What Do They Master? Perceived Benefits of the Master's Thesis Experience

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This qualitative study explores the learning outcomes achieved by students undertaking a master's research thesis. Interviews were conducted with 24 alumni of a higher education/student affairs program who matriculated between 1986 and 1996. Program faculty, student support staff, and graduate assistantship supervisors were also interviewed. Students experienced the thesis process in eight clearly identifiable stages, with learning outcomes associated with each stage. Four areas of growth were attributed to completing a thesis: personal development, skills development, content expertise, and relationship development. Faculty advisors were identified as critical to the success of the thesis. Implications for student-advisor interaction are discussed.

Deans of graduate schools view advising as a critical element in student retention and development; further, the relationship between advisor and advisee is fundamental to graduate student satisfaction (Berger, 1992; Wong, Selke, & Thomas, 1995). The master's research thesis is perceived as a key vehicle for building this relationship, and criteria for evaluating the quality of master's degree programs often include the research thesis as a key indicator (Conrad, Haworth, & Millar, 1993). Many professional master's programs offer students a choice of certification: a general examination or a research thesis. As a result, assisting students with the decision about pursuing a research thesis is an important dimension of graduate student advising.

In making the choice between a thesis or exam, students and advisors must consider many variables, including the student's career objectives, prior research experience, and capacity for building research skills. Other factors to consider include how the thesis experience might enhance the student's personal growth and development, the opportunity costs of courses omitted to accommodate registration for thesis hours, the unique learning outcomes expected from the thesis experience, and the relevance of those learning outcomes for the student's anticipated professional situation.

To evaluate these variables, advisors and students need insight gained from research and theory. Unfortunately, "research on graduate students' experience is lacking; even more scarce are empirical studies of graduate students" (Hodgson & Simoni, 1995, p. 245). In particular, the perceived benefits of a research thesis for practice-oriented master's students are undocumented. We examined student and faculty perceptions of the master's thesis experience and explored the institutional factors that affect how faculty members view the thesis.

Role of the Master's Thesis in Graduate Education

The master's thesis plays a key role in three dimensions of graduate education: quality evaluations of programs, student mastery of a recognizably valuable set of learning outcomes, and as a facilitator in resolving certain developmental issues experienced by people in their twenties. Each is discussed below.

Because graduate programs can differ dramatically in structure, a brief definition of the master's thesis is warranted. The Council of Graduate Schools advocates that a master's thesis demonstrate "independent ability to address and solve a serious intellectual problem, albeit one that is less ambitious than that addressed by the doctoral dissertation" (Madsen, 1992). The Council (1990) also indicated that the thesis should be limited in scope and, while representing an original and substantial contribution to the field, should not require an excessive amount of student time or effort. British commentary on the master of philosophy degree is similar: The thesis should demonstrate an ability to "test ideas; understand appropriate techniques; make use of published work and source material; and show familiarity with different theories and empirical studies" (Phillips & Pugh, 1994, pp. 21–22).

Program Quality

The thesis requirement turns out to be a key criterion in the evaluation of the quality of master's programs. Through extensive research, Conrad et al. (1993) identified four clusters of attributes of high-quality master's programs: cul-

ture, planned learning experiences, resources, and leadership. The planned learning experiences include a tangible product, such as a thesis or report: "Many interviewees emphasized that the single most important condition underlying effective 'tangible-product' learning experiences was faculty commitment to master's students . . . expressed when faculty spent time guiding students through the research process, discussing problems as they arose in the lab or the field, and critically reviewing and providing constructive feedback on drafts of student theses and reports" (Conrad et al., 1993, p. 303).

Learning Outcomes

Orna and Stevens (1995) highlighted the potential benefits of completing a research project whether as a thesis or as another independent project. Students should gain confidence in their abilities to a) manage time, finish complex projects, and work independently, b) develop the professional and interpersonal skills for close, sustained, and critical collegial interaction with a mentor, and c) attain intellectual development through integrative and transformative knowledge work. In addition, students should learn to a) use information resources, b) internalize information by transforming it into structured internal knowledge, c) manage information, d) integrate information with other research activities to make connections between theory and field research, and e) transform acquired knowledge into a product that can be shared with others. The key advising question is whether these skills can be best learned through a thesis or could be acquired through the cumulative experience of substantial research courses.

Developmental Issues

The majority of master's students in professional programs, like higher education/student affairs, is aged in the mid-twenties (Kinser, 1993; Richmond & Sherman, 1991). Therefore, perhaps the most applicable developmental research for understanding master's degree students can be found in the life cycle literature (Levinson, 1978, 1996; Sheehy, 1976). Levinson classified the period from ages 22 through 28 as the "entry life structure for early adulthood." Sheehy refers to these years as the "trying twenties." Levinson's latest work, which focuses on women, identified a critical "age 25 shift" and is particularly pertinent to our study because more females than males attend graduate programs in higher education/student affairs (Forney, 1994).

Major issues for young professionals in this age group revolve around shaping dreams; that is, "fashioning a provisional structure that provides a workable link between the valued self and the adult society" (Levinson, 1978, p. 57). It also involves making key choices (Levinson, 1996), finding mentors, and trying on different life structures (Sheehy, 1976, p. 121). Sheehy described persons experiencing the trying twenties as absolutely sure that decisions are irrevocable. They believe that they are bound to their choices forever. For those students anticipating academic careers, the potential role of a research thesis in responding to these issues is very rich. For those with other career objectives, the converse may be true: Why should they complete a thesis when they believe they may never conduct research again? Advisors need to help individuals with career aspirations outside the academy assess the benefits of the thesis experience.

Given the inherent tension between the need to explore and the need to commit during the early adult years, a developmental model of academic advising seems best suited to help advisees assess the benefits and liabilities of the thesis option. Focusing on student individuality, developmental advising is a process by which student and advisor work together to identify and clarify career goals and develop educational plans to achieve those objectives (Gordon, 1988). In programs where the master's represents a terminal degree, advisors are challenged to identify where the thesis might contribute to the key developmental tasks of these young professionals, namely, making choices, particularly career choices, and gaining self-confidence (Gould, 1978).

According to the literature, contributions from the thesis experience could be mapped across five major theoretical domains: psychosocial, cognitive-development, maturity, typology, and person-environment (Knefelkamp & Cornfeld, 1978). However, the literature fails to explore student perceptions of the experience. Thus, serious questions remain to be answered, including the following that this study sought to illuminate:

1. What do students who choose the thesis option consider the most valuable outcomes—cognitive, social, or other?
2. What constitutes a successful thesis experience?
3. What types of faculty input are most influential?
4. What do students and faculty need to contribute to ensure a successful thesis experience?

5. What value might the thesis experience hold for prospective employers and subsequent job performance?
6. What institutional factors affect faculty behaviors and attitudes toward thesis students?

Procedure

Because little research on the master's thesis experience is available on which to base a preliminary inquiry, we took an exploratory, qualitative, interview-based approach to focus on student perceptions. The purpose of the qualitative approach is to create a rich understanding of the anticipated and felt benefits of the thesis experience (Demb, 1996; Patton, 1990). Beyond the practice-oriented results, we identified field-based hypotheses for a second round of inquiry (Demb, 1996, p. 111).

An in-depth, exploratory review of student experiences within a single program was considered the most promising strategy because cross-discipline variation in culture and requirements could be held constant. The sample was drawn from alumni of a program in higher education/ student affairs within a college of education at a large, public, research I institution (Carnegie Foundation for the Advancement of Teaching, 1994). Alumni who matriculated between 1986 and 1996 and undertook master's theses, their faculty advisors, and student services administrators participated. During each of those 10 years, approximately 15% selected the thesis option.

The thesis experience was also considered from the faculty perspective, especially with respect to institutional and professional workload and reward criteria. Because advising is often inadequately considered when evaluating the workload of faculty members at research universities, we also explored incentives for faculty members to spend extensive time with these students.

In this program, master's thesis requirements assume one year of student effort at the level of a standard graduate course per enrollment period. Thesis proposals can be either formal or informal according to advisor preference. The thesis outline parallels the dissertation in literature review, methodology, analysis, findings, and conclusions. An oral defense is required.

Results

Of 34 alumni who chose the thesis option between 1986 and 1996, 24 responded to letter invitations, completed the Kolb Learning Style Inventory (LSI) (1985) and participated in the telephone interview. Of 8 faculty advisors, 7 were successfully contacted for interviews and completed the Kolb LSI. Of 4 student support administrators, 3 agreed to participate. They indicated so little interaction with the master's students in this program that their comments are not discussed further. Of 4 graduate assistantship supervisors contacted, 3 agreed to participate.

During the interview, alumni were asked to discuss their goals in attending the program, the manner and time frame in which the thesis decision was made, the people who were most important, and the most stimulating and frustrating aspects of the process. They were asked to elaborate on those aspects of the process that surprised them and those that evolved as anticipated, what they gained from the experience, and the effect of the experience on them and their professional situations. They were prompted to give advice for students considering the thesis option and for faculty members working with thesis students.

During the interview, faculty respondents were asked how many students inquired and ultimately undertook thesis preparation and how they had explained program options to advisees. They were also asked what both student and advisor needed to contribute to the process, what constituted a successful experience, and how much time and effort thesis advising required. In addition, they were asked how workload, promotion, or tenure considerations affected their availability for thesis advising, whether non-thesis students might be disadvantaged in terms of faculty interaction, and in what other ways students might gain the kind of learning acquired during the thesis process.

Graduate assistant supervisors were asked their observations about the differences between thesis and non-thesis students. Student support professionals were asked about the nature of their interactions with students related to their thesis projects and about potential job implications for students writing the thesis.

To assure inter-interviewer reliability, we conducted the pilot interviews together. Then, we split the interview list and individually conducted interviews. Each then prepared detailed notes of the interviews. Because interviews were conducted via the telephone, tape-recording was deemed inappropriate.

Data analysis in qualitative research has been characterized as a process through which the meanings of the participants' lived experiences are given voice (Miles & Huberman, 1994). Through exhaustive and careful reading of interview data, themes were allowed to emerge from

the text and were not imposed prior to data collection and analysis. Text was coded and analyzed using HyperReseach, a computer software package for qualitative analysis (Hesse-Biber, Kinder, Dupuis, Dupuis, & Tornabene, 1998) to identify themes. In addition to the global analyses, responses of alumni over the age of 25 were studied separately to ascertain whether students older than Levinson's watershed age described their responses to the thesis experience differently.

The Student Experience

The alumni who conducted thesis research ranged in age from 21 to 43 when they started the program, with a median age of 23. Five alumni were over the age of 25 when they started. The women-to-men ratio was 7:1. According to program records, this gender ratio differed significantly from the entire group of students who had completed a master's thesis in the higher education/student affairs program between 1986 and 1996, which was 3.25:1, and from the student population in this program where the female:male ratio from 1992 through 1996 was approximately 3:1; the interviewee group underrepresented men.

Of the 24 respondents, 10 continued on to Ph.D. programs; the other 14 considered the master's degree their terminal professional degree. In their research, 15 alumni had used quantitative methodology; 7 had employed qualitative approaches; and 2 had utilized a combination of quantitative and qualitative methods.

The first, and most striking, characteristic of the alumni description of the thesis experience was that individuals experienced the process in clearly identifiable "stages." These stages emerged as former students described the most stimulating or frustrating aspects of the process, outlined the ways in which advisors most productively interacted with them, and spoke about their most important learnings. As described by students, the thesis experience is not one smoothly continuous experience. Instead, it consists of a passage through eight identifiably different phases, much like passing through rapids on a river, with each phase bringing different challenges and learning outcomes: a) the decision, b) framing the research question, c) literature review, d) data collection, e) data analysis, f) writing, g) the oral defense, and h) finishing.

The decision. The second dramatic finding was that three fourths of the participant alumni arrived as new students on campus either knowing that they wanted to undertake a thesis or having made that decision within a very short time. Advisor input had been important to only 3 of the 24 alumni participants as they evaluated options.

Students chose the thesis option because they became excited about a topic (25%) or because it seemed a good alternative to a comprehensive exam and was a natural fit for their learning styles (20%). For another 30% it provided a better learning experience or more of a personal challenge than the examination option. For one half of the alumni, namely those who were considering the Ph.D., the thesis experience served as a dry run of a major research project.

Although nearly all alumni in this study independently decided to complete the thesis, they commented about their perception that the research thesis choice was not actively encouraged. They noted a lack of information about the thesis alternative, both in terms of "what it meant" to undertake a major research project and also in terms of the structural aspects of a thesis, for example, the division of chapters and the required written format.

Framing the question. Nine participants (38%) addressed this stage directly. Five (21%) described the amount of time and difficulty required to find a thesis topic as unappealing and unanticipated. "I did drafts for over two months. I would meet with my advisor who would read it and say 'okay go read these five books and call me when you're done.' Holy cow . . . I was just looking for grammar! It was daunting to try to focus the question." Three more (13%) found topic exploration exciting. They indicated that advisor discussions were helpful and identified sources of topics as advisor projects, internship settings, and literature.

The literature review. Students found preparation of the literature review a challenge. They needed to learn how to find the right literature, how much to read and when to stop, to evaluate literature relevance to their research problem, and to assess the quality of the information. Forty-five percent found the literature review stimulating, read more than they had expected, and wanted to learn as much as possible.

Data collection. Frustration was the key emotion associated with data collection for approximately one third of the participants. They found it difficult to obtain participants, and the university human subject review process was more detailed than anticipated. "I couldn't understand why it was so hard. I thought people would jump at the chance . . . I had to scrape to find them." For another group, data collection was exciting and became the moment when they "owned" the pro-

ject. "It's mine. I'm going out. I'm asking questions. I'm getting to the heart of this."

Data analysis. This stage elicited the strongest and most mixed reactions. Students discovered that analysis involved a lot of work. They found that entering statistical data into computers and forms was boring and the statistical analyses were much harder than anticipated. "Trudging through the data was such a burden for me; I really struggled."

Some students conducting qualitative projects were surprised by the richness of their interviews. "I was drawn into the stories and lives of my respondents. I didn't expect that. It was overwhelming." For a few, the data analysis was easier. "I had enough support, and didn't need to be afraid of it. I had chosen the right statistics to analyze my data." Others found it exciting. "Once I got my bearings . . . it was neat to see things emerge and come together." "After the subject took the test and I was putting the data together, I began to see patterns and echoes of the other's work. It was thrilling."

Writing. For more than one third, the writing process was complicated. For some it was frustrating and seemed never ending. "I'd write and write and write and write and write and write . . . one weekend I wrote 30 pages. [*My advisor*] marked one paragraph and said it was so important I needed to write a chapter about it. I was just pouring sweat onto paper." Six found the writing fun and stimulating. "I could move away from the empirical and be creative, think out loud about my early ideas for doing the project."

Oral defense. Reactions were mixed to this part of the experience. Only a few alumni commented, and they described the oral alternatively as scary, exciting, or smooth and easy.

Finishing. Keeping up energy toward the end of the project became difficult for students, and they found finishing a very emotional experience. They were relieved and surprised to make it to the end. It was a rite of passage bringing a terrific sense of accomplishment and pride. They also felt a sense of loss and said that they were tired and exhausted. They were under a lot of stress. "It was a sense of finality, of achievement. It meant more to me than any other experience. This one made me hold up my head and say 'I can do it.'"

Student Outcomes

For each stage the alumni were able to identify the specific skills and experiences they had gained. Through the struggle to frame a question, the students learned how to narrow a topic and how to use the literature to form a question. From the literature review, they learned how to read critically, analyze, and tie previous research into a project and how to gain a deeper understanding of a topic. From the challenges of data collection, they realized that they could handle complexity, and in the process they learned survey design, gained interpersonal skills, and learned how to ask good interview questions. From the data analysis, they learned to persevere through the boring and tedious work of coding or data entry to arrive at the excitement of finding patterns and themes. In addition, they learned to write for a specific audience, to separate opinion from data, and to differentiate a critique of their writing from personal attack.

The similarity in alumni expressions of their overall reactions to the process was notable. In a word, the experience brought "self-confidence." In addition to specific substantive expertise, the process gave them a terrific sense of accomplishment. The students identified four areas of growth and development. At a personal level, they gained pride and confidence in their own abilities. They said that they developed important skills, including critical thinking, data analysis, organization, and writing. "I always had strong counseling skills. . . . Now I have a whole new level of counseling skills." Many spoke about the specific content expertise they gained after undertaking an in-depth examination of their topic. They built and developed relationships with the research literature, faculty, the research community, their professional fields, and in some cases where the research tied into the sites of their assistantships, their specific organizational units. "If I have to do a workshop or presentation, I will automatically begin with an ERIC search to bring in the current literature."

These comments were remarkably similar to the observations of students made by the graduate assistantship supervisors. Arguably, no single individual has more opportunity to observe a graduate student in this program than the assistantship supervisors, and as potential employers, they represented a unique perspective. Students work 20 hours per week for these professionals in responsible roles; the time frame provides more potential for contact with the graduate supervisor than a student might have with any other single individual. The 3 supervisors interviewed are currently employed by the institution and supervised alumni conducting research theses after 1990. All were able to recognize thesis and non-thesis students.

In distinguishing among students, the supervisors used words like "thesis students were more disciplined" or "have set goals for themselves." Supervisors said that thesis students "seem to have more of a connection between their jobs and their academics" than other students and "were able to analyze situations happening on campus within the context of the institution as a whole, not just their immediate job responsibility." All 3 interviewees indicated that the thesis experience would be viewed as an asset to a potential employer.

The lack of differentiation between responses of younger and older students was a key finding. The older alumni were aged 28, 30, 32, 41, and 43 years when they started the program. Responses to questions about overall learning, the personal meaning of the experience, and frustrations, surprises, and satisfactions associated with it covered the same themes for these 5 alumni as for the 19 thesis graduates who were 24 years old or younger.

Another key finding showed the importance of the character of the advising interaction. Thirty-eight percent spoke specifically about this relationship when asked to provide insights for faculty advisors. Faculty accessibility was insufficient for successful advising. Rather, students wanted faculty advisors to offer a complex and balanced blend of guidance and autonomy. Too much of either created problems. Too much autonomy was dysfunctional for this student: "I was a bit paralyzed and didn't ask for help. I needed a bit more intrusive guidance." However, another student cautioned, "Too much guidance from an advisor may make the student feel like they can't do it or that the advisor doesn't have confidence in the student's ability. Let them make mistakes and then use those mistakes as teachable moments—but don't let the student create a disaster." Yet another expressed the advisor-student relationship as follows: "Students need to have it set up to be able to ask questions and not thought to be dumb."

The advice alumni would offer to students considering the thesis option today addressed six major points, including motivation and learning styles. Three fourths of the alumni stressed that students should be highly motivated to undertake the thesis and should have a clear understanding of their career or master-program goals and how the thesis fits into those objectives. On a related point, 38% suggested students should chose a topic "you care about," one for which the person has a "passion." Twenty-five percent suggested that a student weigh the thesis and examination alternatives against their personal learning styles.

One half of the alumni specifically highlighted the relevance of the master's thesis experience for those considering Ph.D. work in the future. Thirty-seven percent also focused on the importance of the advisor relationship. Thirty percent stressed the amount of time the thesis research and write-up would take. Another 30% provided more strident comments that explained that the thesis would take up a great deal of energy, would require the student to give up other activities, and would be difficult and grueling: "Be prepared that it will take up your whole life and if you're not willing to make that commitment, don't do it." Students were cautioned to create a support system that includes a network of friends and others preparing a thesis. For 11 of the alumni (46%), family, friends, and clergy were key players during this stressful process.

Almost one third of the alumni stated unequivocally that the thesis was by far the best option from among the three that this program offered (thesis, case study, or general examination). They believed that it was a great learning experience.

Faculty Perceptions and Context

Three of the 7 faculty participants were female. The faculty group included 1 assistant professor, 4 associate professors, and 2 full professors. Two faculty members joined the department with tenure; 2 were tenured prior to 1986; 2 earned tenure and were promoted during the period of the study. The assistant professor was reviewed and denied tenure in 1995; an associate professor was denied promotion to full professor in 1996. Of the group, 4 continue as active faculty members in the program in 1999 and 2 are retired.

Faculty comments reflected a remarkable similarity to student perceptions. They agreed about the experience qualities that attracted students to the thesis and the characterization of successful thesis experiences and student learning outcomes. They agreed about the attitude and skill students and faculty advisors need to bring to the thesis project and whether non-thesis students might be disadvantaged in terms of faculty interaction.

Faculty participants reported little discussion between 1986 and 1996 about how best to present the thesis option to students or the ways in which an advisor might help a student discern whether the thesis would serve his or her purposes. No written guidelines were available until 1995 when one individual prepared materials for her advisees.

Faculty advisors described successful thesis experiences and increased student learning in terms of the development of writing and research skills, such as framing a question, gaining expertise on the topic, gaining confidence, knowing one's self as an inquirer, and learning how to learn from others. Faculty advisors felt that successful students bring intellectual curiosity and skills, perseverance, intrinsic motivation and commitment, some understanding of research, a strong interest in a topic, some academic and writing skills, a sense of humor, and a tolerance for ambiguity. They charged the faculty with being accessible, encouraging and genuinely engaging with the student, showing patience, challenging the student with care, and being prepared to actively guide the student through the process.

To a person, none of the faculty participants felt non-thesis students to be disadvantaged in developing relations with the faculty. Opportunities for independent projects and interactions with faculty members through course-based research papers were cited as available for any student.

Faculty advisors rated the nature of the effort required to advise master's theses as very similar to that involved in chairing a doctoral dissertation, noting and recognizing that the one-year time frame was substantially shorter than that for a dissertation. However, all faculty participants stressed that the intensive personal interaction went far beyond that involved in guiding a student through a course research paper. One faculty member stated emphatically that advising a thesis was a great deal of extra work and as a result did not encourage students to choose the thesis option.

The workload and reward criteria of the research university context clearly impacted how faculty participants considered working with master's students on the thesis. While criteria for promotion and tenure are multidimensional, current promotion and tenure documents reflect an explicit emphasis and priority on published research. For the untenured faculty member, the advice of colleagues, promotion and tenure criteria, along with other advising responsibilities led to limitations on thesis involvement. Time and effort spent on master's thesis work was viewed as a detriment to progress in other areas. Of the other 6 faculty participants, 1 found it necessary to limit thesis involvement and commented that because of research pressures, only students who were willing to participate in ongoing projects would be accepted as advisees for thesis or dissertation work. One other, as noted above, felt the extra work to be a burden. The other 4 largely dismissed workload considerations. However, 2 were pointed about the lack of recognition for master's thesis advising, yet they indicated that those considerations did not affect how they interacted with thesis students.

Implications for Student-Advisor Interaction During the Thesis

In answer to a direct question, 70% of the alumni identified the advisor as the person most important to them in the thesis process. The remaining 30% named the thesis committee. Clearly the quality of advisor involvement critically affects how the student understands and completes the thesis. Further, these findings can be used to offer suggestions about how an advisor might contribute to an effective thesis experience.

First, faculty advisors need to know and understand thesis-oriented students. This group of alumni was a remarkably focused and self-motivated group of individuals. They based their actions on personal, intrinsic reward systems and held an appreciation of their own learning styles and skills. Faculty advisors should have a good understanding of the research, educational, and writing skills a student brings to the process, and the advising interaction should help students articulate their own motivations and expectations.

Second, student-advisor interactions during the thesis experience may need to be a fairly structured and consistent occurrence. Advisors may need to be proactive about assuring the student that they will be given room for autonomy but that the advisor is there to ensure the student does not falter to the extent they are unable to complete the thesis. Students indicated clearly that a thesis was a new experience; they did not know what to expect from it and sometimes did not know how to ask for help.

Third, students ought to be given detailed information about the time frame, emotional investment, stress, and specific challenges and stages of the thesis process. Students expressed frustration and concern about the ambiguity of the research process and advisor expectations. Many good dissertation guidelines are available for doctoral students; master's students could benefit from similar information. For example, faculty advisors understood that students anticipated that the thesis writing process would be accomplished quickly. Yet, advisors knew that most segments of the thesis require several drafts. Students expressed surprise at how often, and how intensely, their writing was critiqued. Such

frustration might be alleviated if differences in perception were addressed in a straightforward manner early in the process. Being asked to rewrite certain sections or chapters should not come as a surprise to the student.

Fourth, from the similarity in response across age groups among the thesis students, one can reasonably assume that most students find the new experience somewhat intimidating, regardless of the student's prior professional experience. Faculty should anticipate that older students will find the same challenges as younger advisees. The program environment will be unfamiliar and trying for them all. In fact, for those who may have achieved a certain degree of professional competence and confidence in prior roles, the new and often ambiguous situation may be even more unsettling.

Implications for Faculty Members and Program Design

Faculty advisors need to decide whether to encourage more students to participate in the thesis experience. The 34 alumni who had completed a thesis during the 10-year period of study represent only 15% of total enrollments during that time. The findings do not indicate whether or not advisor involvement and encouragement would have affected the decisions of those who chose alternative methods of program completion. Students engaged in a 2-year master's program usually make the thesis decision by the middle of the first year of study; that is, at the same time they are coping with a myriad of other tasks (e.g., becoming familiar with the expectations of graduate education, an assistantship, and possibly a new educational environment). In the midst of the upheaval that accompanies the transition to graduate school, advisor encouragement could be crucial, especially for those students who may be unsure of their success in undertaking a thesis.

However, increasing the number of thesis students in any given year may not be consistent with faculty workload or program objectives. Faculty participants reported that advising a thesis was a major time commitment and while most enjoy the experience, they receive few extrinsic, institutional rewards for undertaking advising at that level. Ultimately, the decision on programmatic changes to encourage the thesis must be based upon the types of learning outcomes deemed appropriate and desirable for a professional program, resources available to sustain such an effort, and the priorities and value structure of each institution regarding faculty workload priorities.

Limitations and Further Research

By design, the generalizability of an in-depth, single-program study is limited to other programs of a similar nature, in this case for other master's programs in higher education/student affairs/student personnel. In addition, the findings suggest directions for inquiry about the benefits of thesis work for master's students in other programs preparing students for nonacademic careers. Cultures among disciplines vary so dramatically that additional comparative research must be initiated before broader generalizations can be drawn (Adam & Roberts, 1993).

Researchers should consider whether a comparison across programs at one university would be more meaningful than a comparison of single programs across institutions. We believe the culture of a professional program to be dominant over the culture of an institution, and over the long-term, we recommend comparative studies of the master's thesis experience in higher education/student personnel or student affairs programs across institutions. Such studies could hold the professional culture constant as the context within which to discuss learning outcomes and assist faculty and institutions in evaluating the appropriate role for the master's thesis experience.

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Authors' Notes

The National Academic Advising Association provided the funding for this research. The authors gratefully acknowledge the importance of this support.

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