



Perspectives on Traditional U.S. Accounting Ph.D. Programs

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Abstract

A persisting shortage of accounting Ph.D. program graduates has plagued academia for at least the last two decades. Despite suggestions fueled by research findings, traditional accounting Ph.D. programs appear to have not implemented substantial changes aimed at alleviating this problem. The present study surveys accounting Ph.D. program coordinators in an effort to articulate the current characteristics of their students and programs, admission requirements, recruiting challenges, and potential program changes. Data obtained from responding coordinators at high-level research institutions are examined in conjunction with prior findings detailing accounting Ph.D. program features. These comparisons unveil that the nature and expectations of these programs remain relatively consistent across the decades. Surprisingly, admissions requirements remain relatively unchanged as well, although the nature of the accounting Ph.D. student seems to be skewing younger, with relatively little professional experience and/or no certifications. High-level research institution coordinators report that the demand for students is somewhat higher than the supply, and that relatively intensive recruitment efforts are employed to fulfill enrollment slots. Although the coordinators indicate at least moderate changes to the program requirements over their tenure, they are not expecting major changes to ensue within the next couple of years. Present study findings suggest that programs at high-level research institutions are not employing significant changes to ameliorate the accounting Ph.D. shortage, highlighting the contrast in desired program outcomes between such institutions and lower level research institutions.

Keywords: accounting Ph.D., traditional doctoral programs, doctoral students, doctoral education

Classification: Education

Methodology: Quantitative

Area of Interest: Business Education

Introduction

Over the last couple of decades, the accounting discipline has recognized a shortage of accounting Ph.D. students entering academia (e.g., Plumlee et al., 2006; Plumlee & Reckers, 2014; Boyle et al., 2015; Cardwell et al., 2019; Daly & Weber, 2021). This shortage has prompted accounting researchers to examine the nature of accounting doctoral programs, focusing mainly on

illuminating the expectations of enrolled students (e.g., Beyer et al., 2010; Brink et al., 2012). Collectively, the findings of these research endeavors suggest that, despite the shortage in qualified professors, significant updates to high-level research accounting Ph.D. programs are not being enacted and program requirements and expectations are perhaps impeding potential student interest in enrollment.

The present study seeks to add to the literature stream by providing a snapshot detail of current accounting doctoral program elements, including characteristics and requirements, admission processes, recruiting challenges, and potential upcoming program changes. In particular, this study targets coordinators' perceptions of alterations to the Ph.D. programs moving forward. Therefore, the findings of this study provide a bridge between the continuing problem of an accounting Ph.D. shortage and the measures, if any, taken to curtail such a shortage in U.S. programs.

An online survey was used to query accounting Ph.D. program coordinators regarding the aforementioned elements of their doctoral programs. Based on responses from high-level research school coordinators, findings indicate that doctoral students are represented by a significant international contingency, are relatively young, and complete their degree in an average of five years. Financial archival research remains the most prevalent research area/methodology; however, auditing has gained some traction as an area of choice. The vast majority of coordinators report that doctoral students are expected to teach, with an average of eight credit hours across the entire program.

Whereas the Graduate Management Admission Test (GMAT) score remains a crucial benchmark for admittance into the doctoral program, its minimum score varies widely as reported by program coordinators. Interestingly, as a condition for admission, most programs do not require a master's degree or prior accounting work experience, and no programs require a CPA license, thereby reducing a possible barrier of entry at the potential loss of practical experience. Alternatively, coordinators indicate that a potential student's familiarity with research, along with eventual placement as a future faculty member, provide an incentive for admission.

The majority of coordinators report that the demand for accounting Ph.D. students is either equal to or outweighs the supply. Yet, most coordinators also expend considerable effort in recruiting students to their programs. Relative to program changes, coordinators indicate that at least moderate alterations have been made during their tenure. Insofar as providing alternative means of instruction, most participating coordinators will likely not include the pursuit of a Doctor of Business Administration (DBA) degree or work toward the implementation of an online option as new alternatives.

The second section of this paper provides a review of previous literature findings as a means to couch the present study's findings in proper context. The third section provides the study methodology, and the fourth section provides the details of the online survey findings. The final section presents a discussion and concluding remarks.

Background

Noted in both practitioner sources as well as academic sources, accounting Ph.D. programs have seen a decline in enrollment. According to the 2019 report of the Association of International Certified Public Accountants (AICPA, 2019), the number of accounting students entering a Ph.D. program declined by 23% from 2016 to 2018. This percentage represents a precipitous drop in a short time frame. The report suggests that advanced education alternatives, or the draw of continuing to work in the profession, may be factors in stifling accounting Ph.D. program enrollments. Conteh and Oke (2019) claim that accounting

doctoral graduate shortages arise from increasing opportunity costs, including a potential Ph.D. student's interest in alternatively obtaining another degree or certification, the perceived attainability of the GMAT standard specifically and restrictive admissions standards in general, and the relatively small number of doctoral programs and enrollment slots available.

According to Boyle et al. (2015), the shortage of accounting doctoral graduates is particularly acute in less research-intensive, non-doctoral granting institutions. Following up an initial study published in 2006 (Plumlee et al., 2006), Plumlee and Reckers (2014) present evidence to suggest that several previously taken counteractive measures to bolster enrollments, such as the Accounting Doctoral Scholars (ADS) Program, are difficult to gauge.

Concurrently, the researchers report little change in the nature and structure of programs, a shrinking pool of qualified candidates, and a growing trend of Ph.D. students whose academic history is not in accounting. The overwhelming majority of surveyed program directors representing AACSB-accredited schools graduating fewer than one hundred accounting students perceives the doctoral shortage as detrimental to their institution. As expected, directors at larger institutions reported significantly less impact.

Apprehensive sentiments regarding entering a Ph.D. program extend beyond the accounting field to the business field in general, worldwide. In 2020, the Association to Advance Collegiate Schools of Business (AACSB) and the European Doctoral Programs Association in Management and Business Administration (EDAMBA) collaborated in the issuance of a joint report on global doctoral programs in business (AACSB & EDAMBA, 2020). From surveying doctoral students and doctoral business program directors, the report presents evidence that a growing number of doctoral students are entering the Ph.D. program as a means to pursue alternative career paths apart from academia. For example, graduates are interested in initiating business ventures or establishing consulting services; however, some view the current academic environment as antiquated in providing adequate preparation for such goals. Hinging on the topic of more flexible accounting doctoral educational options, Bishop et al. (2012) advocate for the DBA program, wherein research and teaching are more evenly valued, students spend less time completing the degree, and more flexibility as to on-campus instruction is offered.

This subtle shift in the landscape may make it important for potential accounting doctoral students to better understand the nature of the Ph.D. program and its expectations. Unfortunately, research suggests that prospective students may have limited exposure to Ph.D. program expectations (e.g., Plumlee et al., 2006). Brink et al. (2012) find that accounting program websites provide sparse or incomplete doctoral-related information. In evaluating the knowledge base of a likely pool of potential doctoral students, Daly and Weber (2021) find that students pursuing their Masters of Accountancy degrees possess paltry knowledge, if any at all, regarding the possible career advancement in academia or the Ph.D. degree. The researchers find that, once given some information regarding a career in academia, the students' disinterest stems mostly from reservations regarding academic research expectations. Consequently, researchers suggest providing more transparency for potential Ph.D. students or exposing graduate students to a typical academic research project.

In regard to some of the characteristics of accounting Ph.D. students, Brink et al. (2012) find that about 28% are international students, and 82% of students complete the Ph.D. program, with an average duration of 4.7 years. Plumlee et al. (2006) noted anemic student involvement in the subject areas of audit, systems, and tax. According to Behn et al. (2008), the accounting areas have been previously broken

down as follows: 49% financial, 20% managerial, 14% audit, 10% tax, 5% information systems, and 2% other. Likewise, archival has been the most widely used methodology, 56%, with behavioral and experimental both comprising 35% (analytical makes up the remaining 9%). Brink et al. (2012) report an increasing trend in the number of doctoral candidates choosing an audit or tax focus, which may be attributable to the ADS Program. Still, 45% choose to research in the financial area. Archival research takes up 53%, whereas behavioral and experimental take 28%.

Regarding program entry prerequisites, Beyer et al. (2010) suggest that the GMAT score may be the most pivotal admission criterion in selecting doctoral candidates to enter the program, stating that the average entry score for half of the U.S. doctoral programs is 650 or above, and this benchmark is expected to rise in future. Brink et al. (2012) disclose an average self-reported GMAT score of 693. In 2007, based on an AAA (American Accounting Association) and APLG (Accounting Programs Leadership Group) study in 2005, Noland et al. reported on an average overall GMAT score of 685 at public universities and 730 at private universities.

Interestingly, the trend in professional work experience and certification expectations for entry into an accounting doctoral program has remained relatively constant over almost two decades. In 2007, Nolan et al. report that 46% of Ph.D. students had work experience somewhere between one and five years and only 56% possessed a professional certification. Although program coordinators participating in their survey indicated that more weight was being attributed to work experience as a program admission criterion, Brink et al. (2012) find that 28% had no work experience, and 43% had up to five years. Plumlee and Reckers (2014) find an average of two years.

Bishop et al. (2012) proffer that a greater well of practical experience fosters the natural development of research questions, as opposed to chasing down research ideas with a particular type of learned statistical methodology. Boyle and Hermanson (2020) note that fewer Ph.D.s entering academia with professional certifications may exacerbate a possible gulf between accounting practice and the professor's ability to effectively teach students entering the profession. Buchholz et al. (2014) surveyed accounting students at a large urban university and discovered that the students attributed little value to their instructor's Ph.D. credential but did attribute some value to their instructor's CPA credential. Specifically, the students indicated that the most effective accounting instructors should possess the CPA credential. These data imply that, from the student perspective at least, the possession of a CPA license is somewhat indicative of mastery and therefore teaching effectiveness.

The ability to produce high quality research continues to be of prime concern for both Ph.D. students and program directors alike. According to the joint report, the AACSB and EDAMBA (2020) doctoral student participants ranked publishing high quality research in peer reviewed journals as one of the most desired program outcomes, with innovative teaching following. According to Brink et al. (2012), Ph.D. students report an average of three research projects in progress. Although the single dissertation is still most widely prevalent, about a third of programs allow a series of papers in lieu of a single product.

Beyer et al. (2010) suggest that a doctoral student become familiar with some seminal accounting articles as a foundation upon which to build a research platform. Those schools designated as top tier research schools may require faculty to teach two courses a year, therefore dedicating most effort to the production of research in the top five accounting journals. The authors contend that, whereas effective teaching is a significant component of success in a doctoral program, developing research skills is an

imperative component. Succinctly, a quality research record may supersede teaching effectiveness as the driver of favorable tenure and promotion decisions at a majority of universities.

Brink et al. (2012) find that doctoral-granting institutions' teaching requirements for doctoral students vary dramatically, from zero to twenty-eight courses over the duration of the program, with an average of near five. Average course preparations are around two. The joint report of the AACSB and the EDAMBA (2020) indicates that approximately half of the institutions do not require the student to teach within the program. If this is considered an important aspect to the graduating doctoral student, these statistics may be a deterrent for program entry. Plumlee et al. (2006) find that North American students are more likely to view teaching, as opposed to research, as the most important aspect of their future academic careers. Those potential students originating from outside North America hold the opposite view.

With regards to changes in the content and delivery methods available in doctoral programs, the AACSB/EDAMBA joint report (2020) shows that a little less than half of the business students surveyed believed that online content may be beneficial in terms of flexibility, but it does not replace the knowledge interchange available in an in-person environment. Program directors believe that the role of faculty members would most likely be changing within the next decade, suggesting that technology, data analytics, and greater ties to the professional community are all key drivers of this change. In addition, developing partially online coursework delivery and gearing the programs more toward practitioners are anticipated changes in the pipeline.

Method

Survey Participants

As the preliminary step to reach accounting Ph.D. program directors, a listing of accounting Ph.D.-granting institutions was obtained via a page on the American Accounting Association's website, entitled, "PhD School List." (aaahq.org, 2021). The listing was then purged of any non-U.S. based institutions, resulting in 102 U.S. institutions. Next, each institution's academic website was searched for information regarding the accounting Ph.D. program and contact information for the accounting Ph.D. program director or coordinator. In the event that the accounting Ph.D. program coordinator was not identified on the institution's website, the accounting chair's or department head's contact information was utilized instead (the email invitation requested that the recipient forward the invitation to the relevant party, if not applicable to the recipient).

From respondents queried, 22.5% offered participation resulting in a total of 23 responses generated from the online survey. All but one respondent classified their accounting school, from an accounting research perspective, as very high, indicative of an R1-level research school. While this sample represents a wide range of schools, their goals to recruit similar levels of high research potential students will be similar. Respondents reported an average of 5.1 (SD = 4.27) years of tenure as accounting Ph.D. coordinator. Program coordinators' responses indicate that two are employed by private institutions, whereas twenty are employed by public institutions (one participant did not respond). Represented institutional geographical locations breakdown as follows: 43% from the Southeast, 14% from both the Midwest and the Southwest, 9% from both the Northeast and the Mid-Atlantic, and 5% from both the Northwest and the West.

Online Survey

The survey was designed in and implemented using Qualtrics software (©2021). Potential survey participants were sent an email invitation, personally addressed, to complete the survey. Another two follow-up requests were sent barring initial completion. Requests for participation were sent between May and July of 2021. Participants were informed that their responses would remain anonymous, due to the possibly sensitive nature of the survey questions. Survey completion time was estimated at between 15 to 20 minutes.

The survey was divided into three sections. In the first section, participants were asked questions about the current status of their accounting Ph.D. programs, including the participant's classification of the school from a research perspective (e.g., very high (R1), high (R2), medium, or low) and the percentage of qualified accounting faculty that work directly with the Ph.D. students. Subsequently, the majority of questions in this section focused on the students—enrollment numbers for the 2021-2022 academic year, average age, average time spent in the Ph.D. program, the percentage of international students, type of research output expected (e.g., dissertation and/or series of papers), and the most popular research methods (archival, behavioral) and research areas (financial, audit, tax, other) within the last five years. Further information was gathered concerning the students' teaching requirements, including the number of course preparations and expected number of credit hours to be taught. The final section question asked what percentage of admitted students fully complete the program.

The second section focused on the admissions process. Questions related to recruitment included the average number of students that apply each year, the general trend in the number of applications over the last five years, the number of students interviewed each year, the perceived level of recruitment effort involved, the current supply/demand balance for qualified Ph.D. students, and the highest number of students that area allowed to be enrolled in the program at one time. The next subset of questions, focusing on student qualifications, included the following: whether the applicants were required to have a master's degree, a CPA license, prior work experience in the accounting field (and if so, what is the minimum amount), the minimum overall GMAT score requirement, and the minimum GPA requirement. Participants were then provided with an opportunity to write in any other additional admission criteria.

The last subset of questions in this section examined the interactions between the Ph.D. students and the program/program faculty. First, study participants were asked to gauge what percentage of the minimum program requirements is available for potential students to read on the program's website. Then, participants were asked how often exceptions to these requirements are made, and if made, what are the major reasons for doing so. Subsequent questions included how important is a potential student's familiarity with research in making an admission decision and whether the students are required to submit a preliminary paper on potential research topics. Finally, the participants were asked about the importance of faculty placement when making an admission decision, and whether preliminary plans regarding a dissertation chair, or faculty mentor, for potential students is made before acceptance into the program.

The third section asked the Ph.D. coordinator participants to gauge some of the challenges and trends within their programs. Once participants provided years of tenure as Ph.D. coordinator, they were asked to evaluate the ease with which they are able to recruit potential program applicants, the general trend of the abilities of potential students (e.g., more inferior/superior candidates), and how likely it is that their institution would consider implementing a fully or majority online accounting Ph.D. program, or a DBA or

EPh.D. program along with the current Ph.D. program. Next, participants were asked about possible program alterations, including the level of program changes since the participant's time as coordinator, and the level of changes under consideration within the next two years. If changes are anticipated, an additional question asked whether the changes are more internally (e.g., university committees) or externally (e.g., AACSB recommendations) driven. Finally, participants were asked to indicate what other information they might be interested in learning about other accounting Ph.D. programs and to provide any comments related to the survey.

Survey Findings

Current Students and Program Characteristics/Requirements

Coordinators were asked to divulge some characteristics of their current accounting Ph.D. students and the requirements related to the Ph.D. programs at their universities. These results are reported in Table 1. Currently, programs support approximately eight concurrent students for the year. Coordinators reported a mean of 8.17 (SD = 2.35) students enrolled (at any stage) in their Ph.D. program, with a minimum of 0 and maximum of 11.

Table 1					
Summary of Findings – Current Students and Program Characteristics/Requirements					
Survey Question	n	Descriptives			
How many Ph.D. students do you currently have enrolled in the program for the 2021-2022 year (at any stage)?	23	Mean 8.17	Std Dev 2.35	Min 0	Max 11
What is the average age of your Ph.D. students?	19	Mean 28.68	Std Dev 1.72	Min 26	Max 32
On average, what percentage of Ph.D. students are international?	19	Mean 47.89	Std Dev 26.62	Min 10	Max 100
On average, how long are students in your program?	22	< 3 years 1	4 years 4	5 years 17	6+ years 0
On average, what percentage of admitted students fully complete the program?	23	Mean 87.39	Std. Dev. 8.06	Min 65	Max 100
Roughly, what percentage of your qualified accounting faculty work directly with accounting Ph.D. students (i.e. co-author or teach seminars with Ph.D. students)?	22	Mean 72.73	Std. Dev. 16.84	Min 30	Max 90
Are students required to submit a preliminary paper on potential research topics?	22	No 22	Yes 0		
Over the past five years, what has been the most popular research area for Ph.D. students?	23	Audit 7	Financial 10	Tax 2	Other 4
Over the past five years, what has been the most popular research method used by Ph.D. students?	23	Archival 16	Behavioral 2	Split 5	
What type of research output is required of a Ph.D. student in order to complete the program? ^a	23	Diss. Only 12	Diss. & Pub. 0	Diss. & Pub.+ 0	Diss. & In-Pro. 11
Do Ph.D. students have a teaching requirement?	23	No 3	Yes 20		
How many different course preps do you expect the average Ph.D. student to have while in your program?	20	Mean 1.2	Std Dev 0.043	Min 1	Max 2.5
How many credit hours do you expect the average Ph.D. student to teach while in your program?	20	Mean 8.73	Std Dev 5	Min 3	Max 20
Notes: a - ‘Diss. Only’ refers to dissertation or series of papers only, ‘Diss & Pub.’ refers to dissertation or series of papers with a least one publication, ‘Diss. & Pub.+’ refers to dissertation or series of papers and more than one publication, and ‘Diss & In-Pro.’ refers to dissertation or series of papers plus an in-progress paper.					

Responses indicate that the average current students' age is 28.68 years ($SD = 1.72$), which is slightly below the national average of 31.5 years across all fields of study according to the Survey of Earned Doctorates (2019). The mean percentage of international accounting Ph.D. students is 47.89% ($SD = 26.62\%$), which is slightly higher than the Survey of Earned Doctorates' average percentage (38%). However, this split varies widely across reporting programs, from 10 to 100 percent of students.

The majority of reporting coordinators (77.27%, $n = 17$) indicate that the average expected time for students to complete their Ph.D. program is five years. The remaining programs (18.18%, $n = 4$) report an average of four years (the single remaining program coordinator reported three or fewer years). No coordinators reported six or more years as an average time to program completion. Along with this, a strong majority (87.39%, $SD = 8.06$) of admitted students are expected, and are able, to successfully complete the program. The maximum reported completion is all students, while the minimum reported completion is 65% of students.

In analyzing the characteristics of the Ph.D. programs, coordinators indicate that the majority of qualified accounting faculty (72.73%, $SD = 16.84$) work directly (i.e. co-author or teach seminars) with their Ph.D. students. The highest reported level of involvement is 90%, and the lowest level is only 30%. All program coordinators reported that a preliminary paper on potential research topics is not an admission requirement.

The program coordinators were asked to report on both the most popular research area as well as the most popular research methodology over the past five years in their program. Financial is the most popular research area for Ph.D. students (43.48%, $n = 10$). Audit is also very popular (30.43%, $n = 7$). Managerial was reported as the most popular by 13.04% ($n = 3$) of coordinators and, lastly, tax by 8.70% ($n = 2$). One coordinator reported that students are fairly evenly distributed across all areas over the last 5 years. As for research methodology, archival is reported as the most popular (69.57%, $n = 16$). Only 8.70% ($n = 2$) of coordinators reported that behavioral is the most popular within their program. The remaining coordinators (21.74%, $n = 5$) reported that students are fairly evenly split between these two methodologies within their program.

The reporting coordinators indicate that their programs are fairly evenly split on research requirements for completion of the Ph.D. program. No programs require a published paper. Slightly more than half of coordinators (52.17%, $n = 12$) state that the programs require only a dissertation or a series of papers. The remaining coordinators (47.83%, $n = 11$) state that the program requires an in-progress paper in addition to a dissertation or a series of papers.

The vast majority of program coordinators (86.96%, $n = 20$) reported that they require their Ph.D. students to teach (consequently, 13.04% [$n = 3$] reported no teaching requirement). In those programs with a teaching requirement, most coordinators expect their students to have only one course preparation for the duration of the program. In sum, coordinators indicate a mean of 1.2 ($SD = 0.43$) preparations, with one as the minimum number of expected preparations and 2.5 as the maximum. Additionally, for those programs with a teaching requirement, coordinators reported that they expect their Ph.D. students to teach roughly nine credit hours of coursework, or normally three classes. Expected teaching hours were reported with a mean of 8.73 ($SD = 5$) required by the average student, with a minimum of 3 and a maximum of 20 hours expected.

Program Admission Requirements

Information provided by coordinators about their accounting Ph.D. program admission requirements is summarized in Table 2. The required minimum acceptable score for the GMAT ranges from 550 to 701, with an average of 643.45 (SD = 40.16). For those program coordinators that indicate a minimum GPA is required for program admission, 22.73% (n = 5) provide a minimum of 3.5, 18.18% (n = 4) provide a minimum of 3.2, and 4.55% (n = 1) provide a minimum of 3.0. Interestingly, 54.55% (n = 12) of coordinators did not indicate a minimum GPA requirement for potential Ph.D. students. However, because the Accounting Ph.D. program falls under the purview of a university's Graduate School, some programs cannot list a GPA requirement, and yet students would still need to clear specific guidelines, such as GPA, under a separate Graduate School requirement. This would create a potential discrepancy in which the Ph.D. program itself would not list a requirement (and thus not be reported by the coordinators in this survey), yet one should still be effectively enforced onto the students.

Table 2
Summary of Findings – Program Admission Requirements

Survey Question	n	Descriptives			
What is the minimum GMAT score required for a potential student?	22	Mean 643.45	Std Dev 40.16	Min 550	Max 701
What is the minimum GPA requirement for a potential student?	22	At least 3.0 1	At least 3.2 4	At least 3.5 5	No requirement 12
Are potential students required to have a Masters' Degree? ^a	23	No 18	Yes 3	Earn 2	
Are potential students required to have a CPA license?	23	No 23	Yes 0		
Are potential students required to have prior work experience in the accounting field?	23	No 19	Yes 4		
If Yes, what is the minimum required work experience a potential student is required to have?	4	0-1 0	1-5 4	5-10+ 0	
How important is potential student's familiarity with research and/or pre-program research interest in making an admission decision? ^b	22	Mean 2.55	Std Dev 0.99	Min 1	Max 4
How important is a potential faculty placement when making an admission decision on a potential student? ^c	22	Mean 1.95	Std Dev 0.56	Min 1	Max 3
Do you formulate preliminary plans regarding a dissertation chair, or faculty mentor, for a potential student before acceptance? ^d	22	Mean 1.91	Std Dev 1	Min 1	Max 4
Do you ever make exceptions to the minimum program requirements to enroll a student? ^e	22	Mean 2.27	Std Dev 0.75	Min 1	Max 4
Notes: a - "Earn" indicates that the student is expected to earn the Master's degree concurrently b - Participants reported on how important prior research familiarity was (1 Extremely Important, 5 Not at all Important)					

- c - Participants reported on how important faculty placement was (1 Extremely Important, 5 Not at all Important)
- d - Participants reported on if they planned for chair/mentor for students (1 Never, 4 Always)
- e - Participants reported on how often they waive requirements (1 Never, 4 Often)

Program coordinators also reported on prerequisite education, licensing, and experience for their potential Ph.D. students. The majority of programs (78.26%, $n = 18$) do not require a master's degree. An additional 8.70% ($n = 2$) do not require a master's degree prior to program entry but require that the student earn one during their Ph.D. coursework. Only 13.04% ($n = 3$) require a master's degree as a condition for admission to the program. No programs require a CPA license for admission. Most programs, 82.61% ($n = 19$), do not have any requirement for prior work experience in the accounting field for admission to their program. The remaining programs (17.39%, $n = 4$) have an experience requirement from one to five years for program admission.

All coordinators report that their program places at least some reliance on a potential student's familiarity with research as an important part of their admissions decision. On a Likert scale from 1 (extremely important) to 5 (not at all important), the coordinators' mean response is 2.55 ($SD = 0.99$). Additionally, on the same scale, when responding to how important a student's eventual placement is as part of admission decisions, the coordinators' mean response is 1.95 ($SD = 0.56$). In the admissions stage, 72% of program coordinators indicate that they do not typically plan for a dissertation chair or faculty mentor as a part of the process for a potential student. Using a scale from 1 (never) to 4 (always), coordinators report a mean of 1.91 ($1\ SD = 1$). On the same scale, most program coordinators stick to their admissions requirements (mean = 2.27, $SD = 0.75$).

Program Recruitment

Coordinators made disclosures regarding their program recruitment, and these findings are reported in Table 3. In gauging the relationship between qualified Ph.D. student supply and demand, eleven coordinators (47.83%) perceive the relationship as even, eight coordinators (34.78%) perceive that demand outstrips supply, and the remaining four (17.39%) coordinators perceive that supply outstrips demand. Barring this slight leaning toward insufficient supply, most program coordinators did not view the number of applicants as trending downward, with a mean of 2.74 ($SD = 0.67$) on a scale from 1 (significantly decreasing) to 5 (significantly increasing).

Table 3
Summary of Findings – Program Recruitment

Survey Question	n	Descriptives			
How would you define the supply/demand balance of qualified potential Ph.D. students?	23	More Supply 4	Even 11	More Demand 8	
Over the last five years, what is the general trend in the number of applications that you have seen? ^a	23	Mean 2.74	Std Dev 0.67	Min 2	Max 5
On average, how many students apply each year?	22	Mean 34.84	Std Dev 13.24	Min 2	Max 50
On average, how many students do you try to interview each year?	23	Mean 9.04	Std Dev 9.15	Min 3	Max 50
What is the highest number of students you will allow to be in the program at one time?	22	Mean 8.18	Std. Dev 3.42	Min 2.5	Max 15
How would you gauge the level of recruitment effort involved? ^b	23	Mean 3.91	Std Dev 1.28	Min 2	Max 5
During your time serving as Ph.D. coordinator at your current institution, how easy have you found it to recruit potential students to apply to your accounting Ph.D. program? ^c	21	Mean 2.43	Std Dev 0.9	Min 1	Max 4
During your time serving as Ph.D. coordinator at your current institution, how would you describe the general trend of the abilities of potential students that apply to your accounting Ph.D. program? ^d	21	Mean 3.29	Std Dev 0.82	Min 1	Max 5
Notes: a - Participants reported on quantity of candidates (1 Significantly decreasing, 5 Significantly increasing) b - Participants reported on level of effort in recruitment (1 None, 2 Minimal, 3 Somewhat intensive, 4 Extremely intensive) c - Participants reported on how difficult it was to recruit (1 Very difficult, 5 Very Easy) d - Participants reported on quality of candidates (1 Many more inferior candidates, 5 Many more superior candidates)					

Overall, coordinators report a healthy number of potential candidates, with a mean of 34.84 (SD = 13.24) potential students submitting applications to their program annually and a range from two to fifty. Program coordinators attempt to interview a substantial number of potential students each year (mean = 9.04, SD = 9.15, range from three to fifty). Programs are limiting student enrollments with a mean of 8.18 (SD = 3.42) students allowed in the program at one time. The maximum reported limit is 15 with an average of 2.5 as the minimum cap on Ph.D. student enrollment.

While most programs did not report a significant drop in applicants, coordinators remain active in the recruitment process. When asked about level of effort involved in recruitment on a scale from 1 (none) to 4 (extremely intensive), coordinators indicated a mean of 3.91 (1.28 SD = 1.28). Most coordinators still convey difficulty in recruiting potential students to their programs. On a scale from 1 (very difficult) to 5 (very easy), the reported mean is 2.43 (SD = 0.9). Despite recruitment challenges, coordinators give no indication that the perceived abilities of potential candidates have worsened. On a scale from 1 (many more inferior candidates) to 5 (many more superior candidates), the reported mean is 3.29 (SD = 0.82). Consequently, it appears that the coordinators perceive candidate abilities as slightly improving.

Program Changes

Finally, coordinators provided some insight into changes and updates involved in their programs, and these results are reported in Table 4. Generally speaking, reporting coordinators have made changes to their Ph.D. program during their tenure; the mean is 3.91 (SD = 1.28) on a scale from 1 (none) to 5 (extensive). Further, program changes were driven more by internal pressures (e.g., institutional or committee goals) rather than by external pressures (e.g., benchmarking other programs or AACSB recommendations), as evidenced by a mean rating of 30.63 (SD = 28.36, minimum = 0, maximum = 92) on a scale from 0 (internally driven) to 100 (externally driven). Regarding potential changes within the next two years, coordinators indicate a mean of 2.00 (SD = 0.82) on a scale from 1 (none) to 5 (extensive).

Table 4
Summary of Findings – Program Changes

Survey Question	n	Descriptives			
During your time serving as Ph.D. coordinator at your current institution, how would you describe changes to the program requirements for the accounting Ph.D. program? ^a	21	Mean 3.91	Std Dev 1.28	Min 2	Max 5
If you made changes, were these more driven from internally (e.g. institutional goals, or committee goals) or externally (e.g. bench marking to other programs or AACSB recommendations) driven? ^b	16	Mean 30.63	Std Dev 28.36	Min 0	Max 92
What level of changes are you considering in the next two years? ^c	21	Mean 2.00	Std Dev 0.82	Min 1	Max 4
How likely do you think it is that your institution will consider implementing a fully or majority online accounting Ph.D. program (i.e. all or most coursework to be completed online)? ^d	21	Mean 1.1	Std Dev 0.29	Min 1	Max 2
How likely do you think it is that your institution will consider implementing a DBA or EPh.D. program along with your current Ph.D. program? ^e	20	Mean 2.05	Std Dev 1.56	Min 1	Max 5
Notes: a - Participants reported on how many changes they have overseen (1 None, 5 Extensive) b - Participants reported on what contributed more to the changes made (0 Internal, 100 External) c - Participants reported on how many changes expected in next two years (1 None, 5 Extensive) d - Participants reported on likelihood of majority online program (1 Very unlikely, 5 Very likely) e - Participants reported on likelihood of additional programs (1 Very unlikely, 5 Very likely)					

Notwithstanding the accelerating trend toward online learning within universities (Castro & Tumibay, 2019), an overwhelming majority of coordinators do not see their Ph.D. programs moving toward a majority online option. On a scale from 1 (very unlikely) to 5 (very likely), coordinators report a mean of 1.1 (SD = 0.29) when considering the likelihood of developing a mostly online Ph.D. program. The vast majority, 90.48% (n = 19), categorized the possibility as very unlikely. Additionally, responding coordinators seem relatively immune to any pressures to add alternative programs to the current Ph.D. program. For instance, the majority of program coordinators are not planning on incorporating alternative programs, such as a DBA or EPh.D., as reported with a mean of 2.05 (SD = 1.56).

Conclusion and Future Research

The findings of the present survey are in line with those of prior research findings. Although high-level research Ph.D. program coordinators report at least moderate changes to their program over an average five-year tenure, it appears that the core characteristics of these programs remain largely unchanged despite the continued shortage in qualified faculty. In particular, admission requirements, program duration, and program requirements are similarly-positioned as they were almost twenty years ago. Data suggest that roughly the same percentage breakdowns in both research area and research methodology still hold. Although most coordinators report that they find a slightly larger demand than supply for students, overall, the high-level research institutions do not seem hard-pressed in attracting and admitting Ph.D. students. From the perspective of an academic employer, it appears that those from these institutions place less importance on practical experience and are more concerned with a potential employee's ability to contribute to a high-level research agenda. Yet, even though programs have eschewed some of the practical experience in students for a more research prepared student, the pool of students at lower levels of education are not widely informed on areas of research (Daly & Weber, 2021).

A natural extension of the present study is a focus on lower-level research institutions that confer accounting doctoral degrees. Since prior research indicates that the doctoral shortage may be most detrimental for these institutions, comparing the characteristics between institutions of differing research levels may prove insightful. The current climate seems to magnify the dichotomy between the ultimate goals of varying types of doctoral granting institutions. Specifically, high-level research institutions focus on attracting Ph.D. students that are geared toward prolific research production within the doctoral-granting accounting academic community and produce graduates with skills tailored to such a task. Conversely, lower-level research institutions focus more on the teaching component of academia and may be more focused on the practical experience for their students that would produce graduates more suited to placement at non-doctoral granting institutions.

The present research suggests that the administrations at high-level research institutions are not pressed for students and, thusly, not interested in altering significant parts of accounting Ph.D. programs even with the long running shortage in qualified accounting Ph.D.s. This may be due to the type of student that these programs are attracting. Taking younger and less experienced students into their program may offer a larger pool of applicants. Conversely, non-doctoral granting institutions, wherein shortages are more prevalent, may focus on attracting graduating Ph.D. students with greater professional experience and credentials to accentuate teaching effectiveness. Unfortunately, such Ph.D. graduates seem harder to attract to Ph.D. programs due to their entrenchment in the accounting profession and high salaries. As such, lower level research institutions that offer the doctoral degree may have to offer alternatives, such as the DBA, in order to meet the demand for accounting Ph.D. personnel at lower-level research doctoral granting, or non-doctoral granting, institutions. In essence,

the incorporation of possible remedies to the accounting Ph.D. shortage may exacerbate the tiered system present in accounting academia.

More drastic alterations to current Ph.D. programs come under closer scrutiny considering the present accounting environment and accounting firms' willingness to embrace alternatives to working at the office. For instance, PricewaterhouseCoopers recently announced an offer to allow employees substantially full-time remote work (McCabe, 2021). Such an announcement represents a monumental shift in the dynamics of the accounting profession. If employers are now offering the option of remote work, potential students may come to expect such allowances for remote learning from universities. The onset of the global pandemic has accelerated changes in the accounting profession to which the notoriously slow-paced academic community will have to pick up the pace to remain relevant. As of the moment, it seems that a one-size-fits-all approach is entrenched in most doctoral granting institutions.

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