of scholarly research, I can always manage to solve difficult problems if I try hard enough.	☐	☐	☐	☐
Q2.	In terms of scholarly research, if someone opposes me, I can find the means and ways to get what I want.	☐	☐	☐	☐
Q3.	In terms of scholarly research, it is easy for me to stick to my aims and accomplish my goals.	☐	☐	☐	☐
Q4.	In terms of scholarly research, I am confident that I could deal efficiently with unexpected events.	☐	☐	☐	☐
Q5.	In terms of scholarly research, thanks to my resourcefulness, I know how to handle unforeseen situations.	☐	☐	☐	☐
Q6.	In terms of scholarly research, I can solve most problems if I invest the necessary effort.	☐	☐	☐	☐
Q7.	In terms of scholarly research, I can remain calm	☐	☐	☐	☐

		1- Not at all True	2- Hardly True	3- Moderately True	4- Exactly True
	when facing difficulties because I can rely on my coping abilities.				
Q8.	In terms of scholarly research, When I am confronted with a problem, I can usually find several solutions.	☐	☐	☐	☐
Q9.	In terms of scholarly research, If I am in trouble, I can usually think of a solution.	☐	☐	☐	☐
Q10.	In terms of scholarly research, I can usually handle whatever comes my way.	☐	☐	☐	☐

Q11. Discuss your thoughts about being able to be successful in your coursework scholarly research?

Q12. Discuss what factors will be impediments or challenges to completing your coursework scholarly research?

Q13. Discuss your thoughts about being able to be successful in your dissertation scholarly research?

Q14. Discuss any challenges that you may anticipate in completing your dissertation scholarly research?

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