International Review of Research in Open and Distributed Learning



Persistence of Women in Online Degree-Completion Programs

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Volume 9, Number 2, June 2008

URI: https://id.erudit.org/iderudit/1071771ar DOI: https://doi.org/10.19173/irrodl.v9i2.455

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Publisher(s)

Athabasca University Press (AU Press)

ISSN

1492-3831 (digital)

Explore this journal

Cite this article

Müller, T. (2008). Persistence of Women in Online Degree-Completion Programs. *International Review of Research in Open and Distributed Learning*, 9(2), 1–18. https://doi.org/10.19173/irrodl.v9i2.455

Article abstract

Although online courses at postsecondary institutions promise adults access, flexibility, and convenience, many barriers to online learning remain. This article presents findings from a qualitative case study, which explored the phenomenon of undergraduate and graduate women learners' persistence in online degree-completion programs at a college in the Northeast of the United States. Research questions asked why women learners persisted or failed to persist, and how factors supporting or hindering persistence influenced learners. Interviews with a purposeful sample of 20 participants revealed the complexity of variables affecting learners' persistence to graduation. Findings suggested that multiple responsibilities, insufficient interaction with faculty, technology, and coursework ranked highest as barriers to women's persistence. Strong motivation to complete degrees, engagement in the learning community, and appreciation for the convenience of an online degree-completion option facilitated persistence.

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June - 2008

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Abstract

ISSN: 1492-3831

Although online courses at postsecondary institutions promise adults access, flexibility, and convenience, many barriers to online learning remain. This article presents findings from a qualitative case study, which explored the phenomenon of undergraduate and graduate women learners' persistence in online degree-completion programs at a college in the Northeast of the United States. Research questions asked why women learners persisted or failed to persist, and how factors supporting or hindering persistence influenced learners. Interviews with a purposeful sample of 20 participants revealed the complexity of variables affecting learners' persistence to graduation. Findings suggested that multiple responsibilities, insufficient interaction with faculty, technology, and coursework ranked highest as barriers to women's persistence. Strong motivation to complete degrees, engagement in the learning community, and appreciation for the convenience of an online degree-completion option facilitated persistence.

Keywords: online learning; adult learners; women learners; postsecondary; persistence; barriers to persistence; retention

Introduction

In the past ten years, mature (over age 40) single-parent, minority, and low-income women have become the largest group among adult learners (Peter & Horn, 2005). Career, family, and community obligations often do not allow adult women to enroll in conventional college programs. Convenient access to distance-learning courses, however, can provide them with education and/ or training.

Online courses promise learners access, flexibility, and convenience. In fall 2006, enrollment of online learners grew to about 3.5 million in the United States, a more than 21 percent growth rate since 2002 (Allen & Seaman, 2007). Although women tend to outnumber men in online courses (Kramarae, 2003), they struggle to succeed in distance-learning courses. Traditional gender divisions of labor in western nations continue to make working women the primary caregivers of children and relatives (von Prümmer, 2000). These multiple commitments in women's lives make successful completion of online courses a challenge.

Evidence suggests that retention rates in distance-learning courses in the United States are lower than in on-seat classes (Carr, 2000; Wojciechowski & Palmer, 2005). Further, the attrition rate for undergraduate online courses may be "10 to 20% higher" than for classroom-based courses

(Herbert, 2006, ¶.1). The problem is that although adult women enroll in online education in increasing numbers, educators may not understand well the factors that contribute to and inhibit their persistence (Furst-Bowe & Dittmann, 2001).

Literature Review

Persistence or retention (Tinto, 1993) can be defined as continuous or intermittent program attendance until learners reach their educational goals (i.e., the completion of a course, certificate program, or degree). According to Tinto's studies of traditional classroom institutions of higher education, the less integrated students are academically and socially, the more likely they are to depart. Building on Tinto's work, researchers have focused on other aspects of the college departure problem such as institutional characteristics, environmental influences, and motivation (Barefoot, 2004; Berger, 2001-2002; Kemp, 2002).

Many studies have addressed learner retention in online environments (Bocchi, Eastman & Swift, 2004; Moore, Bartkovich, Fetzner & Ison, 2003; Packham, Jones, Miller & Thomas, 2004; Zirkle, 2004). While some authors have focused on pre-entry learner variables such as grade point average and number of online courses previously taken (Dupin-Bryant, 2004; Morris, Wu, & Finnegan, 2005), others have studied learner needs such as the need for interaction and support (Furst-Bowe & Dittmann, 2001). Simpson (2003) examined retention strategies. Garland (1993) investigated barriers to retention and added an epistemological dimension (e.g., lack of prior content knowledge or discourse style, mismatch between learner and course expectations) to Cross' (1981) situational, institutional, and dispositional barriers that had the potential to impede adult persistence.

Most research on computer-mediated learning and retention strategies has focused on men and women without disaggregating data by gender although some studies have identified the barriers women face when they enroll in online courses (Burge, 1998; Burke, 2001; Furst-Bowe & Dittmann, 2001). Feelings of isolation, lack of family and institutional support, time limitations, and concerns for cost are among the many hurdles online women learners encounter (Furst-Bowe & Dittmann, 2001; Kramarae, 2003). Nevertheless, "few researchers have studied the ways women handle the multiple responsibilities of income provider, parent, and student" (Kramarae, 2001, p. 31), how online learning can further women's educational goals. More research is therefore needed to understand the interplay of factors that support or hinder women's completion of online courses. Educators who understand the complexity of women's balancing of diverse roles can more effectively advise and prepare women to be successful in online courses. Similarly, educational institutions that recognize women's professional, social, and academic needs are better prepared to create policies and services that address those needs.

Purpose and Context of the Study

The purpose of this qualitative case study was to gain an in-depth understanding of factors that influence women learners' persistence in undergraduate and graduate online degree-completion programs at a college in the northeastern United States. The open-admissions college serves adult learners (approx. 72 percent women, 50 percent minority, and 50 percent part-time) locally in classroom settings and at a distance in online programs. The college's degree-completion programs are for distance learners who work in public schools across the United States. The institution offers master's degree-completion programs to teachers, guidance counselors, nurses, and administrators. The bachelor's degree-completion program is designed for teacher aides.

After an initial summer residency at the college, students return home and enroll online to complete their programs.

Design of the Study

No consensus exists among researchers regarding online persistence factors (Finnegan, 2005). For this reason, this qualitative case study was an empirical inquiry that investigated the phenomenon of persistence within its real-life context of online courses (Yin, 2003). The design of the study was premised on an interpretive approach that assumed participants gave meaning to their experiences through interactions with others (Neuman, 2003). Within the broader interpretive orientation, the study's theoretical framework included distance learning models (Anderson, 2004; Berge, 2002; Huang, 2002; Kasworm, 2003; Salas, Kosarzycki, Burke, Fiore, & Stone, 2002), adult learning models (Brookfield, 1993; Freire, 1993; Knowles & Associates, 1984; Merriam, 2001; Mezirow, 2000), and Tinto's (1993) interactionalist theory of student attrition and persistence.

From a sampling frame of 308 female students who attended the summer residency in 2005, 100 were randomly selected as potential participants. The purpose of the random sample was to have a smaller pool of potential participants that represented the larger population (Creswell, 2002). The author solicited participation through an informed consent letter and follow-up phone calls.

A purposive sample of 20 female participants from among online learners was selected. "Purposive sampling is an acceptable kind of sampling for special situations . . . when a researcher wants to identify particular types of cases for in-depth investigation" (Neuman, 2003, p. 213). Purposive sampling does not give population validity (Stake, 1995). However, the "logic and power [of purposive sampling] . . . lie in selecting *information-rich cases* for study in depth. . . Studying information-rich cases yields insights and in-depth understanding rather than empirical generalizations" (Patton, 2002, p. 230).

In digitally recorded phone interviews, nine undergraduate and 11 graduate students responded to open-ended questions about their experiences as online learners in the context of their professional lives and family obligations. On average, interviews lasted 45 minutes. To protect interview participants' privacy and confidentiality, the author assigned codes to individual participants (i.e., P1 and P2).

The author addressed the following research questions: Why do women learners persist in online courses? Why do they fail to persist or stop out? How do factors affect women learners' persistence?

Data Analysis

After transcription of the interviews, an open-coding process identified key words or phrases that appeared repeatedly (Strauss & Corbin, 1998). These codes were organized into families or categories. Two major code families were identified: 1) barriers to persistence and 2) factors facilitating persistence. Next, transcripts were entered into the qualitative "code-and-retrieve" software *Atlas.ti* (Miles & Huberman, 1994, p. 312), and the manually created codes were further refined. The creation of code families facilitated analysis of data and identification of themes.

Because participants were the primary sources of information, it was vital that the data reflected their responses as faithfully as possible. "In a process called 'member checking'" (Stake, 1995, p.

115), participants received a summary of the findings and the request to confirm the accuracy of the summary. Acording to Lincoln and Guba (1985), member checks are critical to "establishing [the] credibility" (p. 314) of researchers and their findings. Because participants chose not to comment on the summary of findings, the assumption is that results were as authentic a representation of participants' perspectives as possible. A lack of response, however, also points to the difficulty of obtaining feedback from participants who may hesitate to contradict the researcher's understanding of their experiences because the summary appears "biased; the information conflicts with the informant's basic values, beliefs, or self-image; . . . or this is not the way the informant construes . . . the same information" (Miles & Huberman, 1994, p. 276).

Findings

Respondents' experiences in their online courses were mapped against the two major code families: factors that facilitated persistence and factors that were perceived as barriers. A ranking of codes was based on the number of respondents representing each code. Table 1 displays the two code families and the ranking of the most significant code family members (see Appendix A for all codes).

Table 1. Ranking of Most Significant Codes

Facilitating Factors	Ranking	Barriers	Ranking
Engagement in learning	17	Multiple responsibilities	15
community			
Schedule convenience	16	Disappointment in faculty	14
Personal growth	16	Face-to-face preference	13
Peer support	14	Feeling of anxiety	12
Feeling challenged	14	Technology	12
Faculty support	13	Feeling overwhelmed	11

Note. N = 20

Overall, facilitating factors outweighed barriers to persistence. Despite obstacles to their academic progress (i.e., receiving credit for courses), interview participants found greater importance in the positive aspects of their experiences. Respondents valued being engaged in a challenging community that provided the opportunity to learn from classmates and faculty. They commented positively on their personal growth and appreciated the convenience of the college's online course option to complete their degrees.

Before taking courses online, all learners attended a summer residency at the college. Respondents preferred the face-to-face residency environment because they enjoyed the social interactions. Learning online was frequently stressful and accompanied by computer technology problems. More than half of the women felt overwhelmed by the demands of the coursework. A majority remarked on struggling to balance the multiple demands of their families and jobs. Every woman interviewed had a full-time job, and 16 had children in daycare or school. Most women reported having partners. Some partners, however, were frequently absent (e.g., in the military, engaged as a firefighter or long-distance truck driver), and others did not appear to help with children or housework.

Key Facilitators of Learner Persistence

From an analysis of the case study's data, patterns or themes emerged that revealed the complexity of factors affecting women's persistence. Being engaged in a learning community and experiencing personal growth were major themes in support of persistence. The convenience of an online degree-completion option and a variety of motivating factors were also key themes. Finally, taking advantage of support systems was a significant theme. The following sections describe the major themes and provide supporting quotations from the 20 interview participants (P1 - P20).

Engagement in Learning Community

Similar to other research findings (Anderson, 2003), results from this study showed that meaningful interaction with content, faculty, and classmates was an important aspect of respondents' learning communities. When content was relevant to their professional contexts, respondents felt interested and engaged. Research suggests that women prefer learning by forming personal connections (Belenky, Clinchy, Goldberger, & Tarule, 1986; Hayes & Flannery, 2002; Rovai & Baker, 2005). Participant 20 said:

I learn the most from my own peers and from my professors . . . when they talk from personal experiences about the knowledge material . . . in education and things that they would use . . . We'd all share our own personal experiences about English language learners or things like that . . . I think for me, when anything becomes personal, then I really learn it.

Much of the women's sense of satisfaction came from interactions with their classmates and instructors (Herbert, 2006; Richardson & Swan, 2003). Interviewees felt positive about their asynchronous and synchronous online discussions: "It was most interesting to me, reading all my classmates' responses" (P20). Synchronous chats gave women the opportunity not only to learn but also to inquire about the lives of others whom they had met during the summer residency: "We already knew each other from the summer, so it all ended up with a little bit of what's going on in your life, which was always fun" (P14).

Feeling Challenged and Personal Growth

The themes of personal challenge and growth are consistent with Mezirow's (2000) concept of transformational learning and play a significant role in learner persistence. The online experience was new to 16 out of 20 respondents and offered unique challenges. Nevertheless, many (n=14) found learning how to navigate an online course affirmative, and a majority (n=16) found their increased academic and technical expertise the most valuable aspect of their experience: "I just think that . . . the one thing they say is that they know technology now like they have never known before, and so I think especially where the world is now, that that's a very valuable thing" (P20). Participant 12 concluded, "I'm able to focus more on what I'm doing online because it's not as fast paced as it would be if I was in a class . . . I think that I have changed." Participant 7 evaluated her development:

I feel as a learner I got stronger because . . . I'm following directions from the syllabus and being graded on that, of course, but I'm able to do critical thinking.

I'm able to research . . . to get further information, to compile my paper, so that makes me a stronger student.

Berge (2002) proposed that online learners who were able to reflect on their learning were more likely to continue with their studies. Respondents recognized that their online coursework challenged them and helped them develop their thinking. Participant 5 remarked, "[The online discussion] is . . . a learning thing . . . It's knowledge. It's stepping out of the box. It's not staying in one place. . . . The world don't stop . . . just in Georgia."

In addition to stronger analytical abilities, respondents gained independence, skills, and confidence: "You have to be disciplined in order to do online because, if not, you won't meet the deadline, because you have procrastinated, because it's not mandated to do every single day like regular going to school" (P8). "I'm not that great at written communication in teaching physics, like trying to teach through writing something down instead of talking, explaining it, and so that was good for me" (P17). "Because of this experience, I'm not so intimidated" (P1).

Schedule Flexibility and Convenience

All women had a positive experience during their summer residency. Participant 4 summarized common feelings:

I truly enjoyed the five weeks. It was very, very intense, but each week when you finished that course, it was exhausting and exhilarating because I felt like, okay, that part is done . . . I enjoyed the weekends . . . For someone from the south who had never been to New England, it was awesome.

Despite a preference for a residential experience (Kramarae, 2001; Sullivan, 2002), respondents appreciated the convenience of online courses that met the scheduling needs of their busy lives. "I like the flexibility of working it in around my schedule . . . This night isn't good, or I have a snow storm. I'm not leaving the house. It gives me that kind of flexibility, to go ahead and still learn the content" (P19). One mother (P13) of three young children reported: "A lot of times I worked in the middle of the night, so a lot of times I posted my work at one, two in the morning."

Support from Classmates and Faculty

According to research (Anderson, 2003; Kemp, 2002; Richardson & Swan, 2003; Rovai & Baker, 2005), building social relationships with peers and instructors provides a key support system for online learners. Respondents (n = 14) ranked high in importance the relations they built with online classmates: "When I did the online, I also became a friend with someone online, so we would . . . call each other, and we would give each other support" (P11). Participant 5 found communicating with classmates informative and motivating:

We, like, communicate real good to each other, and somebody call me and remind me: "Don't forget, girl, we got class. What you done last night? What did they say?" That's how we communicate a lot, like that. [We] still do.

Because of a family crisis, Participant 18 considered abandoning her studies. She stopped out and did not plan on re-enrolling. With a classmate's encouragement, however, she continued her courses the following term:

I have one [classmate] that nags me to death. She will always call, and I would say, "I'm not going back. Let me call you back later." [I] guess she knew that I wasn't calling her back, but she was constantly calling, trying to get in touch with me, leaving messages.

Similar to the importance of classmates' support, instructors' availability through email, telephone, or online chat, the timeliness of their replies, as well as their words of encouragement were viewed as critical to respondents' academic success. Participant 1 found that faculty reminders made abandoning her studies not an option: "It was the reminders. You could not get away from it."

Many respondents (13) held faculty in high regard: "I want to impress my advisor because she's just that cool" (P2). "Our advisor was very responsive to us. She did get back to us in a timely fashion, and she was a cheerleader, encourager. She truly was there to help us if we needed it, so that was a very positive experience" (P19). Participant 1 commented:

[At the local college,] they say they're geared toward adult learning, in other words, that adults had other responsibilities like full time jobs and families . . . The professors, they weren't so understanding about your life outside of their plan . . . They told you what to do, and it was almost like what we do here in public school . . . It wasn't about forming a relationship with a student to figure out the best way to get us through the program. It was about the student as a number.

Additional Facilitating Factors

Adult learners are motivated to learn when they see value in their education (Knowles, Holton & Swanson, 2005). In response to a question about the purpose of her college education, one undergraduate student who worked as a para-professional said she wanted to become a teacher. Participant 10 saw immediate financial benefits after completing her master's degree: "I went from making \$36,000 to making \$43,000 . . . so that was a huge jump."

The metacognitive ability to reflect on their learning helped women identify strengths that sustained them. They also used a variety of support systems (e.g., the college's technology hot line or friends):

I'm very fortunate to have the people that I have around me because they really give me a push . . . I'm not gonna lie. Sometimes I just feel like, okay, why am I doing this? They constantly tell me, you know, just go for the goal. This is what you want to do. You can do it. (P6)

Key Barriers to Learner Persistence

Balancing multiple responsibilities was a significant theme that emerged as a potential barrier to persistence. A second theme was disappointment in faculty. Although 13 out of 20 women preferred a traditional classroom setting, having a face-to-face preference was not as important a barrier as the emotional hurdles of feeling anxious, frustrated, and overwhelmed. More than half of the interview participants (n = 12) mentioned technology problems. However, similar to all the barriers to persistence the women faced, Internet access, email, or software problems did not pose insurmountable problems.

Balancing Multiple Responsibilities

Three quarters of the study's participants referred to their struggles managing their responsibilities as parents and teachers. Similarly, Kramarae (2003) found that women often felt burdened by taking care of children and other family members at the same time as working and continuing their education online. "I am a working mother . . . [doing coursework] is a sacrifice, of course, because, you know, some Saturdays you may not be able to do it, having other chores to do" (P7). Participant 13 was overwhelmed by the demands of her young children and her work as a literacy teacher in an elementary school:

I had a two year old, a six year old, and an eight year old. I was teaching during the day . . . Unfortunately for me, . . . I couldn't do work until ten at night, and then, really, by the time I got my kids in bed, I was just exhausted . . . The kids were in soccer as well, so it was very stressful for me . . . trying to keep them up with their work, and keep them in sports, and duties as . . . a literacy teacher: grading papers, and reading essays, and all that.

With her husband taking over some childcare duties, the mother was able to complete her degree. Nevertheless, she thought that finishing her master's degree might have been easier had her children been older. She blamed herself for not being sufficiently available to help her son in second grade pass the state's reading test and for his facing the possibility of having to repeat the grade. The mother felt guilty because her son was required to attend summer school. She persisted to degree completion, but she regretted the cost to her family. Research suggests that mothers with young children often have similar feelings of guilt when they undertake distance studies:

What all women with families seem to have in common, though, is the apparent incompatibility of family and domestic responsibilities with serious distance education, and the need to learn to assert their right to be a student as well as a mother and housewife without feeling guilty. (von Prümmer, 2000, p. 72)

Participants struggled with family obligations and increasing professional responsibilities. Two graduate students had administrative roles in addition to being teachers: "Besides teaching in a classroom, I am a department chair. I have been involved in the last few years in curriculum writing and revision for my system" (P4). "I'm doing an administrative and supervisory course, and I'm training to be a principal" (P6). One undergraduate worked as a teacher aide and had a second job to support her family: "As para pro, we don't make what teachers make . . . I have two jobs" (P5).

Disappointment in Faculty

According to research, online learners rank faculty presence high in importance. When faculty interaction is infrequent, the rate of learner satisfaction is low (Herbert, 2006). Fourteen (n = 14) respondents found that instructors' limited communication hindered their ability to understand course expectations: "I do remember trying to hear from a professor that took a very long time. It got to the point where my classmates and I were emailing each other, 'hey, have you heard from the professor?"" (P13). "He was difficult to get a hold of. It took four or five of us trying different techniques and different times . . . We did finally get a hold of him on occasion, very late at night . . . I just really think the professors need to be responsive" (P19).

Insufficient feedback on papers diminished respondents' potential to learn: "I was back as many as five papers, yea, lots of papers . . . Some papers I never did get feedback on . . . If you write a paper and you don't get any feedback, . . . you don't know what the professor is looking for" (P14). "I was getting no response to my paper . . . and I'm like, okay, something is seriously wrong" (P18).

Though most of the women interviewed had positive experiences with instructors, they felt some instructors had low expectations: "I did have some professors who, for a lack of a better term, dumbed down the education" (P2). "I would have probably worked a little harder had there been a little more structure and expectations. I could have kicked it up a little bit more" (P4). Finally, some faculty seemed disengaged: "The professor said, 'Here is your group. Here is your topic. Here are the parameters. Go for it.'

And that was how it went" (P19).

Face-to-face Learning Environment Preference

Consistent with research (Furst-Bowe & Dittmann, 2001; Kramarae, 2001), interview participants (n=13) found the traditional classroom setting during their residency preferable to an online context because in-class learning allowed for more social interaction and immediate feedback. Apart from regretting the absence of contextual clues of a classroom, respondents missed experiential learning activities: "I like to go through the experience . . . If you're telling me something, and then I have an example where I'm gonna actually go through the experience, I learn much better like that" (P9).

A surprising finding of this study was that a strong face-to-face preference appeared negligible when compared to other barriers. Participants did not think their preference was a significant obstacle. Feelings of frustration, anxiety, or disappointment were perceived as greater impediments to their education.

Emotional Hurdles

For 16 of the 20 respondents, taking online courses was a novel experience. At the end of their summer residency, they were apprehensive: "I hope I can get this technology to work" (P19). "I was thinking about how I would adjust taking online courses . . . managing a family . . . teaching myself, . . . having my own things going on, and having to see if online classes fit into my schedule. I was kind of iffy about that" (P3). Once enrolled in online courses, undergraduate respondents in particular found their online experience bewildering and worrying: "I was kind of confused at first...It was very stressful" (P7).

Respondents were concerned about being able to manage the demands of their online coursework and felt overwhelmed by the number of assignments, scheduling, and all the other responsibilities in their lives. Because of conflicting demands on their time, six women were unable to complete assignments on time and fell behind. Nine women reported a variety of schedule concerns: "I had one professor who attempted to have [online discussions] happen and then changed the time on three or four separate occasions, thereby making it impossible for all of us to get our schedules together" (P2). "I had to miss one or two [chats] because of meetings, or some other issue had come up, or I had to be some place, maybe a funeral or something" (P10). "We decided that we would meet on Wednesdays at nine or ten . . . but then a couple of us . . . had children, and we explained to the group that that was sort of difficult" (P13). "The only problem with the

discussions . . . is that it really never quite worked out, due to the fact of getting the right dates, the right times, and the different time zones that we're all in" (P14).

Scheduling conflicts increased some women's sense of feeling overwhelmed. 11 participants felt beleaguered:

It was, I guess, too overwhelming when you come home and you have to decide all this stuff, and do these projects and things, and when you can't find the information. It's discouraging, you know. You got family. You got children. You got a husband. You got . . . jobs and everything. (P15)

Participant 13's doctor warned her that the stress of completing her degree endangered her health:

Me being a parent, and when, really, to be honest, by then I was exhausted. It was to the point where the doctor told me I need to cool off before I mess around and have a heart attack or stroke, but I finished with that. I think it was more the paper part [master's thesis] that was stressing me.

For two women, feelings of stress were compounded by feelings of isolation. Others were frustrated because some classmates appeared to be passing courses even though they failed to complete assignments: "We were the first group to go . . . From there on, what was put online decreased. In fact, one other group posted . . . The other groups did not, so it really felt like we were robbed of the rest of the course content" (P19).

Technology Problems

Interview participants (n = 12) found technology to be a major challenge. The women could not always gain access to the Internet: "[The] Internet was down... We would shut the whole system down, and we would have to postpone... [our chat] for that night" (P7). They tried different strategies to circumvent the access problem by taking advantage of other people's wireless connections or by going to the public library: "The Internet is fine because I know how to go to the public library or to different places... to access the Internet" (P15). Participant 6 was unable to join her chat:

I was getting blocked because I had wireless service. But at the time, the area around my school . . . did not have wireless service, so I was pretty much scurrying around, driving to different locations, just to see if I could log on to the Internet. I did not want to miss the meeting, but I ended up missing the meeting.

With persistence, most interviewees were able to gain access to the Internet. Some technical problems, however, were less well defined and therefore less easy to solve. "The first [chat], it was really hard because, I can't remember exactly what happened, but I know we were all supposed to be on at the same time, and there was something wrong with my computer" (P16). "I guess technical issues, a lot of times . . . you get into something, and you're really not sure" (P18). "Registering for the classes, that was a little problem" (P5). "I just wasn't aware how they did their thing, period, because of the different websites" (P8).

Six women lacked technical skills: "I'm not really a computer person, so I wasn't comfortable at all" (P16). One undergraduate respondent did not learn how to use the college's email system and

interrupted her studies until she could return to the following summer residency: "After I went back and checked it, I found some emails, but it was too late then" (P15).

Additional Barriers

Some women reported that they had financial issues or health problems. Other women acknowledged that they tended to procrastinate and lacked time management skills. Apart from these personal obstacles that were, to some extent, within their control, others reported that they did not obtain support from colleagues at work because they did not ask or because their colleagues seemed uninterested.

Consistent with research that has identified institutional barriers to retention (Garland, 1993; Moore et al., 2003), respondents felt frustrated by the college's administrative system, which was unfamiliar to them (e.g., the financial aid office). Participant 10 was the first in her family to go to college:

I went through 22 people between the United States and India talking with Sally Mae, and I eventually ended up talking to somebody . . . in the financial aid office . . . They were . . . telling me that I had to do this and this . . . It was the craziest stuff, but it's the financial aid jargon . . . that the average person just has no idea what all that . . . means.

A misunderstanding of how quickly respondents would complete their programs as well as incongruence between their expectations of what they hoped to learn and the content of the courses resulted in epistemological barriers (Garland, 1993). Participant 10, a graduate student, said:

When I first registered, they were telling us that you could take these five weeks of courses over the summer and get your master's. What they didn't tell me was that you had to have 12 transfer credits in a graduate program, which I had never established here at a local college.

Participant 15, an undergraduate student, had a similar impression that she would be able to complete her degree during the residency:

I thought I'd come down there and do the courses and . . . graduate . . . [I was] very disappointed . . . You know, they stressed this: no children, no husband, no this, no that . . . You're coming up here to study and do this quick, and that's a piece of burden if I have to come back home and finish half of it.

Participants who had high expectations of themselves, thought some classmates were academically under prepared. Participant 14 found the quality of posted assignments inadequate: "Some of their papers were, I'm sorry to say, very lousy. They were very, very poorly done." Participant 2 was also disappointed:

My cohort mates sent [papers that] were at times indecipherable as to what the meanings were. Punctuation was missing. Capitalization was missing. Spelling was wrong . . . I almost felt as though I were beyond what the other members of my cohort were capable of.

Participant 6 was unhappy with her classmates' technical skills: "I noticed many people who are getting a master's degree . . . still have issues with technology and still have issues with typing, just basic skills . . . To me, that's amazing."

Despite limited technical skills or academic preparation and personal or institutional barriers, all but four of the 20 women interviewed pursued their studies without interruption. Moreover, all participants agreed that the online program option suited them well, given their life situations. Every woman who participated in the interviews had a positive perspective of some parts of her online experience.

Conclusion

At the end of the study in fall 2006, 12 participants had completed their degrees (nine graduate and three undergraduate students). The remaining six undergraduate and two graduate students continued their studies. Findings suggested that variables supporting respondents' continued enrollment played a greater role than those impeding persistence. Graduate students generally seemed to take a pragmatic view of the positive and negative factors affecting their online studies. It is possible that the relative brevity of their program shaped their more positive perspective.

In contrast to graduate students, undergraduate respondents seemed to experience a higher level of appreciation and of frustration with their online courses. Because of a longer program of study, a greater number of credits attempted, more frequent stopping out, a less certain increase in salary, and state teacher licensure requirements, undergraduates may have perceived the hurdles to their persistence as greater than graduate students did. It is also possible that undergraduate students entered the open-admission institution less well prepared than graduate students and therefore found making academic progress more of a challenge.

A greater proportion of undergraduate respondents (7 out of 9) than graduate respondents (4 out of 11) felt overwhelmed by their coursework. More undergraduate women (5 out of 9) than graduate women (1 out of 11) reported falling behind in coursework. A higher proportion of undergraduate women (7 out of 9) than graduate women (5 out of 11) had computer problems and difficulty accessing the Internet. It is possible that the six undergraduate interviewees who took longer to complete their courses were not ready for the academic and technical expectations of online courses because they were either under prepared or had unrealistic expectations of themselves or the program. It is also possible that the institution did not communicate program expectations effectively and that adequate support systems were not in place to assist struggling students.

Implications

The implications of the findings for the college are that online program design should factor in the varied demands on working women's time that may cause the interruption of their studies. Modularizing courses and allowing flexible entry points could allow women to stop out and return without having to repeat already completed course work (Kazis, Callahan, Davidson, McLeod, Bosworth et al., 2007). For instance, instead of scheduling three-credit courses that run 15 weeks, some courses could be designed as shorter one-credit modules. In addition to more accommodating online delivery models, support services and faculty facilitation of courses need improvement.

According to research, adult learners tend to see themselves as customers and expect their needs to be met in a timely and customer-friendly manner (Hadfield, 2003). Women in particular favor a socio-cultural context that promotes their well-being and learning. Participants expressed strong reservations when interactions from administration or faculty were infrequent or absent. Quick responses to complaints about administrative offices (e.g., financial aid) could increase students' rate of satisfaction and alleviate the sense of isolation that some participants expressed.

Careful selection and orientation of faculty (e.g., through simulated course experiences) could result in a better understanding by instructors of the importance of meaningful interaction in online learning communities. Experienced online instructors who act as mentors could provide guidance for inexperienced faculty and improve instructional practices. Monitoring instructors' online presence could assess their effectiveness and address respondents' frustration with the perceived lack of accountability among some instructors.

To address the factor of college readiness, the open-admissions institution may need to require the diagnosis of students' basic skills (e.g., writing, computer, mathematics, and critical thinking) before course registration and offer remedial courses or technical training if necessary. Implicit in diagnostic skills assessments is the implementation of an efficient registration and advising system that tracks students' academic progress, intervenes in times of crisis, and offers academic support such as online tutoring. Finally, counseling services that respond to emotional or health issues may also meet students' need to feel socially connected not only to peers and faculty but also to staff at the institution.

Limitations of the Study

This case study was limited to a small number of participants who persisted despite difficulties and occasional stop outs. Efforts by the author to include women who had dropped out of the online programs were unsuccessful. Focusing on women only could be perceived as a limitation because women's experiences were defined as unique. Future studies may compare experiences of women and men and/ or highlight differences.

Recommendations

Women learners in higher education outnumber men (Peter & Horn, 2005). In the United States, more women than men take online courses (Kramarae, 2003). In some countries the misperception still exists that women with small children are house bound and have time for online studies (von Prümmer, 2000). In the United States, higher education providers of online programs such as the institution where there study was conducted often market to working women without necessarily taking into account that women continue to be primary caretakers of children and other family members. Gender roles are therefore an important variable to consider when designing distance education programs.

Results from this study and the literature indicate that further research is needed to investigate to what extent other factors may support or hinder online persistence of women learners who have full-time jobs, as well as family and community responsibilities. Future research could explore both institutional and demographic variables that may significantly influence women's online academic success at the college and at similar institutions. Additional research could investigate how disparities in professional and economic status affect women's ability to pursue a higher education degree online.

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APPENDIX A

Facilitating Factors

Facilitating Factors	Ranking	Facilitating Factors	Ranking
Engagement in learning community	17	Independence as a learner	11
Feeling of personal growth	16	Used support systems	8
Schedule flexibility	16	Motivation to excel academically	7
Support from classmates	14	Perception of courses as easy credit	7
Feeling challenged	14	Support from family	6
Degree as goal	13	Support from colleagues at work	6
Faculty support	13	Strong computer or writing skills	6
Faculty respect for adult learner	12	Learning applied to job	3
Metacognition: ability to reflect on learner growth	12	Career advancement or salary increase	3
Program completion opportunity	12	Role model for children	3
Enjoyment of learning	12	Study strategies to cope with family distractions	2
High regard for faculty and advisors	11	•	

Note. N = 20.

Barriers

Barriers	Ranking	Barriers	Ranking
Multiple responsibilities	15	Visual or auditory learning style	5
Disappointment in faculty	14	Feeling of Isolation	5
Face-to-face preference	13	Health problems	5
Feeling of anxiety	12	Lack of support from college administration	4
Technology problems	12	Lack of time management skills	4
Feeling overwhelmed by coursework	11	Financial problems	4
Feeling of frustration or	10	Stop out	4
Disappointment			
Schedule conflicts	9	Lack of familiarity with college technology	3
Disappointment in classmates	8	Disappointment in course expectations	3
Experiential learning style	7	High academic expectations of self	2
Falling behind in coursework	6	Lack of support from colleagues at work	1
Lack of computer or writing skills	6	Failure to seek support	1
Mismatch between learner	6	•	
expectations and program			

Note. N = 20.



