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Challenges to the doctoral journey:
a case of female doctoral students from Ethiopia

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Abstract

This study aimed to investigate some challenges female doctoral students experience in their doctoral journey. The study used a qualitative design and structured interviews. The theoretical framework that guided the study was that of Urie Bronfenbrenner's ecosystemic theory. A purposely selected sample of five female doctoral students from the University of South Africa Ethiopia campus participated in the study. The results identified three major areas of concern such as: academic, psychosocial and home/work related. Specifically, female doctoral students reported concerns surrounding quality of supervision support, inadequate academic skill, nature or system of education, stress, motivation, isolation, balancing personal and professional life, relationship problems, home and work related concerns. Hence, universities must provide opportunities and resourceful strategies to meet the challenges posed by women scholars in the doctoral journey.

Keywords: doctoral study; ODL; women; challenges

Doctoral students have a certain level of desire to complete their studies, but on their journey to do so, they encounter challenges that may hinder their progress. The challenges doctoral students face may vary depending on their gender. Women may face greater obstacles and may approach the challenges of doctoral studies differently than men (Leonard, 2001; Raddon, 2002). Moreover, compared to men, women are less likely to pursue the most advanced levels of education; are less likely to seek degrees in high status fields such as the physical sciences, engineering and economics; and are more likely to exit their programmes before degree completion (Leonard, 2001). In spite of the great progress toward gender equity made in recent decades in many countries, women continue to be underrepresented at the senior levels in most disciplines (Leonard, 2001). The lower representation of women faculty in many departments may create an unwelcoming atmosphere for some students and greater conflict in determining their role as women in and outside academia (Raddon, 2002). As a student counselor in the University of South Africa (UNISA) Ethiopia centre, I became aware of some of the challenges doctoral students encounter in the course of their study. My curiosity developed as a few of the female doctoral students I counseled briefly discussed their unique challenges and presented me with myths and misconceptions about their experience. Thus, this research tries to investigate some of the challenges female doctoral students face during their studies. Doctoral programmes at UNISA require students to write an original thesis and the first year of registration is dedicated to proposal development. Upon approval of a proposal the student engages in the thesis phase with the help of his/her assigned supervisor.

Challenges in the Doctoral Journey

In general doctoral students face a number of challenges in the course of their study. For instance, Bitzer (2007) outlines some challenges that doctoral students experience, such as uncomfortable events in life, student supervisor relationships and self-efficacy. Ahern and Manathunga (2004) point out that students tend to experience a drop in motivation as their research is stalled and they do

not make any progress. Moreover, constantly changing topics, lack of communication with the supervisor and general isolation were some of the causes that delay (Ahern & Manathunga, 2004). Similarly, Mouton (2001) outlined factors associated with non-completion of postgraduate studies such as poor planning and management, poor research skills, poor academic writing, isolation, personal problems and inadequate supervision. However, the factors outlined by Mouton (2001) were not gender or race-specific.

There are many barriers reported more by women than men succeeding at various stages of the academic path. Researchers pointed out finances, time management, family and sexual relationships, self-expectations, frequent evaluation and volume of work as some of the common stressors affecting female doctotoral students (Brauer et al., 2003; Toews et al., 1997). In doctoral programmes, higher level of stress was reported by women than men (Oswalt & Riddock, 2007; Toews et al., 1997). One reason cited for more levels of stress among women was that these female graduate students have added the role of student to an already existing set of care taking and other life roles (Hyun, Quinn, Madon & Lusting, 2006; Stratton, Mielke, Kirshenbaum, Goodrich & McRae, 2006). Similarly, Smith, Maroney, Nelson, Lable and Abel (2006) stated that graduate students have many concerns such as finances, children, aging parents, community responsibilities, and partner relationships. These are just some examples of the many ways today's graduate students are impacted by economical and societal discourses. These manifold and overlapping responsibilities can impact female students' emotional well-being and the likelihood of completing their program of study (Hyun et al., 2006). Due to the various roles women have to assume in their daily life, balancing personal and professional development becomes a serious challenge, which in turn leaves them to experience inter-role conflict between their personal and academic roles (Johnson, Batia & Haun, 2008; Offstein, Larson, McNeill & Mjoni, 2004; Raddon, 2002). This interaction/interplay between the various roles and lack of time and energy often lead to stress, which may lead to physical and psychological health problems (Johnson, Batia & Haun, 2008). Hence, the addition of the graduate student role, besides being a parent and worker makes graduate study a difficult journey to many female students.

The availability of social support is also found to be importantant as it attributes to good well-being and helps to diminish isolation. Supporting this claim, Johnson, Batia and Haun (2008) argued that social supports act as buffers to alleviate the stress of adapting to graduate school. Important sources of social support are family, friends, significant others, peers, professors and employers (Castro, Garcia, Cavazos, & Castro, 2011; Johnson, Batia & Haun, 2008, Stratton et al., 2006). Further, graduate students with a support group or network of colleagues tend to perform better academically, experience less emotional and physical distress, withdraw less frequently from ambiguous or tension-producing settings, and suffer from fewer severe physical and psychiatric illnesses that socially isolated persons suffer (Castro et al., 2011; Johnson, Batia & Haun, 2008, Stratton et al., 2006).

In most doctoral programmes, particularly those in the social and natural sciences, the student's supervisor plays a central role in both guiding the student through the research writing process, and also more broadly in the student's professional development (Foster, 2003; Larsson & Frischer, 2003). In addition to influencing the quality of training the student receives and access to professional opportunities, the student-supervisor relationship often shapes motivational and affective aspects of the student's progress, such as his/her level of self-confidence, commitment to the field of study and whether the student persists. Consequently, students' perceptions of respect and friendliness on the part of the supervisor may affect their goal setting and achievement, and have been found to be a better predictor of success than any demographic characteristics of students (Larsson & Frischer, 2003). Graduate students who develop more positive relationships with their supervisor members as professional colleagues are more likely to be involved in their doctoral program, more

likely to develop professionally, and more likely to progress through their program (Ali & Kohun, 2007; Earl-Novell, 2006). Doctoral programs that emphasize a balance between social and academic lives of students ensure better departmental integration of students (Ali & Kohun, 2007). Characteristics associated with a positive graduate experience included a high level of administrative, social, and financial support provided by the student's department, a democratic supervisory structure, mentoring, and positive experiences when utilizing counseling services (Benton, 2003). A positive relationship with supervisor in which the student feels comfortable and able to approach her/his advisor is a key component to doctoral persistence.

Theoretical Framework

The theoretical framework which guided this study was the ecosystemic theory of Urie Bronfenbrenner. The female postgraduate students exist in the micro subsystem which constitute their families either married or unmarried and have children. The meso level is made up of their neighbours, and their work places. The work environment has some effects like stress, which may be brought home with an indirect influence on the life of the family and studies. The macro subsystem has also the values and belief system of the society in which these females found themselves in (Addison, 1992). From the micro system, meso, exo, chrono and macro system this study looked at some factors which brought challenges in the lives of female doctoral students, mainly focusing on the academic, social and emotional aspects. The current study not only focuses on what is happening in the student's life as far as the academic work is concerned, but also looks at what students are experiencing during their journey of studying at a dotoral level in a holistic way. Henceforth, this study aims to investigate some of the academic, professional and psychosocial challenges female doctoral students face in the course of their study. The guiding research question was: What are some of the challenges that female doctoral students experience?

Method

This study is a qualitative case study that focused on the perspectives and experiences of five female doctoral students from the University of South Africa Ethiopia Regional Learning Centre. It uses a single-case study research design. Although the findings from this case study cannot be generalised to the entire female doctoral population, it may have implications and provide learning opportunities for other female doctoral students in Ethiopia. The participants were purposively sampled using a selection criteria, which were: female, active doctoral students, Ethiopian nationals and registered through the Ethiopian regional learning Centre.

Participants

A purposively selected five female doctoral students from Ethiopia were included in this study. The researcher used expert knowledge of the female doctoral students from Ethiopia to select in a non-random manner a sample of female doctoral students that represents a cross-section of female doctoral students from the Ethiopia regional learning centre. Given the subjectivity of the selection mechanism, purposive sampling is generally considered most appropriate for the selection of small samples often from a limited geographic area or from a restricted population definition, where inference to the population is not the highest priority (Jonson & Christensen, 2008). The description of each participant is presented in the following paragraph.

Participant one is 43 years old, married, with children and works as a full time lecturer in a University. She started a doctoral degree in 2013 in the College of Education (CEDU), currently in

a thesis phase and does not have previous experience of learning in an ODL environment. Participant two is 40 years old, married and has children, enrolled at UNISA in 2014 in a doctoral program in the college of Human Sciences (CHS), is in the thesis phase with no previuos ODL experience, and works part time as an agricultural economist. Participant three is 32 years old, married, with children, enrolled for the doctoral program in 2011 in CEDU, assistant professor in a University, doing data analysis, and no previous experience of ODL. Participant four is 36 years old, married and has children, registered for a doctoral program in 2011 in CEDU, full time lecturer, on the thesis phase and no experience of ODL. Participant five is 35 years old, single and has dependents, started her doctoral degree in 2014 under the college of Science, Engineering and Technology (CSET), part time lecturer, on thesis phase, and no previous experience in ODL.

Procedure

The College of Graduate Studies research committee and Research Permission sub-committee (RPSC) of the University of South Africa granted ethical approval prior to commencement of the research. The participants were recruited by telephone, using lists of female doctoral students enrolled in Ethiopia and from the counseling service data. Before conducting the interview, a consent form that explained the purpose, procedure and confidentiality of the study was sent electronically to 15 female doctoral students. Then interviews were conducted with those students who opted to participate (N=5). Furthermore, a follow up telephone interview was conducted to gain some clarity on students' responses.

Data collection instrument

This study used a structured interview and 10 items were included in the qualitative script. The items in the interview script were developed for this study based on the objective of the study, existing literature in the area and also using the data acquired on the one-to-one, email and telephone counseling services. The items in the interview look at challenges in system of education, supervision, psychological problems, home/professional life, and also one item asking them to write any suggestion or comments. In order to assure validity of the interview script, it was sent to one academic and two support staff; and also to two students for review. Moreover, existing literature and research on the area was considered to validate the instrument. Based on the feeedbacks received some typing errors and unclear questions were revised and the final version was adopted.

Data Analysis

The interviews were tape-recorded, transcribed verbatim and studied in-depth as a whole and then sentence-by-sentence. Emerging concepts, which revealed something about the experience, were highlighted in each transcript. A rigorous process of searching for commonalities across the five interviewees' response followed this. This enabled the systematic development of three main themes. A reflective diary maintained during the research process was crucial in the grasping of essential meanings. The findings were then discussed by interpreting them in relation to related research and existing knowledge. Actions and interpretations throughout the research process were guided by the importance of ensuring rigour, in order to maximize credibility of the findings. Firstly, the researcher asserts that the methods employed were appropriate to the research aims and the ontological and epistemological assumptions underpinning them. The research question was constantly referred during interviewing and analysis, to maintain congruity of purpose. Reflections from earlier interviews were used to inform subsequent interviews in a process of concurrent data

collection and analysis. Descriptions and interpretations of the interview were checked out, with sensitivity, and sent out to the five participants for their confirmation that the representations were accurate.

Results

The following section presents results highlighting the experiences of female doctoral students in their doctoral journey. The results were presented in three thematic areas: academic, psychosocial and home/professional challenges.

Academic concerns

These concerns relate with challenges in the area of supervisor support, nature of education, financial support, knowledge and skill of the student.

Supervision. All participants considered their supervisors as one of the most important factors shaping their experiences as doctoral students. Most students seemed satisfied with their supervisors overall. Nonetheless, some noted concerns in the supervision process, which include: delay of feedback, unclear/unreadable feedback, inadequate guidance, and communication problems were among the common ones. Other concern had to do with a lack of supervisors' understanding or sensitivity to the fact that female students undergo unique challenges and may have a particular need for support. A student reported the following:

> *I like my supervisor and we have a good relationship. But the only challenge I had with him is that he takes long time to give feedback and I end up sending him several reminder emails, which once irritated him.*

Another concern regarding supervision was lack of appropriate guidance, encouragement and monitoring. One student said that the supervisor does not communicate regularly and does not show interest in the research she is doing. In terms of similar kinds of support from their supervisors, female doctoral students reported lower levels of support for such things as help with funding the research, encouragement and support for their career goals. In summary, although there were some challenges, most students were satisfied with their supervisors. All students desired a supervisor who facilitated their professional development, who took interest in them and their work, who was considerate of their time and personal lives and who helped to keep them on track.

Academic skills. The lack of important academic skills were also a concern. One of the most common skill they wanted to improve and needed support with is time management. The nature of distance education, lack of frequent interaction with supervisor and other students and professional and social responsiblities were some of the reasons for them to consider time management as a critical skill. Respondents were also concerned about skills such as digital literacy, using research software, research and academic writing skills. Students also suggested that it would be nice to have training or workshops to assist students in these areas. A student wrote this:

> *I am concerned with the constant feedback that I get from my supervisor on the quality of my written work. I realized that I made so many grammatical mistakes that irritate my supervisor; and he even sometimes prefers to ignore my submissions as I made similar errors again and again. English is a foreign language and the expectations on the side of UNISA and a doctoral research is very high.*

Nature/system of education. In addition to the above academic challenges, the nature of the doctoral program at UNISA is problematic to all of the students. Distance education was new to them and

adjusting to the system was a challenge, as they all acquired their previous degree through traditional (residential) Universities. One student even indicated the need for attitudinal change on her side to adjust with the system of distance education. Furthermore, students highlighted the lack of face to face interaction with the supervisor, lack of interaction among fellow students, no predetermined time to have a discussion with supervisors, and the inaccessiblity of the regional learning centre and its support services were also raised as a concern. One student commented the following on the nature of distance education and necessary academic support:

> The nature of the program is self-directed kind. So one needs to be programmed, organized to pursue the program. But this is against the culture of most of us. I feel that we could have been assisted on how we can be organized and use our time properly. Above all, most of the female students are married and have children. Being a mother has its own responsibilities, which in fact is difficult with other responsibilities at home and office. Specially, in our context where you cannot find nursery, the burden is even higher. I think it better to extend the period of study for women.

The above comment from the student and the highlighted concerns refelect that the nature of education and the need for academic skills that match ODL environments were critical concern areas.

Psychosocial concerns

These are concerns about emotional, psychological, and social well-being reported by participants. Such concerns involved stress, lack of motivation, isolation, or strains on social relationships.

Stress. The most common psychological problem participants raised was stress that comes from financial issues, workload, time pressures and being a mother. Lack of adequate funding to support their family and research was a major source of stress, as all of the students earn low salaries. Moreover, they expressed that financial problems are affecting the quality of their research work and personal life. For example, one female doctoral student expressed her multiple roles and its effects on her life:

> I am a lecturer at a University and I have two children. I usually come home being tired and when I get home I have to do some cooking and assist my kids with their schoolwork. Doing all these tasks makes me tired and neither do I have the energy nor the motivation to concentrate and study. This is my daily life. When I think about my doctoral study, I get stressed and lose hope. But I really want to do it.

Motivation & Isolation. Two students raised lack of motivation as a challenge in the course of doing their thesis. They believed that lack of frequent interaction with supervisor, no face-to face meeting and minimal socialization events for students make it hard to maintain a high level of motivation. Another student also raised feelings of isolation as a critical problem and indicated that most of the time she works in a vacuum, no interaction or discussion, neither with supervisor nor with students.

Work and home concerns

These are concerns that relate with the social life of female students, particularly in the work and home environments. Two students described receiving low research funding from their employer and they were forced to be dependent on their income and that of their husbands'. Others had difficulty acquiring the UNISA bursary due to lack of information and one student found the claiming process problematic after she got the bursary. Students mentioned that financial strains seemed to bring more stress and impact on other areas of their life such as relationship and research. A student wrote:

I have two kids, so my budget needs are very high. I have to continually seek out part time jobs, as my salary is not good enough to support my study. At my university there is no consideration given to women with children.

All of the participants reported a worse financial situation, they were less confident about making it financially and more discouraged about the personal lives and financial concerns. They also reported more insufficient funding opportunities for graduate students within and out of the University. Three of the participants reported that they had not received any support from supervisors and other University staff with regard to funding opportunities available at the University.

Another woman commented on the nature of the academic climate, the promotion process, workload, and job market for academics. One participant said:

As a woman, I found the academic climate very oppressive to the needs of women. It does not take into account how women work most effectively and the kind of support women need in their work. I think women need a different kind of support to overcome the challenges expected at the doctoral study. I would like to see the academic structure change so that women have the opportunity to pursue an academic career without institutional barriers.

Four of the female doctoral students have to teach while they are learning, which takes up most of their time. Some times they are even forced to take additional positions or responsibilities, which in turn consumes their time.

Social. All the participants reported that their unique role at home is a problem and consumes a lot of their time. These women also believe that they have equal rights and capacity as those of men. However, women are culturally bounded to assume additional responsiblities that are not done by men. These include every household responsibility, such as shopping, taking care of children and even producing money for additional expenses. Besides, women are expected to attend different social activities even if they are a student or worker. Even though their husbands are supportive, they do not share these tasks or have the skills to do so. In addition, the cultural role assigned to women by society is also raised as a challenge, where women are predominantly considered as care givers and handlers of every home chore. One of the participants was also concerned about adequately supporting her children financially and emotionally, as her doctoral journey required a lot of sacrifice on her and family time. Although having children and a spouse at home brought joy to these female students, they also felt torn at times between wanting to be with their families and feeling the need to work on their doctoral studies. One respondent went even further to suggest that university environments could be made more women friendly and the demand of parenting should not be ignored. One student clearly described the challenge of being a woman doctoral student as follows:

Different from males, we females are overburdened by house chores and other social life issues. When one is a mother, the duties are doubled as she, in addition to above mentioned home related activities, is expected to take care of her husband and children nutrition, clothing and schooling, etc. I know my male colleagues who are also studying at UNISA. They do many things in addition to their study to get more money. They can go to their office whenever they want to work on their dissertations. They don't worry about the chores and children and other home related activities. When I try to compare myself, even though I have the capacity to do many things, I refrain from them as I have limited time to concentrate on my study. Even if I limited myself from other works which could have helped me get some more money, the time I have for my study is very much limited when compared to that of males.

One participant reported that she could not attend most of the workshops the University organizes due to her responsibility at home. She could not stay away from her home as she has a very young child (2 years old) who needs her constant attention. Moreover, she does not have significant others

to cover these responsibilities. All the female doctoral students described their family, particularly their husbands, as supportive, though the level of support varies. They reported support in sharing of household responsiblities, financial support, verbal encouragement or motivation and one participant also mentioned academic support.

In general, the above concerns show the effect of women socialization and social life and their multiple roles that created pressure on female doctoral students' personal, professional and academic life. These concerns also left them with little free time for them and their family, which often involved the struggle between academic work and personal relationships or family.

Balancing personal and professional life. One area of particular concern for female doctoral students, is how to manage both personal and professional lives. All students reported that supervisors provided little advice on how to manage potentially conflicting demands between their academic and family lives. These female students expressed less confidence in their ability to balance family and professional lives. They mentioned their multiple roles such as: taking care of children and parents, responsibility at work and being a part time doctoral student, as some of the conflicting roles of a woman. One student said:

> *I was afraid of the length of time a doctoral degree takes and the sacrifices I had to make to graduate. I have reduced my social life with friends and family because I do not have free time. The problem of trying to lead my family and be successful in my career is very challenging.*

The above section has presented the various challenges female doctoral students face in their pursuit of a doctoral degree. The next section presents the discussion of findings, implications for future studies and recommendations.

Discussion

This study identified several areas of concern experienced by female doctoral students and illuminated specific areas where change is needed. Accordingly, this study identified concerns surrounding quality of supervision support, inadequate academic skills, nature or system of education, stress, motivation, isolation, balancing personal and professional life, home and work related concerns as challenges in the doctoral journey. Moreover, being a mother, relationship problems, multiple roles at home and lack of encouragement to women scholars in academic career were raised as challenges specific to being a woman.

The participants considered their supervisors as one of the most important factors shaping their experiences as doctoral students and they seemed to be satisfied with their supervisors' overall support. However, they raised important concerns with the quality and timeliness of feedback, guidance, encouragment and motivation on the side of their supervisor. Though there are a number of factors that facilitate successful completion of a doctoral study, most researchers agree that completing a doctoral study is a process that mainly depends on a close, working relationship between students and supervisors, in other words on the quality of research supervision (Grevholm, Persson & Wall, 2005; Lovitts, 2001; Styles & Radloff, 2001; Zainal, 2007). Thus, the effectiveness and quality of research supervision support doctoral students get from the supervisors is critical to their doctoral journey.

In line with many previous research (Brauer *et al.*, 2003; Oswalt & Riddock, 2007; Toews *et al.*, 1997) this study also pointed out stress, lack of motivation, feeling of isolation and lack of self-confidence as the most common psychological problems among all female doctoral students. Some research (Hodgson & Simoni, 1995; Mallinckrodt & Leong, 1992) has identified work and home related stress as a particular difficulty for women and female graduate students compared to their

males. It appears clear that balancing personal and professional life is one in which students want and need more support and help.

Female doctoral students also reported specific challenges to women that relate with their multiple roles and cultural aspects that reduce females simply to care givers and responsible for handling all home chores, though they reported their husbands as supportive. Understanding and considering the varied mix of female doctoral students' background with the goal of reducing anxiety and stress would likely result in improved doctoral student performance, as well as decrease attrition. Research (Castro *et al*., 2011; Johnson, Batia & Haun, 2008; Mouton, 2001; Stratton *et al*., 2006) has suggested that graduate students need adequate social support or networks to overcome the different academic and psychological problems they encounter in the course of their study.

A potential limitation of this study is that responses may have come from individuals with the most extreme difficulties, whereas those who experienced few problems did not respond. In addition, a voluntary sample may also represent a self-selected group who is particularly cognizant of issues affecting women. Finally, the responses of participants in this study may not reflect the concerns of women in other types of higher education, such as residential universities, or women who are not married and have no kids. Thus, future research might devote attention to understanding the influence of particular contexts of women and aspects of the institution or university. This study used a qualitative approach in order to obtain a detailed picture of the challenges facing female academics that could not be captured using a quantitative approach. Such descriptive data are helpful for generating hypotheses. Future research could be directed toward exploring some of the identified concerns in depth. The concerns and suggestions revealed here are illuminating and helpful for improving the enrollment and output of emerging female academics. This study investigated participants who were still in the doctoral journey, and future research should include experiences of students who have already graduated and those students who dropped out of the system.

Universities should put in place support structures and make students aware of such structures during orientation sessions. This study suggests that female doctoral students would benefit from an intensive orientation, so that they can adjust to the nature of education and meet the expectations as a doctoral student. The University might also consider designing student mentoring systems in which experienced doctoral students who are progressing well in the program can share their wisdom with new students and with those who are experiencing obstacles and delays. This type of formalized mentoring system would facilitate students' ability to receive ongoing academic, social, and psychological support from their student colleagues throughout their doctoral tenure. In line with this, the University should create a network and avail a platform for women graduate students and women academics to share experience and bring additional social support. Finally, the academic department might consider developing a regular research progress or performance review meeting between female students and their supervisors using technology enhanced systems (e.g. video conference, Skype, etc). Such progress review can be very powerful, not only in terms of providing substantive guidance, but also in terms of identifying resources, which may best support the student's timely progress toward degree completion.

Therefore, the University, society, and government cannot afford the potential loss of women in the academic career that occurs due to various challenges that hamper their progress. If higher education is to realize the benefits of the growing number of women doctoral students and potential women doctoral degree recipients, it must create an environment that supports them in their struggles and provides opportunities and resourceful strategies to meet the challenges posed by their worthy pursuit.

Acknowledgement

References

Addison, J. T. (1992). Urie Bronfenbrenner. *Human Ecology, 20*(2), 16–20.

Ahern K., & Manathunga, C. (2004). Clutch-starting stalled research students. *Innovative Higher Education, 28*(4), 237–254.

Ali, A., & Kohun, F. (2007). Dealing with social isolation to minimize doctoral attrition—A four state framework. *International Journal of Doctoral Studies, 2*, 33–49.

Benton, T. (2003, September 5). The 5 virtues of successful graduate students. *The Chronicle of Higher Education, 50*(2), C3. Retrieved from http://chronicle.com/article/The-5-Virtues-of-Successful/5060/

Bitzer, E., M. (2007). Supervising higher degrees as a scholarly practice. *South African Journal of Higher Education, 21*(8), 1010–1019.

Brauer, M., Abric, J. C., Drozda-Senkowska, E., Lemaire, P., *et al.* (2003). Doctoral training in the French-speaking countries of Europe: objectives and suggestions for improvement, *European Psychologist, 8*, 9–17.

Castro, V., Garcia, E. E., Cavazos, J., & Castro, A. Y. (2011). The road to doctoral success and beyond. *The International Journal of Doctoral Studies, 6*, 51–77.

Earl-Novell, S. (2006). Determining the extent to which program structure features and integration mechanisms facilitate or impede doctoral student persistence in mathematics. *International Journal of Doctoral Studies, 1*, 45–57.

Foster, J. K. (2003). A UK Ph.D. in psychology: the British Psychological Society guidelines, *European Psychologist, 8*, 39–47.

Grevholm, B., Persson, L. E., & Wall, P. (2005). A dynamic model for education of doctoral students and guidance of supervisors in research groups. *Educational Studies in Mathematics, 60*, 173–197.

Hodgson, C. S., & Simoni, J. M. (1995). Graduate student academic and psychological functioning. *Journal of College Student Development, 36*(3), 244–253.

Hyun, J. K., Quinn, B. C., Madon, T., & Lusting, S. (2006). Graduate student mental health: Needs assessment and utilization of counseling. *Journal of College Student Development, 47*, 247–266. http://dx.doi.org/10.1353/csd.2006.0030

Johnson, B., Batia, A. S., & Haun, J. (2008). Perceived stress among graduate students: Roles, responsibilities, & social support. *VAHPERD Journal, 29*(3), 31–36.

Jonson, B. & Christensen, L. (2008). *Educational research: qualitative, quantitative and mixed-approach* (3rd ed.). Los Angeles: Sage Publications.

Larsson, K. & Frischer, J. (2003). The education of research psychologists in Sweden, *European Psychologist, 8*, 34–38.

Leonard, D. (2001). *A woman's guide to doctoral studies*. Buckingham: Open University Press.

Lovitts, B. E. (2001). *Leaving the ivory tower: the causes and consequences of departure from doctoral study.* Lanham, MD: Rowman & Littlefield Publishers, Inc.

Mallinckrodt, B., & Leong, F. T. L. (1992). Social support in academic programs and family environments: Sex differences and role conflicts for graduate students. *Journal of Counseling .and Development, 70*, 716–723.

Mouton, J. (2001). *How to Succeed in your Masters and Doctoral Studies*. Pretoria: Van Schaik Publishers.

Offstein, E. H., Larson, M. B., McNeill, A. L., & Mjoni Mwale, H. (2004). Are we doing enough for today's graduate student? *The International Journal of Education Management, 18*(7), 396–407.

Oswalt, S., & Riddock, C. (2007). What to do about being overwhelmed: Graduate students, stress and university services. *College Student Affairs Journal, 27*(1), 24–44.

Raddon, A. (2002). Mothers in the academy: positioned and positioning within discourses of the 'successful academic' and the 'good mother', *Studies in Higher Education, 27*, 387–403.

Smith, R. L., Maroney, K., Nelson, K. W., Lable, A., & Abel, H. S. (2006). Doctoral programs: Changing high rates of attrition. *Journal of Humanistic Counseling, Education and Development, 45*(1), 17–31.

Stratton, J. S., Mielke, A., Kirshenbaum, S., Goodrich, A., & McRae, C. (2006). Finding a balanced life: Factors that contribute to life satisfaction in graduate students. *Journal of College & Character, 7*(8), 1–10.

Styles, I., & Radloff, A. (2001). The synergistic thesis: Student and supervisor perspectives. *Journal of Further and Higher Education, 25*(1), 97–106.

Toews, J. A., Lockyer, J. M., Dobson, D. J., Simpson, E., Brownell, A. K. W., Brenneis, F., MacPherson, K. M. & Cohen, G. S. (1997). Analysis of stress levels among medical students, resident, and graduate students at four Canadian schools of medicine, *Academic Medicine, 72*, 997–1002.

Zainal A., N. (2007). Challenges in PhD studies: the Case of Arts Students. *European Journal of Social Sciences, 5*(2), 83–93.