DOCTORAL CANDIDACY EXAMINATION SCORES AND TIME TO DEGREE COMPLETION

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ABSTRACT

Aim/Purpose  The purpose of this study was to determine if there was a relationship between doctoral students’ candidacy examination scores and estimated time to degree completion, measured by dissertation progression.

Background  Time to degree completion in doctoral programs continues to be an issue and reasons for high attrition rates for doctoral students are broad and include varied core components of the academic pathway such as challenges with critical thinking during coursework, stress about passing comprehensive examinations, poor academic writing, and lack of knowledge around scholarly practitioner research.

Methodology  An ex post facto, correlational research design utilized quantitative data to determine whether a relationship existed between candidacy examination scores and time to doctoral degree completion.

Contribution  If student’s ability to score higher on the candidacy examination increases their likelihood of dissertation activity, completion of specified benchmarks such as a pre-prospectus, prospectus, and final dissertation defenses, one year following the candidacy examination, programs have evidence-based support to retain a comprehensive examination.

Findings  The findings denoted a weak to moderate relationship between candidacy examination score and dissertation progression (defending pre-prospectus and/or prospectus) within one year from taking the candidacy examination. Thus, the researchers believe this identification of this relationship warrants further research to continue to examine how candidacy examination scores impact pro-
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gress to degree completion with a focus on academic writing and scholarly practitioner research.

Recommendations for Practitioners

We recommend for practitioners the continued implementation of the candidacy examination for students to aid in addressing any issues or misunderstandings students may have prior to the bulk of their data collection and analysis by assessing students’ abilities in academic writing and scholarly practitioner research and in turn, improve time to degree completion.

Recommendation for Researchers

We recommend that future research is conducted to gather a longitudinal understanding of the implications of administering a comprehensive examination followed by a pre-prospectus and prospectus defense will positively impact student’s progression through their research and result in the dissertation being completed in a more timely manner.

Impact on Society

Doctoral programs need to provide support to avoid students who are progressing through a doctoral program and successfully completing coursework, being halted at the All But Dissertation (ABD) stage and as a result fail to complete these programs due to poor academic writing and lack of knowledge around scholarly practitioner research.

Future Research

A longer analysis timeline and larger sample size would help in further understanding the true beneficial or potentially harmful implications this continued implementation of the candidacy examination has on individual students’ progression through to degree completion.

Keywords
doctoral program, comprehensive examination, candidacy examination, degree completion, Doctor of Education, EdD

INTRODUCTION

Students pursuing higher education are at risk of high attrition rates, with the greatest risk for those pursuing doctoral degrees. Of the 20% of higher education students pursuing doctoral degrees across major disciplines, 57% do not advance to completion of their programs and those who persist take roughly six to seven years to complete (McBrayer et al., 2018; Regis, 2014). Students are typically allotted up to seven years to graduate from their specific program, with the goal for students to complete within five years from their starting semester. Specific to students in the field of education, the attrition rate is alarming with a 50% dropout rate (Garcia, 2013). Furthermore, students may progress through a doctoral program, completing coursework, to be halted at the All But Dissertation (ABD) stage (McBrayer et al., 2018). Additionally, students progressing to this ABD stage are often extending the suggested time to degree completion and after that often they do not complete the program and fail to attain their degree. Time to degree completion in doctoral programs continues to be an issue as “doctoral attrition is a decades-old and multifaceted problem, affecting institutions and students world-wide” (Ames et al., 2018, p. 84). Reasons for continued high attrition rates for doctoral students are broad and include varied core components of the academic pathway such as challenges to think critically during coursework from the lens of a scholarly practitioner, stress about passing comprehensive examinations, poor academic writing, and lack of knowledge around scholarly practitioner research. Furthermore, program admissions are being pushed to increase enrollment for incoming classes and are then forced to admit students who lack preparations and overall abilities to succeed in a doctoral program (McConnell, 2015).

Following a student’s acceptance into a doctoral program, their success and perseverance through graduate-level work is influenced by variables impacting students’ abilities to function adequately in a postsecondary educational environment at the highest level in a doctoral granting program. For ex-
ample, unclear program expectations and structure, students’ feeling secluded in their journey, and lack of preparation for academic writing and scholarly practitioner research in their former studies leads to challenges to degree completion (McBrayer et al., 2018). Additionally, often students do not enter doctoral programs with the ability and drive to learn and retain valuable information, nor do they complete courses through an idea-driven and solution-focused mindset (Johnson, 2015). Completion time for students varies significantly by the individual program’s structure and monitoring, amount of faculty support, and accessibility and utilization of academic resources (McBrayer et al., 2018). Correspondingly, graduate programs are often deprived of institutional support systems for students who encounter troubles related to coursework, dissertation writing, or poor connectedness with advisors (Locke & Boyle, 2016). Students at this level experience stressors around scholarly research as often they are inadequately prepared for the required depth of academic writing (Johnson, 2015).

The number of students within education doctoral programs who are deemed nontraditional are growing with non-traditional meaning older individuals with additional responsibilities being a full-time student including work and raising a family (Wendler et al., 2010). These students then experience difficulties in developing a balance between fulfilling work and school requirements, incongruence between their field of study and work experience, instability within the job market, and demands of family obligations (Johnson, 2015; Locke & Boyle, 2016). Because personal and family issues cannot be predicted, acknowledging their adverse impact on degree progression particularly in the dissertation phase, the researchers have opted to evaluate the doctoral program at their institution based on core factors that may predict time to degree completion and in this case of this study, the candidacy examination and its relation to time to degree completion will be examined. Additionally, for the purposes of this study comprehensive examinations and candidacy examinations will be used interchangeably.

Thus, acknowledging these barriers to completing a doctorate, the intention of this study was to examine one of these core factors contributing to the measurable progression in an effort to improve time to doctoral degree completion. Specifically, this study examined the relationship between candidacy examination scores and time to doctoral degree completion. The following research questions guided this study: 1) What is the relationship between candidacy examination scores and time to Doctor of Education (EdD) completion, specifically completing a pre-prospectus within one semester?; 2) What is the relationship between candidacy examination scores and time to Doctor of Education (EdD) degree completion, specifically completing a prospectus within three semesters; and 3) What is the relationship between candidacy exam scores and time to Doctor of Education (EdD) degree completion in completing pre-prospectus or prospectus in three semesters? The doctoral program being examined was at a designated large public, doctoral research university that is considered to have high research activity (R2 Carnegie classification), located in the rural southeast of the United States. This specified doctoral program measures time to degree completion based on completion of a traditional five-chapter dissertation (chapter one=overview of the study, chapter two=review of the literature, chapter three=methodology, chapter four=findings, and chapter five=discussion). Upon completion of doctoral coursework and passing of a comprehensive examination, specifically in our program the candidacy exam, student’s transition into the dissertation tier as doctoral candidates. To progress through dissertation to degree completion, doctoral candidates have to successfully defend chapter one during a pre-prospectus defense, chapters one revised as well as chapters two and three during a prospectus defense, and to complete the degree, defend all five chapters in a final dissertation defense.

**REVIEW OF THE LITERATURE**

The review of the literature will examine Doctor of Education (EdD) programs, address dissertation and academic research and scholarly practitioner research, examine the comprehensive education examinations, and review potential interventions to support successful degree completion.
**ED.D. Programs**

EdD programs help doctoral students learn to use evidence by teaching students to find, assess, and conduct practical research as well as provide opportunities for students to share their work with users (Firestone et al., 2019). Conventionally, in the field of doctoral level education programs, EdD programs prepare the student to engage in a practitioner role to lead educational organizations (Goldring & Schuermann, 2009). EdD degree seekers often come from an educational background as they are currently employed in higher education or are K-12 administrators or district personnel (Hovanesian, 2013). The benefit of these doctoral students is their ability to apply career experiences to their understanding of course concepts and conversely applying theory-to-practice in their practitioner roles. In doing so, they are demonstrating their ability and commitment to being a scholarly practitioner. Scholarly practitioners are goal-oriented to find solutions to extensive problems of practice and positively impact lives in diverse populations (Ezzani, 2018; Peterson, 2017). With the influence of external experience and coursework, this positive change is effectively advanced through scholarly practitioner focused dissertation topics that play a role in societal education and field development (Ezzani, 2018). Schools of education need to support EdD programs to concentrate on the needs of professional practice preparation in education and this should be implemented through the lens of a scholarly practitioner aimed at solving problems of practice (Perry, 2013).

**Dissertations and Scholarly Practitioner Writing**

Student perseverance through a doctoral program relies heavily on their dissertation work and with this work comes immense amounts of anxiety, despair, and mistrust (Klocko et al., 2015). 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 within their school district or region (Kennedy et al., 2018). EdD students should seek to achieve a well-written dissertation with findings that are related to current problems of practice within the educational arena, to provide practice-based knowledge and inquiry-based learning to navigate these drawbacks (Fertman, 2018). Ross (2010) detailed this affair as a problem for advising faculty to address, not simply a student issue, by stating, “any graduate level educational leadership faculty seeking to continually reform and transform to better meet the needs of their stakeholders should engage in discussions about their underlying assumptions and needs in order to develop a coherent and consistent program” (p. 495). Thus, Ed.D programs must continually assess their outcomes in an effort to ensure doctoral students have the support needed to progress through to degree completion in a timely manner.

**Education Comprehensive Examination**

The comprehensive examination, also referred to as the candidacy examination, is designed to evaluate individual integration and application abilities of course knowledge for doctoral students, with varying structure, as either a written portfolio, oral response, or both, and has been a widely applied method for student evaluation (Boes et al., 1999; Cobia et al., 2005). For the purposes of this study, the comprehensive examination we identified as a core factor contributing to time to doctoral degree completion is the candidacy examination. Many students have exhibited high amounts of stress related to this examination due to the colossal levels of information expected to be known and integrated with minimal directives for this one-day portrayal of understanding one’s field of study (Boes et al., 1999). Thus, the researchers aimed to determine if their candidacy examination benefits (predictor of increased time to degree completion) outweighed the detriments (stress). Additionally, the notion of not passing the requisite examinations, which will exit doctoral students from the program is a well-known stressor. Educators have shown unease about the effectiveness of this examination with focus
on the examination’s relevance to training models, increased students’ anxiety and stress, and whether the academic benefits of this examination outweigh other mounting costs (Cobia et al., 2005).

Furthermore, as suggested previously with institutional interests outweighing student needs, there have been suggestions that the comprehensive examinations serves to eliminate those students who were primarily unfit for the program, leading to less awarded degrees (North et al., 2000; Schafer & Giblin, 2008). Out of a sample of 2,068 doctoral students at a very high research Carnegie classified university, only 61% achieved candidacy status and the time frame leading up to examination completion had the highest dropout rates (Ampaw & Jaeger, 2012). In another Doctor of Education program, Peterson (2017) suggested revising the comprehensive examination structure from an oral presentation and defense, to three written responses concomitant with practitioner-focused course content based on the Carnegie Project on the Education Doctorate (CPED) guidelines. CPED is an organization dedicated to the development and implementation of rigorous EdD programs that prepares scholarly practitioners. CPED explains the dissertation as a project that exhibits the doctoral candidate’s ability to think, to perform, and to act with integrity (Shulman, 2005). Additionally, CPED has placed an emphasis on moving beyond a traditional dissertation to focusing on alternatives, such as dissertations of practice, which are conducted as applied research and focus on real-world problems of practice.

**INTERVENTIONS**

In an effort to improve time to degree in doctoral programs, interventions need to be considered if the goal is to improve academic writing and scholarly practitioner research efforts. Previous literature has discussed rough implications to combatting the daunting dissertation and impacting the harmful attrition rates, with the most often noted need for increased faculty support, and the researchers in this study maintain that these efforts need to be centered around academic writing and scholarly practitioner research (Ampaw & Jaeger, 2012; Boes et al., 1999; Johnson, 2015; Lake et al., 2018; McBryar et al., 2018). Strengthening the relationship between doctoral students and faculty provides the students with extensive knowledge as to how to develop research studies congruent to their dissertation goal and allows for ample feedback during this process. This in turn may increase students’ motivation to carry on in research intensive opportunities, continuing to conduct future studies (McBryar et al., 2018). Although individual factors are challenging to measure, doctoral programs must consider them in relation to the overall progression of their students. For example, personal motivation to persist through an education doctoral program can be greatly influenced by setting preliminary mental health and personal satisfaction goals to prevent burnout (Boes et al., 1999). In addition to these emotion-focused goals, students should set goals that promote maintained physical health, such as healthy eating habits, regular sleeping schedules, and routine exercise (Boes et al., 1999). Faculty support and communication as well as personal motivation increase student success (time to degree completion) within doctoral programs (Lake et al., 2018). Additionally, these student-faculty relationships require communicative reciprocity for the student and their dissertation work to succeed (Ames et al., 2018). Studies on doctoral student’s satisfaction for progression through their program, highlight faculty-mentor frequency of contact and length of relationship accounted for 63% of what these students deem important (Creighton et al., 2008).

Doctoral programs should consider applying cohort structures that inspire partnerships amongst candidates, which allows for enhanced collaboration in their dissertation process and communication skills while working with diverse populations (Ezzani, 2018). This collaborative learning structure promotes individual growth through peer relationships as advised by social and experiential learning theories, which are correlated to higher self-efficacy and self-esteem (Kriner et al., 2015). There is a cyclical relationship of student socialization within a program combining self-direction, ambiguity of structural guidelines, and transition through expected roles (Gardner, 2010). Faculty need to eliminate much of this ambiguity related to structure and transitions and encourage self-direction so students can be successful. This specific structure encourages dissertation work that advances real-world
change in educational communities, which has been shown in past research to be less of a focus previously in dissertation work (Gillham et al., 2019).

**Dissertation Process**

Commonly the traditional dissertation is written as five chapters (introduction, review of literature, methodology, findings, and conclusion; Boote & Beile, 2005). EdD students are encouraged to focus on dissertation to improve problems of practice by engaging in academic writing and scholarly practitioner research (Belzer & Ryan, 2013). However, prior to developing a dissertation, doctoral students must present their work at a formal meeting with their dissertation committee. Typically, this meeting is the prospectus defense and is traditionally written as the introductory chapter or a summary of the first three chapters (Gurvith, 2005; Di Pierro, 2011). This traditional prospectus stage can be a daunting task for students to complete, with many confronted with uncertainty about their proposed dissertation topic requiring an enormous amount of time to write a prospectus of roughly more than 40 pages (Di Pierro, 2011). Previously, Di Pierro (2011) suggested a pre-approach to the prospectus to allow for any incongruences in ideas to be handled prior to exhausting substantial time and effort, by compiling a concept paper, that summarizes the statement of the problem, significance of the study, questions to be researched, review of the literature, methodology, results and analysis, and the discussion, in under seven pages. Correspondingly to the grounds for the development of the concept paper, an educational doctoral program in the southeastern region proposed a restructure for the dissertation process to encourage elevated degree completion rates and foster acceleration through the dissertation process by aligning coursework to the preparation of these phases and or defenses, specifically including a pre-approach in the form of a pre-prospectus defense (McBrayer et al., 2018).

**Conceptual Framework**

The inclusion of a conceptual framework is a critical component of the shared findings of a study, as it allows the researcher to illustrate the assertions that guided their study and provides the context needed to interpret the findings (Adom et al.; 2018; Camp, 2001; Luse et al., 2012). Acknowledging the assertion that successful completion of the candidacy examination demonstrates that doctoral students are prepared to begin their dissertation, it is intuitively logical to assume there would be a relationship between a student’s candidacy exam performance and their dissertation progression (Figure 1).

![Figure 1: Conceptual framework of the relationship between candidacy examinations and dissertation progression](image-url)
Thus, this framework denotes that student’s with high performance based on candidacy examination scores will progress to degree completion in a more timely manner than their counterparts with lower candidacy examination scores.

**Methodology**

An ex post facto, correlational research design utilized quantitative data to determine whether a relationship existed between candidacy examination scores and time to EdD degree completion. More specifically, analysis was guided to address the following supporting questions: 1) What is the relationship between candidacy examination scores and time to Doctor of Education (EdD) completion, specifically completing a pre-prospectus within one semester? 2) What is the relationship between candidacy examination scores and time to Doctor of Education (EdD) degree completion, specifically completing a prospectus within three semesters? 3) What is the relationship between candidacy examination scores and time to Doctorate of Education (EdD) degree completion in completing a pre-prospectus or prospectus in three semesters?

**Study Site and Participants**

The study was conducted at a designated large public, doctoral research university that is considered to have high research activity (R2 Carnegie classification), located in the rural southeast of the United States. The participants were three cohorts of EdD students in an educational leadership program that prepares educators to hold senior level leadership positions within P-12 or higher education. There were 45 students within the three cohorts who took their candidacy examinations over the two-year period of this study. Of these students, each attempted and successfully passed their candidacy examination and went onto the dissertation stage of their EdD. After receiving notification of passing their candidacy exams, these students were assisted with identifying and securing a dissertation chair and committee. At that point, students were able to begin their dissertation. Through the dissertation, students go through a three-stage process with their committee (chair, methodologist, and content specialist) completing three defenses: pre-prospectus, prospectus, and final dissertation. The EdD program is structured to allow students to complete their pre-prospectus as early as the following summer semester (the semester after coursework completion and passing their candidacy exam), their prospectus by the fall semester, and their final dissertation defense potentially as early as that same fall semester, but more realistically the following spring semester (i.e., one year after passing their candidacy examination).

This study is based at a university that is a member of the CPED consortium and again important to note is classified as a high activity research institution. Faculty at this institution are continually working on program improvement based on student feedback. One such improvement included redesign to include a three-tier structure based upon CPED guidelines to prepare scholarly practitioners (McBrayer et al., 2018). The structure included Tier I, which requires students to complete 30 graduate-level credit hours above the completion of a master’s degree. The next stage, Tier II, requires an additional 30 hours to be completed before reaching the comprehensive examination, which requires a passing score to advance and attain candidacy in Tier III, the dissertation phase. Once students attain candidacy status, prior to entering Tier III, they secure a chair and dissertation committee would include all three members, a dissertation chair, a content specialist and a methodologist. A proposed timeline for this structure includes Tier II being completed in five semesters and Tier III, ideally, being completed in three semesters, shown in Figure 2 (McBrayer et al., 2018). During Tier II, students complete a Research Seminar Series to devise their pre-prospectus (PRE) and prospectus (PRO). In Research Seminar I taken during the first semester, chapter one of dissertation (the introduction including a theoretical/conceptual framework, background of the literature, problem of practice, purpose statement, significance of study, research questions, and key terms) is completed. Research Seminar II, taken during the third semester, doctoral candidates complete chapter two of the dissertation, which is the review of the literature. Research Seminar III and IV courses are taken during the fifth
and last semester of Tier II, and doctoral students complete chapter three of the dissertation, the methodology. This redesign and inclusion of a Research Seminar Series allowed for a formal structure to focus the program on improving academic writing and expanding students’ knowledge of scholarly practitioner research through to the three defenses (McBryer et al., 2018). This redesign also augments earlier communication with faculty chairs on research topics that will increase faculty familiarity with the candidate's potential to progress through to degree completion in a timely manner (Boes et al., 1999).

![Diagram](image.png)

**Figure 2: Timeline for comprehensive examinations (candidacy examinations) and defenses**

**COMPREHENSIVE EXAMINATION, CANDIDACY EXAMINATION**

The EdD program gives students a comprehensive examination, specifically a candidacy examination in the spring semester of their second and final year of coursework. The candidacy examination requires students to write a 10-12-page paper from the lens of a scholarly practitioner to address a question pertaining to a problem of practice written by their program faculty with the intention of having students review research based on educational theory and practice supported with peer-reviewed literature. The essay is distributed on the Friday before Spring Break and is due ten days later. The candidacy examinations are assessed by the program faculty in a double-blind review process. Faculty complete a rubric which scores the paper on five areas: focus in writing (30%), scholarly support in writing (30%), organization in writing (10%), writing mechanics (10%), and American Psychological Association (APA) conventions in writing (20%). Students who score between 30-50 points (60-100%) are deemed “adequate” and pass their candidacy examination. Students who score below 30.0 (>60%) are deemed inadequate and are provided one final opportunity to pass, and if this second rewrite is not successful, they must exit the program. In satisfaction with our accrediting agency requirements, the EdD candidacy examination rubric was validated by educational leadership program faculty in collaboration with our college’s assessment initiatives. Validity was utilized to as-
sess each element in the assessment rubric in relation to the purpose of the assignment and to determine if a given rubric element is essential for the assessment to be valid based on the purpose of the assessment. Each rubric element was rated as essential, useful but not essential, and not necessary. Through this vetting of the EDLD faculty and the college’s assessment committee, the rubric was determined to be valid.

The most recent prompt for the candidacy exam was:

> The vexing “adaptive challenges” educators and their schools face are not simple, rather, they are often complex problems that have no known or obvious solution. These adaptive challenges are complex, ambiguous, and fluid in nature (Heifetz et al., 2009; Northouse, 2018; Schultz, 2010) contends that a “new vision of educational leadership must exist if schools are to emerge from their hierarchical, democratically antithetical, and marginalized caves. Leadership in the ideal of the scholar-practitioner is situated to fulfill such a mission of change” (p. 62). As scholarly practitioners, we have the ability to address these adaptive challenges by engaging in intellectual inquiry that is scaffolded by practice and theoretical knowledge (Schultz, 2010). In doing so, this inquiry “seeks to transform practice through examination and generation of knowledge” (Jenlink, 2001, p. 9). As educational leaders, scholar practitioners, and change agents, it is our responsibility to identify and address these adaptive challenges within our educational system. Acknowledging this, using scholarly evidence and connecting it to learned theories/approaches from your coursework, you should:

- Identify a contested issue in P-20 education that is an adaptive challenge.
- Examine this contested issue from the respective conflicting perspectives.
- As a scholar practitioner and educational leader, how could you address the challenge you identified? You should synthesize scholarly literature and your professional insight to construct specific recommendations and/or actions. This should include identifying intended outcomes and discussing how multiple stakeholders would be impacted.

**DATA COLLECTION**

The ex-post-facto research design of the study utilized archival data from three EdD cohorts of doctoral candidates enrolled in the educational leadership dissertation course (EDLD 9999). Within that dataset was how each of these doctoral students (n=45) performed on their candidacy examination (in each of the five areas and overall). Additionally, their dissertation progression was marked by the number of semesters it took them to complete their pre-prospectus and prospectus in an effort to examine time to degree completion with the end result being the final dissertation defense (progress was measured as active within a one-year period). Data were gathered on an Excel sheet and each defense type was identified at either the pre-prospectus, prospectus, and final dissertation phases in each of the semester following students completion of their Tier II coursework in Tier III, the dissertation.

**DATA ANALYSIS**

In an effort to describe and visualize the dataset, descriptive statistics for measures of central tendency (mean, median, and standard deviation) were calculated. To determine if a relationship existed between how well students performed on their candidacy examination with their ultimate dissertation progression, a point-biserial correlation was calculated in SPSS to measure the strength of association between these two variables. Interpretation of the correlation analysis will be based on the general principle that correlation coefficients (r) between 0-.29 are weak, .3-.59 are moderate, and .6-1 are strong. Statistical significance is observed at the 95% confidence level (p>.05).
FINDINGS

The descriptive statistics of measures of central tendency described the differences (mean, median, and standard deviation) of candidacy examination scores between students who made dissertation progress (Table 1). At each of the phases examined in this study (pre-prospectus, prospectus, and active within one year [active status was utilized as the majority of the cohort had not completed the final dissertation defense]), the mean candidacy exam score was higher for students who completed the respective phase in a timely manner compared to their counterparts who did not show progress accordingly. The mean candidacy examination scores for students who completed their pre-prospectus (within a semester), prospectus (within three semesters), and defended at least their pre-prospectus within a year were 40.5, 40.9, and 41.0 respectively. Conversely, their counterparts who did not make dissertation progress had lower scores with means of 39.5, 38.9, and 37.5, respectively. Looking broadly at this data, the observation is noted the mean candidacy examination score for those failing to make dissertation progress (in all three of the areas studied) was below a 40.0.

Table 1: Descriptive Statistics of Candidacy Examination Scores in Relation to PRE/PRO/ACTIVE Status.

<table>
<thead>
<tr>
<th>Candidacy Exam Score</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defended Pre-Prospectus (PRE) within 1 Semester</td>
<td>No</td>
<td>39.5</td>
<td>41.3</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>40.5</td>
<td>41.0</td>
</tr>
<tr>
<td>Defended Prospectus (PRO) within 3 Semesters</td>
<td>No</td>
<td>38.9</td>
<td>41.0</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>40.9</td>
<td>41.5</td>
</tr>
<tr>
<td>Active (Defended PRE and/or PRO) within 3 Semesters</td>
<td>No</td>
<td>37.5</td>
<td>36.5</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>41.0</td>
<td>41.5</td>
</tr>
</tbody>
</table>

Note: n=45

A point-biserial correlation was run between candidacy exam scores and the variables of 1) pre-prospectus completion within one semester, 2) prospectus completion within three semesters, and 3) candidate’s dissertation activity one-year post candidacy exam (Table 2). To answer research question 1 (relationship between candidacy exam scores and pre-prospectus), there was no statistically significant correlation between candidacy exam score and completion of the pre-prospectus within one semester, \( r_{pb}(38) = .098, p = .522 \), with higher test scores being associated with timely pre-prospectus defenses than lower scores, \( M = 40.5 \) (SD = 4.1) vs. \( M = 39.5 \) (SD = 6.3). Candidacy examination scores accounted for 0.96% of the variability in pre-prospectus completion within a year.

Table 2: Correlation between Candidacy Examination Scores and PRE/PRO/ACTIVE status.

<table>
<thead>
<tr>
<th>Candidacy Exam</th>
<th>Pearson Correlation</th>
<th>PRE</th>
<th>PRO</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidacy Exam</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.098</td>
<td>.191</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1</td>
<td>1.0</td>
<td>.052</td>
<td>.209</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>

Similarly, in answering research question 2 (relationship between candidacy exam scores and prospectus), there also was no statistically significant correlation between candidacy exam score and completion of the prospectus within three semesters, \( r_{pb}(38) = .191, p = .209 \), with higher test scores being associated with timely prospectus defenses than lower scores, \( M = 40.9 \) (SD = 4.8) vs. \( M = 38.9 \) (SD = 5.8). Candidacy examination scores accounted for 3.6% of the variability in prospectus completion within a year.
Conversely, in answering research question 3 (relationship between candidacy exam scores and progression within a year), there was a statistically significant correlation between candidacy examination score and candidate’s dissertation activity within the first year post candidacy examination, $rpb(43) = .298, p = .046$, with higher test scores being associated with dissertation progression following candidacy exam than lower scores, $M = 41.0 (SD = 4.6)$ vs. $M = 37.5 (SD = 6.4)$. Candidacy examination scores accounted for 8.9% of the variability in dissertation progression.

**SUMMARY OF FINDINGS**

The measures of central tendency showed a difference between the candidacy examination scores of the doctoral students who progressed timely with their pre-prospectus (within one semester), prospectus (within three semesters), and completing any defense within a year. In each of these three benchmark areas for progression, the mean for students who failed to make progress had mean candidacy exam scores below 40.0 (out of 50). The point-biserial correlation found a weak to moderate relationship between candidacy exam score and dissertation progress (defending pre-prospectus and/or prospectus) within one year from taking the candidacy examination ($p = .046^*, r = .298$). See Figure 3.

![Figure 3: Summary of descriptive and inferential statistical findings for Candidacy Examination Scores.](image)

**DISCUSSION**

The purpose of this study was to determine if there was a correlation between an EdD student’s candidacy examination score and their estimated time to degree completion, measured by dissertation process completion. Specifically, this study examined how long it takes these students to progress through their pre-prospectus and prospectus phases of their dissertation work. The findings indicated that student’s ability to score higher on the candidacy examination increased their likelihood of dissertation activity, either completing a pre-prospectus or prospectus, one year following the candidacy examination. However, there appeared to be no statistical significance shown for the relationship between candidacy exam score and completion of a pre-prospectus in one semester and prospectus in three semesters following the examination. Again, to note, the findings did denote a weak to moderate relationship between candidacy examination score and dissertation progress (defending pre-prospectus and/or prospectus) within one year from taking the candidacy examination and further inquiry is warranted.

Further research is necessary to understand core factors contributing to increased time to degree completion during the dissertation phase. Our findings are attributable because doctoral program
drop-outs generally occur following coursework completion and within the dissertation phase (Dixon, 2015; MacNamara, 2003; Stallone, 2003). This study suggests that focusing on individual candidates’ comprehensive examination scores can help determine who will be more likely to progress in a timely manner through to the dissertation. These overall findings attempt to provide practical implications to faculty and students to support the continuation of the candidacy examination and include continuing to implement the candidacy examination and providing intentional assessment and feedback as well as providing intervention strategies to help students’ progress through the dissertation phase.

**Implication #1: Continue to Implement Candidacy Examination**

The researchers although acknowledge a weak to moderate correlation, believe the findings from this study support the continuation of the comprehensive examination to promote timely degree completion via a focus on academic writing and scholarly practitioner research. We plan to continue to utilize the exam as a foundational block for students in developing a scholarly-based dissertation topic and outline for their research. Continued focus of the candidacy examination will better serve as a predictor for student success in their dissertation and reduce overall attrition throughout the program, with students noting in prior literature that minimal directives and too broad of topics has led to higher dropout rates in doctoral programs (Ampaw & Jaeger, 2012; Boes et al., 1999). This will provide a more applicable approach to assessing student comprehension and retention of course material throughout their overall doctoral experiences. We anticipate the candidacy examination outcomes will diminish educators’ uncertainties related to the effectiveness of comprehensive examinations, acknowledging potential to predict time to degree completion compared to its stress-heavy costs (Boes et al., 1999; Cobia et al., 2005).

Focusing on academic writing and scholarly practitioner research will require students to state and explain in their candidacy examination the practical and applied research around current problems of practice to be addressed through the lens of a scholarly practitioner following suggested CPED guidelines (Peterson, 2017). This is an educational leadership program commitment from just providing students a question that is based in an educational theory by having students’ address and support with literature a problem of practice. This will aid in students’ progression through the dissertation phase as they will be better prepared to move forward in developing their pre-prospectus, prospectus, and final dissertation manuscript based on their own problem of practice. Furthermore, this will motivate students and initiate a scholarly practitioner mindset intended to persist throughout their educational and professional development and, in turn, these students will continue to be motivated to further analyze and resolve problems of practice in their surrounding communities.

**Implication #2: Provide Intentional Assessment and Feedback**

Additionally, we believe that continuing the comprehensive examination will increase inter-rater reliability in assigning scores to student’s submissions. We propose a new structure in how the exams will be scored as we plan to gather our program faculty to collectively read each student’s exam and allow verbal discussion and written commentary about strengths and weaknesses in terms of academic writing and scholarly practitioner research. This will allow for any discrepancies or incongruence in evaluation amongst faculty to be handled promptly and assist in equitable discernment throughout rating scores for each student.

Along with receiving a passing or failing grade, this collective grading structure will allow for ample and intentional feedback to be given to each student from multiple faculty about their dissertation focus. Prior research denoting unclear program expectations and structure, students’ feeling secluded in their journey, and lack of preparation for academic writing and scholarly practitioner research leads to challenges to degree completion (McBrayer et al., 2018) and this calls for intentional assessment and feedback. This intentional assessment and feedback at this level is something that has not been
conducted with the prior questions and is intended to propel students into enhanced communication with faculty to advance their dissertation work and in turn, lead to timelier degree completion.

**Implication #3: Provide Interventions Strategies**

The findings indicated that students scoring a 40 or above on their candidacy examination were likely to either complete a pre-prospectus in one semester, a prospectus in three semesters, or be active within one year of the examination. We believe focusing on the students who fall below that benchmark, are deemed “at-risk” students, as they scored below a 40 on the candidacy exam (a score of 30 or below is failing so the range of 30-40 needs further inquiry). For those at-risk students, we believe the implementation of specified interventions based on both the literature and the findings of this study will be beneficial to students’ time to degree completion. When analyzing our cohort’s scores on their exam, it is imperative to note that three out of the 11 students fall within this at-risk criteria and will be subjected to our proposed interventions. These interventions will include established checkpoints for students by their dissertation chairs to discuss deadlines and process ideas into dissertation frameworks prior to their pre-prospectus and prospectus defenses. Focus within these meetings is intended to promote improved academic writing and increased knowledge around scholarly practitioner research. This will help improve faculty-student rapport and communication, as deemed necessary for student success frequently in previous research and the researchers hope to lessen time to degree completion (Ampaw & Jaeger, 2012; Boes et al., 1999; Johnson, 2015; Lake et al., 2018; McBrayer et al., 2018). Furthermore, additional writing modules that were created within the College of Education to help improve academic writing (e.g., improving writing conventions set forth by the APA, reducing plagiarism, organizing annotated bibliographies and literature reviews) will be accessible through the student’s online course platform and will be required of these at-risk students. Lastly, an increased emphasis in writing earlier in the program will be examined as well as benchmarks throughout the program to measure academic writing and scholarly practitioner research in each course may be the outcome.

Traditionally, during the dissertation phase students acquire an “in-progress” grade until their dissertation is complete. This means students may receive an in-progress score even though no progress was demonstrated in their dissertation process. To combat these in progress scores (even when lack of progress has been made), once students enter the dissertation phase a formalized compilation of benchmarks and a timeline will be implemented for completion of the dissertation in either one year depending on the students’ progress to date. Thus, students will need to demonstrate progress by completing these benchmark requirements or they will receive a grade of unsatisfactory. Additionally, at-risk students requiring added interventions will also need to complete those requirements at specified checkpoints to continue to hold in-progress status.

Overall, we believe that the combination of these three implications will provide greater transparency for students, regarding candidacy examination expectations and scholarly practitioner-garnered dissertation work assurance, and for faculty members, regarding collaborative guidelines for advancing students through the program. Furthermore, each of the above practical implications may elicit increased student-faculty relations and foster comfort and availability to increased communication between these two parties. These collectively will ensure students are developing skills and have a better understanding of problems of practice within their community based on the guiding CPED principles.

**Limitations**

The sample of EdD students selected was from a Carnegie R2 rated university in the southeastern United States and may not be generalizable to a higher rated research-intensive university. As noted, there is minimal prior research on programs using a pre-prospectus stage. We believe this stage is unique to our program’s structure. In addition, this study analyzed progression of only 45 students.
and a larger sample could provide evidence yielding more accurate generalization; however, we
acknowledge this method of developing understanding only accounts for one program of students
and may not be as generalizable across other EdD programs at other institutions. Further, we did not
address other risk factors that lead to longer completion rates or decreased attrition as suggested in
the literature, such as familial obligations as these factors are not predictable. However, we intended
our study to address core factors that contribute to time to degree completion that all students have
the potential to encounter throughout their program, nonetheless we acknowledge a need for further
understanding of these other challenges students may experience.

RECOMMENDATIONS

First, we recommend for practitioners the continued implementation of the candidacy examination
for students to aid in addressing any issues or misunderstandings students may have prior to the bulk
of their data collection and analysis by assessing students’ abilities in academic writing and scholarly
practitioner research and in turn, improve time to degree completion. Second, we recommend that
future research is conducted to gather a longitudinal understanding of the implications of administer-
ing a comprehensive examination followed by a pre-prospectus and prospectus defense will positive-
ly impact student’s progression through their research and result in the dissertation being completed
in a more timely manner. Lastly, we recommend that other doctoral programs need to provide sup-
port to avoid students who are progressing through a doctoral program and successfully complet-
ing coursework, being halted at the All But Dissertation (ABD) stage and as a result fail to complete these
programs via a focus on improving students’ academic writing and expanding their knowledge
around scholarly practitioner research.

CONCLUSION

The findings indicated that student’s ability to score higher on the candidacy examination increased
their likelihood of dissertation activity. The researchers believe the findings from this study support
the continuation of the comprehensive examination to ascertain timely degree completion via a focus
on academic writing and scholarly practitioner research. By continuing the candidacy examination,
providing intentional feedback and assessment, and providing intervention strategies, we aim to ad-
dress former concerns regarding student’s decelerated completion rates or lack of program comple-
tion entirely. With the detrimental effects that All But Dissertation (ABD) classification has on stu-
dents, we believe our dissertation process by including a candidacy examination as a comprehensive
examination and retaining a pre-prospectus phase is vital. Specifically, focusing the candidacy exami-
nation on academic writing and scholarly practitioner research unique to the individual student will
allow preliminary checkpoints for faculty to determine if students are truly prepared for the disserta-
tion phase. Additionally, students will have the opportunity to demonstrate their abilities to write
academically about research-based problems of practice and receive comprehensive feedback from
faculty before entering the time intensive dissertation phase. Furthermore, we believe the implement-
ation of devising intervention strategies for at-risk students will promote increased periodical adviso-
ry communication with students about their progression and address any problems or misunder-
standings students may have prior to the bulk of their data collection and analysis and oral defenses.
Addressing these misunderstandings and any issues, we believe will progressively decrease ABD stu-
dents in the program and lead to degree attainment. Faculty are encouraged to develop increased
communicative opportunities with individual students, this will in turn increase student motivation
and understanding of program requirements and concepts leading to increased chances of graduation
(Lake et al., 2018; Locke & Boyle, 2016).

We will continue future research to gather longitudinal understanding of the implications of adminis-
tering a scholarly practitioner problem-focused comprehensive examination followed by a pre-
prospectus phase. We anticipate further longitudinal research in our program will yield an under-
standing to the effectiveness of a candidacy examination and pre-prospectus stage has on students
and faculty over time. Correspondingly, future research will be continued to attain more longitudinal-based data as doctoral candidates continue to cycle through the program and expand upon our current data set. A longer analysis timeline and larger sample size would help in further understanding the true beneficial or potentially harmful implications this dissertation process has on individual students. We believe the outcomes of this study will positively impact our student’s progression and time to degree completion will improve and this in turn, will help other students at other institutions advance through to degree completion in a timely manner.

REFERENCES


Candidacy Exam and Time to Degree Completion


**BIOGRAPHIES**

**Juliann Sergi McBrayer,** Ed.D. is an Assistant Professor at Georgia Southern University. Holds a Doctorate and Educational Specialist from Georgia Southern University, a Master’s degree from Ohio University, and a Bachelor’s degree from SUNY College at Buffalo. Served 20 years as an educational leadership assistant professor, educational program coordinator for the Georgia Charter Schools Association, instructional school leader in the charter sector, professional development/federal programs coordinator, classroom teacher and teacher leader. As a scholarly practitioner, her research includes the ensuring effectiveness of educational leadership and teacher preparation programs.
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