INTRODUCTION
The well-being of graduate students has become a common concern for higher education institutions (Mistler, Reetz, Krylowicz, & Barr, 2012). Many students are moving to new places, balancing a job along with schoolwork, while simultaneously fulfilling roles as a spouse, parent, or caregiver. The overwhelming process that is graduate school, particularly doctoral programs, can often prove to be too much, leading to struggles with anxiety and depression and a high rate of attrition (Ali & Kohun, 2006). The estimated attrition rate of 40% to 70% (Ali & Kohun, Gardner, 2008b, Gardner, 2009) for doctoral students appears to be a clear symptom of these struggles. Gardner (2008b) reported that doctoral students frustrations resulting from lack of support and direction, coupled with too much isolation with their independent work as the leading cause of attrition. Students in Gardner’s study repeatedly commented on support from an adviser as the most crucial factor in their success (Gardner, 2008b, p.340).

Isolation was a frequently cited reason for anxiety, depression, and attrition (Ali & Kohun, 2006, Grady, LaTouche, Oslaski-Lopez, Powers, & Simack, 2013). Ali and Kohun (2006) found the most common reasons for attrition to be related to financial troubles, overwhelming family obligations, emotional upset, feeling isolated, and confu-
Literature Review

High rates of student attrition is a concern for administrators of on-ground and online doctoral programs. It is a significant concern for recipients of doctoral degrees and is a deterrent to facilitate degree completion. At some level, attrition is to be expected and can be the result of an appropriately rigorous degree program (Most, 2008; p.127). Nonetheless, attrition comes at a great cost to all stakeholders. Universities invest a great deal of resources in doctoral students; this investment comes both in the form of dollars spent, and also the time of faculty and staff members (Pauley et al., 1999, p. 226). The University of Notre Dame determined that approximately $1 million dollars each year could be saved if the attrition of doctoral students diminished by 18% (as reported in Gardner, 2008a, p. 126). A student must also be in support of their advisor to limit forces that constrain degree completion.

It is generally understood that doctoral education is a difficult and lengthy process. Additionally, it is frequently understood to be done largely on one’s own (Cockrell & Shelley, 2011, p. 478). Throughout the process, student support may look different and will make different claims on the time and energy of stakeholders (Cockrell & Shelley, p. 472). These challenges for doctoral students include gender differences, family and workplace commitments, navigating relationships within the academic department and processes, and financial struggles.

Gender Differences

The current body of research indicates that women in doctoral studies face constraints that men do not. These frequently included struggles around relationships with other academicians, opportunities for research and publication, and getting connected to opportunities within the department (Mansfield et al., 2010, p. 728). Until very recently, men continued to women in their degree completion, and completion in a timely manner (Most, 2008, p. 180). Mansfield, Wibron, Lee, and Young’s (2010) research indicated five primary arenas of struggle for women: “constraints within the organizational culture, personal and familial sacrifice, struggles with identity, questioning self, and experiences with mentoring” (p. 731). Most (2008) suggested that given the longitudinal evidence for gender differences in the success and failure of doctoral students, policy makers ought to take notice (p. 186).

Support from Family

Many students find family to be a significant source of both support and encouragement during their time as doctoral students. Pauley, Cunningham, and Toth (1999) found that marital status was not significantly related to the completion of the degree (p. 226). However, familial support was a significant determinant in receiving the doctoral degree (p. 230). More specifically, Pauley et al. (1999) determined that those who did not complete their degrees were less likely to report that they received a great deal of support from their families (p. 230). Maher, Ford, and Thompson (2004) reported that doctoral students of either gender who experienced family struggles throughout the course of their studies had a particularly difficult time (p. 388). They also determined that women who finished their degree earlier were more likely than women who finished later to have reported having experienced support from their families (76% of early-finishers versus 53% of late-finishers) (Mahrer et al., 1999). Students who do not receive support and encouragement from their family members are likely to feel isolated. Moore, Lampley, and Moore (2010) explained that a perceived lack of support may be the result of a family member not understanding the nature of the graduate student life (p. 85).

Support in the Workplace

Many doctoral students anticipate finding a job upon the completion of their program. Moore et al. (2010) explained that a key part of graduate education is connecting with “academic professionalism” as students earn degrees to develop their careers (p. 86). However, as online programs proliferate, students who are already enounced in a job and career have the opportunity to continue their education. Offerman (2011) pointed to previous research that suggested nontraditional students are now already employed full-time, are frequently in management positions within their current careers, and are fitting their studies into their already busy lives (p. 24, 27). As such, support from within the existing workplace is crucial.

Support in the Academic Environment

Support within the academic setting is crucial to the success of students, and students seek this support from their peers, department faculty and staff, and advisers, and program peer mentors. Sutton (2014) reported that students in the online setting have the opportunity to interact with others while developing a community that is encouraging (p. 6). Furthermore, online interaction with faculty developed appropriate boundaries, expectations, and idea sharing in an academic setting (Sutton, p. 6).

Support and Encouragement from Program Peers

Research has determined that students benefit socially and professionally from having mentors in the program in a cohort (Cockrell & Shelley, 2011, p. 480). Pauley et al. (1999) determined that support from student peers was positively associated with, and an important factor determining whether or not a student completed the doctoral program (p. 231-2). Moore et al. (2010) found that support from friends may be the most important and least received type of support for female doctoral students (p. 98). Finding support and connection among fellow students may be particularly important for nontraditional students. Gardner (2008a) noted that the culture of many doctoral programs continues to be structured primarily for white males; as such, those who do not match that profile are likely to feel isolated (p.128, 135). Learning to participate appropriately within the social norms of an academic field is an important part of the graduate student experience. Determining these frequently hidden rules of conduct is a result of positive interaction with peers and faculty.

Support and Encouragement from Faculty

Advisers and faculty support are undeniably important for the success of a doctoral student. Barnes (2010) reported that advisors assist in providing students with valuable experience and relationships, planning for the future, structuring academic life, connecting with research and publication opportunities and setting academic priorities (p. 324). Additionally, the adviser helped to teach doctoral students the social norms of the field (Barnes, 2010, p. 324). Maher, Ford, and Thompson (2004) reported that many students enter doctoral programs with little experience conducting research; as such, many students have to learn about research prior to partnering with faculty and finding employment (p. 387-8). Research projects are important opportunities for interacting with faculty, and to lead to greater productivity throughout the degree program; students who conducted research are more likely to complete the degree (Maher et al., 2004, p. 388). Pauley et al. (1999) determined that students (regardless of gender) who reported a high level of support from faculty members were more likely to complete the degree (p. 234). Similarly, Mansfield et al. (2010) reported that women who finished their doctoral degrees earlier had experienced good mentoring and research opportunities with capable faculty members (p. 729). Female students who had relationships with female faculty were more like-
ly to complete their programs (Mansfield et al., 2010, p. 729). Maher et al. (2004) determined that early-finishing women in doctoral programs were more likely to have received good advising and good relationships with faculty members (p. 398). Women who took longer to complete their degree reported having experienced poor advising (47%) and obstruction from faculty members (36%) (Maher et al., 2004, p. 397).

In researching the common expectations exceptionally successful advisers had for their doctoral students, Barnes (2010) determined that these advisers expected 1) Advisers will be committed to the doctoral degree process; 2) Advisers will have integrity; 3) Advisers will work hard; 4) Advisers will make progress; and 5) Advisers will be good departmental/disciplinary citizens’ (p. 331). Previous studies indicated that students expected their advisers to serve as role models, mentors, guides, professional development experts, and sources of information (Barnes, 2010, p. 325-6).

Developing collegial and meaningful relationships between faculty and students is key for providing students with needed support. Odile recommended fostering relationships through departmental traditions and events (as cited in Cockrell & Shelley, 2011, p. 480). Pauley et al. (1999) found that students believed more non-classroom interaction with faculty would be beneficial (p. 233). Mansfield et al. (2010) recommended utilizing resources from external sources to ensure that female students are fully supported and encouraged throughout their programs of study (p. 735).

Support and Encouragement from Dissertation Chair

In addition to the support required from faculty members and academic advisers, support from the dissertation chair is key. Pauley et al. (1999) found that students who reported receiving support from their dissertation chairperson were more likely to finish their degree program (p. 232). Furthermore, Barnes (2010) reported on a study that determined 44% of students who completed course work but not their dissertations attributed their failure to negative relationships with their dissertation chairperson (as cited in Barnes, p. 32).

Financial Concerns for Doctoral Students

As in all iterations of higher education, funding a doctoral program is a concern for many students. Pauley et al. (1999) determined that the amount of funding available was positively correlated with degree completion (p. 229). Furthermore, a lack of funding can be connected to a longer time spent completing the program (Maher et al., 2004, p. 387). Maher also reported that “women were more likely than men to be dependent on personal resources (40.5% versus 25.7%)” (p. 387). As many students accrue student loan debt throughout their undergraduate and graduate school educations, it becomes difficult to continue borrowing to pay for education.

METHODS

The purpose of this quantitative study was to determine the ways in which men and women experienced support and encouragement during their Doctor of Education program. Using the following research questions, we determined that a survey would be the best method for seeking the answers to our questions.

Research Question 1
Is there a significant difference on the mean scores of the Family dimension of the Support and Encouragement survey between female and male doctoral students?

Research Question 2
Is there a significant difference on the mean scores of the Place of Employment dimension of the Support and Encouragement survey between female and male doctoral students?

Research Question 3
Is there a significant difference on the mean scores of the Program Peers/Faculty dimension of the Support and Encouragement survey between female and male doctoral students?

Research Question 4
Is there a significant difference on the mean scores of the Dissertation Chair dimension of the Support and Encouragement survey between female and male doctoral students?

RESULTS

Data were collected over a three-week span from the initial distribution. There were 94 respondents to the online survey. Fifty-two (65%) of the respondents were female, and 28 (35%) were male. Fourteen respondents did not self-identify. Using an independent samples t-test, it was determined that female and male doctoral students report very similar experiences in support and encouragement among all dimensions. The majority of doctoral students reported the highest level of support (Total Support) for almost all of the areas of survey. Spouse, Partner, or Significant other was the highest rated level of support, 67%. Other high level rankings were for family members (52%), employment peers (54%), immediate supervisor (59%), student peers (52%), and program advisor (48%). For Research Question 1, an independent-samples t test was conducted to evaluate whether the mean scores on the Family dimension (spouse, children, and other family members) of the Support and Encouragement survey were significantly different between male and female doctoral students. The perceived level of support and encouragement received from family was the test variable and the grouping variable was gender. The test was not significant, r(92) = -.37, p =.713. The h2 index was .001, which indicated a small effect size. Male doctoral students’ M = 12.83, SD = 1.77 perceived level of support and encouragement from family was about the same as female doctoral students’ perceived level (M = 12.97, SD = 1.70). The 95% confidence interval for the difference in means was -.90 to .62. The distributions of scores for the two groups are displayed in Figure 1.

For Research Question 2, an independent-samples t test was conducted to evaluate whether the mean scores on the Place of Employment dimension (peers, immediate supervisor, and top supervisor) of the survey were significantly different between males and females. The perceived level of support and encouragement received at their place of employment was the test variable and the grouping variable was gender. The test was not significant, r(92) = -.43, p =.665. Male doctoral students’ M = 13.17, SD = 1.86 perceived level of support and encouragement from their place of employment was about the same as female doctoral students’ perceived level (M = 12.67, SD = 2.20). The 95% confidence interval for the difference in means was -.43 to .62. The distributions of scores for the two groups are displayed in Figure 2.

For Research Question 3, an independent-samples t test was conducted to evaluate whether the mean scores on the Program Peers/Faculty dimension (student peers, adviser, and department faculty) of the survey were significantly different between males and females. The perceived level of support and encouragement received from program peers/faculty was the test variable and the grouping variable was gender. The test was not significant, r(92) = -.14, p =.318. The h2 index was .032, which indicated a small effect size. Male doctoral students’ M = 12.17, SD = 2.34 perceived level of support and encouragement from their program was about the same as female doctoral students’ perceived level (M = 12.92, SD = 1.77). The 95% confidence interval for the difference in means was -.162 to .11. The distributions of scores for the two groups are displayed in Figure 3.

For Research Question 4, an independent-samples t test was conducted to evaluate whether the mean scores on the Dissertation Chair dimension of the survey were significantly different between males and females. The perceived level of support and encouragement received for the dissertation chair was the test variable and the grouping variable was gender. The test was not significant, r(92) = -.733, p =.462. The h2 index was .006, which indicated a small effect size. Male doctoral students’ M = 4.80, SD = 1.42 perceived level of support and encouragement from dissertation chair was about the same for both gender students’ perceived level (M = 4.24, SD = .90). The 95% confidence interval for the difference in means was -.162 to .12.

When asked to rank a list of sources of support and encouragement, over 71% ranked Spouse, Partner, or Significant other as being most important. Other sources that were ranked as important were Immediate Supervisors, Children, and Workplace Peers. In regards to financial support, most reported a combination of Self (72%), Employer (66%), and Financial Aid/Scholarships (60%) funding their pursuit of their doctoral degree.

DISCUSSION

Respondents of the survey were doctoral students in an Educational Leadership program. The department’s primary purpose is “the graduate preparation of adult professionals who will serve as educational leaders in K-12 schools, community/technical colleges, four year colleges and universities, and organizations/agencies” (Welome, n.d., para. 4). Students are enrolled through the participating universities who are approximately 12-15 students. Course offerings are exclusively online, but the department is based on a campus, all faculty members are employed by the participating university employs a Graduate Student Success Specialist whose job is to provide specialized as-

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sistance to students as they face academic and personal hardships. Based on survey results, these current support structures seem to be providing adequate support for stu-
dents at this time.

Doctoral students reported feeling supported and encour-
aged, but there continues to be room for growth in this area. Responses from the question inviting participants to share other comments regarding their support and encouragement throughout the program indicated that some students perceived the need for increased support for each dimension of the study.

Limitations

It is important to note that this study was conducted in
one department at a mid-sized, regional university. The homogeneity of the participants could be a meaningful limitation. Further research in this regard could expand into other departments, programs of study, and universities. Additionally, further research could examine the ways in which support and encouragement is conveyed, and the ways in which individuals communicate their need for support.

Recommendations

We recommend department administrators consider creating opportunities for students and their families to interact in relaxed, fun environments. By bringing those separate spheres together, families may respond with more support. Furthermore, spending time together may help students and faculty members build meaningful, support-

ive relationships. Academic advisors and faculty could consider implementing "check-in" communications with students throughout the semester. Standardizing due dates and communication response times may also pro-

vide support to students. Finally, administrators should ensure that students are aware of the various resources that are available to students.

CONCLUSION

Educating, retaining, and preparing doctoral students re-
quires a high level of support and encouragement. Pauley et al. (1999) determined that the most significant predic-
tor of degree completion was the student’s self-reported level of motivation (p. 232). Nonetheless, through the in-
structure of supportive systems provided by faculty and administration, this internal motivation can be bolstered and student outcomes can be improved. As evidenced by the results in the survey, the majority of students currently enrolled in the participating doctoral program, regardless of gender, are feeling high levels of support from most dimensions in their life. Doctoral students have diverse backgrounds and correspondingly, diverse needs for support and encouragement. The results indicated that most respondents reported that they were getting the support they needed. While improvements to provide more support on an administrative level may be necessary, doctoral students in this study are receiving the levels of support and encouragement needed to persist to completion.

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