Learning the Tricks of the Trades: Women’s Experiences
Apprendre les ficelles des métiers : Les expériences des femmes

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ABSTRACT
This study explored the experiences of 10 women in trades training programs. Using interpretive phenomenological analysis based on 4 focus groups, 9 themes emerged: previous exposure to trades-related tasks, confidence, passion for the work, support from others, the physical nature of the work, the predominantly male environment, proving oneself to others, the “controlled” environment, and job-site discrimination. The results suggest that there is a discrepancy between the social environments of community colleges where the training programs are held and construction job sites. Populations of potential candidates are revealed, and recommendations for practice and future research are discussed.

In Canada, women constitute nearly 50% of the workforce (Statistics Canada, 2007a), but on average earn less than two thirds of an average man’s pay (Statistics Canada, 2010). Women have traditionally held clerical and service jobs that are characterized by low salaries, low status, repetitive tasks, and little chance for advancement (Greene & Stitt-Gohdes, 1997; Hulme, 2006; O’Farrell, 1999; Read, 1994). In recent years, women have begun advancing into high-paying, high-status careers in such fields as law and medicine (Betz, 2006). However, there are many other careers in which women remain drastically underrepresented, such as construction and the skilled trades (e.g., carpentry, electrical contracting, plumbing, welding), where only 2% of working women are employed (Statistics Canada, 2007b).
This situation is unfortunate, as the skilled trades provide a practical option for women experiencing financial pressure. The trades require less formal education while providing financial compensation even during the apprenticeship process. Upon reaching the journeymen level, tradespeople can often find unionized work with a middle-class income, health care benefits, and a pension plan (Heppner & O’Brien, 2001; “Made with the Trades,” n.d.).

It is estimated that, on average across the skilled trades in Canada, 52% of the current workforce is scheduled to retire by 2015, increasing demand for new workers in these trades (WiN Canada, 2009). Furthermore, the Conference Board of Canada (2008) has suggested that over the next 20 years, 40% of available jobs will be in technologies and skilled trades. In the construction industry, spokespeople have identified women as the most significant source of untapped labour (Berik & Bilginsoy, 2006), and provincial and territorial governments have developed programs to attract women and expose them to the world of the skilled trades. Although continual efforts are being made to recruit women across Canada, very few women currently aspire to careers in the skilled trades, despite the financial benefits and the job availability inherent in them. In 2008, women accounted for just 3% of registered apprentices and only 1.7% of people completing the trades programs (CCWESTT, 2011). Women who begin a career in a skilled trade are also more likely than men to drop out of their apprenticeship programs (Byrd, 1999). An early study (Brown, 1981) found the attrition of women in the trades occurs primarily in the first year of their training program.

The purpose of this study was to gain insight into the experiences of Canadian women preparing to enter the construction trades in the 21st century. There is little Canadian research on this topic and much of the international research was carried out a decade or more ago, prior to the establishment of systematic programs to promote women’s entry into the trades. Many barriers have been found to deter women in other countries from pursuing careers in the trades and also to interfere with their ability to advance within these fields. It is not clear whether these barriers remain, now that programs have been implemented across Canada to encourage young women to pursue careers in the construction trades, and women have begun to participate and excel in the construction trades (Conference Board of Canada, 2008; Overend, 2005). The experiences of the current generation of Canadian women pursuing these trades is largely unexplored, which is a problem for career counsellors, school counsellors, and other practitioners who are working to support this population. First, however, it is important to gain an understanding of previous research on this issue. The literature review that follows is divided into three sections: (a) contributors to success, (b) discrimination, and (c) other barriers.

**CONTRIBUTORS TO SUCCESS**

Although few women pursue skilled trades, there are tradeswomen who are quite successful in these careers. Several studies have noted the successes of women in the trades and the variables that impact their success. Latack, Josephs, Roach,
and Levine (1987) found that acceptance from coworkers, fairness in job assignments, and having realistic expectations all contributed to the success of women apprentices. Additional contributors to women’s success in the trades include patience and perseverance to overcome barriers; a sense of amazement, pride, and accomplishment when building and fixing things; and enjoyment of the outdoor elements of trades work (Eisenberg, 1998). Similarly, Greene and Stitt-Gohdes (1997) found innate ability, having a strong sense of self, and a desire for independence to be important contributors to success.

Hulme (2006) found that women in nontraditional careers possessed qualities such as personal strength and self-reliance, while Read (1994) found that female students in traditionally male educational programs displayed self-confidence and believed that others supported their career choices. Furthermore, Bennett (2005) found women greatly attributed education and previous experience in the trades to their success. Finally, family connections have been found to be important: Many women enter the trades through the connections of their fathers, brothers, and uncles and many had families who encouraged them to apply to openings in the trades and apprenticeship programs (Bennett, 2005; Eisenberg, 1998).

**DISCRIMINATION**

Discrimination is one of the barriers most prevalently mentioned in the literature on women in the trades. One prominent form of discrimination is sexual harassment. Women have identified harassment and patronizing behaviour as a source of dissatisfaction with their careers (McIlwee, 1982), and have found harassment and men’s negative attitudes toward affirmative action to be a problem in the workforce (Latack et al., 1987). Eisenberg’s (1998) exploration of pioneering women in the trades and Latour’s (2001) investigation of female construction workers also revealed numerous examples of serious and severe harassment, including overt sexual harassment, threats, and intimidation.

Interestingly, Byrd (1999) found that women react to harassment in two ways. If the harassment is seemingly small, women ignore it. In contrast, women actively resist serious forms of harassment. Unfortunately, Byrd also noted that the harassment of women seems to be a “fact of life on the construction site” (p. 14). This “fact of life” is exemplified in recent studies that continue to report women’s harassment in nontraditional careers such as the trades (Bennett, 2005; Dabke, Salem, Genaidy, & Daraiseh, 2008; Latour, 2001; Nash & Chrisler, 2000).

Although harassment continues to exist, Dabke et al. (2008) suggested coworkers and supervisors are beginning to accept women as members of the trades workforce. Women who have been in the field for 15 years have experienced changing conditions, compared to the abuse and harassment they initially endured in their careers (Dabke et al., 2008). In a recent study of Canadian women in nontraditional occupations (Hulme, 2006), participants reported only one incident of sexism. Instead, they found that their male coworkers were often awkward, or tried to act as gentlemen by holding doors open and apologizing for cursing.
addition, many of the women reported they did not want to be treated differently, but simply wanted to do their job (Dabke et al., 2008).

Another type of discrimination that women in the skilled trades have experienced is being ignored or isolated (Dainty, Bagilhole, Ansari, & Jackson, 2004; Latour, 2001; Mansfield, Koch, Henderson, & Vicary, 1991). More specifically, Dainty et al. (2004) found that women felt excluded from social groups at work, and were often the only person of their gender within their construction companies. Women have also experienced coworkers and supervisors as being unwilling to train them and withholding information about available apprentice and journey-level jobs that they readily provide to male construction workers (Eisenberg, 1998; O’Farrell, 1999). These findings are consistent with the experiences of women in male-dominated careers in science, technology, engineering, and mathematics (Fassinger & Asay, 2006).

Women in the trades also experience stereotyped assumptions. That is, some people in the workforce simply assume that women cannot perform physical labour because they are women. As a result of the assumptions and beliefs of coworkers, many women in the trades overwork to “prove themselves” on the job site (Agapiou, 2002; Bennett, 2005). Another way that stereotyped assumptions emerge is through the assignment of women to repetitive, low-skill tasks such as sweeping, cleaning, and other “housekeeping” duties on the job site (Eisenberg, 1998). Byrd (1999) also reported complaints of repetitive jobs that restrict experience.

Finally, a practical form of discrimination is a lack of restrooms, showers, and changing facilities for women (Eisenberg, 1998; Goldenhar & Sweeney, 1996; O’Farrell, 1999). This is a barrier because it neither presents a welcoming environment nor provides equal amenities for men and women. There is no doubt women find work in the trades physically demanding and at times challenging (Bennett, 2005; Eisenberg, 1998; Mansfield et al., 1991; O’Farrell, 1999). Vezina and Courville (1992) suggested that women could be physically disadvantaged if adjustments are not made to workplace tools and equipment. However, Hulme (2006) suggested that the physical demands of these careers will decrease with advances in technology, machinery, and tools.

OTHER BARRIERS

Women in construction-related trades face numerous other barriers that impede their entrance into trades careers or hinder their progression in these careers (Fielden, Davidson, Gale, & Davey, 2000). Many women lack experience and exposure to trade-related tasks, and consequently never develop self-efficacy in these domains (Betz, 2006). This phenomenon has been repeatedly observed in the international literature, suggesting that women are not exposed to trade-related training in high school, and are not provided with opportunities to practice and develop trade-related skills (Brown, 1981; Ericksen & Palladino Schultheiss, 2009; Hulme, 2006; Josephs, Latack, Roach, & Levine, 1988; Latack et al., 1987; O’Farrell, 1999; Overend, 2005).
The lack of same-sex role models is another barrier that women in the trades experience. Betz and Hackett (1981b) suggested that women role models in nontraditional roles are rare, and consequently few role models exist for women entering nontraditional careers. Overend (2005), in discussing the Canadian context, suggested that women hesitate to enter the trades, partly because they lack role models in this field.

Another barrier is that young women often lack information about careers in the trades and how to enter these occupations (Brown, 1981; Ericksen & Palladino Schultheiss, 2009; Hulme, 2006; Josephs et al., 1988; Latack et al., 1987). Hulme (2006) found that young women in Canada are not exposed to information about how to become tradespeople. Moreover, Gaudet and Savoie (2007) found that Canadian high school guidance counsellors do not have the proper information or skills to provide effective services for young women interested in pursuing nontraditional occupations.

In the construction trades, family issues can be a source of several different barriers. Brown (1981) suggested that a lack of support from family members hinders women’s advancement in the trades. Additionally, family commitments have been found to be a barrier for women in the trades (Dabke et al., 2008; Fielden et al., 2000; O’Farrell, 1999). O’Farrell (1999) expanded on this idea by identifying child-rearing responsibilities as a barrier, while Dabke et al. (2008) reported that the transient nature of trades work is difficult for women with children and family commitments.

Another challenge encountered by women in the trades is the physically demanding nature of the work (Menches & Abraham, 2007; O’Farrell, 1999), and the fact that the nature of the job exposes employees to hazardous situations. All tradespeople may experience injuries, exposure to chemical and physical agents, and lack of safety training. However, there are physical risks that are particular to tradeswomen: lack of protective clothing that fits, lack of showering facilities to clean chemical agents, and injuries due to overworking to “prove” themselves (Eisenberg, 1998; Goldenhar & Sweeney, 1996; O’Farrell, 1999).

A final barrier for women in the trades is the dominant male culture of the field, which may contribute to discrimination (Berik & Bilginsoy, 2006; Fielden et al., 2000; Menches & Abraham, 2007). This environment has been described as one of aggression, conflict, and hostility (Berik & Bilginsoy, 2006; Fielden et al., 2000; Menches & Abraham, 2007). In fact, Menches and Abraham (2007) claimed that male culture is the single largest contributor to women’s problems in the construction industry.

THE PRESENT STUDY

The skilled trades provide women with a potential escape from poverty or a route to financial independence. Yet few women pursue this path, and many who begin do not become journey-level tradespeople. This gap makes it important to understand women’s experiences in trades programs. The experiences of these
women may provide insight into why these programs and careers remain dominated by men, why few women complete trades programs, and what can be done to increase the attraction and retention of women in the skilled trades.

This study was conducted using a feminist approach to career development. No single feminist theory of career development exists; rather, many researchers have contributed to the feminist approaches of women’s career development. Despite the range of researchers, feminist theorists agree with social cognitive theorists that society and social norms have an enormous influence on career development. Social cognitive theory posits that behaviour, personal factors, and the environment interact in a reciprocal way (Bandura, 1986). Thus, one learns through observations of the environment and how others react in the environment. Social cognitive and feminist theorists of career development suggest multiple possible reasons why so few women enter and remain in skilled trades. Specifically, (a) women are often socialized in a way that discourages participation in traditionally male activities while emphasizing the role of women as primary care providers, (b) very few same-sex role models are available in nontraditional roles and occupations, and (c) the educational system encourages the career development of men more than women (Betz, 2006; Betz & Hackett, 1981a, 1981b; Bussey & Bandura, 1984; Chronister, McWhirter, & Forrest, 2006; Farmer, 2006).

Responding to the current Canadian context and to gaps in the existing literature, the purpose of this study was to explore and describe the experiences of women who are pursuing trades careers, specifically focusing on what they perceive to be contributors to their persistence and success to date, as well as the discrimination and barriers that they have encountered. Hence, the research question that guided this study was: “What are the experiences of women in the construction-related trades programs?” This question was broken down into three subparts:

1. What has motivated students to pursue a career in the trades?
2. What has contributed to women’s success thus far, as they pursue these careers?
3. What, if any, are the forms of discrimination and other barriers that they have encountered so far as they pursue these careers?

METHOD

Research Design

This study combined a focus group approach to data collection with Smith and Osborn’s (2003) Interpretive Phenomenological Analysis (IPA) approach to data analysis. IPA has been described as a phenomenological method that aims to derive meaning from qualitative data, specifically regarding how the participants understand the topic in question (Smith, Flowers, & Osborn, 1997). It aims to describe participants’ lived experiences with a phenomenon, while also gaining an understanding of how participants perceive these experiences (Hays & Wood, 2011; Wertz, 2005). In this case, the phenomenon being investigated is women’s experiences of success and barriers in construction-related trades training programs,
including their motivations for pursuing these career paths. However, in contrast to other forms of phenomenology such as Giorgi’s Descriptive Phenomenology, IPA does not assume the existence of universal essences that underlie experiences. This approach to research was chosen because each woman would likely have a different perspective and experience to describe and it was important from the researchers’ feminist theoretical framework that the chosen research method acknowledge these differences, even when exploring a phenomenon across participants. IPA provides a mechanism for examining women’s lived experiences that is consistent with this feminist perspective.

**Participants**

Ten women from two community colleges (one located in Ontario, one in New Brunswick) participated in the study. Participants were enrolled in various programs: carpentry, welding, drilling and blasting techniques, and heavy equipment operation. Eight of the women were enrolled in pre-employment programs, while 2 were enrolled in apprenticeship programs. Participants were between 19 and 39 years of age. Three women had completed university degrees while 1 had a previous community college diploma. Three women had started but not completed a previous college or university program; for 3 participants, this was their first experience in a postsecondary program. One woman was engaged, 1 was in a common-law relationship, and 8 were single. Only one participant had children. All participants identified as Caucasian. None of the women had female instructors in their trades programs. Four participants were the only women in their programs, 2 had one other woman in their programs, 1 had two other women in her program, and 3 had four other women in their programs.

Participants were recruited through e-mails and flyers distributed to classes, sent by college instructors and department staff. The e-mails and flyers included information about the researcher and the nature of data collection, including that food and refreshments would be offered during the focus groups. No other remuneration was provided to participants. All participant names were replaced with pseudonyms in the study.

**Data Collection Procedures**

Four on-campus focus groups were used to collect the data. Two focus groups had 3 participants, while the remaining two focus groups had 2 participants. Each focus group lasted between 40 and 75 minutes, and food and non-alcoholic beverages were provided. Participants were instructed that they could comment, question, or respond to others’ comments and statements throughout the focus group. The discussions were audio-recorded. Following the recommendations of Krueger (1998), the focus groups were semistructured, guided by eight questions that were presented orally and written on chart paper:

1. What is your name and what program are you in?
2. How did you become interested in a career in the trades?
3. How has your experience in this field been so far?
4. What has contributed to your success in the program?
5. What barriers or obstacles have you experienced?
6. Have you experienced any discrimination related to your gender?
7. What future obstacles do you anticipate when you are in the workforce?
8. Is there anything that you feel you should clarify or emphasize that was discussed today?

Participants were also provided with a comment card to express any individual opinions that might not have been shared during the focus group. The researcher transcribed the audio-recording of each focus group recording using a verbatim strategy.

Data Analysis Procedures

Data analysis was conducted using Smith and Osborn’s (2003) approach to IPA, after all four focus groups concluded. First, transcripts were reviewed by the researcher to develop familiarity with the data. Notes were made during these revisions, the researcher commented on items of significance or interest, and tentative patterns were identified. Next, themes were listed from these notes, and connections or contradictions were made between themes. As coinciding themes emerged, they were verified using quotes from the participants and matched with “identifiers” taken directly from the transcript data. All transcripts were analyzed using this process. Once this process was complete, a final table of themes was created, where themes were removed and prioritized based on their frequency and intensity in the transcripts. Nine themes emerged across the four focus groups.

Rigour Procedures

The primary mechanism to enhance credibility and trustworthiness was participant validation of the emergent themes: participants were contacted by e-mail or telephone for verification of the researcher’s original interpretations, and themes were expanded according to participants’ feedback. Six of the 10 women responded to the findings. All respondents agreed with the themes chosen. Several chose to elaborate on examples of their experiences with the themes, but these elaborations confirmed rather than contradicted the initial interpretations. Nonetheless, their elaborations were incorporated into the data, thus expanding the descriptions of the themes.

Procedural rigour was enhanced through audio-recording the focus group sessions to ensure that no information was missed, in addition to ongoing audit of the procedures. Specifically, the second author (who was not involved in conducting the focus groups or the analysis beyond auditing) met regularly with the researcher to (a) examine fidelity to the intended method; (b) discuss potential problems (e.g., when attendance at one group was reduced to two participants due to a snowstorm, could that still count as a “focus group”?); and (c) facilitate the researcher’s self-reflection on how her own experiences might be influencing her interpretations.
Previous Exposure to Trades-Related Tasks

Previous exposure to the trades was experienced as an important motivation for the women to pursue their careers. For some, high school courses allowed them to explore different trades. Erin, Melissa, and Vanessa, for example, took trades courses in high school. Interestingly, 2 participants were exposed to welding through the arts. Danielle, age 22, described her experience:

I actually did my degree in visual arts. And while I was doing that, I started welding in sculpture and then … I quickly realized there were not a lot of jobs that paid well for having a BFA [Bachelor of Fine Arts]. So, I was like, well I like welding, so I’ll go to college for a year and then I’ll actually be able to get a job that makes money and I’ll be doing something like that.

Others were exposed to the trades through their families and experiences growing up. Many of the women had male family members in the trades. Lara, age 29, for example, described an experience of being exposed to trades-related tasks through the work of her father who was a contractor:

All my life, we put houses together and did different contracts and built different things and worked on the trucks and, you know, just fun things like that. So, growing up in an environment that allowed me to do that, made me comfortable going this way.

Confidence

Confidence was a topic that arose in many of the focus groups. Some women experienced confidence as an important contributor to their success. Tracy, age 31 and a carpentry apprentice, felt that it was important to “have the confidence in yourself to step it up a little bit.” In the same way, Lara described displaying confidence to her peers in a shop demonstration in her program:

Everybody’s all standing around, kind of watching this guy talk and he’s like: “Does anybody want to go first?” I’m like: “Yes, I do.” And I think from there people are like: “Yeah, she’s pretty confident. She’s doing this.” … You gotta go hard, you know, and get in people’s minds that this is what I’m doing.

Although many of the women discussed confidence, Nancy, age 23, also acknowledges that finding confidence is not always easy: “Being optimistic and self confidence [sic] definitely plays a role, even though I kind of struggle with it once in a while.”

Passion for the Work

Several of the women experienced a clear passion for their work, using the word “love” when referring to their jobs and programs. Tracy describes the passion that she feels for her job, despite other people’s negative opinions of her situation: “I
really don’t care what people think. Honestly, I really don’t. I, if people laugh, I tell them that at least I love my job every day.” Likewise, several of the women described experiencing an “immediate” love or passion for the work. Participants also referred to the “excitement” and “fun” that renders them passionate about their career. For example:

I get so excited about it. It’s like a big sandbox really. Like, every time you go into the shop, you’re like [gasp]. You’re going to get paid to play in this big sandbox. It’s—it’s a lot of fun.

Support from Others

Different sources of support were described in each focus group. Nancy, for example, identified the supports that have contributed to her success and described the sense of pride in herself that she experienced as a result of their support: “friends and family. First, them being proud make [sic] me feel more proud.” Many participants also experienced their instructors as being very supportive of them. Vanessa, age 21, and Sheila, age 23, illustrate how instructors provided them with additional supports to ensure their success:

V: One of my teachers … ended up being my tutor as well so I got to see him before I had class. So him, like, pushing me to do well right before class really just, like, helped so much. It was so awesome.

S: I had one teacher purchase my textbooks for me because he knew that I couldn’t afford it. I was paying out of my own pocket for—I didn’t have any help for anything—and he actually got me my textbook for me because he knew how much I wanted to succeed in this program.

Several participants also mentioned feeling supported by the college as a whole, and from the men in their programs. Lara described how the men in her program supported her on her first day of class:

We were at our lockers and a teacher, or I don’t know, maybe she was um, like an assistant, or works in an office somewhere. She said: “Oh, you’re the only girl.” One of the boys popped up and said: “Oh no she’s not! She’s one of us!” And you know, it instantly made me feel like “alright, I’m jelled, we’re good.”

Some participants, who had previously worked in their field, perceived that their male coworkers were supportive. Tracy described her experience of what happened when another worker had come to her job-site and made discriminatory comments about working with women:

And I’m not the only one on my crew that heard it. So it wasn’t just coming from me, there was the other guy … that went and discussed it with the site super after, because they do stand up for me. In the end, I learned that my boys do actually stand up for me.
The Physical Nature of the Work

The physical nature of work in the trades was discussed in all four focus groups. For some women, this was part of the appeal of a career in the trades, because they like “hard work.” Other participants experienced the physicality of their work as a contributor to their success because they are “hands-on” learners. As Sheila explained: “See it once and that’s the way I learn. You put it on a blackboard and give me a piece of paper to read and it’s not—I don’t comprehend that way.”

However, many of the women also experienced the physical nature of the work to be their greatest barrier to success in their fields. Andrea, age 37, describes physical ability as a challenge in her apprenticeship, citing an experience completing a task with her supervisor:

I’m not as tall as a lot of the guys. For instance, my hands aren’t as big, I can’t manipulate some of the materials. Um, just strength, I think in my apprenticeship you know, it’s not a fitness thing, it’s just you’re just not as strong. So for example, last year we were moving some huge posts … it was a struggle. I mean, it was fine, we did it, but if it had been him and another guy, it wouldn’t have been as hard, and I think that that became apparent to him, which made me really uncomfortable at the time, because I knew that I was like, “I’m doing as best I can,” but it’s—I’m just not as strong as somebody who’s a man, I guess.

While some of the participants perceived physical strength as a barrier, others experienced it as something that could be developed and accommodated. Women discussed “pumping iron” to gain strength and going to the gym. They also described experiences of having to “think about the challenge in a different way” and using tools to compensate for strength. For example, Sheila explained using “a longer pole … so you’re getting more pull … leverage.”

The Predominantly Male Environment

The fact that the women were in a predominantly male environment was apparent in each focus group. The women described various experiences about being the “only girl” or one of very few women in their programs. Danielle was one of several participants who described being initially intimidated on the first day because of the predominantly male environment:

On the first day, there was like a big breakfast … And when I walked into this room, like, I saw one other girl who was one of the girls in welding … So it was just me and this other girl in this room of, like, hundreds of guys. And it was kind of intimidating at first, but like, then everyone was like, cool and stuff.

However, Danielle also found advantages to being one of very few women:

In some ways being one of the few females makes you stand out more. So, like, whereas with—at least with my program—some of the guys, people still don’t know their names … but when you’re one of the few girls, everybody knows who you are, like the first day of school. So I guess people are more inclined
to pay attention to you, or like, remember you I guess and that kind of thing. So that’s good.

This feeling of standing out was also evident in other focus groups; some women described feelings of “sticking out” or being “watched.” These perceptions sometimes experienced in a very negative way:

I almost cried one day. I was … nailing together beams. And after a while, I felt like people were watching me, so every time I missed a nail I felt worse and worse. And my arm just started to burn, ’cause it was a 46-foot beam … I didn’t want to stop, because I didn’t want to seem weak.

Proving Oneself to Others

In each focus group, women discussed other people’s opinions of their careers and their ability to do the work. In this case, “others” refers to family, peers, coworkers, employers, and future employers. Nancy described the experience of telling people in her life that she wanted to be a carpenter: “Sometimes I get the laugh or the eye roll … It’s kind of like, I just want to show you, like, come see what we built.”

Similarly, many women experienced a desire to “prove” themselves to the men in their programs and on their job sites. Sheila explains, “There’s definitely a level of proving yourself … the guys don’t expect as much from you ’cause you’re a girl. They don’t think you might know as much as they do.”

Several participants depicted situations in which they experienced negative reactions when communicating their career plans to other people besides their coworkers. Melissa, age 18, explained, “My main obstacle technically is my family … cause they don’t see me as a tradesman.” Lara, who previously studied at university, also encountered people’s negative opinions: “Coming from the academic background at first, people were like ‘What are you talking about? Why would you do a trade?’”

Women were also concerned about the opinions and stereotyped assumptions they may encounter in the future. Lara perceived judgements by employers as a potential barrier in the near future: “You’re going to be judged. Your boss could be a jerk, he could be just chauvinistic, ‘Ah, men rule the world.’” Similarly, both participants in the apprenticeship program anticipated facing stereotyped assumptions when they become journey-level tradeswomen. Andrea connects past experiences to her near future:

Um, I’m sort of nervous about going … to a job site, not by myself, but as the lead hand sort of. The job that I had before this was a very male-oriented … situation. And when I could go and give information, they would always ask to speak to somebody else. And it was usually a man … I’m nervous about going to a job site having somebody say: “What do you—you don’t know what you’re talking about. How do you know how to do this?” and you know, it doesn’t matter that I’m a fully trained carpenter, as a woman I might not know because they’re a bit closed-minded and old-fashioned or whatever.
Women's Experiences in the Trades

The “Controlled Environment”

None of the participants perceived experiencing discrimination in their college training. Instead, they described experiencing their colleges as welcoming and supportive environments for women. Nancy referred to the college as a “controlled environment” in which she had not experienced many barriers or discrimination. Although the women stated that they did not experience discrimination based on their gender, they did describe instances of “sexist jokes,” “crude jokes,” and “comments” that occurred in their programs. However, they seemingly accepted or excused these jokes and comments, stating, “Guys will be guys” and “I crack enough of them [jokes] myself that it doesn’t bother me.” Many women also expressed that they “play along” with the jokes in class.

Job-Site Discrimination

Several of the women had previously worked in their fields, or other fields that were predominantly male, and described instances of discrimination in these workplaces. For example, Sheila reported an incident in which she was told that she was not hired because of her gender since she might be a “distraction” to other coworkers, a line of reasoning that she experienced as “ridiculous” and demeaning. Another participant provided an account of being hired because she was a woman, but subsequently discovering that her hiring was a “joke”:

I’ve been hired as a joke. ’Cause I was a female put with a grain crew of 20 men. So I was told that I was just eye candy. And I moved all the way up to Alberta for it…. Then after the month, they admitted, like, why they had hired me. They’d never seen me, but it was the idea. They knew I’d be the only female in the position.

This participant elaborated on how she felt about this experience: “I quit. I don’t want to be treated like that.” Yet, she still seemed accepting of the discriminatory behaviour by saying: “It happens.”

Participants also discussed numerous experiences of how men alter their behaviour on a site where a woman is working. Andrea’s experience illustrates this phenomenon:

And then they’ll see me and be like “Oh.” You know, they won’t talk to me … and it’s just like “you don’t have to watch what you say around me … you can say whatever you want” … there’s that aspect where you know, you just sort of feel a bit outside sometimes.

Lara, on the other hand, experienced men reacting to women coworkers in several ways she found to be discriminatory:

There’s three different types of guys: there’s usually the one that wants to protect you. And they’re like: “Oh, don’t do that, you’re going to get hurt” … The other guys is “I want in your pants” … And then there’s the other guy who’s like “I hate you and you’re taking my job.”
One woman described the experience of having a supervisor whose beliefs limited her work opportunities. She described having alternating supervisors every 2 weeks: “the one supervisor … he would put me on the more advanced machines … But the next two weeks, the supervisor that came in—I was on the parts washer. ‘Women are supposed to clean.’” This participant illustrated her frustration of being assigned to the parts washer: “Every two weeks I’d be stuck on that.”

Participants also provided examples in which they were not provided with adequate facilities to change, shower, and use the washroom. Andrea spoke of a recent job site:

It’s the law that they have to supply a port-a-potty on site. But there’s lot of people that don’t … the last job that we did, all the guys would go behind the garage and they’d go for a pee. And I’d have to go up to Subway and it cost me $2.25 to buy a drink every time I wanted to use the bathroom.

She later added: “That’s very frustrating … but that’s just one of those things.”

Another participant, Sheila, also described inadequate changing and showering facilities, and that she would be “the first choice to go” during layoffs “because had the labour board walked in at any given time, and they don’t have the proper facilities, it’s a big fine they’re looking for.” She added: “So I understood that. I took the job knowing that that could happen.”

Even the participants who had not yet worked in the field anticipated experiencing discrimination on the job. One participant stated, “Discrimination, I’m going to run into it hugely, one hundred percent, no matter where I go” and “It will come.” These participants were not only concerned about discrimination from coworkers and employers, but also from other women, including female coworkers, wives and partners of male coworkers, and women who had traditional views of gender:

Some people will think, “Oh my goodness, what are you doing? You should be at home having children … teaching them, rearing them, bringing them up to be good people in the world.” And, I just can’t imagine sitting by the wayside doing that … They’re going be like “What are you doing? I don’t believe this, you’re out there working with my husband.”

The women experienced various different negative reactions to discrimination, including feeling “insulted,” “frustrated,” and “bothered” by the way they had been treated. At the same time, many seemed to normalize their experiences, framing discrimination as something that was simply a part of their field, with statements such as “guys will be guys,” “that’s just one of those things,” and having to “face that and deal with it.”

**Discussion**

Many of the themes that emerged are consistent with previous research on women in nontraditional trades. For example, Bennett (2005) stated that previous
exposure to the trades contributed to women’s success. This reality also emerged in the present study, where many women described being exposed to trades tasks in high school, at home, and in postsecondary education. The participants’ exposure to the trades-related tasks suggests that this experience fosters an interest in the trades and leads women to pursue these careers. Furthermore, the women’s previous exposure to trades-related tasks illustrates that these women have already overcome a barrier that many women have traditionally faced: an absence of experience and exposure to the field (Ericksen & Paladino Schultheiss, 2009; Padavic, 1991, 1992).

Consistent with Bandura’s (1977) social learning theory, these women developed self-efficacy for trades-related tasks through exposure and reinforcement. The theme of “exposure to the trades” overlaps with “support from others” in the context of social learning theory, as the “others” seemingly reinforced the trades-related tasks. Participants perceived being encouraged by family members, often fathers, who worked with them in traditionally male tasks. The women also perceived support from their instructors, who assisted them outside of the classroom in order to ensure their success.

Betz (2006) theorized that women are often discouraged from the trades because of an absence of mentors and role models in nontraditional tasks with whom they can identify (Betz & Hackett, 1981b). In the current study, although none of the women had female instructors or described female role models, they felt supported by their male instructors. This finding could suggest that modern women find mentors in men as well as women, and perhaps women are able to identify with male mentors as role models.

Interestingly, two of the participants were exposed to the trades through previous involvement and education in fine arts, as Danielle described above. This is an interesting finding as it could provide a new avenue to recruit women into the trades. Furthermore, as this exposure occurred during the women’s late teens or early twenties, it suggests that these women developed a self-efficacy for these tasks later in life rather than when they were children.

The women in this study revealed that confidence was a component of their success. This finding is consistent with previous research (Eisenberg, 1998; Green & Stitt-Gohdes, 1997; Hulme, 2006). According to social learning theory, these women may have developed confidence through their reported support from others and previous exposure to trades-related tasks.

Another finding consistent with previous research, perhaps contributing to the women’s confidence and success, is their passion for trades work. The “fun” and “love” that they described is similar to the sense of amazement and enjoyment of the work described by Eisenberg (1998). The passion that they described also related to the physical nature of their work. Several women explained that they enjoyed the “hard work” and activity involved in their trades and even perceived the “hands-on” nature of their programs as an advantage, since they described themselves as kinesthetic learners.
However, the physical nature of work in the trades has often been found to be a barrier in prior research (Eisenberg, 1998; Goldenhar & Sweeney, 1996; Menches & Abraham, 2007; O’Farrell, 1999). Similarly, participants in the present study found the physical nature of the work to be a barrier, perceiving their male counterparts as having more physical strength for work tasks and feeling the need to build their strength and “prove” themselves.

Participants clearly reported that their programs were predominantly male. Many researchers have described the dominant male culture of the field as a barrier to success (Berik & Bilginsoy, 2006; Fielden et al., 2000; Menches & Abraham, 2007). In the present study, the women were initially intimidated by the predominantly male environment, but later perceived their male classmates as supportive. Amidst the predominantly male programs, women perceived themselves as “standing out,” “sticking out,” and being “watched.” This has been described in earlier studies and has historically been perceived negatively (Byrd, 1999; Eisenberg, 1998; Hulme, 2006). The women in the current study were at times uncomfortable with this, but also saw it as an advantage because everyone, including instructors, would know them. Although this was perceived as advantageous in their programs of study, it is unclear how women perceived “standing out” in the field.

Along with the predominantly male environment and physically demanding work comes a stereotype that women cannot perform the work needed in the construction industry. In the present study, the women spoke at length regarding the opinions of other people. A theme that emerged from this dialogue was the idea of wanting to “prove oneself” to others. Agapiou (2002), Bennett (2005), and Goldenhar and Sweeney (1996) also described this concept, finding that women in trades overwork in order to prove themselves and to compensate for their coworkers’ assumptions and beliefs about women’s abilities. This idea was evident in one participant’s description of continuing work, despite pain and fatigue, for fear of appearing weak to her male classmates. Similarly, other participants perceived the need to prove themselves to family members, supervisors, future employers, and coworkers.

A particularly intriguing finding that emerged from the data was that women did not perceive being discriminated against in their programs of study. They found the community college, their instructors, and their classmates “open-minded” and supportive. The women did experience sexist jokes and comments, but did not perceive this as discrimination. These findings are similar to those of Denissen (2010) and Byrd (1999), who found that mild forms of discrimination are tolerated. In this case, however, the women did not even describe these instances as discrimination. A potential explanation for this could be that many of the women had previous exposure to trades-related tasks and environments. The culture of the trades is often characterized by teasing, derogative comments, and joke telling (Latack et al., 1987; Loosemore, Phua, Dunn, & Ozguc, 2009). Because they had previously experienced this environment, these women could have become accustomed to the comments and jokes that arise in their programs and have developed ways to cope with these behaviours.
In contrast to the accepting and “open-minded” atmosphere that women perceived at the college level, those participants who had previously worked in the trades experienced various forms of discrimination on job sites. This included not being hired because of gender, being hired as a “joke,” and the absence of amenities appropriate for women. These forms of discrimination were present in research from the 1990s (Eisenberg, 1998; Goldenhar & Sweeney, 1996; O’Farrell, 1999). Unfortunately, the present study suggests that advances have not been made in this area, as women continue to experience the same issues today.

This discrepancy between the social environment of community colleges and construction job sites may be an important contributor to some women’s decisions to abandon their career paths in the trades. Although the participants anticipated experiencing discrimination when joining the world of work, they may not be prepared to cope with more serious forms of discrimination. After not perceiving discrimination in college, attempting to work in an industry where discrimination is more prominent could discourage women from remaining in their career, and potentially contribute to the attrition that has been observed with women in trades (Brown, 1981; Statistics Canada, 2007b).

There were several limitations to this study that need to be considered when interpreting the results. For example, each focus group consisted of only two or three people, which could have reduced the diversity of discussion in comparison to slightly larger focus groups. This limitation does not negate the themes that emerged, but raises the possibility that there may be other aspects of women’s experience in the trades that did not emerge. Also, the fact that only one participant had a child and 80% were under 30 years of age may also have contributed to the absence of some issues in the focus groups. For example, although family has previously been identified as an important barrier in the literature (Betz, 2006; Dabke et al., 2008; Fielden et al., 2000; O’Farrell, 1999), the women in this study rarely mentioned family. It is possible that family is no longer a barrier, but it is more likely that family issues were not of primary concern in this particular group of women. Furthermore, all the participants in this study were Caucasian. Thus, information about Canadian women-of-colour in the trades is still lacking.

Finally, some participants may not have been comfortable sharing personal stories in a focus group format. Attempts were made to reduce this potential problem by providing participants with the opportunity to write comments after the focus group discussion ended, and by individually verifying themes with participants.

This study has revealed several themes that could be useful for counselling practice. First, when providing career planning and counselling services for women, the trades and other nontraditional professions should be considered as viable options. Women have found success in these areas, and anticipate future success. Although the trades may not suit all women, they might be a feasible option for women who have kinesthetic learning styles. One specific group of women who could be encouraged to consider trades careers are those who are interested in visual arts. These women may have already been exposed to trades-related tasks (e.g., working with wood or metal), and have a learning style that is compatible with trades training.
Practitioners should also ensure that women have a realistic view of the trades. A realistic evaluation of the kinds of barriers that may be encountered in the field, even if they are absent from the training programs, will be important to communicate to women interested in pursuing trades careers. Career counsellors in particular could aid in educating them about their rights in the workplace surrounding harassment, discrimination, and accessible amenities. This study also provides implications for personal counselling with women in skilled trades careers. It provides practitioners with insight into the challenges women in these roles encounter, including harassment, discrimination, and isolation in the workplace. Further, despite being qualified, these women might have challenges finding employment.

With the dearth of existing research on women in construction-related trades, there are many directions for future research. More in-depth research on what leads teenage women to consider trades careers could inform professionals and colleges on how to retain and attract different groups of women into trades programs. One topic that requires further exploration is how tradeswomen, or women training to be tradespeople, balance work with family and child rearing, and whether they intend to continue their careers after having children. Additionally, longitudinal quantitative research to examine factors contributing to the attrition of women in trades education and career paths could be beneficial in understanding the environments and criteria that are required to retain women in these careers. Similarly, qualitative research with women who have left trades programs and career paths could be conducted to explore what contributed to their decisions to leave the profession. Another approach would be to conduct research with men in trades to better understand their opinions of working with women and how these attitudes may contribute to, or even reduce, the barriers that women encounter to pursuing these career paths. Finally, the findings of this study suggest that another area to explore is the potential links between learning styles and women’s pursuit of trades careers. This could shed light on what types of learners to recruit into the trades, and provide counselling professionals with career avenues for specific learning styles.

References


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